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# 310 CMR 30.000: HAZARDOUS WASTE

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#### GENERAL PROVISIONS

#### 30.001: Authority

310 CMR 30.000 is promulgated by the Commissioner of the Department of Environmental Protection pursuant to the authority granted by M.G.L. c. 21A, § 2, M.G.L. c. 21C, §§ 4 and 6, M.G.L. c. 21E, § 6, and by St. 1987, c. 587, § 47.

### 30.002: Purpose

310 CMR 30.000 is intended to protect public health, safety, and welfare, and the environment, by comprehensively regulating the generation, storage, collection, transport, treatment, disposal, use, reuse, and recycling of hazardous waste in Massachusetts. 310 CMR 30.000 should be read together with M.G.L. c. 21C and c. 21E, § 6 and by St. 1987, c. 584, § 47, each of which has many important substantive requirements not repeated in 310 CMR 30.000.

## 30.003: Rules of Construction

- (1) 310 CMR 30.000 shall be construed to effectuate the purposes of M.G.L. c. 21C and the federal Resource Conservation and Recovery Act.
- (2) As used in 310 CMR 30.000, words in the singular also include the plural.
- (3) Words in the masculine gender also include the feminine and neuter genders.
- (4) No provision of 310 CMR 30.000 shall be construed to limit the Department's authority to take or arrange for, or to require any person to perform, any response action authorized by M.G.L. chs. 21C or 21E which the Department deems necessary to protect health, safety, public welfare or the environment.
- (5) The provisions of 310 CMR 30.000 are severable, and if any provision hereof or the application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions hereof or applications thereof which can be given effect without the invalid provision or application.
- (6) Federal statutes and regulations which are cited within 310 CMR 30.000 but which are not specifically adopted by reference shall be used as guidance in interpreting the state regulations in which they appear.
- (7) No provision of 310 CMR 30.000 shall be construed to relieve any person of the necessity of complying with all other applicable federal, state or local laws (*e.g.*, the more stringent requirements and effective dates established pursuant to the federal Hazardous and Solid Waste Amendments).
- (8) No provision of 310 CMR 30.000 (or 310 CMR 40.0000: *Massachusetts Contingency Plan*) shall be construed to limit the Department's authority to require additional response actions on a case-by-case basis in accordance with 310 CMR 30.829, when necessary to protect health, safety, public welfare or the environment.

# 30.004: Effective Date

Each provision in 310 CMR 30.000 and each subsequent revision shall be effective and have the force of law upon publication of the provision or revision in the *Massachusetts Register*. Every other state title shall be effective and have the force of law in accordance with the provisions of each. If a state title fails to state a date from when it is to be effective, it shall become effective upon publication in the *Massachusetts Register*.

# 30.005: Computation of Time

Unless otherwise specifically provided by law, 310 CMR 30.000, or any determination issued pursuant to 310 CMR 30.000, any time period prescribed or referred to in 310 CMR 30.000 or in any determination issued pursuant to 310 CMR 30.000 shall begin with the first day following the act which initiates the running of the time period, and shall include every calendar day,

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including the last day of the time period so computed. If the last day is a Saturday, Sunday, legal holiday, or any other day in which the offices of the Department are closed, the deadline shall run until the end of the next business day. If the time period prescribed or referred to is less than seven days, only days when the offices of the Department are open shall be included in the computation.

## 30.006: Accurate and Timely Submittals to the Department

- (1) No person shall make any false, inaccurate, or misleading statement in any application, record, report, plan, or statement which that person submits, or is required to submit, to the Department pursuant to M.G.L. c. 21C, 310 CMR 30.000, or any order issued by the Department.
- (2) Any application, record, report, plan, or statement which any person is required to submit to the Department shall be submitted within the time period presented in M.G.L. c. 21C, 310 CMR 30.000, or any order issued by the Department, unless otherwise specified by the Department.

#### 30.007: Accurate and Complete Record Keeping; Automatic Extension

- (1) No person shall make any false or misleading statement in any record, report, plan, file, log, or register which that person keeps, or is required to keep, pursuant to M.G.L. c. 21C, or 310 CMR 30.000. Any record, report, plan, file, log, or register which any person is required to keep shall be filled out completely and otherwise kept in compliance with M.G.L. c. 21C, 310 CMR 30.000, or any order issued by the Department.
- (2) The periods prescribed in 310 CMR 30.000, including 310 CMR 30.331, for keeping records shall be extended automatically for the duration of any unresolved enforcement action regarding the activity in question or as ordered by the Department.

## 30.008: Accurate Monitoring

No person shall falsify, tamper with, or render inaccurate any monitoring device or method which any person maintains, or which is required to be maintained pursuant to M.G.L. c. 21C or 310 CMR 30.000. Any monitoring which any person is required to perform shall be promptly, fully and accurately performed and shall otherwise be in compliance with M.G.L. c. 21C, 310 CMR 30.000, or any order issued by the Department.

## 30.009: Certification

- (1) Any person signing a document pursuant to 310 CMR 30.062, 30.142, 30.800, or when providing any other information ordered or requested by the Department pursuant to 310 CMR 30.000, shall make the following certification: "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including possible fines and imprisonment."
- (2) This certification need not appear on a manifest, but every person signing a manifest shall comply with 310 CMR 30.006 and 30.007.

### 30.010: Definitions

As used throughout 310 CMR 30.000, the following terms shall have the following meanings, unless the context clearly indicates otherwise.

Aboveground Tank means a device meeting the definition of a tank that is situated in such a way that the entire surface area of the tank is completely above the plane of the adjacent surrounding surface and the entire surface area of the tank (including the tank bottom) is able to be visually inspected. Where a double-walled tank is used, the entire surface area of the outer wall must be completely above the surrounding surface and be able to be visually inspected.

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<u>Accidental Occurrence</u> means an accident including, but not limited to, continuous or repeated exposure to conditions, which results in bodily injury or property damage neither expected nor intended by the insured. Every accidental occurrence shall be deemed either sudden or non-sudden.

<u>Accumulation</u> means the short term containment of hazardous waste on the premises of the person who generated such waste in a manner which does not constitute disposal, provided that if such containment is not as provided for in 310 CMR 30.340 or 30.351, such containment is storage and not accumulation of hazardous waste.

<u>Active Life of a Facility</u> means the period from the initial receipt of hazardous waste at the facility until the Department receives certification of final closure.

Active Portion means that portion of a facility where treatment, storage, or disposal operations are being or have been conducted after November 19, 1980 and which is not a closed or inactive portion. (See also closed portion and inactive portion.)

<u>Actual Public Underground Drinking Water Source</u> means a groundwater source of drinking water used by a Public Water System as defined in 310 CMR 22.02: *Definitions*.

<u>Acutely Hazardous Regulated Recyclable Material</u> means a recyclable material that, if discarded, would be a waste listed in 310 CMR 30.136 or a waste with EPA Hazardous Waste No. F020, F021, F022, F023, F026, or F027 listed in 310 CMR 30.131.

Acutely Hazardous Waste means a waste listed in 310 CMR 30.136 or a waste with EPA Hazardous Waste No. F020, F021, F022, F023, F026, or F027 listed in 310 CMR 30.131.

<u>Administrator</u> means the Administrator of the U.S. Environmental Protection Agency or his designee.

Amalgam means an alloy containing mercury and other metals used to restore the dentition.

Amalgam Waste means any waste containing mercury amalgam or otherwise associated with preparation or use of amalgam, including but not limited to amalgam collected by chair-side traps, screens, filters, vacuum system filters, amalgam separators or other devices; waste elemental mercury; and waste amalgam capsules.

Ancillary Equipment means any device including, but not limited to, such devices as piping, fittings, flanges, valves, and pumps, that is used to distribute, meter, or control the flow of hazardous waste from its point of generation to a storage or treatment tank(s), between hazardous waste storage and treatment tanks to a point of disposal onsite, or to a point of shipment for disposal off-site.

Annual Rate Limiting Constituent means the compound, element, or waste fraction in a hazardous waste which sets the maximum amount of hazardous waste which can be loaded onto soil per year.

<u>Aquifer</u> means a geologic formation, group of formations, or part of a formation capable of yielding a significant amount of ground water to wells or springs.

Area of Critical Environmental Concern (ACEC) means an area designated by the Secretary of the Executive Office of Energy and Environmental Affairs pursuant to 301 CMR 12.00: *Areas of Critical Environmental Concern*.

<u>Authorized Representative</u> means the person responsible for the overall operation of a facility or an operational unit (*i.e.*, part of a facility), *e.g.*, the plant manager, superintendent or person of equivalent responsibility. For purposes of complying with 310 CMR 30.800, the definition of an authorized individual at 310 CMR 30.822(8) shall control.

<u>Battery</u> means a device consisting of one or more electrically connected electrochemical cells which is designed to receive, store, and deliver electric energy. An electrochemical cell is a system consisting of an anode, cathode, and an electrolyte, plus such connections (electrical and mechanical) as may be needed to allow the cell to deliver or receive electrical energy. The term battery also includes an intact unbroken battery from which the electrolyte has been removed.

<u>Boiler</u> means an enclosed device that uses controlled flame combustion and meets all the requirements in 310 CMR 30.010: <u>Boiler(a)</u> through (d):

- (a) the device must have physical provisions for recovering and exporting thermal energy in the form of steam, heated fluids, or heated gases; and
- (b) the device's combustion chamber and primary energy recovery section(s) must be of integral design. To be of integral design, the combustion chamber and the primary energy recovery section(s) (such as waterwalls and superheaters) must be physically formed into one manufactured or assembled unit. A unit in which the combustion chamber and the primary energy recovery section(s) are joined only by ducts or connections carrying flue gas is not integrally designed; however, secondary energy recovery equipment (such as economizers or air preheaters) need not be physically formed into the same unit as the combustion chamber and the primary energy recovery section. The following units are not precluded from being boilers solely because they are not of integral design: process heaters (units that transfer energy directly to a process stream), and fluidized bed combustion units; and
- (c) while in operation, the device must maintain a thermal efficiency of at least 60%, calculated in terms of the recovered energy compared with the thermal value of the fuel; and (d) the device must export and utilize at least 75% of the recovered energy calculated on an annual basis. In this calculation, no credit shall be given for recovered heat used internally in the same unit. (Examples of internal use are the preheating of fuel or combustion air, and the driving of induced or forced draft fans or feedwater pumps.)

<u>Bulk Scrap Metal Item</u> means a large item composed of worn out metal or a metal product that has outlived its original use, such as automobile hulks, railroad cars, steel beams from torn down buildings or bridges, and household appliances. (*See* also 310 CMR 30.010: <u>Scrap Metal.</u>)

<u>By-product</u> means a material that is not one of the primary products of a production process and is not solely or separately produced by the production process. Examples are process residues such as slags or distillation column bottoms. <u>By-product</u> does not include a co-product that is produced for the general public's use and is ordinarily used in the form it is produced by the process.

<u>Cathode Ray Tube</u> or <u>CRT</u> means a vacuum tube, composed primarily of glass, which is the visual or video display component of an electronic device. A used, intact CRT means a CRT whose vacuum has not been released. A used, broken CRT means glass removed from its housing or casing whose vacuum has been released.

Central Accumulation Area means an on-site hazardous waste accumulation area subject to 310 CMR 30.000 at a large quantity generator, small quantity generator or a very small quantity generator. A central accumulation area at an eligible academic entity that chooses to be subject to 310 CMR 30.354 is the area where the entity must also comply with the requirement for making the hazardous waste determination at 310 CMR 30.354(11) when accumulating unwanted material, unless the entity already has accumulated designated hazardous waste in the laboratory, in which case the waste determination must be made at the point of generation.

<u>Certification</u> means a statement by a person which is true to the best of that person's knowledge and belief.

<u>Class A or Class SA Segment of a Surface Water Body</u> means a segment of an inland or coastal surface water body so assigned said class pursuant to 314 CMR 4.00: *Massachusetts Surface Water Quality Standards*.

<u>Clean Water Act</u> means the Federal Water Pollution Control Act, currently known as the Clean Water Act, 33 U.S.C. §§ 1251 *et seq*.

<u>Closed Portion</u> means that portion of a facility which an owner or operator has closed in compliance with the approved facility closure plan and all applicable closure requirements. (*See* also 310 CMR 30.010: <u>Active Portion</u>.)

Closure. (See 310 CMR 30.010: Final Closure and Partial Closure.)

30.010: continued

Closure Plan means the plan for closure prepared pursuant to 310 CMR 30.580 through 30.586.

<u>Collect</u> means gather at a place or places away from the premises of a licensee, *e.g.*, a transporter collecting hazardous waste from several sources.

<u>College</u> or <u>University</u> means a private or public, post-secondary, degree-granting, academic institution, that is accredited by an accrediting agency listed annually by the U.S. Department of Education.

Commercial Chemical Product or Manufacturing Chemical Intermediate Having the Generic Name Listed in 310 CMR 30.133 or 30.136 means a chemical substance which is manufactured or formulated for commercial or manufacturing use and which consists of the commercially pure grade of the chemical, any technical grades of the chemical that are produced or marketed, and all formulations in which the chemical is the sole active ingredient. It does not mean a waste, such as a manufacturing process waste, that contains any of the substances listed in 310 CMR 30.133 or 30.136. Where a manufacturing process waste is deemed to be a hazardous waste because it contains a substance listed in 310 CMR 30.133 or 30.136, such waste will be listed in either 310 CMR 30.131 or 30.132 or will be identified as a hazardous waste by the characteristics set forth in 310 CMR 30.120 through 30.125.

<u>Commissioner</u> means the Commissioner of the Department of Environmental Protection or his or her designee.

Completely Enclosed Recycling System means a unit that is primarily for the recycling of a regulated recyclable material and that is totally enclosed and is managed so that the regulated recyclable material is accumulated in tanks or containers in compliance with 310 CMR 30.205(19). (See 310 CMR 30.010: Treatment Which is an Integral Part of the Manufacturing Process for a description of a totally enclosed unit.)

Component means any constituent part of a unit or group of constituent parts of a unit which are assembled to perform a specific function (*e.g.*, a pump seal, pump, kiln liner and kiln thermocouple.)

<u>Compressed Gas</u> means any material or mixture having in the container an absolute pressure exceeding 40 pounds per square inch at 70°F or, regardless of the pressure at 70°F, having an absolute pressure exceeding 104 pounds per square inch at 130°F.

Construction (with respect to any project of construction under M.G.L. c. 21C) means:

- (a) the erection or building of new structures and acquisition of lands or interests therein, or the acquisition, replacement, expansion, remodeling, alteration, modernization, or extension of existing structures, and
- (b) the acquisition and installation of initial equipment for, or required in connection with, new or newly acquired structures of the expanded, remodeled, altered, modernized or extended part of existing structures (including trucks and other motor vehicles, and tractors, cranes, and other machinery) necessary for the proper utilization and operation of the facility after completion of the project; and includes preliminary planning to determine the economic and engineering feasibility and health and safety aspects of the project, the engineering, architectural, legal, fiscal, and economic investigations and studies, and any surveys, designs, plans, working drawings, specifications, and other action necessary for the carrying out of the project, and
- (c) the inspection and supervision of the process of carrying out the project to completion.

<u>Container</u> means any portable device in which a hazardous waste is stored, transported, treated, disposed of, or otherwise handled.

<u>Containment Building</u> means a hazardous waste management unit that is eligible for interim status and used to store or treat hazardous waste in compliance with the provisions of 310 CMR 30.099(6)(q).

30.010: continued

<u>Contingency Plan</u> means a document setting out an organized, planned, and coordinated course of action to be followed in case of a fire, explosion or release of hazardous waste or hazardous waste constituents which could threaten public health, safety, or welfare, or the environment.

Corrosion Expert means a person who, by reason of his or her knowledge of the physical sciences and the principles of engineering and mathematics, acquired by a professional education and related practical experience, is qualified to engage in the practice of corrosion control on buried or submerged metal piping systems and metal tanks. Such a person shall be certified by the National Association of Corrosion Engineers (NACE) or be a Massachusetts registered professional engineer who has certification or licensing that includes education and experience in corrosion control on buried or submerged metal piping systems and metal tanks.

<u>Crime Involving Moral Turpitude</u> means a crime involving fraud, misrepresentation or deceit including, but not limited to, fraud, misrepresentation or deceit in conducting business or obtaining a license or permit as well as any other crime that adversely reflects on the applicant or licensee's competence to transport, use, collect, store, treat or dispose of hazardous waste.

<u>CRT Collector</u> means a person who receives used, intact CRTs for recycling, repair, resale, or donation.

<u>CRT Glass Manufacturer</u> means an operation or part of an operation that uses a furnace to manufacture CRT glass.

CRT Processing means conducting all of the following activities:

- (1) Receiving broken or intact CRTs;
- (2) Intentionally breaking intact CRTs or further breaking or separating broken CRTs; and
- (3) Sorting or otherwise managing glass removed from CRT monitors.

<u>Current Closure Cost Estimate</u> means the most recent cost estimate prepared pursuant to 310 CMR 30.903.

<u>Current Post-closure Cost Estimate</u> means the most recent cost estimate prepared pursuant to 310 CMR 30.905.

<u>Debris</u> means solid material exceeding a 60 mm particle size that is intended for disposal and that is: A manufactured object; or plant or animal matter; or natural geologic material. However, the following materials are not debris: any material for which a specific treatment standard is provided in Subpart D, Part 268 as incorporated by reference at 310 CMR 30.750(1), namely lead acid batteries, cadmium batteries, and radioactive lead solids; process residuals such as smelter slag and residues from the treatment of waste, wastewater, sludges, or air emission residues; and intact containers of hazardous waste that are not ruptured and that retain at least 75% of their original volume. A mixture of debris that has not been treated to the standards provided by 40 CFR Part 268.45, and other material, is subject to regulation as debris if the mixture is comprised primarily of debris, by volume, based on visual inspection.

<u>Demonstration</u> means the initial exhibition of a new technology, process or practice or a significantly new combination or use of technologies, processes or practices, subsequent to the development stage, for the purpose of proving technological feasibility and cost effectiveness.

Department means the Massachusetts Department of Environmental Protection.

<u>Designated Facility</u> means a person or facility described in 310 CMR 30.305 that has been designated on the manifest by the generator pursuant to 310 CMR 30.310 (manifesting requirements).

<u>Destination Facility</u> means a facility that is authorized to receive and recycle, treat or dispose of a particular category of universal waste, except those management activities described in 310 CMR 30.1034(1), (3) through (5) as well as 310 CMR 30.1044(1), (3) through (5). A facility at which a particular category of universal waste is only accumulated is not a destination facility for purposes of managing that category of universal waste. If located in Massachusetts, these facilities shall be properly licensed in compliance with 310 CMR 30.800, or be properly permitted in compliance with 310 CMR 30.290.

<u>Dike</u> means an embankment or ridge of either natural or man-made materials used to prevent the movement of liquids, sludges, solids, or other materials.

Directly to a Facility means a hazardous waste or regulated recyclable material shipment is collected by a transporter at the point of generation and remains in transportation at all times from the time of acceptance from the generator to delivery of the shipment at the destination facility designated on the manifest or shipping paper by the generator. Such shipments are in transportation as long as the hazardous waste or regulated recyclable material remains loaded on the transporter's vehicle after acceptance and until delivery to the designated destination facility. However, the transfer of containers of hazardous waste and regulated recyclable material between vehicles at transfer stations, as allowed under state, federal and local laws and regulations, and receipt and intermediate storage of Class A regulated recyclable material at Massachusetts licensed treatment, storage and disposal facilities, may be considered in transportation for the purpose of 310 CMR 30.010: Directly to a Facility.

<u>Discharge</u> or <u>Hazardous Waste Discharge</u> means the accidental or intentional spilling, leaking, pumping, pouring, emitting, emptying or dumping of hazardous waste into or on any land, surface water, ground water, or into the atmosphere.

<u>Disposal</u> means the discharge, deposit, injection, dumping, spilling, leaking, incineration or placing of any hazardous waste into or on any land or water so that such hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground waters.

<u>Disposal Facility</u>. (See 310 CMR 30.010: <u>Facility</u>.)

<u>Dredged Material</u> means sediment and associated materials that are moved from below the mean high tide line for coastal waters and below the high water mark for inland waters during dredging activities.

<u>Drinking Water Supplies</u> means ground or surface water currently in use or which may reasonably be expected to be used in the future as sources of public or private drinking water supply.

<u>Drip Pad</u> means an engineered structure consisting of a curbed, free-draining base, constructed of non-earthen materials and designed to convey preservative kick-back or drippage from treated wood, precipitation, and surface water run-on to an associated collection system at wood preserving plants, and which is eligible for interim status and managed in compliance with the provisions of 310 CMR 30.099(6)(n).

<u>Drum-top Crusher</u> means a crushing unit, and the container it is mounted to, that is designed to crush mercury-containing lamps.

DOT means the United States Department of Transportation.

<u>Elementary Neutralization</u> means the reacting of an acid or base with an aqueous corrosive hazardous waste in an elementary neutralization unit for the intended and actual purpose of rendering the waste less hazardous or nonhazardous.

Elementary Neutralization Unit means a device which:

- (a) is used for neutralizing aqueous wastes that are hazardous solely because they exhibit the corrosivity characteristic defined in 310 CMR 30.123(1)(a) or that are listed in 310 CMR 30.130 solely because they exhibit the corrosivity characteristic; and
- (b) meets the definition of a tank, tank system or container.

<u>Eligible Academic Entity</u> means a college or university, or a nonprofit research institute that is owned by or has a formal written affiliation agreement with a college or university, or a teaching hospital that is owned by or has a formal written affiliation agreement with a college or university.

Empty Container. (See 310 CMR 30.106.)

<u>Environmental Monitor</u> means the publication of that name issued by the MEPA Unit of the Massachusetts Executive Office of Environmental Affairs pursuant to 301 CMR 11.00: *MEPA Regulations*.

EPA means the United States Environmental Protection Agency.

<u>EPA Hazardous Waste Number</u> means the number assigned by EPA to each listed hazardous waste or to each hazardous waste characteristic in 40 CFR Part 261. (*See* also <u>Massachusetts</u> Hazardous Waste Number.)

<u>EPA Identification Number</u> means the number assigned by the Department to each generator, transporter, user, and treatment, storage, or disposal facility. (*See* also <u>Massachusetts Identification Number.</u>)

Equivalent Method means any testing or analytical method approved, in writing, by the Administrator based upon the standards and procedures prescribed by 40 CFR 260.20 and 260.21. The Department will consider any method so approved to be an acceptable method under the circumstances for which it was approved even if the method does not yet appear within "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication *SW*-846, as incorporated by reference at 310 CMR 30.012.

Existing Hazardous Waste Incinerator. (See 310 CMR 30.010: Existing Unit.)

Existing Hazardous Waste Management (HWM) Facility or Existing Facility means a facility which was in operation, or for which construction commenced, on or before November 19, 1980. A facility has commenced construction if:

- (a) The owner or operator has obtained the Federal, State and local approvals or permits necessary to begin physical construction; and
- (b) either:
  - 1. A continuous on-site, physical construction program has begun; or
  - 2. The owner or operator has entered into contractual obligations-which cannot be cancelled or modified without substantial loss-for physical construction of the facility to be completed within a reasonable time.

Existing Installation means a manufacturing plant or other industrial establishment which was in existence on October 15, 1983, or for which construction had commenced on or before October 15, 1983.

Existing Pile. (See 310 CMR 30.010: Existing Unit.)

Existing Portion means the existing unit's land surface area which was specifically included in the original Part A permit application and on or in which hazardous waste(s) was placed prior to the issuance of a license pursuant to 310 CMR 30.000.

Existing Surface Impoundment or Existing Impoundment. (See 310 CMR 30.010: Existing Unit.)

Existing Tank System or Existing Component means a tank system or component that:

- (a) is used for the storage or treatment of hazardous waste and that is in operation, or for which installation commenced on or prior to:
  - 1. July 14, 1986 for those tank systems which are owned or operated by a Small Quantity Generator, are new underground tanks, or are tanks which cannot be entered for inspection (*i.e.*, tanks which are subject to the requirements of the federal Hazardous and Solid Waste Amendments); or
  - 2. December 1, 1988 for all other types of tank systems (*e.g.*, tank systems which are not owned or operated by a Small Quantity Generator and are either existing underground tanks or tanks that can be entered for inspection).
- (b) Installation will be considered to have commenced if the owner or operator has obtained all federal, state, and local approvals or permits necessary to begin physical construction of the site or installation of the tank system and if either:
  - 1. a continuous on-site physical construction or installation program has begun, or
  - 2. the owner or operator has entered into contractual obligations, which cannot be cancelled or modified without substantial loss, for physical construction of the site or installation of the tank system to be completed within a reasonable time.

Existing Unit means a storage, treatment or disposal unit (*e.g.*, existing surface impoundment, tank, pile, incinerator) which was specifically included in the original Part A permit application and in which hazardous waste(s) was placed prior to the issuance of a license pursuant to 310 CMR 30.000, or a unit which is otherwise lawfully in use at the time the license application is submitted to the Department.

Existing Well means a well that is in existence and being used to supply a person with drinking water on the date that an owner or operator of a proposed facility submits:

- (a) a license application to the Department pursuant to 310 CMR 30.000; or
- (b) a notice of intent pursuant to 990 CMR 4.00: *Notice of Intent*, whichever is submitted first.

<u>Expanding Facility</u> or <u>Expansion</u> means an increase in the design capacity or a process used at a facility to treat, store or dispose of hazardous waste beyond that design capacity specified in the facility's original Part A permit application.

# Facility means:

- (a) All contiguous land, and structures, other appurtenances, and improvements on the land, used for treating, storing, or disposing of hazardous waste. A facility may consist of several treatment, storage, or disposal operational units (*e.g.*, one or more landfills, surface impoundments, or combinations of them);
- (b) For the purpose of implementing corrective action under 310 CMR 30.602(9) and (10) or 40 CFR 264.101, all contiguous property under the control of the owner or operator required to seek a permit under subtitle C of RCRA. This definition also applies to facilities implementing corrective action under RCRA Section 3008(h) and M.G.L. c. 21E;
- (c) Notwithstanding 310 CMR 30.010: <u>Facility(b)</u>, a remediation waste management site as defined in 40 CFR 260.10 is not a facility that is subject to corrective action requirements, but nevertheless will be subject to such requirements if the site is located within a facility as defined in 310 CMR 30.010: <u>Facility(b)</u>.

<u>Facility Having Interim Status Pursuant to RCRA</u> or <u>Interim Status Facility</u> means a facility which satisfies the qualifications of 310 CMR 30.099(1).

<u>Facility Mailing List</u> means the mailing list for a facility maintained by the Department in accordance with 310 CMR 30.833(4)(a)8.

30.010: continued

<u>Federal, State and Local Approvals or Permits Necessary to Begin Physical Construction</u> means permits and approvals required under Federal, State or local hazardous waste control statutes, regulations or ordinances.

<u>Final Closure</u> means the act or process of deactivating all hazardous waste management units at a facility in compliance with all applicable closure requirements so that hazardous waste management activities are no longer conducted at the facility except as provided in 310 CMR 30,200 or 30,300.

<u>Food-chain Crop</u> means tobacco, any crop grown for human consumption, and any crop grown for feed for animals whose products are consumed by humans.

## Formal Written Affiliation Agreement means:

- (a) for a nonprofit research institute, a written document that establishes a relationship between institutions for the purposes of research and/or education and is signed by authorized representatives, as defined at 310 CMR 30.010, from each institution. A relationship on a project-by-project or grant-by-grant basis is not considered a formal written affiliation agreement.
- (b) for a teaching hospital, a master affiliation agreement and program letter of agreement, as defined by the Accreditation Council for Graduate Medical Education, with an accredited medical program or medical school.

<u>Fossil Fuel</u> means coal, coke, distillate oil, residual oil, used oil fuel, or natural or manufactured gas.

<u>Fossil Fuel Utilization Facility</u> means any furnace(s), fuel burning equipment, boiler(s), space heater(s), or any appurtenance thereto used for the burning of fossil fuels, for the emission of products of combustion, or in connection with any process which generates heat and may emit products of combustion, but does not mean a motor vehicle.

<u>Free Liquid</u> means any liquid which readily separates from the solid portion of a waste under ambient temperature and pressure.

<u>Freeboard</u> means the vertical distance between the top of an open tank or surface impoundment dike, and the surface of the waste contained therein.

<u>Fuel</u> means any solid, liquid, or gaseous material used for the production of heat or power by burning.

<u>Functionally Equivalent Component</u> means a component which performs the same function or measurement and which meets or exceeds the performance specifications of another component.

<u>Generator</u> means any person, by site, whose act or process produces hazardous waste identified or listed in 310 CMR 30.100, or whose act first causes a hazardous waste to become subject to regulation.

<u>Ground Water</u> means water below the land surface in a zone of saturation.

<u>Hazardous Debris</u> means debris that contains one or more wastes listed in 310 CMR 30.130 through 30.136, or that exhibits any of the characteristics of hazardous waste identified in 310 CMR 30.120 through 30.125.

<u>Hazardous Waste</u> means a waste, or combination of wastes, which because of its quantity, concentration, or physical, chemical or infectious characteristics may cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness or pose a substantial present or potential hazard to human health, safety, or welfare or to the environment when improperly treated, stored, transported, used or disposed of, or otherwise managed. *See* 310 CMR 30.104 for possible exemptions. Hazardous waste includes the hazardous waste component(s) of mixed waste. *See* 310 CMR 30.010: <u>Mixed Waste</u>.

30.010: continued

<u>Hazardous Waste Constituent</u> or <u>Constituent</u> means an element or compound that caused the Department to list the waste as a hazardous waste in 310 CMR 30.131 through 30.136 (*See* 310 CMR 30.160, which lists these constituents) or a contaminant listed in 310 CMR 30.125.

<u>Hazardous Waste Fuel</u> means a regulated recyclable material, other than a used oil fuel, that:

- (a) is burned for energy recovery in an industrial or utility boiler or in an industrial furnace; and
- (b) is:
  - 1. presumed to be hazardous waste fuel (see 310 CMR 30.215); or
  - 2. a mixture of any hazardous waste or any material presumed to be hazardous waste fuel when combined with any other material; and
- (c) is managed in compliance with 310 CMR 30.200.

<u>Hazardous Waste Incinerator</u> means any incinerator used for the reduction of hazardous waste, or in which any hazardous waste feed is caused, suffered, allowed, or permitted to be burned, except infectious waste regulated by the Department of Public Health pursuant to M.G.L. c. 111, §§ 3, and 51 through 56.

<u>Hazardous Waste Management Unit</u> means a contiguous area of land on or in which is placed hazardous waste or tanks or containers of hazardous waste, or the largest area in which there is a significant likelihood of mixing hazardous waste constituents in the same area. Examples of hazardous waste management units include a surface impoundment, a waste pile, a land treatment area, a landfill cell, an incinerator, a tank and its associated piping and underlying containment system, and a container storage area. A container alone does not constitute a hazardous waste management unit. A container or tank plus the land or pad upon which the container or tank is placed does constitute a hazardous waste management unit.

<u>Hazardous Waste Number</u>. (*See EPA Hazardous Waste Number and Massachusetts Hazardous Waste Number*.)

<u>Identification Number</u>. (See <u>EPA Identification Number</u>.)

<u>Inactive Portion</u> means that portion of a facility which is not operated after November 19, 1980. (*See* also 310 CMR 30.010: <u>Active Portion</u> and <u>Closed Portion</u>.)

<u>Incineration</u> means controlled combustion in an enclosed device, the primary purpose of which is to thermally break down hazardous waste.

<u>Incinerator</u> means any enclosed device using controlled flame combustion that neither meets the criteria for classification as a boiler nor is listed as an industrial furnace.

<u>Incompatible Waste</u> means a hazardous waste which is unsuitable for:

- (a) placement in a particular device or facility because it may cause corrosion or decay of containment materials (e.g., container inner liners or tank walls); or
- (b) commingling with another waste or material under uncontrolled conditions because the commingling might produce heat or pressure, fire or explosion, violent reaction, toxic dusts, mists, fumes, or gases, or flammable fumes or gases. (See 310 CMR 30.561 for examples.)

<u>Individual Generation Site</u> means the contiguous site at or on which one or more hazardous wastes are generated. An individual generation site, such as a large manufacturing plant, may have one or more sources of hazardous waste but is considered a single or individual generation site if the site or property is contiguous.

## <u>Industrial Boiler</u> means a boiler that is:

- (a) located on the site of a facility engaged in a manufacturing process in which substances are transformed into new products, including the component parts of products, by mechanical or chemical processes, or
- (b) used in conjunction with a greenhouse.

30.010: continued

<u>Industrial Furnace</u> means any of the following enclosed devices that are integral components of a manufacturing process and that use controlled flame devices to accomplish recovery of materials or energy:

- (a) cement kilns.
- (b) lime kilns.
- (c) aggregate kilns.
- (d) phosphate kilns.
- (e) coke ovens.
- (f) blast furnaces.
- (g) smelting, melting, or refining furnaces (including pyrometallurgical devices such as cupolas, reverberator furnaces, sintering machine, roasters, and foundry furnaces).
- (h) titanium dioxide chloride process oxidation reactors.
- (i) methane reforming furnaces.
- (j) pulping liquor recovery furnaces.
- (k) combustion devices used in the recovery of sulphur values from spent sulphuric acid.

Inject means to emplace fluid into a formation by gravity or greater pressure through a well.

<u>Injection Well</u> means a well into which fluids are injected. (*See* also 310 CMR 30.010: <u>Underground Injection.</u>)

<u>Inner Liner</u> means a continuous layer of material placed inside a tank or container which protects the structural materials of the tank or container from the contained waste or reagents used to treat the waste.

<u>Interim Status</u>. (*See* 310 CMR 30.010: <u>Facility Having Interim Status Pursuant to RCRA or Interim Status Facility</u>.)

<u>Interim Zone II</u> means the area within ½ mile radius of a public water supply wellhead. <u>Interim Zone II</u> is used when a hydrogeologically defined Zone II has not been established. (*See* 310 CMR 30.010: Zone II.)

<u>International Shipment</u> means the transportation of hazardous waste into or out of the jurisdiction of the United States.

<u>Key Staff Individual</u> means an individual who is directly responsible for the operation of a hazardous waste activity, or who supervises or oversees one or more individuals responsible for the operation of a hazardous waste activity.

<u>Laboratory</u> (for purposes of 310 CMR 30.354 only) means an area owned by an eligible academic entity where relatively small quantities of chemicals and other substances are used on a non-production basis for teaching or research (or diagnostic purposes at a teaching hospital) and are stored and used in containers that are easily manipulated by one person. Photo laboratories, art studios, and field laboratories are considered laboratories. Areas such as chemical stockrooms and preparatory laboratories that provide a support function to teaching or research laboratories (or diagnostic laboratories at teaching hospitals) are also considered laboratories.

<u>Laboratory Clean-out</u> means an evaluation of the inventory of chemicals and other materials in a laboratory that are no longer needed or that have expired and the subsequent removal of those chemicals or other unwanted materials from the laboratory. A clean-out may occur for several reasons. It may be on a routine basis (*e.g.*, at the end of a semester or academic year) or as a result of a renovation, relocation, or change in laboratory supervisor or occupant. A regularly scheduled removal of unwanted material as required by 310 CMR 30.354(8) does not qualify as a laboratory clean-out.

<u>Laboratory Worker</u> means a person who handles chemicals and/or unwanted material in a laboratory and may include, but is not limited to, faculty, staff, post-doctoral fellows, interns, researchers, technicians, supervisors, managers, and principal investigators. A person does not need to be paid or otherwise compensated for his or her work in the laboratory to be considered a laboratory worker. Undergraduate and graduate students in a supervised classroom setting are not laboratory workers.

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<u>Land Disposal</u> means placement in or on the land and includes, but is not limited to, placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, salt dome formation, salt bed formation, underground mine or cave, or placement in a concrete vault, or bunker intended for disposal purposes.

<u>Land Subject to Flooding</u> means land area which is within the estimated maximum lateral extent of floodwater which will theoretically result from the statistical 100-year frequency storm or, as the case may be, from the statistical 500-year frequency storm.

<u>Land Treatment Facility</u> means a facility or part of a facility at which hazardous waste is applied onto or incorporated into the soil surface so as to render such waste less hazardous or non-hazardous by degradation, transformation, or immobilization processes occurring in or on the soil. Such facilities are disposal facilities if waste will remain after closure. The hazardous waste management unit in which the above described activities occur is also referred to as a land treatment unit.

Land Treatment Unit. (See 310 CMR 30.010: Land Treatment Facility.)

<u>Landfill</u> means a hazardous waste disposal facility or part of a facility where hazardous waste is placed in or on land and which is not a pile, a land treatment facility, a surface impoundment, an injection well, a salt dome formation, a salt bed formation, an underground mine, a cave or a corrective action management unit.

<u>Landfill Cell</u> means a discrete volume of a hazardous waste landfill for which a liner is used to provide isolation of hazardous waste from adjacent cell(s) or waste(s). Examples of landfill cells are trenches and pits.

<u>Large Quantity Generator of Class A Regulated Recyclable Material</u> (See 310 CMR 30.010: <u>Small Quantity Generator or Large Quantity Generator of Class A Regulated Recyclable Material</u>).

<u>Large Quantity Handler of Universal Waste</u> means a universal waste handler that accumulates 5,000 kilograms or more total of universal waste at any time. This designation as a large quantity handler of universal waste is retained until such time as a change of status request is received by the Department in compliance with 310 CMR 30.1043, and through the end of the calendar year in which the change of status request was received.

<u>Leachate</u> means any liquid, including any suspended components in a liquid, that has percolated through or drained from hazardous waste.

<u>Leak Detection System</u> means a system capable of detecting the failure of either the primary or secondary containment structure or detecting the presence of hazardous waste or accumulated liquid in the secondary containment structure. Such a system must consist of an interstitial monitoring device designed to detect continuously and automatically, and to signify with a visual or audible alarm, the failure of the primary or secondary containment structure or the presence of hazardous waste into the secondary containment structure.

<u>Legal Defense Costs</u> means expenses that an insurer incurs in defending against claims of any person, other than the insured or the insurer, brought pursuant to an insurance policy.

<u>License</u> means the written approval, on a form prescribed by the Department, issued pursuant to M.G.L. c. 21C, to collect, transport, treat, store, use, or dispose of hazardous waste.

<u>Licensee</u> or <u>Hazardous Waste Licensee</u> means a person licensed, pursuant to M.G.L. c. 21C, to undertake the collection, transportation, storage, treatment, use, or disposal of hazardous wastes.

<u>Liner</u> means a continuous layer of natural or man-made material(s) which is beneath or on the sides of a surface impoundment, waste pile, landfill, or landfill cell, and which restricts the downward or lateral escape of hazardous waste, hazardous waste constituents or leachate.

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<u>Loading Rate</u> means the mass or volume of waste applied to a unit area of land per unit time.

<u>Low-level Mixed Waste (LLMW)</u> means a waste that contains both low-level radioactive waste and hazardous waste.

<u>Low-level Radioactive Waste (LLW)</u> means a radioactive waste which contains source, special nuclear, or byproduct material, and which is not classified as high-level radioactive waste, transuranic waste, spent nuclear fuel, or byproduct material as defined in the Atomic Energy Act of 1954, § 11e.(2). (*See* also 10 CFR 61.2 for the definition of "waste" promulgated by the Nuclear Regulatory Commission.)

Manifest means the shipping document EPA Form 8700-22 (including, if necessary, EPA Form 8700-22A), originated and signed by the generator or offeror in accordance with the instructions in 40 CFR part 262, Appendix and the applicable requirements of 40 CFR parts 262 through 265, as in effect on July 1, 2006.

<u>Manifest Tracking Number</u> means the alphanumeric identification number (*i.e.*, a unique three-letter suffix preceded by nine numerical digits), which is pre-printed in Item 4 of the Manifest by a registered source.

<u>Massachusetts Hazardous Waste Number</u> means the number assigned by the Department to each hazardous waste which is listed by the Department and which does not have an EPA hazardous waste number.

<u>Massachusetts Identification Number</u> means the number assigned by the Department to each Very Small Quantity Generator, as described in 310 CMR 30.353, or Small Quantity Generator of waste having only Massachusetts hazardous waste numbers, as described in 310 CMR 30.351.

Media means soils, groundwater and sediments but not debris or other wastes such as sludges.

Mercury-containing Device means any electrical product or component (excluding batteries, lamps and thermostats) which contains elemental mercury that is necessary for its operation and is housed within an outer metal, glass or plastic casing. Mercury-containing devices include, but are not limited to, thermocouples, thermometers, manometers, barometers, sphygmomanometers, electrical switches and relays, as well as certain gas flow regulators and water meters.

<u>Mercury-containing Lamp</u> means any bulb or tube portion of an electric lighting device specifically designed to produce radiant energy including, but not limited to, incandescent, fluorescent, high intensity discharge, and neon lamps in which mercury is purposefully introduced by the manufacturer for the operation of the lamp.

Mining Overburden Returned to the Mine Site means any material overlying an economic mineral deposit which is removed to gain access to that deposit and is then used for reclamation of a surface mine.

Miscellaneous Unit means a hazardous waste management unit where hazardous waste is treated, stored, or disposed of and that is not one of the following: a container, tank, surface impoundment, waste pile, land treatment unit, landfill, incinerator, boiler, industrial furnace, or an interim status containment building managed in compliance with 310 CMR 30.099, corrective action management unit, or unit excluded from licensing requirements pursuant to 310 CMR 30.801, research facility, or staging pile.

Mixed Waste means, any waste that contains both hazardous waste and source, special nuclear, or by-product material as defined by the Atomic Energy Act of 1954, as amended, 43 U.S.C. §§ 2011 *et seq*. For purposes of 310 CMR 30.010: Mixed Waste, radioactive waste oil shall not be considered a mixed waste, and shall be exempt from all provisions of 310 CMR 30.000. Mixed wastes that are exempted by the Nuclear Regulatory Commission (NRC) Beneath Regulatory Concern shall be regulated as hazardous wastes subject to all applicable provisions of 310 CMR 30.000.

Municipal or Industrial Wastewater Treatment Facility Permitted under M.G.L. c. 21, § 43 means:

- (a) a publicly owned treatment works having a permit issued pursuant to 314 CMR 2.00: *Permit Procedures*, and 314 CMR 3.00: *Surface Water Discharge Permit Program*, or 314 CMR 5.00: *Ground Water Discharge Permit Program*; or
- (b) a wastewater treatment unit permitted pursuant to 314 CMR 2.00: *Permit Procedures*, and 314 CMR 3.00: *Surface Water Discharge Permit Program*, or 314 CMR 5.00: *Ground Water Discharge Permit Program* which treats, or treats and accumulates incidental to such treatment, influent wastewater which is a hazardous waste; or
- (c) a surface impoundment permitted under 314 CMR 2.00: *Permit Procedures*, and 314 CMR 3.00: *Surface Water Discharge Permit Program*, or 314 CMR 5.00: *Ground Water Discharge Permit Program* which:
  - 1. treats an influent wastewater which is a hazardous waste; or
  - 2. treats and accumulates incidental to such treatment, a wastewater treatment sludge which is a hazardous waste.

If a treatment works receives hazardous waste from one or more off-site sources, all treatment, storage and disposal units, and all accumulation at the site of the treatment works, are regulated under M.G.L. c. 21C and are not part of a "municipal or industrial wastewater treatment facility permitted under M.G.L. c. 21, § 43". However, the discharge is still subject to regulation under M.G.L. c. 21, § 43.

<u>Naturally Occurring and/or Accelerator-produced Radioactive Material (NARM)</u> means radioactive materials that:

- (a) Are naturally occurring and are not source, special nuclear, or by-product materials defined by the Atomic Energy Act of 1954; or
- (b) Are produced by an accelerator.

New Facility means any facility which is not an existing facility.

New Hazardous Waste Incinerator. (See 310 CMR 30.010: New Unit.)

<u>New Installation</u> means a manufacturing plant or other industrial establishment which was not in existence on October 15, 1983 or for which construction had not begun on or before October 15, 1983.

New Pile. (See 310 CMR 30.010: New Unit.)

New Surface Impoundment or New Impoundment. (See 310 CMR 30.010: New Unit.)

New Tank (See 310 CMR 30.010: New Unit).

New Tank System or New Tank Component means a tank system or component that is used for the storage or treatment of hazardous waste and for which installation commenced after:

- (a) July 14, 1986 for those tank systems which are owned or operated by a Small Quantity Generator, are new underground tanks, or are tanks which cannot be entered for inspection (*i.e.*, tanks which are subject to the requirements of the federal Hazardous and Solid Waste Amendments); or
- (b) December 1, 1988 for all other types of tank systems (*e.g.*, tank systems which are not owned or operated by a Small Quantity Generator and are either existing underground tanks or tanks that can be entered for inspection).

(See also 310 CMR 30.010: Existing Tank System regarding when installation will be considered to have commenced.)

New Unit means a treatment, storage or disposal unit (e.g., new impoundment, tank, pile, incinerator) which is not an existing unit.

No Free Liquids (as used in 310 CMR 30.104(3)(i) and (j)) means that solvent-contaminated wipes may not contain free liquids as determined by Method 9095B (Paint Filter Liquids Test), included in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (EPA Publication *SW-846*), which is incorporated by reference, and that there is no free liquid in the container holding the wipes.

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Noisome or Unwholesome Odor means an objectionable odor detectable off the site of a facility.

Non-profit Research Institute means an organization that conducts research as its primary function and files as a nonprofit organization under the tax code pursuant to 26 U.S.C. 501(c)(3).

Non-sudden Accidental Occurrence means an accidental occurrence which takes place over time and which involves continuous or repeated exposure to conditions.

Oil means petroleum in any form including crude oil, fuel oil, petroleum derived synthetic oil and refined oil products, including petroleum distillates such as mineral spirits and petroleum naphtha composed primarily of aliphatic hydrocarbons. It does not mean petrochemicals or animal or vegetable oils.

Open Burning means the combustion of any material without the following characteristics:

- (a) Control of combustion air to maintain adequate temperature for efficient combustion,
- (b) Containment of the combustion-reaction in an enclosed device to provide sufficient residence time and mixing for complete combustion, and
- (c) Control of emission of the gaseous combustion products.

Open Burning includes above or underground smoldering fires. (See also 310 CMR 30.010: Thermal Treatment.)

Operator means the person responsible for the over-all operation of a facility.

Owner means any person who has legal ownership of a facility or any part of a facility, or who has effective control over an activity subject to regulation under 310 CMR 30.000.

<u>Partial Closure</u> means the act or process of deactivating one or more hazardous waste management units at a facility in compliance with applicable closure requirements, while one or more other hazardous waste management units at the facility remain, or are intended to remain, active or in operation.

<u>PCBs</u> or <u>Polychlorinated Biphenyls</u> means any chemical substance that is limited to the biphenyl molecule that has been chlorinated to varying degrees or any combination of substances which contains such substance.

<u>Person</u> means any agency or political subdivision of the federal government or Commonwealth, any state, public or private corporation or authority, individual, trust, firm, joint stock company, partnership, association, or other entity, and any officer, employee or agent of said person, and any group of said persons.

<u>Personnel</u> or <u>Facility Personnel</u> means all persons who work at or for, or oversee the operations of, a hazardous waste facility or a hazardous waste transporter, and whose actions or failure to act may result in non-compliance with the requirements of M.G.L. c. 21C or 310 CMR 30.000.

<u>Pesticide</u> means a substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, and any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant; provided that the term "Pesticide" shall not include any article that is a "new animal drug" within the meaning of § 201(w) of the Federal Food, Drug and Cosmetic Act, or that has been determined by the Secretary of the United States Department of Health, Education and Welfare not to be a new animal drug by a regulation establishing conditions of use for the article, or that is an animal feed within the meaning of § 201(x) of the Federal Food, Drug and Cosmetic Act.

<u>Petrochemical</u> means an individual organic chemical compound for which petroleum or natural gas is the ultimate raw material, except that aliphatic hydrocarbon compounds, which maintain, after use, closed cup flashpoints equal to or greater than 140°F (and which are not otherwise a characteristic or listed hazardous waste) are oils. A mixture of a petrochemical and a petroleum distillate that has a closed cup flashpoint equal to or greater than 140°F (and which is not otherwise a characteristic or listed hazardous waste if discarded) is oil.

[NOTE: Oil refinery conversion processes change the size and/or structure of hydrocarbon molecules in petroleum distillates to produce petrochemicals (*e.g.*, olefinic and aromatic organic compounds) and their derivatives (*e.g.*, monomers used to produce plastics, synthetic fibers and rubbers).]

<u>Pile</u> means any non-containerized aggregation of solid, nonflowing hazardous waste that is being treated or stored.

<u>Planned Public Underground Drinking Water Source</u> means groundwater within land which has been acquired for drinking water purposes by a city, town, district, or other body politic which supplies drinking water to the public, regardless of the sustained yield of the groundwater source, provided that the land is acquired for that purpose before the date that the owner or operator of a proposed facility submits:

- (a) a license application to the Department pursuant to 310 CMR 30.000; or
- (b) a notice of intent pursuant to 990 CMR 4.00: *Notice of Intent*, whichever is submitted first.

<u>Point-source</u> means any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. <u>Point-source</u> does not include return flows from irrigated agriculture.

<u>Polyhalogenated Aromatic Hydrocarbons</u> means hazardous waste listed in 310 CMR 30.131 and having any of the following Hazardous Waste Numbers: F020, F021, F022, F023, F026, or F027.

<u>Post-closure</u> means the period after the time closure has been completed and approved by the Department.

<u>Post-closure Plan</u> means the plan for post-closure care prepared pursuant to 310 CMR 30.590.

<u>Potential Private Underground Drinking Water Source</u> means a groundwater source capable of sustaining a yield of between two and 100 gallons per minute of drinking water and which has less than 10,000 mg./liter total dissolved solids. This definition does not include groundwater beneath an area which is served by a public water system on the date that the owner or operator of a proposed facility submits:

- (a) a license application to the Department pursuant to 310 CMR 30.000; or
- (b) A notice of intent pursuant to 990 CMR 4.00: *Notice of Intent*, whichever is submitted first.

<u>Potential Public Underground Drinking Water Source</u> means a groundwater source capable of sustaining a yield of 100 gallons or more per minute of drinking water and which has less than 10,000 mg./liter total dissolved solids. <u>Potential Public Underground Drinking Water Source</u> does not include an aquifer which has been exempted from being an underground source of drinking water pursuant to 310 CMR 27.00: *Underground Water Source Protection*.

<u>Precious Metals</u> means gold, silver, platinum, palladium, irridium, osmium, rhodium, or ruthenium, or any combination of these.

<u>Private Underground Drinking Water Source</u>. (See 310 CMR 30.010: <u>Potential Private Underground Drinking Water Source</u> and <u>Existing Well</u>.)

<u>Public Underground Drinking Water Source.</u> (See 310 CMR 30.010: <u>Actual Public Underground Drinking Water Source</u>, Planned Underground Drinking Water Source, and Potential Public Underground Drinking Water Source.)

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<u>Public Water System</u> means a system for the provision to the public of piped water for human consumption as defined in 310 CMR 22.02: *Definitions*.

<u>Publicly Owned Treatment Works</u> or <u>POTW</u> means any device or system used in the treatment (including recycling and reclamation) of municipal sewage or industrial wastes of a liquid nature which is owned by a public entity. A POTW includes any sewers, pipes, or other conveyances only if they convey wastewater to a POTW providing treatment.

<u>RCRA</u> means the federal Solid Waste Disposal Act as revised by the Resource Conservation and Recovery Act of 1976, 42 U.S.C. §§ 6901 *et. seq.* 

<u>Reactive Acutely Hazardous Unwanted Material</u> means an unwanted material that is one of the acutely hazardous commercial chemical products listed in 310 CMR 30.136 for reactivity.

<u>Recyclable Material</u> means any material other than an inherently waste-like material that is used, reused or reclaimed.

- (a) Used or reused material means any material that is either:
  - 1. employed as an ingredient (including use as an intermediate) in an industrial process to make a product (for example, distillation bottoms from one process used as feedstock in another process). However, a material will not satisfy this condition if distinct components of the material are recovered as separate end products (as when metals are recovered from metal-containing secondary materials); or
  - 2. employed in a particular function or application as an effective substitute for a commercial product (for example, spent pickle liquor used as phosphorous precipitant and sludge conditioner in wastewater treatment).
- (b) Reclaimed material means any material that is processed to recover a usable product or that is regenerated. Examples are recovery of lead values from spent batteries and regeneration of spent solvents.

Refuse means all solid or liquid waste materials, including garbage and rubbish.

<u>Regional Administrator</u> means the Regional Administrator for the EPA Region in which the facility is located, or his or her designee.

Regulated Recyclable Material means any recyclable material which:

- (a) has a characteristic described in 310 CMR 30.120 through 310 CMR 30.125;
- (b) is listed or otherwise described in 310 CMR 30.131 through 310 CMR 30.136; or
- (c) has been determined by the Department to be a hazardous waste pursuant to 310 CMR 30.144.

<u>Release</u> means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing into the environment, but excludes:

- (a) emissions from the exhaust of an engine;
- (b) release of source, byproduct, or special nuclear material from a nuclear incident, as those terms are defined in 42 U.S.C. § 2014, if such a release is subject to requirements with respect to financial protection established by the Nuclear Regulatory Commission under 42 U.S.C. § 2210;
- (c) the normal application of fertilizer;
- (d) the application of pesticides in a manner consistent with their labeling; and
- (e) the application of residuals in accordance with 310 CMR 32.00: *Land Application of Sludge and Septage*.

Representative Sample means a sample of a universe or whole (*e.g.*, waste pile, lagoon, ground water) which can be expected to exhibit the average properties of the universe or whole.

Research Facility means a site or works at which research studies are conducted or where hazardous waste is otherwise subjected to an innovative and experimental treatment, recycling, or disposal technology or other process for which permit or license standards have not been promulgated under 310 CMR 30.000. Without limiting the generality of the foregoing, such facility may consist of several operating units, and shall include all land, structures, and other appurtenances and improvements which are directly related to continuous research, development, and demonstration activity. 310 CMR 30.010: Research Facility does not include, and research facility is not, a site or works licensed or otherwise authorized pursuant to 310 CMR 30.099, 30.104(3)(b), 30.104(3)(c), 30.200, 30.801, 30.862 or 30.863 or any provision of 310 CMR 30.000 other than 310 CMR 30.864.

Research Study means the continuous research, development and demonstration activity conducted by a research facility, in which a hazardous waste is subjected to an innovative and experimental treatment, recycling or disposal technology or other process for which permit or license standards have not been promulgated under 310 CMR 30.000, and for the primary purpose of determining:

- (a) whether the waste is amenable to such process;
- (b) what pretreatment, if any, is required;
- (c) the optimal process conditions needed to achieve the desired treatment, recycling, disposal or other process result;
- (d) the efficiency of such process for a specific waste or wastes;
- (e) the characteristics and volumes of residuals from a particular process; and/or
- (f) cost effectiveness.

For the purpose of implementing 310 CMR 30.864, 310 CMR 010: Research Study also includes liner compatibility, corrosion, and other material compatibility studies and toxicological and health effects studies. Research Study does not include, and Research Study is not, an activity conducted pursuant to 310 CMR 30.099, 30.104(3)(b), 30.104(3)(c), 30.200, 30.801, 30.862, or 30.863, or a means to store, treat or dispose of hazardous waste or to employ the technology otherwise at the research facility site other than for the purpose of conducting research studies.

Response Action means any action such as assessment, containment, removal, disposal, treatment or storage undertaken as part of a corrective action performed pursuant to M.G.L. c. 21E, and 310 CMR 40.0000: *Massachusetts Contingency Plan*, Federal Superfund (CERCLA), RCRA Corrective Action or an analogous cleanup authority within another state.

<u>Run-off</u> means any rainwater, leachate, or other liquid that drains over land from any part of a facility.

<u>Run-on</u> means any rainwater, leachate, or other liquid that drains over land to any part of a facility.

<u>Saturated Zone</u> or <u>Zone of Saturation</u> means that part of the earth's crust in which all voids are filled with water.

<u>Scrap Metal</u> means metal particles, which would be hazardous waste if tested without additional particle size reduction including, but not limited to, finely shredded metal trimmings. Scrap metal does not include the following: metal containing process residues generated from smelting, refining, and other operations (*e.g.*, drosses, slags and sludges), liquid wastes containing metals (*e.g.*, spent acids, spent caustics, or other liquid wastes with metals in solution), liquid metal wastes (*e.g.*, liquid mercury), metal containing wastes with a significant liquid component, such as spent batteries, metal powders and intact used electronic components. (*See* also 310 CMR 30.010: Bulk Scrap Metal Item.)

<u>Shipping Paper</u> means an invoice, bill of lading, or other shipping document serving a similar purpose; other than a hazardous waste manifest used to document the conveyance of materials between different locations.

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<u>Single Application Limiting Constituent</u> means the compound, element or waste fraction in a hazardous waste which sets the maximum amount of hazardous waste which can be loaded onto soil per application.

Site or On-site means the same or geographically contiguous property in single ownership which may be divided by a public or private right-of-way, provided the entrance and exit between the properties is at a cross-roads intersection, and access is by crossing as opposed to going along the right-of-way. Non-contiguous properties owned by the same person but connected by a right-of-way which that person controls, and to which the public does not have access, are considered on-site property.

<u>Sludge</u> means any solid, semi-solid, or liquid waste generated from a municipal, commercial, or industrial waste water treatment plant, water supply treatment plant, or air pollution control facility exclusive of the treated effluent from a wastewater treatment plant.

Small Quantity Generator or Large Quantity Generator of Class A Regulated Recyclable Material means a person who generates 100 kilograms or more of RRM in a calendar month and/or any amount of acutely hazardous RRM, and/or accumulates 1000 kilograms or more of RRM at any one time.

<u>Small Quantity Handler of Universal Waste</u> means a universal waste handler who accumulates less than 5,000 kilograms total of universal waste at any time.

<u>Soil Capacity Limiting Constituent</u> means the compound, element or waste fraction in a hazardous waste which sets the total amount of hazardous waste which can be loaded onto soil.

Solid Waste Management Unit (SWMU) means any discernible unit at which solid wastes have been placed at any time, regardless of whether the unit was intended for the management of solid or hazardous waste. Such unit includes any area at a facility at which solid wastes have been routinely and systematically released.

### Solvent-contaminated Wipe means:

- (1) A wipe that, after use or after cleaning up a spill, either:
  - (a) Contains one or more of the F001 through F005 solvents listed in 310 CMR 30.131 or the corresponding P- or U-listed solvents found in 310 CMR 30.133 and 310 CMR 30.136;
  - (b) Exhibits a hazardous characteristic found in 310 CMR 30.120 through 30.125 when that characteristic results from a solvent listed in 310 CMR 30.131; and/or
  - (c) Exhibits only the hazardous waste characteristic of ignitability found in 310 CMR 30.122 due to the presence of one or more solvents that are not listed in 310 CMR 30.131.
- (2) Solvent-contaminated wipes that contain listed hazardous waste other than solvents, or exhibit the characteristic of toxicity, corrosivity, or reactivity due to contaminants other than solvents, are not eligible for the exclusions at 310 CMR 30.104(3)(i) and (j).

<u>Space Heater</u> means a heating device that is used for direct heating of the area in, and adjacent to, the area in which the device is located.

# Speculative Accumulation means:

- (a) accumulation or storage of material before that material is recycled; or
- (b) accumulation or storage of material in the hope or expectation, but without there being a written record indicating a commitment that the material will be recycled. Speculative accumulation shall be deemed not to be occurring if the person accumulating or storing the material persuades the Department that:
  - 1. the material can feasibly be recycled; and

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- 2. during the calendar year (commencing on January 1<sup>st</sup>), the amount of material that is recycled, and/or that is transferred to a different site for recycling, equals at least 75%, by weight or volume, of the sum of:
  - a. the amount being accumulated on January 1st of the calendar year;
  - b. the amount generated on-site during the calendar year; and
  - c. the amount received from off-site during the calendar year.

To determine whether the foregoing percentage requirement has been met with respect to any particular material, the calculations shall include only material of the same type (e.g., slags from a single smelting process) that is combusted as a fuel, used, reused, or recycled in the same way (i.e., that is utilized in the same way or that is obtained from the same reuse or recycling process). The calculations shall not include hazardous waste that, pursuant to 310 CMR 30.140(1)(f), is not subject to regulation as hazardous waste.

<u>Spent Material</u> means any material that has been used and that as a result of contamination, depletion, or other factors (*e.g.*, extreme temperature) can no longer serve the purpose for which it was produced without processing.

<u>Spill</u> means the accidental spilling, leaking, pumping, emitting, discharging, emptying, or dumping of hazardous wastes or materials which become hazardous wastes when spilled into or on any land or water.

<u>Storage</u> means the containment of hazardous waste for a temporary period in a manner which does not constitute disposal, at the end of which period the hazardous waste will be used, treated, disposed of, transported or stored elsewhere.

<u>Sudden Accidental Occurrence</u> means an accidental occurrence which is not continuous or repeated in nature.

<u>Sump</u> means any pit or reservoir that meets the definition of 310 CMR 30.010: <u>Tank</u> and those troughs/trenches connected to it that serve to collect hazardous waste for transport to hazardous waste storage, treatment, or disposal facilities.

<u>Surface Impoundment</u> or <u>Impoundment</u> means a facility or part of a facility which is a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials), which is designed to hold an aggregation of liquid hazardous waste or waste containing free liquid, and which is not an injection well. Examples of surface impoundments are: holding, storage, settling, and aeration pits, ponds, and lagoons.

<u>Tank</u> means a stationary device used to store or to contain hazardous waste which is constructed primarily of non-earthen materials (*e.g.*, wood, concrete, steel, plastic) which provide structural support.

<u>Tank System</u> means a hazardous waste storage or treatment tank and its associated ancillary equipment and containment system.

<u>Teaching Hospital</u> means a hospital that trains students to become physicians, nurses or other health or laboratory personnel.

<u>Thermal Treatment</u> means the treatment of hazardous waste in a device which uses elevated temperatures as the primary means to change the chemical, physical, or biological character or composition of the hazardous waste. Examples of thermal treatment processes are incineration, molten salt, pyrolysis, calcination, wet air oxidation, and microwave discharge. (*See* also 310 CMR 30.010: <u>Incinerator</u> and <u>Open Burning</u>.)

<u>Thermostat</u> means a temperature control device that contains metallic mercury in an ampoule attached to a bimetal sensing element.

<u>Threat of Release</u> means a substantial likelihood of a release which requires action to prevent or mitigate damage to the environment which may result from such release. Circumstances which represent a threat of release include, but are not limited to, sites or vessels containing or conducting an amount of hazardous waste in excess of the reportable quantity for that hazardous waste where no release has occurred but where:

- (a) corrosion, damage, malfunction or other conditions are visible, known to exist or should be known to exist; and
- (b) where these conditions are likely to result in a release.

<u>Trained Professional</u> means a person who has completed the applicable training requirements of 310 CMR 30.341(1)(a) for large quantity generators, or is knowledgeable about normal operations and emergencies in accordance with 310 CMR 30.351(9)(g) for small quantity generators or is knowledgeable about normal operations and emergencies, based on training equivalent to that specified in 310 CMR 30.351(9)(g), for Very Small Quantity Generators. A trained professional may be an employee of the eligible academic entity or may be a contractor or vendor who meets the requisite training requirements.

<u>Transfer Station</u> means an intermediate point in the transport of hazardous wastes where such wastes are brought, stored and transferred to vehicles for movement to other intermediate points or to the point of ultimate storage, treatment, or disposal.

<u>Transport</u> means the movement, by vessel or carrier, of hazardous wastes from the point of generation to any intermediate point(s) or to the point(s) of ultimate storage, use, treatment, recovery or disposal.

<u>Transportation Related Area</u> means a parking area or other place where shipments of hazardous waste are held by a transporter during the normal course of transportation. A transportation related area shall not include a hazardous waste transfer station, school or hospital parking lot, or residentially zoned location.

<u>Treatability Study</u> means a study in which a hazardous waste is subjected to a treatment process to determine

- (a) whether the waste is amenable to the treatment process;
- (b) what pretreatment, if any, is required;
- (c) the optimal process conditions needed to achieve the desired treatment;
- (d) the efficiency of a treatment process for a specific waste or wastes; or
- (e) the characteristics and volumes of residuals from a particular treatment process. For the purpose of implementing 310 CMR 30.104(3)(b) and 30.104(3)(c) exemptions, 310 CMR 30.010: Treatability Study also includes liner compatibility, corrosion, and other material compatibility studies and toxicological and health effects studies. Treatability Study shall not include, and a Treatability Study is not, a means to commercially treat or dispose of hazardous waste.

<u>Treatment</u> means any method, technique or process, including neutralization, incineration, stabilization or solidification, designed to change the physical, chemical or biological character or composition of any hazardous waste so as to neutralize such waste or so as to render such waste less hazardous, nonhazardous, safer to transport, amenable to storage, or reduced in volume, except such method or technique as may be included as an integral part of a manufacturing process at the point of generation.

<u>Treatment Which Is an Integral Part of the Manufacturing Process</u> means any treatment method or technique which is at the site of generation of the waste, is not primarily for the purpose of recycling hazardous waste, and is:

(a) Directly connected via pipes or the equivalent from an industrial production process [*i.e.*, a process which produces a product, produces an intermediate, produces a by-product, renders a service (*e.g.*, dry-cleaning), or produces a material which is used back in the production process]; and

(b) Totally enclosed so that it is designed, constructed, and operated to prevent spills, leaks, or emissions of hazardous materials to the environment. A treatment unit may be deemed "totally enclosed" if it is completely contained on all sides (*i.e.*, an open-topped tank or treatment vessel shall not be deemed totally enclosed). If a treatment unit is vented, it may be deemed "totally enclosed" only if such vent(s) is/are designed to prevent overflow and emissions of gases, vapors, or aerosols where such events might occur through normal operation, equipment failure, or process upsets. This shall be accomplished through the use of suitable traps, recycle lines, sorption units, or the equivalent. If the effluent from the treatment unit discharges to surface water, ground water, or a sewer, the treatment unit may be deemed "totally enclosed" only if all discharges are in compliance with all applicable Federal, State, and local laws, regulations, and permits. If one unit operation in a series of unit operations is not "totally enclosed" or connected by pipe to the unit immediately upstream from that unit, then only unit operations upstream from that unit may be deemed "treatment which is an integral part of the manufacturing process".

<u>Treatment Zone</u> means a soil area of the unsaturated zone of a land treatment unit within which hazardous constituents are degraded, transformed, or immobilized.

<u>Underground Drinking Water Source</u> means any aquifer supplying drinking water for human consumption, an aquifer in which ground water contains less than ten thousand parts per million total dissolved solids, or an aquifer designated as such by the Department or a municipality.

<u>Underground Injection</u> means the subsurface emplacement of fluids through a bored, drilled or driven well; or through a dug well, where the depth of the dug well is greater than the largest surface dimension. (*See* also 310 CMR 30.010: <u>Injection Well</u>.)

<u>Underground Tank</u> means a device meeting the definition of 310 CMR 30.010: <u>Tank</u> which is resting on the adjacent surrounding surface or which has any portion of its total height below the adjacent surrounding surface.

<u>United States</u> means the 50 States, the District of Columbia, the Commonwealth of Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.

<u>Universal Waste</u> means any of the following hazardous wastes, as further described in 310 CMR 30.1020, that are managed under the universal waste requirements of 310 CMR 30.1000:

- (a) Batteries;
- (b) Pesticides;
- (c) Thermostats;
- (d) Mercury-containing devices; and
- (e) Mercury-containing lamps.

[NOTE: Not all batteries, pesticides and lamps are hazardous waste, and therefore, they do not all qualify as universal wastes; such wastes may instead be managed as nonhazardous solid wastes.]

## Universal Waste Handler:

- (a) Means:
  - 1. A generator of universal waste; or
  - 2. The owner or operator of a facility that receives universal waste from other universal waste handlers, accumulates universal waste, and sends universal waste to another universal waste handler, to a destination facility, or to a foreign destination.
- (b) Does not mean:
  - 1. A person who treats (except under the provisions of 310 CMR 30.1034(1), (3), (4) or (5), or 310 CMR 30.1044(1), (3), (4) or (5)), disposes of, or recycles universal waste; or
  - 2. A person engaged in the off-site transportation of universal waste by air, rail, highway, or water, including a universal waste transfer facility.

30.010: continued

<u>Universal Waste Transfer Facility</u> means any transportation-related facility, including loading docks, parking areas, storage areas and other similar areas where shipments of universal waste batteries are held during the normal course of transportation for ten days or less.

<u>Universal Waste Transporter</u> means a person engaged in the off-site transportation of universal waste by air, rail, highway, or water.

<u>Unsaturated Zone</u> or <u>Zone of Aeration</u> means the zone between the land surface and the water table.

<u>Unused Waste Oil</u> means oil that is superfluous or abandoned fuel, storage tank bottoms, cleanout sludge, sludge from the separation of unused oil from a nonhazardous waste, contaminated oil resulting from the clean-up of a release of oil, and any other waste oil that is not used waste oil.

<u>Unwanted Material</u> means any chemical, mixtures of chemicals, products of experiments or other material from a laboratory that is no longer needed, wanted or usable in the laboratory and that is destined for hazardous waste determination by a trained professional. Unwanted materials include reactive acutely hazardous unwanted materials and materials that may eventually be determined not to be a waste or a hazardous waste, pursuant to 310 CMR 30.010 and 310 CMR 30.302. If an eligible academic entity elects to use another equally effective term in *lieu* of "unwanted material," as allowed by 310 CMR 30.354(6)(a)1.a., the equally effective term has the same meaning and is subject to the same requirements as "unwanted material" under 310 CMR 30.354.

<u>Uppermost Aquifer</u> means the aquifer nearest the natural ground surface and any lower aquifer that is hydraulically interconnected with this aquifer.

<u>Use Constituting Disposal</u> means the application or placement on the land of a recyclable material either without mixing with any other substance(s), or after mixing or combining with any other substances.

<u>Used Oil Fuel</u> means a regulated recyclable material:

- (a) that is recycled by being burned for energy recovery; and
- (b) that is:
  - 1. waste oil; or
  - 2. any fuel, other than hazardous waste fuel, produced from waste oil by processing, blending, or other treatment; and
- (c) that is managed in compliance with 310 CMR 30.200.

<u>Used Oil Fuel Fired Space Heater</u> means a space heater that burns used oil fuel for energy recovery.

<u>Used Waste Oil</u> means used and/or reprocessed, but not subsequently re-refined, oil that has served its original intended purpose. Such oil includes, but is not limited to, fuel oil, engine oil, gear oil, cutting oil, petroleum distillates such as mineral spirits and petroleum naphtha composed primarily of aliphatic hydrocarbons, transmission fluid, and dielectric fluid. It does not mean petrochemicals or animal or vegetable oils.

<u>USPS</u> means the United States Postal Service.

<u>Utility Boiler</u> means a boiler that is used to produce electric power, steam, or heated or cooled gases or fluids for sale.

<u>Vehicle Identification Device</u> means the document which identifies a specific vehicle used to transport hazardous waste, and which is issued by the Department pursuant to M.G.L. c. 21C, § 7.

#### 30.010: continued

<u>Very Small Quantity Generator of Class A Regulated Recyclable Material (RRM)</u> means a person who generates less than 100 kilograms of RRM in a calendar month, no acutely hazardous RRM, and accumulates less than 1000 kilograms of RRM at any one time.

<u>Vessel</u> means every type of watercraft used or capable of being used as a means of transportation on the water.

<u>Washout</u> means the movement of hazardous waste from the active portion of a facility as a result of flooding.

#### Waste:

- (a) Waste means any discarded material. A waste may be a solid, liquid, semi-solid, or contained gaseous material, or any refuse or sludge, and may result from industrial, commercial, mining, or agricultural operations, or from municipal or other governmental activities, or from the activities of other persons.
- (b) Discarded material means any material that is:
  - 1. abandoned by being disposed of, burned, or incinerated;
  - 2. accumulated, stored, or treated before or in *lieu* of being disposed of, burned, or incinerated;
  - 3. inherently waste-like material;
  - 4. recycled in a manner that is not in compliance with 310 CMR 30.000.
- (c) Inherently waste-like material means material that is:
  - 1. hazardous waste numbered F020;
  - 2. hazardous waste numbered F021 (except when used as an ingredient to make a product at the site of generation);
  - 3. hazardous waste numbered F022;
  - 4. hazardous waste numbered F023:
  - 5. hazardous waste numbered F026;
  - 6. hazardous waste numbered F028; and
  - 7. designated as such by the Department using the following criteria:
    - a. the materials are ordinarily disposed of, burned, or incinerated; or
    - b. the materials contain one or more toxic constituents listed in 310 CMR 30.160 that are not ordinarily in raw materials or products for which the materials substitute (or are found in raw materials or products in smaller concentrations) and are not used or reused during the recycling process; and
    - c. the material may pose a substantial hazard to public health, safety, or welfare, or the environment when recycled.

<u>Waste Oil</u> means used or unused waste oil (or any mixture thereof) that is not otherwise hazardous pursuant to 310 CMR 30.120 through 30.136, except that used waste oil with a flash point greater than or equal to 100°F and less than 140°F (solely through use) remains subject to regulation as used waste oil.

<u>Working Container</u> means a small container (*i.e.*, two gallons or less) that is in use at a laboratory bench, hood, or other work station, to collect unwanted material from a laboratory experiment or procedure.

Waste Pile. (See 310 CMR 30.010: Pile.)

#### Wastewater Treatment Unit means a device which:

- (a) Is part of a wastewater treatment facility which is subject to regulation pursuant to § 307(b) (pretreatment provisions) or § 402 (NPDES program or equivalent state program) of the Federal Clean Waters Act; and
- (b) Either:
  - 1. treats or recycles an influent wastewater which is a hazardous waste; or
  - 2. treats or recycles a wastewater treatment sludge which is a hazardous waste; or
  - 3. is used for the accumulation or storage of a wastewater treatment sludge which is a hazardous waste, prior to the reintroduction of such sludge into the treatment process; and

#### 30.010: continued

(c) meets the definition of a tank or tank system.

310 CMR 30.010: <u>Wastewater Treatment Unit</u> does not include a unit used solely for the accumulation or storage of a wastewater treatment sludge prior to disposal on-site or prior to transportation to an off-site facility. Each such unit is subject to the requirements of 310 CMR 30.340 or 310 CMR 30.690, as the case may be.

<u>Water (Bulk Shipment)</u> or <u>Bulk Shipment Water</u> means the bulk transportation of hazardous waste which is loaded or carried onboard a vessel without containers or labels.

<u>Watershed</u> means an area which is drained by or drains into a hydrologic feature such as a brook, creek, swamp, stream, river, spring, lake, pond, great pond, estuary, or ocean.

<u>Well</u> means a bored, drilled, or driven-shaft, or a dug-hole, whose depth is greater than its largest surface dimension.

Well Injection. (See 310 CMR 30.010: Underground Injection.)

Wetlands means any land or water area subject to M.G.L. c. 131, § 40, and as may be further defined in the regulations promulgated pursuant thereto, 310 CMR 10.00: Wetlands Protection.

White Oil means a petroleum based oil which contains no aromatic hydrocarbons and is transparent, colorless, odorless, and tasteless when cold. Synonyms for white oil include liquid paraffin, liquid petrolatum, USP mineral oil, white mineral oil, and vaseline oil.

<u>Wipe</u> means a woven or nonwoven shop towel, rag, pad, or swab made of wood pulp, fabric, cotton, polyester blends, or other material.

<u>Working Container</u> means a small container (*i.e.*, two gallons or less) that is in use at a laboratory bench, hood, or other work station, to collect unwanted material from a laboratory experiment or procedure.

Zone 2 means the hydrogeologically defined area of contribution to a public water supply wellhead.

## 30.011: References to Code of Federal Regulations

- (1) References to federal regulations within 310 CMR 30.000 shall refer to those regulations in effect as follows:
  - (a) Any reference to Title 40 of the Code of Federal Regulations (40 CFR) refers to those regulations in effect on July 1, 2008, unless otherwise specified.
  - (b) Any reference to Title 49 of the Code of Federal Regulations (49 CFR) refers to those regulations in effect on October 1, 2007, unless otherwise specified.

# 30.012: Publications Incorporated by Reference

- (1) When used in 310 CMR 30.000, the following publications are incorporated by reference:
  (a) "ASTM Standard Test Methods for Flash Point of Liquids by Setaflash Closed Tester,"
  ASTM Standard D-3278-78, available from American Society for Testing and Materials, 100
  Barr Harbor Drive, West Conshohocken, PA 19428-2959.
  - (b) "ASTM Standard Test Methods for Flash Point by Pensky-Martens Closed Tester," ASTM Standard D-93-79 or D-93-80. D-93-80 is available from American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.
  - (c) "ASTM Standard Method for Analysis of Reformed Gas by Gas Chromatography," ASTM Standard D 1946-82, available from American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.
  - (d) "ASTM Standard Test Method for Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High-Precision Method)," ASTM Standard D 2382-83, available from American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.

#### 30.012: continued

- (e) "ASTM Standard Practices for General Techniques of Ultraviolet-Visible Quantitative Analysis," ASTM Standard E 169-87, available from American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.
- (f) "ASTM Standard Practices for General Techniques of Infrared Quantitative Analysis," ASTM Standard E 168-88, available from American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.
- (g) "ASTM Standard Practice for Packed Column Gas Chromatography," ASTM Standard E 260-85, available from American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.
- (h) "ASTM Standard Test Method for Aromatics in Light Naphthas and Aviation Gasolines by Gas Chromatography," ASTM Standard D 2267-88, available from American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.
- (i) "APTI Course 415: Control of Gaseous Emissions," EPA Publication *EPA-450/2-81-005*, December 1981, available from National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.
- (j) "Flammable and Combustible Liquids Code" (1977 or 1981), available from the National Fire Protection Association, 470 Atlantic Avenue, Boston, MA 02210.
- (k) "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication *SW*-846 [Third Edition (November, 1986), as amended by Updates I (July 1992), II (September 1994), IIA (August 1993), IIB (January 1995), III (December 1996), IIIA (April 1998)] and IIIB (November 2004)]. The Third Edition of *SW*-846 and associated updates are available for purchase from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161; or for purchase from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402, (202) 512-1800. For identification of the appropriate version of applicable methods, *see* 40 CFR 260.11(3), (3)(i) through (xxvii), inclusive, which is hereby incorporated by reference.
- (l) "ASTM Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteriscope", ASTM Standard D 2879-86, available from American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.
- (2) The references listed in 310 CMR 30.012(1) are also available for inspection at the Office of the Federal Register, 800 North Capitol Street, NW., Suite 700, Washington, DC. These incorporations by reference were approved by the Office of the Secretary of the Commonwealth of Massachusetts. These materials are incorporated as they exist on the date of approval and a notice of any change in these materials will be published in the *Massachusetts Register*.

# 30.020: Imminent Threats

- (1) If, in making a determination which may be the subject of an adjudicatory hearing under M.G.L. c. 30A, the Department finds that an imminent threat to the public health, welfare, safety, or to the environment could result pending the conclusion of the adjudicatory hearing requested thereon, the Department may, pursuant to M.G.L. c. 21C, § 11, order that the determination become provisionally effective and enforceable immediately upon issuance, and shall remain so notwithstanding and until the conclusion of any adjudicatory hearing procedures.
- (2) Any person aggrieved by an imminent threat finding made pursuant to 310 CMR 30.020(1) may, by the close of the next business day after the receipt of the determination, request an adjudicatory hearing for the sole purpose of adjudicating whether the determination should become provisionally effective and enforceable immediately. This adjudicatory hearing shall not be for the purpose of adjudicating the merits of the determination. If a request for hearing is not made within this deadline, the Department's finding shall be deemed assented to. Such request for hearing may be made orally, in writing, or by telephone, and the Department shall proceed to schedule such hearing, as soon as is reasonably possible, for the following purposes:
  - (a) To allow the person requesting the hearing to show cause why such order should not take effect immediately;
  - (b) To allow the person requesting the hearing to show cause why such alleged violation or violations do not constitute an imminent danger to the public health, safety, or welfare or to the environment.

#### 30.020: continued

(3) If the Department finds there is not an imminent threat, or if the Department's finding that there is an imminent threat is rendered unenforceable by order of any court of competent jurisdiction, the remainder of the Department's determination, of which the imminent threat finding was a part, shall remain in full force and effect unless the Department or the court orders otherwise.

# 30.030: Presumption of Irreparable Harm

Any violation of M.G.L. c. 21C, of 310 CMR 30.000, or of any order, license, or approval issued thereunder, shall be presumed to constitute irreparable harm to the public health, safety, and welfare, and to the environment. Such presumption may be rebutted by the introduction of competent evidence.

# 30.040: Recording Notice of License and of Past Disposal

- (1) No storage, treatment, use, or disposal for which a license is required pursuant to 310 CMR 30.000, and no construction, maintenance, or operation of a facility for which such license is required, shall proceed until the owner of the land affected thereby has recorded notice of the issuance of such license in the appropriate Registry of Deeds or, if the land in question is registered land, in the registry section of the land court for the district wherein the land lies. The landowner shall submit to the Department a certified copy of each notice described in 310 CMR 30.040(1), including the date and book and page numbers of recording of such notice, within 30 days after the landowner receives the recorded notice from the registry.
- (2) No land on or in which hazardous waste has been disposed, and no interest in such land, shall be conveyed or leased, and no such land shall be devoted to any use other than as a facility for such disposal, until notice of such disposal is recorded in the registry of deeds, or if the land affected thereby be registered land, in the registry section of the land court for the district wherein the land lies.

# 30.060: Notification Procedures

## 30.061: Who Must Notify and Obtain an EPA Identification Number

- (1) Any person who generates hazardous waste, except a generator who is registered as a Very Small Quantity Generator pursuant to 310 CMR 30.353 or as a Small Quantity Generator of waste having only Massachusetts hazardous waste numbers, and any person who transports hazardous waste, or who owns or operates a facility for the treatment, storage, use, or disposal of hazardous waste, shall notify the Department of such activity and obtain an EPA Identification number.
- (2) Any person who generates hazardous waste, or who owns or operates a facility for the use, treatment, storage, or disposal of hazardous waste, shall promptly notify the Department in writing whenever
  - (a) the person who submitted the original or most recent notification form is no longer the same person as the person who is the generator of the hazardous waste covered by said notification form, or the person who is the owner or operator of the facility covered by said notification form. If the facility is a facility having interim status pursuant to RCRA, the provisions of 310 CMR 30.099(8) shall apply. If the facility is licensed pursuant to 310 CMR 30.800, the provisions of 310 CMR 30.828 shall apply; or
  - (b) there is a change in the name or mailing address (the provisions of 310 CMR 30.063(1) shall apply to changes in the address of the site) of, or the contact individual for, the person who submitted the original or most recent notification form.

# 30.062: Form of the Notification

Except as provided in 310 CMR 30.061(2) notification shall be on a form prescribed by the Department and shall include the following information:

#### 30.062: continued

- (1) The name and address of the generator, transporter, user, or facility for which notification is being given.
- (2) The address of the site for which notification is being given.
- (3) The EPA identification number of the generator, transporter, user, or facility if one has been assigned.
- (4) The name and telephone number of the individual who should be contacted regarding information contained in the notification.
- (5) The name of the legal owner of the generator, transporter, user, or facility.
- (6) The type of activity involving hazardous waste or regulated recyclable material for which notification is being given, *i.e.* generation, transportation, treatment, storage, use, or disposal.
- (7) For generators of hazardous waste or regulated recyclable material, information showing whether or not the generator is a Very Small Quantity Generator pursuant to 310 CMR 30.353, a Small Quantity Generator pursuant to 310 CMR 30.351, or a Large Quantity Generator subject to 310 CMR 30.340.
- (8) The name and EPA or Massachusetts hazardous waste number of each hazardous waste or regulated recyclable material handled by the generator, transporter, user, or facility. Transporters who do not generate, use, store, treat, or dispose of hazardous waste, and persons conducting activities regulated pursuant to 310 CMR 30.393(3), are not required to complete this section of the notification form with respect to such activities.
- (9) Certification, in compliance with 310 CMR 30.009.

#### 30.063: Number of Forms

- (1) Any person who generates or uses hazardous waste, or owns or operates facilities, at more than one site or at a site or sites different from what was covered in a previously submitted notification form, shall submit a separate notification form for each such site.
  - (a) Each separate notification form shall cover only one site and shall cover all the hazardous waste activities at that site. An individual generation site, such as a large manufacturing plant, may have one or more sources of hazardous waste but is considered a single or individual generation site if the site or property is contiguous.
  - (b) For each separate notification form, the Department shall assign a separate EPA identification number. Each EPA identification number shall be valid only for the site covered by the notification form.
- (2) A person who transports, but does not generate, use, store, treat, or dispose of, hazardous waste may submit only one form which covers all the transportation activities which that person conducts within the Commonwealth of Massachusetts.

# 30.064: Change of Hazardous Waste Handled

Any person who has provided either to the EPA or to the Department proper notification of hazardous waste activity and has received an EPA identification number may handle additional hazardous wastes, not included in the original notification, only after complying with the following:

- (1) A generator shall notify the Department in writing of the additional hazardous waste to be generated; or
- (2) An owner or operator of a facility may store, treat, or dispose of a hazardous waste which was not previously identified in the facility's Part A application provided:

- (a) the storage, treatment or disposal of the previously unidentified hazardous waste is eligible for interim status authorization and the owner or operator notifies the Department in writing at least 45 days before the treatment, storage or disposal of such hazardous waste commences; or
- (b) the owner or operator obtains from the Department, pursuant to 310 CMR 30.800, a license or license modification which authorizes the storage, treatment or disposal of the previously unidentified hazardous waste before the storage, treatment or disposal of such hazardous waste commences.

# 30.099: Interim Status Facilities

# (1) Qualifying for Interim Status.

- (a) Any person who owns or operates an "existing hazardous waste management facility" or a facility in existence on the effective date of statutory or regulatory amendments under M.G.L. c. 21C that render the facility subject to the requirement to have a license pursuant to 310 CMR 30.800 shall have interim status to the extent the owner or operator has:
  - 1. complied with the requirements of 310 CMR 30.060 pertaining to notification of hazardous waste activity; and
  - 2. complied with the requirements of 310 CMR 30.099(2) governing submission of Part A applications.
- (b) If the EPA has granted interim status prior to September 15, 1989, then such status shall continue until terminated pursuant to 310 CMR 30.099(12) or a determination or order of the Department.
- (c) Failure to qualify for interim status. If the Department has reason to believe upon examination of a part A application that it fails to meet the requirements of 40 CFR § 270.13 as adopted and amended at 310 CMR 30.099(3), it shall notify the owner or operator in writing of the apparent deficiency. Such notice shall specify the grounds for the Department's belief that the application is deficient. The owner or operator shall have 30 days from receipt to respond to such a notification and to explain or cure the alleged deficiency in the part A application. If, after such notification and opportunity for response, the Department determines that the application is deficient it may take appropriate enforcement action.
- (d) 310 CMR 30.099 shall not apply to any facility which has been previously denied a RCRA permit or license or if authority to operate the facility under RCRA or M.G.L. c. 21C has been previously terminated.

# (2) Submittal of Part A Applications.

- (a) Owners and operators of an existing hazardous waste management facility or of a facility in existence on the effective date of statutory or regulatory amendments under M.G.L. c. 21C that render the facility subject to the requirement to have a license pursuant to 310 CMR 30.800 shall submit Part A of their license application no later than:
  - 1. six months after the date of publication of regulations which first require them to comply with the standards set forth in 310 CMR 30.500 through 30.900, or
  - 2. 30 days after the date they first become subject to the standards set forth in 310 CMR 30.500 through 900, whichever first occurs.
- (b) Any person submitting a Part A application shall:
  - 1. provide the Department with the information set forth in 40 CFR 270.13, as adopted at 310 CMR 30.099(3);
  - 2. use the form prescribed by the Department; and
  - 3. complete, sign and submit the application to the Department in compliance with 310 CMR 30.807.
- (3) <u>Content of a Part A Application</u>. 40 CFR 270.13 is hereby incorporated by reference subject to the following additions, modifications, and exceptions:
  - (a) In 40 CFR 270.13(a), "permit," is substituted with "license";
  - (b) In 40 CFR 270.13(j), the phrase "under 40 CFR part 261" is hereby replaced with "in 310 CMR 30.100"; and
  - (c) In 40 CFR 270.13(k)(9), the references to "permits" are hereby modified to reference "permits or licenses".

#### (4) Operation During Interim Status.

- (a) Unless allowed under 310 CMR 30.099(5), during the interim status period the facility shall not:
  - 1. treat, store, or dispose of hazardous waste not specified in the Part A license application;
  - 2. employ processes not specified in Part A of the license application; or
  - 3. exceed the design capacities specified in the Part A license application.
- (b) During interim status, owners or operators shall comply with the interim status standards at 310 CMR 30.099, including the standards of 40 CFR part 265, as adopted and amended at 310 CMR 30.099(6).

# (5) Changes During Interim Status.

- (a) Except as provided in 310 CMR 30.099(5)(b), the owner or operator of an interim status facility may make the following changes at the facility:
  - 1. Treatment, storage, or disposal of newly listed or identified hazardous wastes not previously identified in Part A of these license application (and addition of the units being used to treat, store, or dispose of these hazardous wastes on the effective date of the listing or identification) if the owner or operator submits a revised part A license application prior to such treatment, storage, or disposal;
  - 2. Increases in the design capacity of processes used at the facility if the owner or operator submits a revised Part A license application prior to such a change (along with a justification explaining the need for the change) and the Department approves the changes because:
    - a. There is a lack of available treatment, storage, or disposal capacity at other hazardous waste management facilities, or
    - b. The change is necessary to comply with a Federal, State, or local requirement.
  - 3. Changes in the processes for the treatment, storage, or disposal of hazardous waste or addition of processes if the owner or operator submits a revised Part A license application prior to such change (along with a justification explaining the need for the change) and the Department approves the change because:
    - a. The change is necessary to prevent a threat to public health, safety, welfare or the environment because of an emergency situation, or
    - b. The change is necessary to comply with a Federal, State, or local requirement.
  - 4. Changes in the ownership or operational control of a facility if the new owner or operator submits a revised part A license application no later than 90 days prior to the scheduled change. When a transfer of operational control of a facility occurs, the old owner or operator shall comply with the requirements of 310 CMR 30.099(6)(c) (Financial Requirements for interim status facilities), until the new owner or operator has demonstrated to the Department that he is complying with the requirements of that subpart. The new owner or operator must demonstrate compliance with 310 CMR 30.099(6)(c) within six months of the date of the change in ownership or operational control of the facility. Upon demonstration to the Department by the new owner or operator of compliance with subpart H, the Department shall notify the old owner or operator in writing that he no longer needs to comply with subpart H as of the date of demonstration. All other interim status duties are transferred effective immediately upon the date of the change in ownership or operational control of the facility.
  - 5. Changes made in accordance with an interim status corrective action order issued by EPA under section 3008(h) or other Federal authority, by an authorized State under comparable State authority, or by a court in a judicial action brought by EPA or by an authorized State. Changes pursuant to 310 CMR 30.099(5) are limited to the treatment, storage, or disposal of hazardous waste or constituents of hazardous waste from releases that originate within the boundary of the facility.
  - 6. Addition of newly regulated units for the treatment, storage, or disposal of hazardous waste if the owner or operator submits a revised part A license application on or before the date on which the unit becomes subject to the new requirements.
- (b) Except as specifically allowed pursuant to 310 CMR 30.099(5)(b), changes listed pursuant to 310 CMR 30.099(5)(a) may not be made if they amount to reconstruction of the hazardous waste management facility. Reconstruction occurs when the capital investment in the changes to the facility exceeds 50% of the capital cost of a comparable entirely new hazardous waste management facility. If all other requirements are met, the following changes may be made even if they amount to a reconstruction:

- 1. Changes made solely for the purposes of complying with the requirements of 310 CMR 30.694 for tanks and ancillary equipment.
- 2. If necessary to comply with Federal, State, or local requirements, changes to an existing unit, changes solely involving tanks or containers, or addition of replacement surface impoundments that satisfy the standards of RCRA § 3004(o).
- 3. Changes that are necessary to allow owners or operators to continue handling newly listed or identified hazardous wastes that have been treated, stored, or disposed of at the facility prior to the effective date of the rule establishing the new listing or identification.
- 4. Changes during closure of a facility or of a unit within a facility made in accordance with an approved closure plan.
- 5. Changes necessary to comply with an interim status corrective action order issued by EPA under § 3008(h) or other Federal authority, by corrective action undertaken pursuant to M.G.L. c. 21C or M.G.L. c. 21E, or by a court in a judicial proceeding brought by EPA or an authorized State, provided that such changes are limited to the treatment, storage, or disposal of hazardous waste or constituents of hazardous waste from releases that originate within the boundary of the facility.
- 6. Changes to treat or store, in tanks, containers or containment buildings, hazardous wastes subject to land disposal restrictions imposed by 310 CMR 30.750 or RCRA § 3004, provided that such changes are made solely for the purpose of complying with 310 CMR 30.750 or RCRA § 3004.
- 7. Addition of newly regulated units described in 310 CMR 30.099(5)(a)6.
- 8. Changes necessary to comply with standards under 40 CFR part 63, Subpart EEE—National Emission Standards for Hazardous Air Pollutants From Hazardous Waste Combustors.
- (6) Until a final license decision takes effect pursuant to 310 CMR 30.838, an interim status facility shall at all times comply with each of the following:
  - (a) 310 CMR 30.502 through 310 CMR 30.579 subject to the following modifications:
    - 1. In *lieu* of the specific licensed facility documentation requirements of 310 CMR 30.513(2)(a)5., the owner or operator of an interim status facility shall comply with the applicable Waste Analysis Plan requirements established pursuant to 310 CMR 30.099(6)(f) through (p) and 310 CMR 30.750.
    - 2. In *lieu* of 310 CMR 30.542(2)(g), the following information shall be recorded, as it becomes available, and maintained in the operating record until closure of the facility, or for at least three years after the information is recorded in the operating record of the facility, whichever period is longer: Records and results of waste analysis, waste determinations, and trial tests performed as specified in 310 CMR 30.099(6)(f) through (p), and 310 CMR 30.750.
  - (b) 40 CFR Part 265 Subpart G [Closure and Post-closure] subject to the following provisions:
    - 1. The Department shall approve, modify, or disapprove a proposed closure plan within a reasonable time after its receipt by the Department. If the Department does not approve the plan, the Department shall provide the owner or operator with a detailed written statement of reasons for the Department's not approving the plan. Not later than 30 days after receiving said statement, the owner or operator shall submit a new or modified closure plan to the Department. Within a reasonable time after receiving said new or modified closure plan, the Department shall approve, modify, or disapprove it. If the Department modifies the plan, this modified plan (*i.e.* as modified by the Department) shall be the approved closure plan.
    - 2. Such facility's closure plan shall describe how and when each hazardous waste management unit at the facility shall be closed during the facility's intended operating life, and how the facility as a whole shall be closed at the end of its intended operating life. The plan shall identify how the requirements of 40 CFR Subpart G, as adopted and amended at 310 CMR 30.099(6)(b), shall be complied with. The facility's closure plan need not describe when the facility as a whole shall be closed, except that the facility's closure plan shall describe when the facility as a whole shall be closed if:
      - a. the facility's closure plan has not been approved by the Department, or
      - b. the facility's remaining operating life is less than 20 years, and the facility is using a trust fund to demonstrate financial assurance for closure pursuant to 310 CMR 30.904.

- 3. An owner or operator who does not have an approved closure plan shall submit a closure plan to the Department and an owner or operator who is subject to post-closure requirements and who does not have an approved post-closure plan shall submit a post-closure plan to the Department, as follows:
  - a. at least 180 days prior to the date on which he or she expects to begin closure of the first surface impoundment, waste pile, land treatment unit, or landfill, or final closure of the facility if it involves such a unit, whichever is earlier; or
  - b. at least 45 days prior to the date on which he or she expects to begin final closure of a facility with only tanks, container storage, or incinerator units.
- 4. The date on which the owner or operator "expects to begin . . . closure" shall be no later than 30 days after the date on which any hazardous waste management unit receives the known final volume of hazardous waste.
- 5. An owner or operator with an approved closure plan shall notify the Department in writing:
  - a. at least 60 days prior to the date on which he or she expects to begin closure of a surface impoundment, waste pile, landfill, or land treatment unit, or final closure of a facility involving such a unit; or
  - b. at least 45 days prior to the date on which he or she expects to begin final closure of a facility with only tanks, container storage, or incinerator units.
- 6. The Department shall approve, modify, or disapprove a proposed post-closure plan within a reasonable time after its receipt by the Department. If the Department does not approve the plan, the Department shall provide the owner operator with a detailed written statement of reasons for the Department's not approving the plan. Not later than 30 days after receiving said statement, the owner or operator shall submit a new or modified post-closure plan to the Department. Within a reasonable time after receiving said new or modified post-closure plan, the Department shall approve, modify, or disapprove it. If the Department modifies the plan, this modified plan (*i.e.* as modified by the Department) shall be the approved post-closure plan.
- 7. For the purposes of groundwater monitoring during closure and post closure, the owner or operator of an interim status facility shall comply with all applicable provisions of 310 CMR 30.099(6)(d).
- 8. In *lieu* of 40 CFR 265.111, 265.114, 265.115, and 265.120, the requirements of 310 CMR 30.582: *Closure Performance Standards*, 30.585: *Disposal or Decontamination of Equipment*, 30.587(2) and (3): *Completion and Certification of Closure*, and 30.596(2) and (3): *Completion and Certification of Post-closure Care* shall apply.
- (c) 310 CMR 30.900, provided that:
  - 1. a surety bond guaranteeing performance of closure shall not be acceptable for the purpose of complying with 310 CMR 30.904, and
  - 2. a surety bond guaranteeing performance of post-closure care shall not be acceptable for the purpose of complying with 310 CMR 30.906.
- (d) 40 CFR Part 265, Subpart F: *Groundwater Monitoring*, as in effect on July 1, 2005, excluding 40 CFR §§ 265.90(c) and 265.90(e) unless written approval for a waiver pursuant to said provisions is granted by the Department. The owner or operator or a stand-by surface impoundment which is designed and operated solely for the containment of hazardous waste in the event of an emergency at the facility (*e.g.*, equipment failure or overflows) may apply to the Department, in writing, for a waiver from all or part of the groundwater monitoring requirements of 40 CFR Part 265, Subpart F. Notwithstanding any provision of 310 CMR 30.099(6) or 310 CMR 30.660: *Groundwater Protection*, the Department may require the owner or operator of any facility subject to the requirements of 310 CMR 30.099(6) to comply with, and such owner or operator shall comply with, all or part of 310 CMR 30.660: *Groundwater Protection* if the Department determines that such action is appropriate to protect public health, safety or welfare or the environment;
- (e) 40 CFR Part 265, Subpart I: *Use and Management of Containers*, as in effect on July 1, 2005, provided that the owner or operator shall also comply with 310 CMR 30.682: *Labeling and Marking of Containers*.

- (f) 310 CMR 30.690, provided that the owner or operator shall do the following, in addition to complying with 310 CMR 30.513, whenever a tank system is used to treat chemically or to store a hazardous waste that is substantially different from waste previously stored or treated in that tank system, or whenever a tank system is used to treat chemically a hazardous waste with a substantially different process than any previously used in that tank system:
  - 1. Conduct waste analyses and trial treatment or storage tests (*e.g.* bench-scale or pilot-plant scale tests); or
  - 2. Obtain written, documented information on similar waste under similar operating conditions to show that the proposed treatment or storage will the meet the requirements of 310 CMR 30.695: *General Operating Requirements*.
- (g) 40 CFR Part 265, Subpart K: *Surface Impoundments*, provided that the owner or operator shall remove all hazardous waste from each impoundment in compliance with 40 CFR § 265.228 unless the Department, in writing, directs otherwise;
- (h) 40 CFR Part 265, Subpart L: Waste Piles;
- (i) 40 CFR Part 265, Subpart M: Land Treatment;
- (j) 40 CFR Part 265, Subpart N: *Landfills* however, in *lieu* of compliance with 40 CFR 265.120, as well as 40 CFR 265.312 through 265.316, an owner/operator shall comply with 310 CMR 30.596 as well as 310 CMR 30.628 through 30.632;
- (k) 40 CFR Part 265, Subpart O: Incinerators;
- (1) 40 CFR Part 265, Subpart P: Thermal Treatment;
- (m) 40 CFR Part 265, Subpart Q: Chemical, Physical and Biological Treatment;
- (n) 40 CFR Part 265, Subpart W: Drip Pads;
- (o) 40 CFR Part 265, Subpart AA: Air Emission Standards for Process Vents;
- (p) 40 CFR Part 265, Subpart BB: Air Emission Standards for Equipment Leaks;
- (q) 40 CFR Part 265, Subpart DD: Containment Buildings;
- (r) All provisions of 310 CMR 30.000 regulating mixed waste as hazardous waste;
- (s) 310 CMR 30.602(12): Corrective Action Management Units, 30.602(13): Temporary Units and 30.602(14): Staging Piles;
- (t) 310 CMR 30.750: Land Disposal Restrictions; and
- (u) 40 CFR Part 265, Subpart CC: Air Emission Standards for Tanks, Surface Impoundments, and Containers.
- (7) A facility having interim status pursuant to RCRA at which there is stored waste oil (MA01) generated at that facility shall be considered by the Department to have interim status for such storage of waste oil, and the owner or operator shall at all times comply with 310 CMR 30.510 through 30.579 and 30.900 and all applicable requirements set forth in 40 CFR Part 265 as adopted and amended at 310 CMR 30.099.
- (8) Ownership or operational control of a facility having interim status pursuant to RCRA shall not be transferred from one person to another until at least 90 days after a revised Part A permit application is submitted to the EPA and the Department. If the facility is licensed pursuant to 310 CMR 30.800, the provisions of 310 CMR 30.828 shall apply.
- (9) The owner or operator of a facility having interim status pursuant to RCRA shall notify the Department's hazardous waste program by certified mail of the commencement of a voluntary or involuntary proceeding pursuant to Title 11 (Bankruptcy) of the United States Code in which the owner or operator is named as a debtor within ten days after commencement of the proceeding.
- (10) An owner or operator of a facility having interim status pursuant to RCRA is prohibited from placing any hazardous waste, or any container or tank holding hazardous waste, in any salt dome, salt bed formation, underground mine or cave. In addition, an owner or operator of a facility having interim status pursuant to RCRA is prohibited from injecting hazardous waste into or through any well, as provided in 310 CMR 30.604(1).
- (11) The owner or operator of a facility having interim status pursuant to RCRA is prohibited from storing, treating, disposing of, or otherwise managing any hazardous waste containing any polyhalogenated aromatic hydrocarbons.

- (12) Notwithstanding any provision of 310 CMR 30.099(6) or any other provision of 310 CMR 30.000, a facility having interim status pursuant to RCRA shall cease to be a facility having interim status pursuant to RCRA in accordance with the following provisions:
  - (a) A land disposal facility which, on or any time before September 15, 1989, was a facility having interim status pursuant to RCRA shall not be a facility having interim status pursuant to RCRA on and after September 15, 1989 unless, by no later than November 8, 1985, the owner or operator of such facility had submitted to the Department:
    - 1. a Part B hazardous waste facility license application for the facility, and
    - 2. certification that, as of the date of the certification, the facility was in compliance with all applicable groundwater monitoring and financial responsibility requirements in effect on the date of the certification.
  - (b) A land disposal facility which is in existence on the effective date of statutory or regulatory amendments under M.G.L. c. 21C that render the facility subject to the requirement to have a license pursuant to 310 CMR 30.800, and which is granted interim status, shall not be a facility having interim status pursuant to RCRA on and after the date 12 months after the facility first becomes subject to such license requirement, unless by that date the owner or operator of such facility has submitted to the Department:
    - 1. a Part B hazardous waste facility license application for the facility, and
    - 2. certification that the facility is in compliance with all applicable ground water monitoring and financial responsibility requirements.
  - (c) A land disposal facility that is granted authority to operate in interim status pursuant to 310 CMR 30.099(5)(a)1., 2. or 3. shall not be a unit having interim status pursuant to RCRA on and after the date 12 months after the unit is granted authority to operate, unless by that date the owner or operator of the unit certifies that the unit is in compliance with all applicable ground water monitoring and financial responsibility requirements.
  - (d) A hazardous waste incinerator which, on or any time before November 8, 1989, was a facility having interim status pursuant to RCRA shall not be a facility having interim status pursuant to RCRA on and after November 8, 1989 unless, by no later than November 8, 1986, the owner or operator of such facility had submitted to the Department a Part B hazardous waste facility license application for the facility.
  - (e) A facility other than a landfill or a hazardous waste incinerator which on or any time before November 8, 1992, was a facility having interim status pursuant to RCRA shall not be a facility having interim status pursuant to RCRA on and after November 8, 1992 unless, by no later than November 8, 1988, the owner or operator of such facility had submitted to the Department a Part B hazardous waste facility license application for the facility.
  - (f) The Department may require an owner or operator of an existing hazardous waste management facility or of a facility in existence on the effective date of statutory or regulatory amendments under M.G.L. c. 21C that render the facility subject to the requirement to have a license to submit Part B of their license application. Any owner or operator shall be allowed at least six months from the date of request to submit Part B of the application. Any owner or operator of an existing hazardous waste management facility or of a facility in existence on the effective date of statutory or regulatory amendments under M.G.L. c. 21C that render the facility subject to the requirement to have a license may voluntarily submit Part B of the application at any time. Any owner or operator of such a hazardous waste management facility shall submit either a Part B license application in compliance with 310 CMR 30.800 or a closure plan in compliance with 40 CFR 265, Subpart G as adopted and amended at 310 CMR 30.099(6)(b), prior to the date on which interim status terminates pursuant to 310 CMR 30.099(12)(a) through (c).
  - (g) Failure to furnish a requested Part B application on time, or to furnish in full the information required by the Part B application, is grounds for termination of interim status pursuant to 310 CMR 30.850.

# (13) <u>Corrective Action at Interim Status Disposal Facilities.</u>

(a) For purposes of 310 CMR 30.099(13) only, all terms shall be defined as defined in 310 CMR 30.010, except that the following terms shall be defined as follows:

- 1. <u>Hazardous Material</u> means material, including, but not limited to, any material in whatever form which, because of its quantity, concentration, chemical, corrosive, flammable, reactive, toxic, infectious or radioactive characteristics, either separately or in combination with any substance or substances, constitutes a present or potential threat to human health, safety, welfare, or to the environment, when improperly stored, treated, transported, disposed of, used, or otherwise managed. The term shall not include oil, but shall include waste oil and all those substances that are included under 42 U.S.C. § 9601(14), but it is not limited to those substances. The term shall also include, but is not limited to, material regulated as hazardous waste or recyclable material under 310 CMR 30.000 and 310 CMR 40.0000.
- 2. <u>Interim Status Disposal Facility Implementing Corrective Action</u> means a facility that has not been issued a hazardous waste permit/license pursuant to 310 CMR 30.602(9) or a post closure order pursuant to 310 CMR 30.602(10), at which:
  - a. Hazardous waste was disposed of in a surface impoundment, waste pile, land treatment unit, or landfill, after July 26, 1982; or
  - b. An owner or operator either certified closure of or applied for a closure by removal determination regarding the closure of a surface impoundment, waste pile, land treatment unit, or landfill, after January 26, 1983.
- 3. <u>Licensed Site Professional</u> and <u>LSP</u> each means a hazardous waste site professional, as defined in M.G.L. c. 21A, § 19, holding a valid license issued by the Board of Registration of Hazardous waste Site Professionals pursuant to M.G.L. c. 21A, §§ 19 through 19J.
- 4. OHM means oil and/or hazardous material.
- 5. Oil means insoluble or partially soluble oils of any kind or origin or in any form, including, without limitation, crude or fuel oils, lube oil or sludge, asphalt, insoluble or partially insoluble derivatives of mineral, animal or vegetable oils and white oil. The term shall not include waste oil, and shall not include those substances that are included in 42 U.S.C. § 9601(14).
- (b) The requirements of 310 CMR 30.099(13) shall apply to the owner and/or operator of an Interim Status Disposal Facility Implementing Corrective Action. The owner and/or operator of an Interim Status Disposal Facility Implementing Corrective Action shall investigate and remediate all releases and potential releases of OHM at or from the facility in accordance with the requirements of 310 CMR 30.099(13).
- (c) The owner and/or operator of an Interim Status Disposal Facility Implementing Corrective Action shall be regulated under M.G.L. c. 21E and 310 CMR 40.0000 (the Massachusetts Contingency Plan or MCP) and shall carry out all response actions in accordance with the requirements of those provisions. In order to be considered as adequately regulated pursuant to M.G.L. c. 21C, the owner and/or operator of an Interim Status Disposal Facility also shall comply with the additional requirements specified in 310 CMR 30.099(13).
  - 1. An owner or operator of an Interim Status Disposal Facility Implementing Corrective Action who at the time of the effective date of 310 CMR 30.099(13) already is performing response actions addressing all releases and potential releases of OHM at or from the facility in accordance with M.G.L. c. 21E and 310 CMR 40.0000 shall continue to comply with those provisions, and shall also comply with the additional requirements specified in 310 CMR 30.099(13). 310 CMR 30.099 applies only to owners or operators who already have submitted to the Department an LSP Tier Classification Opinion and Release Notification Form(s), covering all solid waste management units at a facility, in full conformance with all applicable provisions of the MCP.
  - 2. On or before 90 days from the effective date of 310 CMR 30.099(13), an owner or operator of an Interim Status Disposal Facility Implementing Corrective Action who is not covered by 310 CMR 30.099(13)(c)(1), or anyone else notified by the Department to comply with this provision, shall submit to the Department an LSP Tier Classification Opinion and Release Notification Form(s), addressing all releases and potential releases of OHM at or from the facility, from all solid waste management units, in full conformance with all applicable provisions of the MCP. The owner or operator shall perform response actions at the facility in accordance with M.G.L. c. 21E and 310 CMR 40.0000, and also shall comply with the additional requirements specified in 310 CMR 30.099(13).

- (d) The response actions required under 310 CMR 30.099(13) shall, at a minimum, be equivalent to that specified for corrective action in 40 CFR 264.101 as adopted at 310 CMR 30.602. Utilizing the oversight and public participation procedures specified in 310 CMR 30.099(13)(e)1. through 6., the Department will ensure that any such response actions:
  - 1. Protect health, safety, public welfare and the environment for all releases and potential releases of OHM at or from a facility, and
  - 2. Meet all applicable requirements of the MCP, including the Response Action Performance Standards set forth at 310 CMR 40.0191 and the Performance Standards for Response Action Outcomes at 310 CMR 40.1004 and/or the Performance Standards for Remedy Operation Status at 310 CMR 40.0893(2), whichever are applicable.
- (e) Department Oversight and Public Participation.
  - 1. While a response action is being carried out, the Department and the owner or operator of an Interim Status Disposal Facility Implementing Corrective Action shall comply with all required Public Involvement activities in full conformance with the applicable provisions of 310 CMR 40.1400. In addition, at a minimum, prior to submitting a final Phase III report regarding remedy selection under the MCP to the Department in conformance with 310 CMR 40.0850, the owner or operator of an Interim Status Disposal Facility Implementing Corrective Action shall:
    - a. Provide an opportunity for public comment on the Phase III by holding a minimum 30 day comment period, which may include the holding of a public meeting. The owner or operator shall give notice of the opportunity to submit comments, and of the public meeting if any, by causing the notice to be published (at its expense) in a newspaper having a substantial circulation in the affected area and by providing the notice to the Department and to all persons on the facility mailing list maintained pursuant to 310 CMR 40.1400.
    - b. Provide the Department with a copy of all public comments received.
    - c. Summarize and respond to the comments, and provide the Department and all persons who submit comments with a copy of the summary and response, noting which comments were incorporated, and explaining why other comments were not incorporated.
  - 2. If at any time during the carrying out of a response action, for any reason including in response to public comments received pursuant to 40 CMR 40.1400 or 310 CMR 30.099(13), the Department determines that the response action is not being carried out in accordance with the MCP or 310 CMR 30.099(13), the Department may take any appropriate action, including issuing an order pursuant to M.G.L. c. 21E, §§ 9 and 10, and 310 CMR 40.0010. In particular, notwithstanding 310 CMR 40.0550(4)(a) and 40.0560(4)(a), the Department may at any time require the owner or operator of an Interim Status Facility Implementing Corrective Action to obtain prior Departmental approval of one or more of the submittals specified by 310 CMR 40.0550(2) or 40.0560(2), whichever is applicable, or the response actions or submittals required pursuant to 310 CMR 40.0800. The Department may require such prior approval for submittals or response actions as they relate to the entire facility or some portion thereof. 3. The Department shall audit in accordance with the MCP the response actions at all facilities at which corrective actions are undertaken pursuant to 310 CMR 30.099(13). If the Department determines that response action(s) at an Interim Status Disposal Facility Implementing Corrective Action has not been completed so as to meet all of the requirements of the MCP and 310 CMR 30.099(13), then the owner and/or operator of the facility shall perform any additional response actions required by the Department in accordance with the MCP and 310 CMR 30.099(13). The Department will notify the owner or operator in writing if it determines that further response action at a facility is required and shall include the basis for any such determination in any such notification. 4. Upon a tentative determination by the Department that response action(s) undertaken by the owner or operator of an Interim Status Disposal Facility Implementing Corrective Action were performed in compliance with M.G.L. c. 21E, the MCP, 310 CMR 30.099(13) and any other requirements applicable to such response actions, and that all other requirements for the termination of interim status have been met, the Department

shall publish, or cause to be published, a public notice reflecting the Department's tentative determination to terminate the facility's interim status. Any such notice shall:

- a. Be published, at the Department's expense, in a newspaper having a substantial circulation in the affected area;
- b. Be provided to the owner or operator of the facility and to all persons on the facility mailing list maintained pursuant to 310 CMR 40.1400; and
- c. Indicate the basis for the Department's tentative determination and that the Department will accept public comments on the tentative determination for at least 30 days from the date of publication.
- 5. After the public comment period, which may include holding a public meeting, the Department shall make a final determination. The Department will make a final determination to terminate a facility's interim status only if it finds that the facility has completed corrective action in full compliance with M.G.L. c. 21E, the MCP, 310 CMR 30.099(13) and any other requirements applicable to such response action(s), and that all other requirements for the termination of interim status have been met. Notice of the Department's final determination shall be provided to the owner or operator of the Interim Status Disposal Facility Implementing Corrective Action and to all persons who commented on the Department's tentative determination.
- 6. The Department may, when the Department deems it appropriate, make an earlier determination that all or a designated portion of the response actions undertaken by an owner or operator of an Interim Status Disposal Facility Implementing Corrective Action were performed in compliance with M.G.L. c. 21E, the MCP, 310 CMR 30.099(13) and any other requirements applicable to such response actions, even if the Interim Status Disposal Facility Implementing Corrective Action does not yet meet all requirements for the termination of interim status. The process for making any such determinations shall be the same as that set forth in 310 CMR 30.099(13)(e)4. Any such determination, however, shall not terminate interim status for the Interim Status Disposal Facility Implementing Corrective Action.
- (f) Nothing in 310 CMR 30.099(13) shall relieve an owner or operator of an Interim Status Disposal Facility Implementing Corrective Action from any other obligation imposed by law, including but not limited to any closure or post closure obligation of 310 CMR 30.580 and 310 CMR 30.590, respectively, or any financial responsibility requirement imposed under 310 CMR 30.900. With respect to closure and post closure requirements for regulated units, Interim Status Disposal Facilities Implementing Corrective Action will remain regulated under M.G.L. c. 21C, notwithstanding that they will carry out response actions for facility-wide corrective action under M.G.L. c. 21E.
- (g) Nothing in 310 CMR 30.099(13) shall limit the authority of the Department under any statute or other regulation, including but not limited to the authority to issue any order to prevent or abate the release of OHM or potential sources of OHM.
- (h) The owner or operator of an Interim Status Disposal Facility Implementing Corrective Action subject to 310 CMR 30.099(13) is responsible for payment of all Annual Compliance Fees for which it can be assessed pursuant to the provisions of 310 CMR 5.00, M.G.L. c. 21E and the MCP, and is responsible for payment of all applicable fee(s) required to accompany any submissions(s) pursuant to the provisions of 310 CMR 5.00, M.G.L. c. 21E and the MCP.

## 30.100: IDENTIFICATION AND LISTING OF HAZARDOUS WASTES

# 30.101: Purpose and Scope

310 CMR 30.101 through 30.199, cited collectively as 310 CMR 30.100, identify or otherwise describe those wastes which are subject to 310 CMR 30.000, establish provisions for classifying waste as non-hazardous, and prescribe testing methods and procedures.

# 30.102: Methods of Identification of Hazardous Wastes

- (1) The Department uses two methods to identify or otherwise describe which wastes are regulated as hazardous wastes. Based upon the general criteria specified in 310 CMR 30.110 through 30.112, these methods are:
  - (a) Identification of the characteristics of hazardous waste; and/or
  - (b) Listing of specific types or sources of hazardous waste and of acutely hazardous waste.

- (2) Accordingly, unless exempt pursuant to 310 CMR 30.104, a waste is a hazardous waste subject to 310 CMR 30.000 if:
  - (a) The waste is listed in 310 CMR 30.130 through 30.136.
  - (b) The waste, including a mixture of non-hazardous waste and one or more hazardous wastes, exhibits any of the characteristics of hazardous waste identified in 310 CMR 30.120 through 30.125.
  - (c) The waste is a mixture of non-hazardous waste and one or more hazardous wastes listed in 310 CMR 30.130 through 30.136. However, the following mixtures are not hazardous wastes:
    - 1. A mixture of non-hazardous waste and one or more hazardous wastes listed in 310 CMR 30.130 through 30.136 solely because the waste(s) exhibit(s) one or more characteristics of hazardous waste identified in 310 CMR 30.122 (ignitable), 30.123 (corrosive), or 30.124 (reactive) is not a hazardous waste when the resultant mixture no longer exhibits any such characteristic of hazardous waste. Any mixing process to render a waste non-hazardous is treatment of hazardous waste subject to the applicable requirements of 310 CMR 30.500 through 30.900.
    - 2. A mixture of non-hazardous waste and one or more hazardous wastes listed in 310 CMR 30.130 through 30.136 which neither meets the description of a waste listed in 310 CMR 30.130 through 30.136 nor exhibits a characteristic identified in 310 CMR 30.120 through 30.125, provided the generator can persuade the Department that the mixture consists of:
      - a. wastewater, the discharge of which is regulated under either § 402 or § 307(b) of the Clean Water Act or M.G.L. c. 21 § 43 (including wastewater at facilities which have eliminated the discharge of wastewater); and
      - b. one of the wastestreams identified in and managed in compliance with 40 CFR 261.3(a)(2)(iv)(A) through (E), as in effect on July 1, 1999, and which is incorporated by reference in 310 CMR 30.102(2)(c)1.b. with the following additions, modifications and exceptions:
        - (i) References to "§ 261.31" in 40 CFR 261.3(a)(2)(iv)(A) and (B) are hereby replaced with "310 CMR 30.131".
        - (ii) The reference to " $\S$  261.32" in 40 CFR 261.3(a)(2)(iv)(C) is hereby replaced with "310 CMR 30.132".
        - (iii) The reference to "\s 261.33" in 40 CFR 261.3(a)(2)(iv)(D) is hereby replaced with "310 CMR 30.133 or 310 CMR 30.136".
        - (iv) 40 CFR 261.3(a)(2)(iv)(D) is hereby modified to exclude the following phrase: "and rinstate[sic] from empty containers or from containers that are rendered empty by that rinsing;" and to insert an "and" before "discharges from safety showers...".
        - (v) The reference to "Subpart D of this part" is hereby replaced with "310 CMR 30.130 through 30.133".
  - (d) The waste is generated from the treatment, storage, disposal, or use of a hazardous waste, including any sludge, spill residue, ash emission control dust, and leachate.

# 30.103: Hazardous Waste Numbers

- (1) A hazardous waste which is identified by one or more characteristics in 310 CMR 30.120 through 30.125 is assigned every EPA Hazardous Waste Number that is applicable as established pursuant to 310 CMR 30.120 through 30.125. Except as indicated in 310 CMR 30.103(3), each applicable Hazardous Waste Number shall be used in complying with the notification requirements of 310 CMR 30.060 through 30.064 and all applicable recordkeeping and reporting requirements prescribed in 310 CMR 30.300 through 30.900.
- (2) Each hazardous waste listed in 310 CMR 30.130 through 30.136 is assigned a Hazardous Waste Number which precedes the name of the waste. This number is either an EPA Hazardous Waste Number or a Massachusetts Hazardous Waste Number. This number, in addition to any Hazardous Waste Numbers applicable to the waste pursuant to 310 CMR 30.103(1), shall be used in complying with the notification requirements of 310 CMR 30.060 through 30.064 and all applicable recordkeeping and reporting requirements prescribed by 310 CMR 30.300 through 30.900.

#### 30.103: continued

(3) As specified in 40 CFR 268.9(b) and as incorporated by reference at 310 CMR 30.750, for a waste subject to 310 CMR 30.750 that is both listed under 310 CMR 30.130 through 30.136 and exhibits a characteristic under 310 CMR 30.120, the treatment standard for the waste code listed under 310 CMR 30.130 through 30.136 will operate in lieu of the standard for the waste code under 310 CMR 30.120, provided that the treatment standard for the listed waste includes a treatment standard for the constituent that causes the waste to exhibit the characteristic. Otherwise, the waste must meet the treatment standards for all applicable listed and characteristic waste codes.

# 30.104: Wastes Subject to Exemption from 310 CMR 30.000

A waste identified in 310 CMR 30.104 is exempt from the requirements of 310 CMR 30.000 when handled in compliance with the requirements, if any, established by or referenced in 310 CMR 30.104 for that waste. A waste that is exempted from 310 CMR 30.000 may still be subject to other federal, state or local requirements. A waste identified in 310 CMR 30.104 that is not managed in compliance with the terms established by or referenced in 310 CMR 30.104 is a hazardous waste and is subject to all applicable requirements of 310 CMR 30.000.

# (1) <u>Wastes Based Upon Exclusions from the Definition of Hazardous Waste Pursuant to M.G.L. c. 21C.</u>

- (a) Domestic sewage and any mixture of domestic sewage and other waste that passes through a sewer system to a publicly owned treatment works, provided that the other waste is legally discharged to the sewer system. "Domestic sewage" means untreated sanitary wastes that pass through a sewer system.
- (b) Industrial wastewater discharges that are point source discharges permitted pursuant to M.G.L. c. 21, § 43 or subject to permits under section 402 of the Federal Water Pollution Control Act of 1967 as amended, or managed in compliance with 310 CMR 71.00. This exclusion applies only to the actual point source discharge. It does not exclude industrial wastewaters while they are being collected, stored or treated before discharge, nor does it exclude sludges that are generated by industrial wastewater treatment.
- (c) Irrigation return flows.
- (d) Source, special nuclear or by-product material as defined by the Atomic Energy Act of 1954, as amended, 43 U.S.C. § 2011 *et seq*.

# (2) Wastes Otherwise Excluded from 310 CMR 30.000.

- (a) Waste exempt pursuant to:
  - 1. 310 CMR 30.102(2)(c)1. or 2.;
  - 2. 310 CMR 30.105(1) addressing certain PCB wastes regulated pursuant to the Toxic Substances Control Act; or
  - 3. 310 CMR 30.106: Residues of Hazardous Waste in Empty Containers.
- (b) The material is a recyclable material reclaimed in compliance with 310 CMR 30.202(5) or 30.280(2).
- (c) The waste ceases to be a hazardous waste pursuant to 310 CMR 30.141.
- (d) The waste is listed in 310 CMR 30.130 through 30.136 but has been classified as non-hazardous pursuant to 310 CMR 30.142; or
- (e) The following wastes are not hazardous even though they are generated from the treatment, storage, or disposal of a hazardous waste, provided they do not exhibit any of the characteristics described pursuant to 310 CMR 30.120 through 30.125:
  - 1. Waste pickle liquor sludge generated by lime stabilization of spent pickle liquor from the iron and steel industry (SIC Codes 331 and 332);
  - 2. Nonwastewater residues, such as slag, resulting from high temperature metals recovery (HTMR) processing of K061, K062 or F006 waste, in units identified as rotary kilns, flame reactors, electric furnaces, plasma arc furnaces, slag reactors, rotary hearth furnace/electric furnace combinations or industrial furnaces (as defined in 310 CMR 30.010: Industrial Furnace (f) and (g)), that have been approved for disposal as special wastes pursuant to M.G.L. c. 111, § 150A at waste disposal facilities, provided that:

- a. these residues meet the generic exclusion levels identified in the tables of 40 CFR 261.3(c)(2)(ii)(C), as incorporated by reference, for all constituents, and exhibit no characteristics of hazardous waste. Testing requirements must be incorporated in a facility's waste analysis plan or a generator's waste analysis plan; at a minimum, composite samples of residues must be collected and analyzed quarterly and/or when the process or operation generating the waste changes. Persons claiming this exclusion in an enforcement action will have the burden of proving by clear and convincing evidence that the material meets all of the exclusion requirements including the notification and certification requirements of 310 CMR 30.104(2)(e)2.b.
- b. A one-time notification and certification shall be provided to the solid waste facility and sent to the Department. The notification and certification must also be retained by the generator and treatment facility and must be updated if the process or operation generating the waste changes and/or if the solid waste facility receiving the waste changes. However, the generator or treatment facility need only notify the Department on an annual basis if such changes occur. Such notification and certification shall be submitted to the Department no later than December 31<sup>st</sup>. The contents of the notification and certification shall comply with 40 CFR 261.3(c)(2)(ii)(C)(2), as incorporated by reference.
- 3. Residue resulting from the treatment of hazardous debris, as defined in 40 CFR 268.2 and incorporated by reference at 310 CMR 30.750(1), provided such treatment was conducted by means of the required extraction or destruction technologies specified in 40 CFR 268.45: *Table 1* also as incorporated by reference at 310 CMR 30.750(1). Persons claiming this exclusion in an enforcement action will have the burden of proving by clear and convincing evidence that the material meets all of the exclusion requirements.
- (f) Materials subject to in-situ mining techniques which are not removed from the ground as part of the extraction process.
- (g) Household waste, including household waste that has been collected, transported, stored, treated, disposed, recovered (e.g., refuse derived fuel) or reused, except household hazardous waste accepted or accumulated at an event or center subject to 310 CMR 30.390. "Household waste" means any material (including garbage, trash, and sanitary wastes in septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas). A resource recovery facility managing municipal waste shall not be deemed to be treating, storing, disposing of, or otherwise managing hazardous wastes for the purposes of 310 CMR 30.000, if such facility:
  - 1. Receives and burns only
    - a. Household waste (except household hazardous waste accepted or accumulated at an event or center subject to 310 CMR 30.390) and
    - b. Waste from commercial or industrial sources that does not contain hazardous waste; and
  - 2. Does not accept hazardous waste, and the owner or operator of such facility has established contractual requirements or other appropriate notification or inspection procedures to assure that hazardous wastes are not received at or burned in such facility.
- (h) Wastes generated by any of the following and which are returned to the soil as fertilizer:
  - 1. The growing and harvesting of agricultural crops; and
  - 2. The raising of animals, including animal manures.
- (i) Mining overburden returned to the mine site.
- (j) Fly ash waste, bottom ash waste, slag waste, and flue gas emission control waste generated primarily from the combustion of coal or other fossil fuels.
- (k) Drilling fluids, produced waters and other wastes associated with the exploration, development, or production of crude oil, natural gas or geothermal energy.
- (l) Waste which is hazardous solely because it fails the test for toxicity due to the presence of chromium and waste which is hazardous because it is listed in 310 CMR 30.130 through 30.136 due only to the presence of chromium, provided the waste does not fail the test for any characteristic other than toxicity due only to the presence of chromium, shall not be subject to 310 CMR 30.000 if the criteria of 310 CMR 30.104(2)(1)1. through 3. are satisfied and documentation establishing compliance with these criteria is kept on-site by the generator in compliance with 310 CMR 30.331 and made available for inspection by the Department or the waste meets one or more of the descriptions in 310 CMR 30.104(2)(1)4.

- 1. The chromium in the waste is exclusively, or nearly exclusively, trivalent chromium.
- 2. The waste is generated from an industrial process which uses trivalent chromium exclusively, or nearly exclusively, and the process does not generate hexavalent chromium
- 3. The waste is typically and frequently managed in non-oxidizing environments.
- 4. Specific wastes which meet the standard in 310 CMR 30.104(2)(1)1. through 3., provided they do not fail the test for the toxicity characteristic for any other constituent and do not exhibit any other characteristic, are:
  - a. Chrome (blue) trimmings generated by the following subcategories of the leather tanning and finishing industry; hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.
  - b. Chrome (blue) shavings generated by the following subcategories of the leather tanning and finishing industry: Hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.
  - c. Buffing dust generated by the following subcategories of the leather tanning and finishing industry; hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue.
  - d. Sewer screenings generated by the following subcategories of the leather tanning and finishing industry: Hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.
  - e. Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: Hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.
  - f. Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: Hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; and through-the-blue.
  - g. Waste scrap leather from the leather tanning industry, the shoe manufacturing industry, and other leather product manufacturing industries.
  - h. Wastewater treatment sludges from the production of TiO2 pigment using chromium-bearing ores by the chloride process.
- (m) Waste from the extraction, beneficiation, and processing of ores and minerals (including coal, phosphate rock and overburden from the mining of uranium ore). For purposes of 310 CMR 30.104(2)(m), beneficiation of ores and minerals is restricted to the activities enumerated by 40 CFR 261.4(b)(7)(i) and waste from the processing of ores and minerals includes only those wastes specifically identified in 40 CFR 261.4(b)(7)(ii)(A) through (T) and incorporated by reference herein.
- (n) Cement kiln dust waste.
- (o) Waste which consists of discarded arsenical-treated wood or wood products which fails the test for the Toxicity Characteristic for Hazardous Waste Codes D004 through D017 and which is not a hazardous waste for any other reason if the waste is generated by persons who utilize the arsenical-treated wood and wood products for these materials' intended end use.
- (p) Petroleum-contaminated media and debris that fail the test for the Toxicity Characteristic of 310 CMR 30.125 (Hazardous Waste Codes D018 through D043 only) when managed in compliance with the requirements of 310 CMR 40.000.
- (q) Explosives which are destroyed by, or whose destruction is supervised, by U.S. Army Explosive Ordinance personnel, if such explosives are generated by a Small Quantity Generator, as that term is defined in 310 CMR 30.351(1) and (2), such destruction does not involve land disposal, and such destruction occurs during an immediate response to an immediate threat to human health, safety or welfare or to the environment, by U.S. Army Explosive Ordnance personnel.
- (r) Explosives which are destroyed by, or whose destruction is supervised by the Department of Public Safety pursuant to M.G.L. c. 148, § 9 and codified at 527 CMR 13.00, if such explosives are generated by a Small Quantity Generator, as that term is defined in 310 CMR 30.351(1) and (2), such destruction does not involve land disposal, and such destruction occurs during an immediate response to an immediate threat to human health, safety or welfare or to the environment, by Department of Public Safety personnel.

- (s) Wastes with infectious characteristics, which are regulated by the Department of Public Health pursuant to M.G.L. c. 111, §§ 3, and 51 through 56.
- (t) Amalgam waste that is hazardous solely because it fails the test for the Toxicity Characteristic of 310 CMR 30.125 for Hazardous Waste Code D009 when managed by dental facilities in compliance with the requirements of 310 CMR 73.00.
  - 1. Massachusetts facilities that reclaim amalgam waste described in 310 CMR 30.104(2)(u) must comply with the requirements of 310 CMR 30.200 and 30.800, as applicable.
  - 2. Massachusetts facilities that consolidate, but do not reclaim shipments of amalgam waste described in 310 CMR 30.104(2)(u) must, prior to shipping off-site for reclamation:
    - a. accumulate amalgam waste in containers that are sealed and structurally sound; and
    - b. accumulate amalgam waste for no more than one year.
- (u) Medicinal nitroglycerin, in finished dosage form such as tablets or capsules, that would otherwise meet the description of a P081 listed waste, is not subject to hazardous waste regulation pursuant to 310 CMR 30.000 so long as, upon generation, the following conditions are met:
  - 1. the waste does not meet the description of any other listing; and
  - 2. the waste does not exhibit any hazardous waste characteristic, including the characteristic for which it was originally listed (*i.e.*, the reactivity characteristic, as described at 310 CMR 30.124).
- (v) Hazardous debris, as defined in 310 CMR 30.010, that has been treated using one of the required extraction or destruction technologies specified in 310 CMR 30.750 (see 40 CFR 268.45: *Table 1*). Persons claiming this exclusion in an enforcement action will have the burden of proving by clear and convincing evidence that the material meets all of the exclusion requirements.

#### (3) Wastes Subject to Conditional Exemptions.

- (a) Samples of waste collected for the sole purpose of testing to determine their properties, characteristics or composition while being managed pursuant to 310 CMR 30.104(3)(a)1. and provided that the generator or sample collector complies with the requirements of 310 CMR 30.104(3)(a) 2. and 3.
  - 1. The exemption established in 310 CMR 30.104(3)(a) is only applicable when:
    - a. The sample is being transported to a laboratory for the purpose of testing; or
    - b. The sample is being transported back to the sample collector after testing; or
    - c. The sample is being stored by the sample collector before transport to a laboratory for testing; or
    - d. The sample is being stored in a laboratory before testing; or
    - e. The sample is being stored in a laboratory after testing but before it is returned to the sample collector; or
    - f. The sample is being stored temporarily in the laboratory after testing for a specific purpose (for example, until conclusion of a court case or enforcement action where further testing of the sample may be necessary).
  - 2. In order to qualify for the exemption in 310 CMR 30.104(3)(a), a sample collector shipping samples to a laboratory and a laboratory returning samples to a sample collector shall:
    - a. Comply with DOT, USPS, or any other applicable shipping requirements; or
    - b. Comply with the following requirements if the sample collector determines that DOT, USPS, or other shipping requirements do not apply to the shipment of the sample:

- (i) Assure that the following information accompanies the sample:
  - (A) The sample collector's name mailing address and telephone number;
  - (B) The laboratory's name, mailing address, and telephone number;
  - (C) The quantity of the sample;
  - (D) The date of shipment; and
  - (E) A description of the sample.
- (ii) Package the sample so that it does not leak, spill, or vaporize from its packaging.
- 3. This exemption shall not apply when the sample is discarded or if the laboratory determines that the waste is hazardous but the laboratory is no longer meeting any of the conditions stated in 310 CMR 30.104(3)(a)1.e. or f.
- (b) Treatability Study Samples. Except as provided in 310 CMR 30.104(3)(b) and (c), any person who generates or collects samples for the purpose of conducting treatability studies is exempt from the requirements of 310 CMR 30.000, and need not include treatability study samples in quantity determinations made pursuant to 310 CMR 30.340(1), 30.351(1) and 30.353(1), so long as such samples are managed pursuant to 310 CMR 30.104(3)(b).
  - 1. The exemption established in 310 CMR 30.104(3)(b) is only applicable when:
    - a. The generator or sample collector is collecting and preparing a sample for transportation; or
    - b. The generator or sample collector is accumulating or storing a sample prior to transportation to a laboratory or testing facility; or
    - c. The generator or sample collector is transporting a sample to a laboratory or testing facility for the purpose of conducting a treatability study; or
    - d. The sample is being transported back to the generator or sample collector after completion of the treatability study.
  - 2. Any person who generates or collects samples for the purpose of conducting a treatability study shall comply with the following requirements:
    - a. The generator or sample collector shall accumulate for treatability studies a total of no more than 10,000 kilograms of media contaminated with non-acutely hazardous waste, 1,000 kilograms of non-acutely hazardous waste other than contaminated media, 1 kilogram of acutely hazardous waste, or 2,500 kilograms of media contaminated with acutely hazardous waste for each treatment process being evaluated for each generated waste stream; and

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- b. The mass of each sample shipment shall not exceed 10,000 kilograms; the 10,000 kilogram quantity may be all media contaminated with non-acutely hazardous waste, 2,500 kilograms of media contaminated with acutely hazardous waste, 1,000 kilograms of hazardous waste, and 1 kilogram of acutely hazardous waste; and
- c. The generator or sample collector accumulates treatability study samples at the site of generation for 180 days or less; and
- d. The generator or sample collector shall package the sample to ensure that the sample will not leak, spill, or vaporize from its packaging during shipment, and shall ensure that:
  - (i) The transportation of each sample shipment shall comply with DOT, USPS, and all other applicable shipping requirements; or
  - (ii) If DOT, USPS, or other shipping requirements do not apply to the shipment of the sample, the following information shall accompany the sample:
    - (A) The name, mailing address, and telephone number of the originator of the sample;
    - (B) The name, address, and telephone number of the facility that will perform the treatability study;
    - (C) The quantity of the sample;
    - (D) The date of shipment; and
    - (E) A description of the sample including the EPA Hazardous Waste Number of the material in the sample; and
- e. The generator or sample collector shall cause the sample to be shipped only to a laboratory or testing facility which is exempt pursuant to 310 CMR 30.104(3)(c), or has a valid license issued by the Department pursuant to M.G.L. c. 21C or interim status; and
- f. The generator or sample collector may transport the sample off the site of generation without having to obtain a license to transport hazardous waste or a vehicle identification device for the vehicle in which the hazardous waste is transported, and without having to use a hazardous waste manifest, but only if all of the following requirements are met:
  - (i) The generator or sample collector may not collect or transport any treatability sample except such treatability samples generated by that generator.
  - (ii) the transport of the treatability sample is not prohibited by the DOT pursuant to 49 CFR 172.101(d).
  - (iii) The generator or sample collector may deliver the treatability sample only to a destination described in 310 CMR 30.104(3)(b)2.e.
  - (iv) The generator or sample collector may not transport more, in the aggregate, than 200 kilograms of treatability sample in any one vehicle at any one time. Such treatability samples may be transported only in containers.
  - (v) The generator or sample collector shall transport the treatability sample only in containers that are
    - (A) compatible with the sample; and
    - (B) tightly sealed; and
    - (C) tightly secured to the vehicle in which they are transported; and
    - (D) clearly marked and labelled in a manner which identifies, in words, the material(s) in the container (e.g., acetone, toluene) and the hazard(s) associated with the sample (e.g., ignitable, toxic, dangerous when wet); and
    - (E) clearly marked with the words "Treatability Sample"; and
    - (F) in compliance with applicable regulations and standards of the DOT and the Massachusetts Department of Public Works, and the Massachusetts Board of Fire Prevention Regulations, 527 CMR 1.00 through 24.00.
  - (vi) Treatability samples that are incompatible with each other shall not be transported in the same vehicle at the same time.
  - (vii) In the event that a fire, explosion, spill or other release or threat of release of oil, hazardous waste, or hazardous material occurs during transport, the generator shall take all appropriate action to protect public health, safety, and welfare and the environment, and shall

- (A) Immediately notify the local fire and police departments; and
- (B) Call the Bureau of Waste Site Clean-up at the Department's Regional Office serving the location where the release or threat of release occurred when required by and within the time frames established pursuant to 310 CMR 40.0311 through 40.0317. To report a release after normal business hours, dial (617) 556-1133, (888) 304-1133 (or such other telephone number as may be designated by the Department) or follow any instructions provided on the answering message for the Regional Office.
- (C) In addition to the notification requirements of 310 CMR 30.104(3)(b)2.f.(vii)(A) and (B), when a fire, explosion, spill or other release could threaten human health or the environment, when a reportable quantity limit established pursuant to 310 CMR 40.0000 has been exceeded, or when the generator has knowledge that a spill has reached surface water or an adjoining shoreline, the generator shall immediately notify the National Response Center at its 24-hour toll-free number (1-800-424-8802) and provide the information required pursuant to 310 CMR 30.351(9)(i)2.a through g.
- (viii) The vehicle in which the treatability sample is transported shall go directly to the intended destination, without any stops or detours in between except those reasonably and immediately necessary in response to road conditions, the driver's need for nourishment or rest, the vehicle's need for service or maintenance, or emergencies.
- (ix) The generator shall placard the vehicle when so required by DOT pursuant to 49 CFR 172.504.
- g. A generator or sample collector who ships or offers for shipment any sample in excess of 200 kilograms in weight shall:
  - (i) not itself transport the sample unless that generator or sample collector has at that time a valid license issued by the Department pursuant to M.G.L. c. 21C to transport hazardous waste; and
  - (ii) offer the sample for transportation only to a person who has at that time both an EPA identification number and a valid license issued by the Department pursuant to M.G.L. c. 21C for the transport of that hazardous waste sample; and (iii) limit the mass of each sample shipment to 10,000 kilograms or less. The 10,000 kilogram quantity may be all media contaminated with non-acutely hazardous waste, or may include 2,500 kilograms of media contaminated with acutely hazardous waste, 1,000 kilograms of hazardous waste, and 1 kilogram of acutely hazardous waste; and
- h. The generator or sample collector shall maintain the following records for a period of at least three years after completion of the treatability study, or for the duration of any unresolved enforcement action, whichever period is longer:
  - (i) Copies of the shipping documents;
  - (ii) A copy of the contract with the facility conducting the treatability study;
  - (iii) Documentation showing:
    - (A) the amount of waste shipped pursuant to 310 CMR 30.104(3)(b);
    - (B) the name, address, and EPA identification number of the laboratory or testing facility that received the waste;
    - (C) the date of the shipment to the laboratory or testing facility; and
    - (D) whether or not unused samples and residues were returned to the generator; and
- i. A Large Quantity Generator shall report the information required in 310 CMR 30.104(3)(b)2.g.(iii) in its Biennial Report, as described in 310 CMR 30.332.
- (c) Samples undergoing treatability studies at laboratories and testing facilities. While a sample undergoing a treatability study is at a laboratory or testing facility, such sample is not subject to any requirement of 310 CMR 30.000, provided that the requirements set forth in 310 CMR 30.104(3)(c) are met. The laboratory or test facility which only conducts treatability studies on treatability samples is not subject to any requirement of 310 CMR 30.000 provided that the requirements of 310 CMR 30.104(3)(c) are met. A mobile treatment unit may qualify as a testing facility subject to 310 CMR 30.104(3)(c). Where a group of mobile treatment units are located at the same site, the limitations specified in 310 CMR 30.104(3)(c) apply to the entire group of mobile treatment units collectively as if the group were one mobile treatment unit.

- 1. A laboratory or testing facility which intends to conduct treatability studies shall notify the Department, in writing, and shall submit an application to the Department prior to commencing or conducting such treatability studies, and shall not commence such treatability studies without the prior, written, site-specific approval of the Department. The application shall include the following information:
  - a. The name and address of the owner of the property where the laboratory or testing facility is located:
  - b. The name and address of the owner and operator of the laboratory or testing facility;
  - c. The name and telephone number of the individual responsible for supervising all treatability studies at the laboratory or testing facility;
  - d. An operations plan which shall include a site plan and shall describe, at a minimum, all of the following:
    - (i) All hazardous waste storage areas;
    - (ii) All hazardous waste treatment and sample analysis areas:
    - (iii) All hazardous wastes to be stored and treated or analyzed, including chemical name and waste codes;
    - (iv) All hazardous waste treatment processes;
    - (v) Procedures for obtaining detailed chemical and physical analyses of representative samples of wastes prior to receipt by the laboratory or testing facility for treatability study; and
    - (vi) Chemical and physical screening methods used to verify that the information obtained pursuant to 310 CMR 30.104(3)(c)1.d.(v) accurately represents the hazardous waste received from off-site generators and sample collectors; and
  - e. Certification that the laboratory or testing facility is in compliance with 310 CMR 30.351(8) and (9), and that there are written emergency procedures to be used in the event of a fire, explosion, or spill within the storage, analysis, and treatment areas, including identification of the individual(s) responsible for implementing and carrying out all emergency actions; and
  - f. The signatures described in 310 CMR 30.807(1) and certification required by 310 CMR 30.009 both for sites where mobile treatment units are placed and for applicants located at a laboratory or testing facility; and
  - g. Listing and status of all required permits or construction approvals for treatability study activity conducted, or intended or proposed to be conducted, by the applicant; and
  - h. A description of introductory and continuing training programs for all personnel involved in the treatability studies, and documentation of all training given and intended or proposed to be given to each employee. Each applicant's training program shall emphasize hazardous waste management, treatment, and emergency procedures; and
  - i. Certification that there are written decontamination procedures in effect for mobile treatment units as required in 310 CMR 30.585;
  - j. The following certification, which shall be separately signed by the persons described in 310 CMR 30.807: I certify under penalty of law that the hazardous waste treatment process and equipment have been designed and installed and will be operated safely with a minimum risk to public health and safety and to the environment.
  - k. Documentation that the applicant has sent a copy of the notification to the Board of Health, Fire Department and Emergency Planning Committee of the city or town in which the laboratory, testing facility, or mobile treatment unit will be located.
- 2. The Department may obtain additional information or conduct inspections at the treatability site at any time to ensure that the operation constitutes an insignificant potential hazard to the public health, safety, or welfare or the environment.
- 3. The laboratory or testing facility conducting the treatability study shall have an EPA identification number as described in 310 CMR 30.511.
- 4. The laboratory or testing facility shall initiate, in any one day, treatment in all treatability studies on no more than 10,000 kilograms of "as received" media contaminated with non-acutely hazardous waste, 2,500 kilograms of media contaminated with acutely hazardous waste, or 250 kilograms of other "as received" hazardous waste. "As received" waste means the waste as received in the shipment from the generator or sample collector.

- 5. For the purpose of evaluation in treatability studies, the total quantity of "as received" hazardous waste stored at a laboratory or testing facility shall not at any time exceed, in the aggregate, 10,000 kilograms. The10,000 kilogram quantity may include not more than 10,000 kilograms of media contaminated with non-acutely hazardous waste, 2,500 kilograms of media contaminated with acutely hazardous waste, 1,000 kilograms of non-acutely hazardous wastes other than contaminated media, and 1 kilogram of acutely hazardous waste. The total quantity of as received hazardous waste does not include treatment materials (including non-hazardous waste) added to "as received" hazardous waste.
- 6. The laboratory or testing facility shall hold no sample longer than 90 days after the completion of the treatability study in which the sample was used, or one year after the generator or sample collector ships the sample to the laboratory or testing facility (two years for treatability studies involving bioremediation), whichever date first occurs. Up to 500 kilograms of treated material from a particular wastestream from treatability studies may be archived for future evaluation up to five years from the date of initial receipt. Quantities of materials archived shall be counted towards the total storage limit for the laboratory or testing facility.
- 7. The laboratory or testing facility shall accumulate treatability study samples, retained samples, treatability study residues and treatment materials (including nonhazardous waste) added to "as received" hazardous waste in storage at the laboratories or testing facilities in compliance with the requirements in 310 CMR 30.351(8) and (9).
- 8. In a treatability study, the placement of hazardous waste into or on land, and the open burning of hazardous waste, are prohibited.
- 9. For three years following completion of each study, or for the duration of any unresolved enforcement action, whichever period is longer, the laboratory or testing facility shall maintain all records that show the treatment rate, the quantity of material in storage, and the amount of time of storage, including, without limitation, records showing the following:
  - a. The name, address, and EPA identification number of the generator or sample collector of each waste sample;
  - b. The date the shipment was received by the laboratory or testing facility;
  - c. The quantity of waste accepted;
  - d. The quantity of "as received" waste in storage each day;
  - e. The date the treatment study was initiated and the amount of "as received" waste introduced to treatment each day;
  - f. The date the treatability study was concluded; and
  - g. The date on which the laboratory or testing facility returned any unused sample or residues generated from the treatability study to the generator or sample collector or, if sent to a designated facility, the name and EPA identification number of the facility.
- 10. The laboratory or testing facility shall keep on-site a copy of the treatability study contract and all shipping papers associated with the transport of treatability study samples to and from the facility for a period ending not less than three years from the completion date of each treatability study, or for the duration of any unresolved enforcement action, whichever period is longer. In the case of mobile treatment units, the laboratory or testing facility shall retain such information at the fixed facility where the mobile treatment unit is stored when not in use. If such location is situated outside the Commonwealth, such records shall be made available upon request of the Department.
- 11. The laboratory or testing facility shall prepare and submit a report to the Department by March 15 of each year that estimates the number of studies and the amount of waste expected to be used in treatability studies during the current year, and includes the following information for the previous calendar year:
  - a. The name, address, and EPA identification number of the laboratory or testing facility conducting the treatability studies;
  - b. The types (by process) of treatability studies conducted;
  - c. The names and addresses of persons for whom studies have been conducted (including the EPA identification number of each);
  - d. The total quantity of "as received" waste together with any materials archived pursuant to 310 CMR 30.104(3)(c)6. in storage each day;
  - e. The quantity and types of waste subjected to treatability studies;

- f. When each treatability study was conducted;
- g. The final disposition of residues and unused sample from each treatability study;
- h. The names and addresses of all transporters or shippers (including the USPS) of wastes;
- i. Types of wastes including waste codes shipped or transported; and
- j. Dates of each shipment.
- 12. The laboratory or testing facility shall determine whether any unused sample or residues generated by the treatability study are hazardous waste pursuant to 310 CMR 30.100 and if so, are subject to 310 CMR 30.000, unless the residues and unused samples are returned to the sample originator pursuant to 310 CMR 30.104(3)(b).
- 13. The laboratory or testing facility shall comply with the following closure requirements:
  - a. 310 CMR 30.585 (for equipment, structures, and soil);
  - b. 310 CMR 30.689 (for containers); and
  - c. 310 CMR 30.699 (for tank systems).
- 14. The laboratory or testing facility shall notify the Department by letter when the facility is no longer planning to conduct any treatability studies at the site and certifies compliance with the closure requirements referenced in 310 CMR 30.104(3)(c)13.
- (d) Research Study Samples. Except as provided in 310 CMR 30.104(3)(d) and 310 CMR 30.864, any person who generates or collects samples for the purpose of conducting a research study is exempt from the requirements of 310 CMR 30.000, and need not include research study samples in quantity determinations made pursuant to 310 CMR 30.340(1), 310 CMR 30.351(1) and 30.353(1), so long as such samples are managed pursuant to 310 CMR 30.104(3)(d).
  - 1. The exemption established in 310 CMR 30.104(3)(d) is only applicable when:
    - a. The generator or sample collector is accumulating or storing a sample prior to transportation to a research facility; or
    - b. The generator or sample collector is collecting and preparing a sample for transportation; or
    - c. The generator or sample collector is transporting, or causing to have transported, a sample to a research facility for the purpose of conducting a research study.
    - d. The sample is being transported back to the generator or sample collector after completion of the research study and pursuant to a contractual agreement with the research facility.
  - 2. Any person who generates or collects samples, in excess of treatability study limits as set forth in 310 CMR 30.104(3)(b), for the purpose of conducting a research study shall comply with the following requirements:
    - a. For each treatment or disposal process evaluated for each generated waste stream, the generator or sample collector shall accumulate for a research study no more than the quantity of such waste stream that is necessary for the purpose of such study and specified in a contractual agreement with the destination research facility; and
    - b. The generator or sample collector shall accumulate at any one time for all research studies no more than the total quantities of various waste streams that are determined to be necessary for the purpose of such studies and specified in one or more contractual agreements with the destination research facility; and
    - c. The generator or sample collector shall package the sample to ensure that the sample will not leak, spill, or vaporize from its packaging during shipment; and
    - d. The generator or sample collector shall cause the sample to be shipped only to a research facility which has a valid license issued by the Department pursuant to 310 CMR 30.864; and
    - e. The generator or sample collector who transports or offers for transport to a research facility any sample shall:
      - (i) Comply with all applicable manifest requirements in 310 CMR 30.310 through 30.316;
      - (ii) Not itself transport the sample unless that generator or sample collector has at that time a valid license issued by the Department pursuant to M.G.L. c. 21C to transport hazardous waste; and
      - (iii) Offer the sample for transportation only to a person who has at that time both an EPA identification number and a valid license issued by the Department pursuant to M.G.L. c. 21C for the transport of that hazardous waste sample; and

- f. The generator or sample collector shall maintain the following records for a period of at least three years after completion of a research study, or for the duration of any unresolved enforcement action, whichever period is longer:
  - (i) Copies of all manifests;
  - (ii) A copy of the contractual agreement with the research facility conducting the research study;
  - (iii) Documentation showing:
    - (A) The amount of waste transported pursuant to 310 CMR 30.104(3)(d);
    - (B) The name, address, and EPA identification number of the research facility that received the waste; and
    - (C) The date of the shipment(s) to the research facility.
- g. A Large Quantity Generator shall report the information required in 310 CMR 30.104(3)(d)2.f. in its Biennial Report, as described in 310 CMR 30.332.
- 3. Any person who intends to or does generate or collect samples, below treatability study limits set forth in 310 CMR 30.104(3)(b), for the purpose of conducting a research study shall comply with all applicable requirements set forth in 310 CMR 30.104(3)(b).
- (e) Gasoline and water mixtures that are hazardous for the ignitability characteristic (D001) and/or the toxicity characteristic for benzene (D018) provided that the generator of the gasoline and water mixtures complies with the requirements of 310 CMR 30.104(3)(e). Such generators shall ensure that:
  - 1. the material has never been used and is being reclaimed for gasoline content;
  - 2. the material, if accumulated on-site prior to shipping, is accumulated in containers that are sealed, structurally sound and labeled as a "Gasoline/Water Mixture For Reclamation Ignitable Toxic Benzene";
  - 3. the material is transported by a hazardous waste transporter using either a manifest or bill of lading, or by a common carrier using a bill of lading in compliance with 310 CMR 30.223(4)(b), as applicable, and in such a manner so as to not cause a leak or spill during transit;
  - 4. records from the recycling facility demonstrating that each shipment of material to the recycling facility was received and recycled in compliance with applicable state and federal laws and regulations, are kept by the generator for three years from the date of recycling; and
  - 5. the recycling facility signs the bill of lading or manifest acknowledging receipt of the material and returns a copy after signature to the generator.
- (f) Dredged material when temporarily stored at an intermediate facility pursuant to 314 CMR 9.07(4), or when placed in confined disposal pursuant to 314 CMR 9.07(8), provided it is managed in accordance with the following:
  - 1. the material is managed in accordance with requirements established in a Clean Water Act (33 U.S.C. 1344) § 401 certification, specifically covering the intermediate facility or the confined disposal; and
  - 2. the material is managed in accordance with requirements included in a permit issued under § 404 of the Clean Water Act, specifically covering the intermediate facility or the confined disposal;
  - 3. this exemption shall not apply:
    - a. to any facility or activity that is not subject to regulation under § 404 of the Clean Water Act;
    - b. to any facility or activity for which 401 certification requirements have been waived by the Department;
    - c. to any facility or activity regarding which all 401 certification requirements established by the Department have not been included in a 404 permit; or
    - d. if the Department determines that compliance with some or all of the provisions of 310 CMR 30.000 is required.
- (g) Low-level mixed waste and the transportation and disposal of Naturally Occurring and/or Accelerator-produced Radioactive Material (NARM) that contain hazardous waste managed in compliance with 40 CFR Part 266, Subpart N, hereby incorporated by reference, subject to the following exceptions, additions and modifications:

- 1. When the low-level mixed waste referenced in 310 CMR 30.104(3)(g) has met the requirements for reaching background radiation levels in its Nuclear Regulatory Commission background license for decay-in-storage and can be disposed of as a non-radioactive waste, then the conditional exemption for storage no longer applies and such waste is subject to hazardous waste regulation pursuant to the applicable provisions of 310 CMR 30.000.
- 2. Within three days of becoming subject to hazardous waste regulation, pursuant to 310 CMR 30.104(3)(g)1., such waste shall be transferred to the generator's hazardous waste accumulation area, and labeled with the date on which the waste was transferred to the accumulation area as the container accumulation start date.
- (h) Used, broken cathode ray tubes (CRTs) and processed CRT glass undergoing recycling that are managed in compliance with 310 CMR 30.104(3)(h). Such generators shall ensure that:
  - 1. <u>Prior to Processing</u>. These materials are not hazardous wastes if they are destined for recycling and if they meet the following requirements:
    - a. <u>Storage</u>. The broken CRTs shall be placed in a container (*i.e.*, a package or a vehicle) that is constructed, filled, and closed to minimize releases to the environment of CRT glass (including fine solid materials).
    - b. <u>Labeling</u>. Each container in which the used, broken CRT is contained shall be labeled or marked clearly with one of the following phrases: "Used cathode ray tube(s)-contains leaded glass" or "Leaded glass from televisions or computers." It shall also be labeled: "Do not mix with other glass materials."
    - c. <u>Transportation</u>. The used, broken CRTs shall be transported in a container meeting the requirements of 310 CMR 30.104(3)(h)1.a. and 310 CMR 30.104(3)(h)1.b.
    - d. Speculative Accumulation and Use Constituting Disposal. The used, broken CRTs are subject to the speculative accumulation prohibition described at 310 CMR 30.205(14), including the same record-keeping requirements as are stated there for permittees. If they are used in a manner constituting disposal, or intended for disposal, and they or their components exhibit a hazardous waste characteristic described at 310 CMR 30.125, they shall comply with the applicable requirements of 310 CMR 30.000 instead of the requirements of 310 CMR 30.104(3)(h).
    - e. <u>Exports</u>. In addition to the applicable conditions specified in 310 CMR 30.104(3)(h)1. and 2., exporters of used, broken CRTs shall comply with the EPA administered requirements at 40 CFR 261.39(a)(5).
  - 2. <u>Requirements for Used CRT Processing</u>. Used, broken CRTs undergoing CRT processing as defined in 310 CMR 30.010 are not hazardous wastes if they meet the following requirements:
    - a. <u>Storage</u>. Used, broken CRTs undergoing processing are subject to 310 CMR 30.104(3)(h)1.d.
    - b. Processing.
      - i. All CRT processing activities described in the CRT processing definition at 310 CMR 30.010(1) through (3) shall be performed within a building with a roof, floor, and walls;
      - ii. No activities may be performed that use temperatures high enough to volatilize lead from CRTs; and
      - iii. A company that conducts CRT Processing shall submit a one-time notification to the Department on a form specified by the Department 30 days prior to commencing CRT Processing. This notification shall include, at a minimum, the name and address of the company conducting the CRT Processing, the name and phone number of a company contact person, a description of the CRT glass processing operation including, but not limited to, the procedures for acceptance, handling and processing, and the name and address of the facilities to which the CRT glass is sent for recycling.
    - c. <u>Processed CRT Glass Sent to CRT Glass Making or Lead Smelting</u>. Glass from used CRTs that is destined for recycling at a CRT glass manufacturer or a lead smelter after processing is not a hazardous waste if it meets the speculative accumulation prohibition described at 310 CMR 30.205(14), including the same record-keeping requirements as is stated there for permittees.

- d. <u>Use Constituting Disposal</u>. Glass from used CRTs that exhibits a hazardous waste characteristic described at 310 CMR 30.125 and that is used in a manner constituting disposal, or intended for disposal, shall comply with the requirements of 310 CMR 30.000 instead of the requirements of 310 CMR 30.104(3)(h).
- (i) Solvent-contaminated wipes that are sent for cleaning and reuse are not hazardous wastes from the point of generation, provided that all of the following conditions are met:
  - 1. The solvent-contaminated wipes, when accumulated, stored, and transported, are contained in non-leaking, closed containers that are labeled "Excluded Solvent-contaminated Wipes." The containers must be able to contain free liquids, should free liquids occur. During accumulation, a container is considered closed when there is complete contact between the fitted lid and the rim, except when it is necessary to add or remove solvent-contaminated wipes. When the container is full, or when the solvent-contaminated wipes are no longer being accumulated, or when the container is being transported, the container must be sealed with all lids properly and securely affixed to the container and all openings tightly bound or closed sufficiently to prevent leaks and emissions:
  - 2. The solvent-contaminated wipes may be accumulated by the generator for up to 180 days from the start date of accumulation for each container prior to being sent for cleaning;
  - 3. At the point of being sent for cleaning on-site or at the point of being transported off-site for cleaning, the solvent-contaminated wipes must contain no free liquids as defined in 310 CMR 30.010;
  - 4. Free liquids removed from the solvent-contaminated wipes or from the container holding the wipes must be managed according to the applicable regulations found in 310 CMR 30.000:
  - 5. Generators must maintain at their site the following documentation:
    - a. Name and address of the laundry or dry cleaner that is receiving the solvent-contaminated wipes;
    - b. Documentation that the 180-day accumulation time limit in 310 CMR 30.104(3)(i)2. is being met; and
    - c. Description of the process the generator is using to ensure the solvent-contaminated wipes contain no free liquids at the point of being laundered or dry cleaned on-site or at the point of being transported off-site for laundering or dry cleaning.
  - 6. The solvent-contaminated wipes are sent to a laundry or dry cleaner in Massachusetts, or in another State where this exclusion has been adopted, whose discharge, if any, is regulated under §§ 301 and 402 or § 307 of the Clean Water Act.
- (j) Solvent-contaminated wipes, except for wipes that are hazardous waste due to the presence of trichloroethylene, that are sent for disposal are not hazardous wastes from the point of generation provided that all of the following conditions are met:
  - 1. The solvent-contaminated wipes, when accumulated, stored, and transported, are contained in non-leaking, closed containers that are labeled "Excluded Solvent-contaminated Wipes." The containers must be able to contain free liquids, should free liquids occur. During accumulation, a container is considered closed when there is complete contact between the fitted lid and the rim, except when it is necessary to add or remove solvent-contaminated wipes. When the container is full, or when the solvent-contaminated wipes are no longer being accumulated, or when the container is being transported, the container must be sealed with all lids properly and securely affixed to the container and all openings tightly bound or closed sufficiently to prevent leaks and emissions;
  - 2. The solvent-contaminated wipes may be accumulated by the generator for up to 180 days from the start date of accumulation for each container prior to being sent for disposal;
  - 3. At the point of being transported for disposal, the solvent-contaminated wipes must contain no free liquids as defined in 310 CMR 30.010;
  - 4. Free liquids removed from the solvent-contaminated wipes or from the container holding the wipes must be managed according to the applicable regulations found in 310 CMR 30.000;

#### 30.104: continued

- 5. Generators must maintain at their site the following documentation:
  - a. Name and address of the landfill or combustor that is receiving the solvent-contaminated wipes;
  - b. Documentation that the 180-day accumulation time limit in 310 CMR 30.104(3)(i)2. is being met; and
  - c. Description of the process the generator is using to ensure solvent-contaminated wipes contain no free liquids at the point of being transported for disposal.
- 6. The solvent-contaminated wipes are sent for disposal
  - a. To a municipal solid waste landfill permitted pursuant to M.G.L. c. 111, § 150A (Solid Waste Management Act) and implementing regulations, or to a municipal solid waste landfill in another state where this exclusion has been adopted and which is regulated under 40 CFR Part 258, including 40 CFR 258.40, or to a hazardous waste landfill regulated under 40 CFR Parts 264 or 265 or equivalent State regulations; or
  - b. To a municipal waste combustor in Massachusetts or other combustion facility regulated under M.G.L. c. 111, § 142A through § 142E and implementing regulations, or to a municipal waste combustor or other combustion facility in another State where this exclusion has been adopted and which is regulated under Section 129 of the Clean Air Act, or to a hazardous waste combustor, boiler, or industrial furnace regulated under 40 CFR parts 264, 265, or 266 subpart H or equivalent State regulations.

# 30.105: Exemption for PCB Wastes Regulated Pursuant to Toxic Substances Control Act

- (1) PCB waste, as defined in 40 CFR 761.3, consisting of dielectric fluid or electrical equipment containing dielectric fluid that would be subject to hazardous waste regulation due to the presence of PCBs are exempt from 310 CMR 30.000 provided:
  - (a) the waste is regulated pursuant to 40 CFR 761, as in effect on July 1, 2002;
  - (b) the waste does not meet the description of any listing (see, e.g., 310 CMR 30.131 describing MA01 and MA02); and
  - (c) the waste is hazardous solely because it exhibits the Toxicity Characteristic (D018 D043 only).
- (2) PCB waste, as defined in 40 CFR 761.3, consisting of dielectric fluid or electrical equipment containing dielectric fluid that is subject to hazardous waste regulation due to the presence of PCBs need only be managed and identified using the appropriate Massachusetts hazardous waste number(s) provided:
  - (a) the waste is regulated pursuant to 40 CFR 761, as in effect on July 1, 2002;
  - (b) the waste does not meet the description of an F, K, U or P listed waste; and
  - (c) the only applicable EPA Hazardous waste codes are D018 D043.

NON-TEXT PAGE

#### 30.106: Exemption for Residues of Hazardous Waste in Empty Containers and Tanks

(1) Any residue of hazardous waste remaining in either an empty container or an inner liner removed from an empty container, as defined in 310 CMR 30.106(2), is not subject to regulation under 310 CMR 30.000. Any residue of hazardous waste in either a container that is not empty or an inner liner removed from a container that is not empty, as defined in 310 CMR 30.106(2), is subject to regulation under 310 CMR 30.000.

# (2) <u>Definition of Empty</u>.

- (a) A container or an inner liner removed from a lined container that has held any hazardous material or hazardous waste, except a waste that is a compressed gas or that is listed or otherwise described in 310 CMR 30.136, is empty if:
  - 1. all wastes have been removed that can be removed using the practices commonly employed to remove materials from that type of container, *e.g.*, pouring, pumping, and aspirating; and
  - 2. no more than 2.5 centimeters (one inch) of residue remain on the bottom of the container or inner liner; or
  - 3. no more than 3% by weight of the total capacity of the container remains in the container or inner liner if the container is less than or equal to 119 gallons in size, or
  - 4. no more than 0.3% by weight of the total capacity of the container remains in the container or inner liner if the container is greater than 119 gallons in size.
- (b) A container that has held a hazardous material or hazardous waste that is a compressed gas is empty when the pressure in the container is substantially at atmospheric pressure.
- (c) A container or inner liner removed from a lined container that has held a hazardous waste listed or otherwise described in 310 CMR 30.136 is empty if:
  - 1. the container or inner liner has been triple rinsed using a solvent capable of removing the commercial chemical product or manufacturing intermediate; or
  - 2. the container or inner liner has been cleaned by another method that has been shown in the scientific literature, or by tests conducted by the generator, to achieve equivalent removal; or,
  - 3. in the case of a lined container, the inner liner that prevented contact of the commercial chemical product or manufacturing intermediate with the container has been removed.

#### (d) A paper bag which:

- 1. has contained a hazardous material or a hazardous waste, except for a waste listed in 310 CMR 30.136, is empty if all wastes have been removed that can be removed by shaking or using equivalent means to ensure that all wastes have been removed to the extent feasible.
- 2. has contained a hazardous material or a hazardous waste listed in 310 CMR 30.136 shall never be deemed an "empty container".
- (3) A tank that contained non-acutely hazardous waste and that has been disconnected such that it is no longer stationary is considered a container and is empty if there is no evidence of free flowing liquid or hazardous waste residuals as determined by the generator based on testing or knowledge of the waste. For tanks that accumulated wastes listed in 310 CMR 30.136, the tank is considered an empty container if it has been disconnected and the requirements of 310 CMR 30.106(2)(c) are satisfied.

# 30.110: Criteria and Procedures for Determining which Wastes are to be Regulated as Hazardous or Non-hazardous Wastes

The Department shall not identify and define a waste as a hazardous waste in 310 CMR 30.100 unless it determines that the waste meets one or more of the criteria established in 310 CMR 30.111 and 30.112.

# 30.111: Criteria for Identifying the Characteristics of Hazardous Waste

- (1) The Department shall identify and define a characteristic of hazardous waste within 310 CMR 30.100 only upon determining that a waste that exhibits the characteristic:
  - (a) may cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or

#### 30.111: continued

- (b) pose a substantial present or potential hazard to human health, safety, or welfare, or to the environment, when improperly stored, treated, transported, used, or disposed of, or otherwise managed; and
- (2) The characteristic can be:
  - (a) Measured by an available standardized test method which is reasonably within the capability of the generators of waste or of private sector laboratories that are available to serve such generators; or
  - (b) Reasonably detected by generators through their knowledge of their waste.

# 30.112: Criteria for Listing Hazardous Waste

- (1) The Department shall list a waste as a hazardous waste within 310 CMR 30.100 only upon determining that the waste meets one of the following criteria:
  - (a) It exhibits any of the characteristics of hazardous waste identified in 310 CMR 30.120 through 30.125;
  - (b) It satisfies the criteria of 40 CFR 261.11(a)(2) (criteria used to designate Acutely Hazardous Waste) which are hereby incorporated by reference; or
  - (c) It satisfies the criteria of 40 CFR 261.11(a)(3) (criteria used to designate Toxic Waste) which are hereby incorporated by reference subject to the following additions, modifications and exceptions:
    - 1. References to "appendix VIII" are hereby replaced with "310 CMR 30.160".
    - 2. The reference to "Administrator" is hereby replaced with "Department".
    - 3. The reference to "human health or the environment" is hereby replaced with "public health, safety, welfare, or to the environment".
    - 4. The term "used" shall be inserted after "transported" in 40 CFR 261.11(a)(3).
    - 5. The reference to "human health and environmental damage" is hereby replaced with "damage to public health, safety, welfare or the environment" in 40 CFR 261.11(a)(3)(ix).
    - 6. The reference to "health or environmental hazard posed" is hereby replaced with "hazard posed to public health, safety, welfare or the environment" in 40 CFR 261.11(a)(3)(x).
- (2) The Department may list classes or types of waste as hazardous waste if the Department has reason to believe that individual wastes, within the class or type of waste, typically or frequently are hazardous under the definition of hazardous waste found in M.G.L. c. 21C, § 2.

# 30.120: CHARACTERISTICS OF HAZARDOUS WASTE

310 CMR 30.120 through 30.125 identify and define the characteristics which distinguish hazardous waste from other waste. Any waste which exhibits one or more of such characteristics is subject to 310 CMR 30.000, unless exempted pursuant to 310 CMR 30.104.

# 30.121: Determining Characteristics

In determining whether a waste exhibits any of such characteristics, as is required of generators by 310 CMR 30.302, a representative sample of the waste shall be analyzed using the tests specified in 310 CMR 30.152 through 30.157. For purposes of 310 CMR 30.120 through 30.125, the Department will consider a sample obtained using any of the applicable sampling methods specified in 310 CMR 30.151 to be a representative sample.

# 30.122: Ignitability

- (1) A waste exhibits the characteristic of ignitability if a representative sample of the waste has any of the following properties:
  - (a) It is a liquid, other than an aqueous solution containing less than 24% alcohol by volume, and has a flash point of less than 60°C, which is approximately 140°F, as determined by one of the methods prescribed in 310 CMR 30.152.

#### 30.122: continued

- (b) It is not a liquid and is capable, under standard temperature and pressure of causing fire through friction, absorption of moisture or spontaneous chemical changes and, when ignited, burns so vigorously and persistently that it creates a hazard.
- (c) It is an ignitable compressed gas as defined in 40 CFR 261.21(a)(3), as incorporated by reference, and as determined by the test methods described in that regulation or equivalent methods.
- (d) It is an oxidizer, as defined in 40 CFR 261.21(a)(4), and as incorporated by reference, and as determined by the test methods described in that regulation.
- (2) A waste that exhibits the characteristic of ignitability has the EPA Hazardous Waste Number of D001.

# 30.123: Corrosivity

- (1) A waste exhibits the characteristic of corrosivity if a representative sample of the waste has either of the following properties:
  - (a) It is aqueous and has a pH less than or equal to 2, or greater than or equal to 12.5, as determined by a pH meter using the method prescribed by 310 CMR 30.153(1).
  - (b) It is a liquid and corrodes steel (Type SAE 1020) at a rate greater than 6.35 mm (approximately 0.250 inch) per year at a test temperature of 55°C (approximately 130°F) as determined by the test method prescribed by 310 CMR 30.153(2).
- (2) A waste that exhibits the characteristic of corrosivity has the EPA Hazardous Waste Number of D002.

# 30.124: Reactivity

- (1) A waste exhibits the characteristic of reactivity if a representative sample of the waste has any of the following properties:
  - (a) It is normally unstable and readily undergoes violent changes without detonating.
  - (b) It reacts violently with water.
  - (c) It forms potentially explosive mixtures with water.
  - (d) When mixed with water, it generates toxic gases, vapors or fumes in a quantity sufficient to present a danger to public health, safety, or welfare, or to the environment.
  - (e) It is a cyanide or sulfide bearing waste which, when exposed to a pH of between 2 and 12.5, can generate toxic gases, vapors or fumes in a quantity sufficient to present a danger to public health, safety, or welfare, or to the environment.
  - (f) It is capable of detonation or explosive reaction if it is subjected to a strong initiating source or if heated under confinement.
  - (g) It is readily capable of detonation or explosive decomposition or reaction at a standard temperature and pressure.
  - (h) It is a forbidden explosive as defined in 49 CFR 173.54 or a Division 1.1, 1.2 or 1.3 explosive as defined in 49 CFR 173.50(b)(1) through (3).
- (2) A waste that exhibits the characteristic of reactivity has the EPA Hazardous Waste Number of D003.

# 30.125: Toxicity Characteristic (TC)

- (1) A waste exhibits the characteristic of toxicity if, using the Toxicity Characteristic Leaching Procedure incorporated by reference in 310 CMR 30.155 or an equivalent method, the extract from a representative sample of the waste contains any of the contaminants listed in 310 CMR 30.125: Table 1 at a concentration equal to or greater than the respective value given in that table. Where the waste contains less than 0.5% filterable solids, the waste itself, after filtering using the methodology incorporated by reference in 310 CMR 30.155, is considered to be the extract for the purposes of 310 CMR 30.125.
- (2) A waste that exhibits the characteristic of toxicity has the EPA Hazardous Waste Number specified in 310 CMR 30.125: Table 1 which corresponds to the toxic contaminant causing it to be hazardous.

30.125: continued

Table 1.

MAXIMUM CONCENTRATION OF CONTAMINANTS FOR TOXICITY CHARACTERISTIC

EPA			Regulatory Level
HW No. 1	Contaminant	CAS No. 2	(milligrams/liter)
D004	Arsenic	7440-38-2	5.0
D005	Barium	7440-39-3	100.0
D018	Benzene	71-43-2	0.5
D006	Cadmium	7440-43-9	1.0
D019	Carbon tetrachloride	56-23-5	0.5
D020	Chlordane	57-74-9	0.03
D021	Chlorobenzene	106-90-7	100.0
D022	Chloroform	67-66-3	6.0
D007	Chromium	7440-47-3	5.0
D023	o-Cresol	95-48-7	200.0 4
D024	m-Cresol	108-39-4	200.0 4
D025	p-Cresol	106-44-5	200.0 4
D026	Cresol		200.0 4
D016	2, 4-D	94-75-7	10.0
D027	1, 4 Dichlorobenzene	106-46-7	7.5
D028	1, 2 Dichloroethane	107-06-2	0.5
D029	1, 1 Dichloroethylene.	75-35-4	0.7
D030	2,4 Dinitrotoluene	121-14-2	0.13 3
D012	Endrin	72-20-8	0.02
D031	Heptachlor (and its		
	epoxide)	76-44-8	0.008
D032	Hexachlorobenzene	118-74-1	0.13 3
D033	Hexachlorobutadiene	87-68-3	0.5
D034	Hexachloroethane	67-72-1	3.0
D008	Lead	7439-92-1	5.0
D013	Lindane	58-89-9	0.4
D009	Mercury	7439-97-6	0.2
D014	Methoxychlor	72-43-5	10.0
D035	Methyl ethyl ketone	78-93-3	200.0
D036	Nitrobenzene	98-95-3	2.0
D037	Pentachlorophenol	87-86-5	100.0
D038	Pyridine	110-86-1	5.0 3
D010	Selenium	7782-49-2	1.0
D011	Silver	7440-22-4	5.0
D039	Tetrachloroethylene	127-18-4	0.7
D015	Toxaphene	8001-35-2	0.5
D040	Trichloroethylene	79-01-6	0.5
D041	2, 4, 5-Trichlorophenol	95-95-4	400.0
D041 D042	2, 4, 6-Trichlorophenol	88-06-2	2.0
D042 D017	2, 4, 5-TP (Silvex)	93-72-1	1.0
D043	Vinyl chloride	75-01-4	0.2
D 0 13	, my omondo	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0.2

<sup>&</sup>lt;sup>1</sup> Hazardous Waste Number

<sup>&</sup>lt;sup>2</sup> Chemical abstracts service number

Quantitation limit is greater than the calculated regulatory level. The quantitation limit becomes the regulatory level.

<sup>&</sup>lt;sup>4</sup> If o-, m-, p-Cresol concentration cannot be differentiated, the total cresol (D026) concentration is used. The regulatory level of total cresol is 200 mg/l.

#### 30.130: Lists of Hazardous Wastes

Hazardous Waste No.

Substance

310 CMR 30.131 through 30.136 contain four lists of hazardous wastes. The first is a list of waste from non-specific sources. Such wastes may be generated as a part of a number of different industrial operations. Any residue or contaminated soil, water, or other debris resulting from the clean up of a spill, into or on any land or water, of any hazardous waste on this list shall carry the EPA Hazardous Waste Number of the released hazardous waste unless another hazardous waste number is designated within 310 CMR 30.131 (see, *e.g.*, F039).

The second is a list of hazardous wastes produced by specific industries. Any residue or contaminated soil, water, or other debris resulting from the clean up of a spill, into or on any land or water, of any hazardous waste on this list shall carry the EPA Hazardous Waste Number of the released hazardous waste.

The third is a list of commercial chemical products which, if discarded or intended to be discarded in pure or off-specification form, constitute hazardous waste.

The fourth is a list of acutely hazardous wastes.

The Department will indicate the basis for listing the classes or types of wastes listed in 310 CMR 30.131 through 30.136 which have EPA Hazardous Waste Numbers by employing one or more of the following Hazard Codes:

Ignitable Waste	(I)
Corrosive Waste	(C)
Reactive Waste	(R)
Toxicity Characteristic Waste	(E)
Acutely Hazardous Waste	(H)
Toxic Waste	(T)

The absence of a letter code in 310 CMR 30.133 indicates that the compound is listed for toxicity. The absence of a letter code in 310 CMR 30.136 indicates that the compound is listed for acute toxicity. Appendix VII of 40 CFR 261, which is adopted at 310 CMR 30.162, identifies the constituent which caused a waste to be listed for toxicity in 310 CMR 30.131 and 310 CMR 30.132.

A waste is a hazardous waste if it is listed in 310 CMR 30.131 through 30.136, unless it has been excluded pursuant to 310 CMR 30.142. A hazardous waste listed in 310 CMR 30.131 through 30.136 has the Hazardous Waste Number specified therein.

In addition, the following Hazardous Waste Numbers shall be used as set forth below:

MA00	Hazardous waste designated as such pursuant to 310 CMR 30.144. The manifest shall include (1) a description of the most hazardous constituent of the waste, and (2) a reference to the date when the Department designated the waste as hazardous, and, (3) reference to the office of the Department which designated the waste as hazardous. For example: "Alizarin mixture, 3/7/85 NE".
MA95	Universal waste shipped on a hazardous waste manifest by a licensed hazardous waste transporter.
MA97	Class A regulated recyclable material (including, but not limited to, specification used oil fuel) that is shipped using a hazardous waste manifest.
MA98	Off-specification used oil fuel that is shipped using a hazardous waste manifest.
MA99	Not hazardous waste. This designation is to be used only for material that is not hazardous waste and that is shipped using a hazardous waste manifest.

#### 30.131: Hazardous Waste from Non-specific Sources

Hazardous

Waste No. Hazardous Waste

Generic

The following spent halogenated solvents used in degreasing: tetrachloroethylene, trichloroethylene, methylene chloride. 1,1,1,-trichloroethane, carbon tetrachloride, and chlorinated fluorocarbons; all spent solvent mixtures/blends used in degreasing containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. (T)

The following spent halogenated solvents: tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1,-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2,-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane and 1,1,2-trichloroethane; all spent solvent mixtures/blends containing, before use, a total of 10% or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F001, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. (T)

The following spent non-halogenated solvents: xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol: all spent solvent mixtures/blends containing, before use, only the above spent non-halogenated solvents; and all spent solvent mixtures/blends containing, before use, one or more of the above non-halogenated solvents, and a total of 10% or more (by volume) of one or more of those solvents listed in F001, F002, F004 and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. (I)

The following spent non-halogenated solvents: cresols and cresylic acid, and nitrobenzene; all spent solvent mixtures/blends containing, before use, a total of 10% or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002 and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. (T)

The following spent non-halogenated solvents: toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2-ethoxyethanol, and 2-nitropropane; all spent solvent mixtures/blends containing, before use, a total of 10% or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002, and F004; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. (I,T)

F006 Wastewater treatment sludges from electroplating operations except from the following processes:

- (1) sulfuric acid anodizing of aluminum;
- (2) tin plating on carbon steel;
- (3) zinc plating (segregated basis) on carbon steel;
- (4) aluminum or zinc-aluminum plating on carbon steel;
- (5) cleaning/stripping associated with tin, zinc and aluminum plating on carbon steel; and
- (6) chemical etching and milling of aluminum. (T)
- F007 Spent cyanide plating bath solutions from electroplating operations. (R,T)
- Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process. (R, T)
- F009 Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process. (R, T)
- F010 Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process. (R, T)
- F011 Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations. (R, T)
- F012 Quenching wastewater treatment sludges from metal heat treating operations where cyanides are used in the process. (T)
- Wastewater treatment sludges from the chemical conversion coating of aluminum except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process. (T)
- Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or compound in a formulating process) of trichlorophenol or tetrachlorophenol, or of intermediates used to produce their pesticide derivatives. This listing does not include wastes from the production of hexachlorophene from highly purified 2,4,5-trichlorophenol. (H)

#### 30.131: continued

- Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of pentachlorophenol, or of intermediates used to produce its derivatives. (H)
- Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetrachlorobenzene, pentachlorobenzene, or hexachlorobenzene under alkaline conditions. (H)
- Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of trichlorophenols and tetrachlorophenols. This listing does not include wastes from equipment used only for the production or use of hexachlorophene from highly purified 2,4,5-trichlorophenol. (H)
- Wastes from the production, utilizing free radical catalyzed processes, of chlorinated aliphatic hydrocarbons having one, two, three, four, or five carbon atoms. These wastes include, but are not limited to, distillation residues, heavy ends, tars, and reactor cleanout wastes. These wastes do not include light ends, spent filters and filter aids, spent dessicants, wastewater, wastewater treatment sludges, spent catalysts, and wastes listed in 310 CMR 30.131 or 30.132. (T)
- F025 Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution. (T)
- Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetrachlorobenzene, pentachlorobenzene, or hexachlorobenzene under alkaline conditions. (H)
- F027 Discarded unused formulations containing trichlorophenol, tetrachlorophenol, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. This listing does not include formulations containing hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component. (H)
- Residues resulting from the incineration or thermal treatment of soil contaminated with hazardous waste having EPA Hazardous Waste Nos. F020, F021, F022, F023, F026 or F027. (T)
- Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations (except potentially cross-contaminated wastes that have had the F032 waste code deleted in accordance with 40 CFR 261.35 or potentially cross-contaminated wastes that are otherwise currently regulated as hazardous wastes (*i.e.*, F034 or F035), and where the generator does not resume or initiate use of chlorophenolic formulations). This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol. (T)
- Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use creosote formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol. (T)
- Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use inorganic preservatives containing arsenic or chromium. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol. (T)
- Petroleum refinery primary oil/water/solids separation sludge. Any sludge generated from the gravitational separation of oil/water/solids during the storage or treatment of process wastewaters and oily cooling wastewaters from petroleum refineries. Such sludges include, but are not limited to, those generated in: oil/water/solids separators; tanks and impoundments; ditches and other conveyances; sumps; and stormwater units receiving dry weather flow. Sludges generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges generated in aggressive biological treatment units as defined in 40 CFR 261.31(b)(2)

#### 30.131: continued

(including sludges generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units), and K051 wastes are not included in this listing. This listing does include residuals generated from processing or recycling oil-bearing hazardous secondary materials excluded under 40 CFR 261.4(a)(12)(i), if those materials are to be disposed of. (T)

Petroleum refinery secondary (emulsified) oil/water/solids separation sludge. Any sludge and/or float generated from the physical and/or chemical separation of oil/water/solids in process wastewaters and oily cooling wastewaters from petroleum refineries. Such wastes include, but are not limited to, all sludges and floats generated in: induced air flotation (IAF) units, tanks and impoundments, and all sludges generated in dissolved air flotation (DAF) units. Sludges generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges and floats generated in aggressive biological treatment units as defined in 40 CFR 261.31(b)(2), (including sludges and floats generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and F037, K048, and K051 wastes are not included in this listing. (T)

Leachate resulting from the treatment, storage, or disposal of wastes classified by more than one waste code under 310 CMR 30.131 through 30.136, or from a mixture of wastes classified under 310 CMR 30.120 through 30.125 and 30.131 through 30.136. (Leachate resulting from the management of one or more of the following EPA Hazardous Wastes and no other hazardous waste retains its hazardous waste code(s): F020, F021, F022, F026, F027, and/or F028.) (T)

MA01 Waste oil<sup>1</sup> means used or unused waste oil (or any mixture thereof) that is not otherwise hazardous waste pursuant to 310 CMR 30.120 through 30.136, except that used waste oil that has a flash point greater than or equal to 100° F and less than 140° F (solely through use) remains subject to regulation as used waste oil.

MA02 Wastes which contain polychlorinated biphenyls (PCBs) in concentrations equal to or greater than 50 parts per million.

MA04 Waste generated in the manufacture of paint (*e.g.*, oils, shellac, varnish, stains, lacquer, latex, enamel, alkyds, urethanes, acrylics, casein) which is not otherwise regulated as hazardous waste pursuant to 310 CMR 30.120 through 30.125 (characteristics of hazardous waste) or 310 CMR 30.130 through 30.136 (lists of hazardous wastes) if:

- (1) The paint is formulated with one or more ingredients which are listed as hazardous constituents in 310 CMR 30.160; or
- (2) The paint is formulated with any ingredient which contains 1% or more by weight of hazardous constituents listed in 310 CMR 30.160.

#### 30.132: Hazardous Waste from Specific Sources

Industry and EPA Hazardous

Waste No. Hazardous Waste

### **Wood Preservation:**

K001 Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol.

### **Inorganic Pigments:**

K002	Wastewater treatmen	sludge from	the production of	chrome yellow an	d orange pigments.
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K003 Wastewater treatment sludge from the production of molybdate orange pigments.

K004 Wastewater treatment sludge from the production of zinc yellow pigments.

K005 Wastewater treatment sludge from the production of chrome green pigments.

Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated).

K007 Wastewater treatment sludge from the production of iron blue pigments.

K008 Oven residue from the production of chrome oxide green pigments.

White oils and incidental waste oil appearing as a film on scrap metal are not subject to 310 CMR 30.000. However, waste transformer oil is subject to 310 CMR 30.000. See also 310 CMR 30.200.

30.132: continued

Industry and EPA Hazardous

Waste No. Hazardous Waste

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K009	Distillation bottoms from the production of acetaldehyde from ethylene.
IXOO	Distination bottoms from the production of acctardenyte from emylene.

- K010 Distillation side cuts from the production of acetaldehyde from ethylene.
- K011 Bottom stream from the wastewater stripper in the production of acrylonitrile. (R, T)
- K013 Bottom stream from the acetonitrile column in the production of acrylonitrile. (R, T)
- K014 Bottoms from acetonitrile purification column in the production of acrylonitrile.
- K015 Still bottoms from the distillation of benzyl chloride.
- K016 Heavy ends or distillation residues from the production of carbon tetrachloride.
- K017 Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin.
- K018 Heavy ends from the fractionation column in ethyl chloride production.
- K019 Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production.
- K020 Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production.
- K021 Aqueous spent antimony catalyst waste from fluoromethanes production.
- K022 Distillation bottom tars from the production of phenol/acetone from cumene.
- K023 Distillation light ends from the production of phthalic anhydride from napthalene.
- K024 Distillation bottoms from the production of phthalic anhydride from naphthalene.
- K093 Distillation light ends from the production of phthalic anhydride from ortho-xylene.
- K094 Distillation bottoms from the production of phthalic anhydride from ortho-xylene.
- K025 Distillation bottoms from the production of nitrobenzene by the nitration of benzene.
- K026 Stripping still tails from the production of methy ethyl pyridines.
- K027 Centrifuge and distillation residues from toluene diisocyanate production. (R, T)
- K028 Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane.
- K029 Waste from the product steam stripper in the production of 1,1,1-trichloroethane.
- K095 Distillation bottoms from the production of 1,1,1-trichloroethane.
- K096 Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane.
- K030 Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene.
- K083 Distillation bottoms from aniline production.
- K103 Process residues from aniline extraction from the production of aniline.
- K104 Combined wastewater streams generated from nitro-benzene/aniline production.
- K085 Distillation or fractionation column bottoms from the production of chlorobenzenes.
- K105 Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes.
- K107 Column bottoms from product separation from the production of 1,1-dimethyl-hydrazine (UDMH) from carboxylic acid hydrazines.
- K108 Condensed column overheads from product separation and condensed reactor vent gases from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.
- K109 Spent filter cartridges from product purification from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.
- K110 Condensed column overheads from intermediate separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.
- K111 Product washwaters from the production of dinitrotoluene via nitration of toluene.
- K112 Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene.
- K113 Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.
- K114 Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.
- K115 Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.
- K116 Organic condensate from the solvent recovery column in the production of toluene diisocyanate *via* phosgenation of toluenediamine.

30.132: continued

Industry and EPA Hazardous

Waste No. Hazardous Waste

K117	Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via
	bromination of ethene.

- K118 Spent adsorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.
- K136 Still bottoms from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.
- K149 Distillation bottoms from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups. (This waste does not include still bottoms from the distillation of benzyl chloride.) (T)
- Organic residuals, excluding spent carbon adsorbent, from the spent chlorine gas and hydrochloric acid recovery processes associated with the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups. (T)
- Wastewater treatment sludges, excluding neutralization and biological sludges, generated during the treatment of wastewaters from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups. (T)
- K156 Organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes. (T)
- Wastewaters (including scrubber waters, condenser waters, washwaters, and separation waters) from the production of carbamates and carbamoyl oximes. (T)
- K158 Bag house dusts and filter/separation solids from the production of carbamates and carbamoyl oximes. (T)
- K159 Organics from the treatment of thiocarbamate wastes. (T)
- Purification solids (including filtration, evaporation, and centrifugation solids), bag house dust and floor sweepings from the production of dithiocarbamate acids and their salts. (R,T) (This listing does not include K125 or K126.).
- Wastewater treatment sludges from the production of ethylene dichloride or vinyl chloride monomer (including sludges that result from commingled ethylene dichloride or vinyl chloride monomer wastewater and other wastewater), unless the sludges meet the following conditions: (i) they are disposed of in a subtitle C or nonhazardous landfill licensed or permitted by the state or federal government; (ii) they are not otherwise placed on the land prior to final disposal; and (iii) the generator maintains documentation demonstrating that the waste was either disposed of in an on-site landfill or consigned to a transporter or disposal facility that provided a written commitment to dispose of the waste in an off-site landfill. Respondents in any action brought to enforce the requirements of subtitle C must, upon a showing by the government that the respondent managed wastewater treatment sludges from the production of vinyl chloride monomer or ethylene dichloride, demonstrate that they meet the terms of the exclusion set forth above. In doing so, they must provide appropriate documentation (e.g., contracts between the generator and the landfill owner/operator, invoices documenting delivery of waste to landfill, etc.) that the terms of the exclusion were met. (T)
- Wastewater treatment sludges from the production of vinyl chloride monomer using mercuric chloride catalyst in an acetylene-based process. (T)
- Nonwastewaters from the production of dyes and/or pigments (including nonwastewaters commingled at the point of generation with nonwastewaters from other processes) that, at the point of generation, contain mass loadings of any of the constituents identified in paragraph (c) of 40 CFR 261.32 that are equal to or greater than the corresponding paragraph (c) levels, as determined on a calendar year basis. These wastes will not be hazardous if the nonwastewaters are: (i) disposed in a Subtitle D landfill unit subject to the design criteria in 40 CFR 258.40, (ii) disposed in a Subtitle C landfill unit subject to either 40 CFR 264.301 or 265.301, (iii) disposed in other Subtitle D landfill units that meet the design criteria in 40 CFR 258.40, 264.301, or 265.301, or (iv) treated in a combustion unit that is permitted under Subtitle C, or an on-site combustion unit that is permitted under the Clean Air Act. For the purposes of this listing, dyes and/or pigments production is defined in paragraph (b)(1) of 40 CFR 261.32. Paragraph (d) of

30.132: continued

Industry and EPA Hazardous

Waste No. Hazardous Waste

40 CFR 261.32 describes the process for demonstrating that a facility's nonwastewaters are not K181. This listing does not apply to wastes that are otherwise identified as hazardous under 40 CFR 261.21 through 261.24 and 261.31 through 261.33 at the point of generation. Also, the listing does not apply to wastes generated before any annual mass loading limit is met. (T)

### **Inorganic Chemicals:**

K071	Brine purification muds from the mercury cell process in chlorine production, where separately
	prepurified brine is not used.

- K073 Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production.
- K106 Wastewater treatment sludge from the mercury cell process in chlorine production.
- K176 Baghouse filters from the production of antimony oxide, including filters from the production of intermediates (e.g., antimony metal or crude antimony oxide). (E)
- K177 Slag from the production of antimony oxide that is speculatively accumulated or disposed, including slag from the production of intermediates (e.g., antimony metal or crude antimony oxide). (T)
- K178 Residues from manufacturing and manufacturing-site storage of ferric chloride from acids formed during the production of titanium dioxide using the chloride-ilmenite process. (T)

### Pesticides:

K031	By-product salts generated in the production of MSMA and cacodylic acid.
	- j product sums generated in the production of the sum that different

- K032 Wastewater treatment sludge from the production of chlordane.
- K033 Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane.
- K034 Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane.
- K097 Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane.
- K035 Wastewater treatment sludges generated in the production of creosote.
- K036 Still bottoms from toluene reclamation distillation in the production of disulfoton.
- K037 Wastewater treatment sludges from the production of disulfoton.
- K038 Wastewater from the washing and stripping of phorate production.
- K039 Filter cake from the filtration of diethylophosphorodithioic acid in the production of phorate.
- K040 Wastewater treatment sludge from the production of phorate.
- K041 Wastewater treatment sludge from the production of toxaphene.
- K098 Untreated process wastewater from the production of toxaphene.
- K042 Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T.
- K043 2,6-Dichlorophenol waste from the production of 2,4-D.
- K099 Untreated wastewater from the production of 2,4-D.
- K123 Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenebisdithiocarbamic acid and its salts.
- K124 Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salts. (C,T)
- K125 Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts.
- K126 Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenebisdithiocarbamic acid and its salts.
- Wastewater from the reactor and spent sulfuric acid from the acid dryer from the production of methyl bromide.
- K132 Spent absorbent and wastewater separator solids from the production of methyl bromide.

### **Explosives:**

K044 Wastewater treatment sludges from the manufacturing and processing of explosives. (R)

K045 Spent carbon from the treatment of wastewater containing explosives. (R)

30.132: continued

Industry and EPA Hazardous

Waste No. Hazardous Waste

K046 Wastewater treatment sludges from the manufacturing, formulation and loading of lead-based

initiating compounds.

K047 Pink/red water from TNT operations. (R)

### Petroleum Refining:

K048 Dissolved air flotation (DAF) float from the petroleum refining industry.

K049 Slop oil emulsion solids from the petroleum refining industry.

K050 Heat exchanger bundle cleaning sludge from the petroleum refining industry.

K051 API separator sludge from the petroleum refining industry.

K052 Tank bottoms (leaded) from the petroleum refining industry.

K169 Crude oil storage tank sediment from petroleum refining operations. (T)

K170 Clarified slurry oil tank sediment and/or in-line filter/separation solids from petroleum refining operations. (T)

K171 Spent Hydrotreating catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert support media).

K172 Spent Hydrorefining catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert support media). (I, T)

### Iron and Steel:

K061 Emission control dust/sludge from the primary production of steel in electric furnaces.

K062 Spent pickle liquor from steel finishing operations. (C,T)

#### **Primary Copper:**

K064 Acid plant blowdown slurry/sludge resulting from the thickening of blowdown slurry from primary copper production.

### Primary Lead:

K065 Surface impoundment solids contained in and dredged from surface impoundments at primary lead smelting facilities;

### **Primary Zinc:**

K066 Sludge from treatment of process wastewater and/or acid plant blowdown from primary zinc production;

### Primary Aluminum:

K088 Spent potliners from primary aluminum reduction:

### Ferroalloys:

K090 Emission control dust or sludge from ferrochromium silicon production.

K091 Emission control dust or sludge from ferrochromium production.

### Secondary Lead:

K069 Emission control dust/sludge from secondary lead smelting.

Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting.

# Veterinary Pharmaceuticals:

K084 Wastewater treatment sludges generated during the production of veterinary compounds from arsenic or organo-arsenic compounds.

K101 Distillation tar residues from the distillation of aniline based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.

K102 Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.

30.132: continued

Industry and EPA Hazardous

Waste No. Hazardous Waste

Ink Formulation:

K086 Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead.

### Coking:

- K087 Decanter tank tar sludge from coking operations.
- Process residues from the recovery of coal tar including, but not limited to, collecting sump residues from the production of coke from coal or the recovery of coke by-products produced from coal. This listing does not include K087 (decanter tank tar sludges from coking operations).

  (T)
- K142 Tar storage tank residues from the production of coke from coal or from the recovery of coke by-products produced from coal. (T)
- K143 Process residues from the recovery of light oil including, but not limited to, those generated in stills, decanters, and wash oil recovery units from the recovery of coke by-products produced from coal. (T)
- Wastewater sump residues from light oil refining including, but not limited to, intercepting or contamination sump sludges from the recovery of coke by-products produced from coal. (T)
- K145 Residues from naphthalene collection and recovery operations from the recovery of coke by-products produced from coal. (T)
- K147 Tar storage tank residues from coal tar refining. (T)
- K148 Residues from coal tar distillation including, but not limited to, still bottoms. (T)

# 30.133: Hazardous Wastes Which Are Discarded Commercial Chemical Products or Off-specification Batches of Commercial Chemical Products or Spill Residues of Either

- (1) The following materials or items are hazardous wastes if and when they are, or are intended to be, discarded:
  - (a) Any commercial chemical product or manufacturing chemical intermediate having the generic name listed in 310 CMR 30.133.
  - (b) Any off-specification commercial chemical product or manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in 310 CMR 30.133.
  - (c) Any residue remaining in a container or in an inner liner removed from a container that has held any commercial chemical product or manufacturing chemical intermediate having the generic name listed in 310 CMR 30.133, unless the container is empty as defined in 310 CMR 30.106.
  - (d) Residues or hazardous waste constituents contained in media. Any residue or contaminated soil, water, or other debris resulting from the clean-up of a spill, into or on any land or water, of any commercial chemical product or manufacturing chemical intermediate having the generic name listed in 310 CMR 30.133, or any residue or contaminated soil, water or other debris resulting from the cleanup of a spill, into or on any land or water, of any off-specification chemical product or manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in 310 CMR 30.133.
- (2) These hazardous wastes and their corresponding EPA Hazardous Waste Numbers are:

Haz.	Chemical	
Waste	Abstracts	
Number	Numbers	Substance
U394	30558-43-1	A2213
U001	75-07-0	Acetaldehyde (I)

30.133: continued

Haz.	Chemical	
Waste	Abstracts	
Number	Numbers	Substance
U034	75-87-6	Acetaldehyde, trichloro-
U187	62-44-2	Acetamide, N-(4-ethoxyphenyl)-
U005	53-96-3	Acetamide, N-9H-fluoren-2-yl-
U240	94-75-7*	Acetic acid, (2,4-dichlorophenoxy)-, salts & esters
U112	141-78-6	Acetic acid ethyl ester (I)
U144	301-04-2	Acetic acid, lead(2+) salt
U214	563-68-8	Acetic acid, thallium(1+) salt
see F027	93-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-
U002	67-64-1	Acetone (I)
U003	75-05-8	Acetonitrile (I,T)
U004	98-86-2	Acetophenone
U005	53-96-3	2-Acetylaminofluorene
U006	75-36-5	Acetyl chloride (C,R,T)
U007	79-06-1	Acrylamide
U008	79-10-7	Acrylic acid (I)
U009	107-13-1	Acrylonitrile
U011	61-82-5	Amitrole
U012	62-53-3	Aniline (I,T)
U136	75-60-5	Arsinic acid, dimethyl-
U014	492-80-8	Auramine
U015	115-02-6	Azaserine
U010	50-07-7	Anrino[2',3':3,4]pyrrolo[1,2-a]indole-4,7-dione, -amino-8-[[(amino-
		carbonyl)oxy]methyl]-1,1a,2,8, 8a,8b-hexahydro-8a-methoxy-5-
		methyl-,[1aS-(1aalpha, 8beta, 8aalpha, 8balpha)]-
U280	101-27-9	Barban
U278	22781-23-3	Bendiocarb
U364	22961-82-6	Bendiocarb phenol
U271	17804-35-2	Benomyl
U157	56-49-5	Benz[j]accanthrylene, 1,2-dihydro-3-methyl-
U016	225-51-4	Benz[c]acridine
U017	98-87-3	Benzal chloride
U192	23950-58-5	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-
		propynyl)-
U018	56-55-3	Benz[a]anthracene
U094	57-97-6	Benz[a]anthracene, 7,12-dimethyl-
U012	62-53-3	Benzenamine (I,T)
U014	492-80-8	Benzenamine, 4,4'-carbonimidoylbis[N,N-dimethyl-
U049	3165-93-3	Benzenamine, 4-chloro-2-methyl-, hydrochloride
U093	60-11-7	Benzenamine, N,N-dimethyl-4-(phenylazo)-
U328	95-53-4	Benzenamine, 2-methyl-
U353	106-49-0	Benzenamine, 4-methyl-
U158	101-14-4	Benzenamine, 4,4'-methylenebis[2-chloro-
U222	636-21-5	Benzenamine, 2-methyl-, hydrochloride
U181	99-55-8	Benzenamine, 2-methyl-5-nitro-
U019	71-43-2	Benzene (I,T)
U038	510-15-6	Benzeneacetic acid, 4-chloro-alpha-(4-chloro-
		phenyl)-alpha-hydroxy-, ethyl ester
U030	101-55-3	Benzene, 1-bromo-4-phenoxy-
U035	305-03-3	Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]-

30.133: continued

Haz.	Chemical	
Waste	Abstracts	
Number	Numbers	Substance
U037	108-90-7	Benzene, chloro-
U221	25376-45-8	Benzenediamine, ar-methyl-
U028	117-81-7	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl)
		ester
U069	84-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester
U088	84-66-2	1,2-Benzenedicarboxylic acid, diethyl ester
U102	131-11-3	1,2-Benzenedicarboxylic acid, dimethyl ester
U107	117-84-0	1,2-Benzenedicarboxylic acid, dioctyl ester
U070	95-50-1	Benzene, 1,2-dichloro-
U071	541-73-1	Benzene, 1,3-dichloro-
U072	106-46-7	Benzene, 1,4-dichloro-
U060	72-54-8	Benzene, 1,1'-(2,2-dichloroethylidene)bis
0000	72-34-0	[4-chloro-
U017	98-87-3	Benzene, (dichloromethyl)-
U223	26471-62-5	Benzene, (diemoromethyl)- Benzene, 1,3-diisocyanatomethyl- (R, T)
U239	1330-20-7	
U201	108-46-3	Benzene, dimethyl- (l,T) 1,3-Benzenediol
U127	118-74-1	
		Benzene, hexachloro-
U056	110-82-7	Benzene, hexahydro- (I)
U220	108-88-3	Benzene, methyl-
U105	121-14-2	Benzene, 1-methyl-2,4-dinitro-
U106	606-20-2	Benzene, 2-methyl-1,3-dinitro-
U055	98-82-8	Benzene, (1-methylethyl)- (I)
U169	98-95-3	Benzene, nitro-
U183	608-93-5	Benzene, pentachloro-
U185	82-68-8	Benzene, pentachloronitro-
U020	98-09-9	Benzenesulfonic acid chloride (C,R)
U020	98-09-9	Benzenesulfonyl chloride (C,R)
U207	95-94-3	Benzene, 1,2,4,5-tetrachloro-
U061	50-29-3	Benzene, 1,1'-(2,2,2-trichloroethylidene)
11247	70 40 5	bis[4-chloro-
U247	72-43-5	Benzene, 1,1'-(2,2,2-trichloroethylidene)
11022	00 07 7	bis[4-methoxy-
U023	98-07-7	Benzene, (trichloromethyl)-
U234	99-35-4	Benzene, 1,3,5-trinitro-
U021	92-87-5	Benzidine
U202	81-07-2*	1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide, & salts
U278	22781-23-3	1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate
U364	22961-82-6	1,3-Benzodioxol-4-ol, 2,2-dimethyl-
U203	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-
U141	120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-
U090	94-58-6	1,3-Benzodioxole, 5-propyl-
U367	1563-38-8	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-
U064	189-55-9	Benzo[rst]pentaphene
U248	81-81-2*	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-
		phenylbutyl)-, & salts, when present at
		concentrations of 0.3% or less
U022	50-32-8	Benzo[a]pyrene
U197	106-51-4	p-Benzoquinone
U023	98-07-7	Benzotrichloride (C,R,T)
U085	1464-53-5	2,2'-Bioxirane
U021	92-87-5	[1,1'-Biphenyl]-4,4'-diamine
U073	91-94-1	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro-
U091	119-90-7	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethoxy-

30.133: continued

Haz.	Chemical	
Waste	Abstracts	
Number	Numbers	Substance
11005	110.02.7	
U095	119-93-7	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-
U225	75-25-2	Bromoform
U030	101-55-3	4-Bromophenyl phenyl ether
U128	87-68-3	1.3-Butadiene, 1,1,2,3,4,4-hexachloro-
U172	924-16-3	1-Butanamine, N-butyl-N-nitroso-
U031	71-36-3	1-Butanol (I)
U159	78-93-3	2-Butanone (I,T)
U160	1338-23-4	2-Butanone, peroxide (R,T)
U053	4170-30-3	2-Butenal
U074	764-41-0	2-Butene, 1,4-dichloro- (I,T)
U143	303-34-4	2-Butenoic acid, 2-methyl-, 7-[[2,3-dihydroxy-
		2-(1-methoxyethyl)-3-methyl-1-oxo-
		butoxy)methyl]-2,3,5,7a-tetrahydro-1H-
		pyrrolizin-1-yl ester, [1S-[1alpha(Z),7
		(2S*,3R*),7aalpha]]-
U031	D71-36-3	n-Butyl alcohol (I)
U136	75-60-5	Cacodylic acid
U032	13765-19-0	Calcium chromate
U372	10605-21-7	Carbamic acid, 1H-benzimidazol-2-yl, methyl ester
U271	17804-35-2	Carbamic acid, [1-[(butylamino)carbonyl]-1H-benzimidazol-2-yl]-,
		methyl ester
U238	51-79-6	Carbamic acid, ethyl ester
U178	615-53-2	Carbamic acid, methylnitroso-, ethyl ester
U280	101-27-9	Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester
U373	122-42-9	Carbamic acid, phenyl-, 1-methylethyl ester
U409	23564-05-8	Carbamic acid, [1,2-phenylenebis (iminocarbonothioyl)]bis-,dimethyl
		ester
U097	79-44-7	Carbamic chloride, dimethyl-
U114	111-54-6*	Carbamodithioic acid, 1,2-ethanediylbis-, salts and esters
U062	2303-16-4	Carbamothioic acid, bis (1-methylethyl)-, S- (2,3-dichloro-2-
		propenyl) ester
U389	2303-17-5	Carbamothioic acid, bis (1- methylethyl) -, S - (2,3,3-trichloro-
		2-propenyl) ester
U387	52888-80-9	Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester
U279	63-25-2	Carbaryl
U372	10605-21-7	Carbendazim
U367	1563-38-8	Carbofuran phenol
U215	6533-73-9	Carbonic acid, dithallium(1+) salt
U033	353-50-4	Carbonic difluoride
U156	79-22-1	Carbonochloridic acid, methyl ester (I,T)
U033	353-50-4	Carbon oxyflouride (R,T)
U211	56-23-5	Carbon tetrachloride
U034	75-87-6 205-02-2	Chlorathusil
U035	305-03-3	Chlorambucil
U036	57-74-9	Chlorron horin
U026 U037	494-03-1 108-90-7	Chlornaphazin Chlorobenzene
		Chlorobenzilate
U038 U039	510-15-6 59-50-7	p-Chloro-m-cresol
U039 U042	110-75-8	2-Chloroethyl vinyl ether
U042 U044	67-66-3	Chloroform
U044 U046	107-30-2	Chloromethyl methyl ether
U047	91-58-7	beta-Chloronaphthalene
U048	95-57-8	o-Chlorophenol
0040	95-51 <b>-</b> 0	о-стиогорненог

30.133: continued

Haz.	Chemical	
Waste	Abstracts	
Number	Numbers	Substance
U049	3165-93-3	4-Chloro-o-toluidine, hydrochloride
U032	13765-19-0	Chromic acid H2CrO4, calcium salt
U050	218-01-9	Chrysene
U051		Creosote
U052	1319-77-3	Cresol (Cresylic acid)
U053	4170-30-3	Crotonaldehyde
U055	98-82-8	Cumene (I)
U246	506-68-3	Cyanogen bromide CNBr
U197	106-51-4	2,5-Cyclohexadiene-1,4-dione
U056	110-82-7	Cyclohexane (I)
U129	58-89-9	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,
		2alpha, 3beta, 4alpha, 5alpha, 6beta)-
U057	108-94-1	Cyclohexanone (I)
U130	77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-
U058	50-18-0	Cyclophosphamide
U240	94-75-7*	2,4-D, salts & esters
U059	20830-81-3	Daunomycin
U060	72-54-8	DDD
U061	50-29-3	DDT
U062	2303-16-4	Diallate
U063	53-70-3	Dibenz[a,h]anthracene
U064	189-55-9	Dibenzo[a,i]pyrene
U066	96-12-8	1,2-Dibromo-3-chloropropane
U069	84-74-2	Dibutyl phthalate
U070	95-50-1	o-Dichlorobenzene
U071	541-73-1	m-Dichlorobenzene
U072	106-46-7	p-Dichlorobenzene
U073	91-94-1	3,3'-Dichlorobenzidine
U074	764-41-0	1,4-Dichloro-2-butene (I,T)
U075	75-71-8	Dichlorodifluoromethane
U078	75-35-4	1,1-Dichloroethylene
U079	156-60-5	1,2-Dichloroethylene
U025	111-44-4	Dichloroethyl ether
U027	108-60-1	Dichloroisopropyl ether
U024	111-91-1	Dichloromethoxy ethane
U081	120-83-2	2,4-Dichlorophenol
U082	87-65-0	2,6-Dichlorophenol
U084	542-75-6	1,3-Dichloropropene
U085	1464-53-5	1,2:3,4-Diepoxybutane (I,T)
U108 U028	123-91-1 117-81-7	1,4-Diethyleneoxide Diethylhexyl phthalate
U395	5952-26-1	Diethylene glycol, dicarbamate
U086	1615-80-1	N,N'-Diethylhydrazine
U087	3288-58-2	O,O-Diethyll S-methyl dithiophosphate
U088	84-66-2	Diethyl phthalate
U089	56-53-1	Diethylstilbesterol
U090	94-58-6	Dihydrosafrole
U091	119-90-4	3,3'-Dimethoxybenzidine
U092	124-40-3	Dimethylamine (I)
U093	60-11-7	p-Dimethylaminoazobenzene
U094	57-97-6	7,12-Dimethylbenz[a]anthracene
U095	119-93-7	3,3'-Dimethylbenzidine
U096	80-15-9	alpha,alpha-Dimethylbenzylhydroperoxide (R)
U097	79-44-7	Dimethyicarbamoyl chloride
U098	57-14-7	1,1-Dimethylhydrazine
		• •

30.133: continued

Haz.	Chemical	
Waste	Abstracts	
Number	Numbers	Substance
U099	540-73-8	1,2-Dimethylhydrazine
U101	105-67-9	2,4-Dimethylphenol
U102	131-11-3	Dimethyl phthalate
U103	77-78-1	Dimethyl sulfate
U105	121-14-2	2,4-Dinitrotoluene
U106	606-20-2	2,6-Dinitrotoluene
U107	117-84-0	Di-n-octyl phthalate
U108	123-91-1	1,4-Dioxane
U109	122-66-7	1,2-Diphenylhydrazine
U110	142-84-7	Dipropylamine (I)
U111	621-64-7	Di-n-propylnitrosamine
U041	106-89-8	Epichlorohydrin
U001	75-07-0	Ethanal (I)
U404	121-44-8	Ethanamine, N,N-diethyl-
U174	55-18-5	Ethanamine, N-ethyl-N-nitroso-
U155	91-80-5	1,2-Ethanediamine, N,N-dimethyl-N'-1-
		pyridinyl-N'-(2-thienylmethyl)-
U067	106-93-4	Ethane, 1,2-dibromo-
U076	75-34-3	Ethane, 1,1-dichloro-
U077	107-06-2	Ethane, 1,2-dichloro-
U131	67-72-1	Ethane, hexachloro-
U024	111-91-1	Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro-
U117	60-29-7	Ethane, 1,1'-oxybis- (I)
U025	111-44-4	Ethane, 1,1,'-oxybis[2-chloro-
U184	76-01-7	Ethane, pentachloro-
U208	630-20-6	Ethane, 1,1,1,2-tetrachloro-
U209	79-34-5	Ethane, 1,1,2,2-tetrachloro-
U218	62-55-5	Ethanethioamide
U226	71-55-6	Ethane, 1,1,1-trichloro-
U227	79-00-5	Ethane, 1,1,2-trichloro-
U410	59669-26-0	Ethanimidothioic acid, N, N'-[thiobis
0.110	2,00,200	[(methylimino)carbonyloxy]]bis-,dimethyl ester
U394	30558-43-1	Ethanimidothioic acid, 2-(dimethylamino)- N-hydroxy-2-oxo-,methyl
00) !	30220 13 1	ester
U359	110-80-5	Ethanol, 2-ethoxy-
U173	1116-54-7	Ethanol, 2,2'-(nitrosoimino)bis-
U395	5952-26-1	Ethanol, 2,2'-oxybis-, dicarbamate
U004	98-86-2	Ethanone, 1-phenyl-
U043	75-01-4	Ethanone, 1-phenyl- Ethene, chloro-
U042	110-75-8	Ethene, (2-chloroethoxy)-
U078	75-35-4	Ethene, 1,1-dichloro-
U079	156-60-5	Ethene, 1,2-dichloro-, (E)-
U210	127-18-4	Ethene, tetrachloro-
U228	79-01-6	Ethene, trichloro-
U112	141-78-6	Ethyl acetate (I)
		•
U113 U238	140-88-5 51-79-6	Ethyl carbamate (urethane)
	51-79-6 60-20-7	Ethyl other (I)
U117	60-29-7	Ethyl ether (I) Ethyl enebis dithiographymic acid, salts, & esters
U114	111-54-6*	Ethylene dibromide
U067	106-93-4	Ethylene dibromide
U077	107-06-2	Ethylene dichloride
U359	110-80-5	Ethylene glycol monoethyl ether
U115	75-21-8	Ethylene oxide (I,T)
U116	96-45-7	Ethylenethiourea

30.133: continued

Haz.	Chemical	
Waste	Abstracts	
Number	Numbers	Substance
U076	75-34-3	Ethylidene dichloride
U118	97-63-2	Ethyl methacrylate
U119	62-50-0	Ethyl methanesul fonate
U120	206-44-0	Fluoranthene
U122	50-00-0	Formaldehyde
U123	64-18-6	Formic acid (C,T)
U124	110-00-9	Furan (I)
U125	98-01-1	2-Furancarboxaldehyde (I)
U147	108-31-6	2.5-Furandione
U213	109-99-9	Furan, tetrahydro- (I)
U125	98-01-1	Furfural (I)
U124	110-00-9	Furfuran (I)
U206	18883-66-4	Glucopyranose, 2-deoxy-2-(3-methyl-3-nitroso-
0200	10002 00 1	ureido) D-
U206	18883-66-4	D-Glucose, 2-deoxy-2-[[(methylnitrosoamino)-
0200	10005-00-4	carbonyl]amino]-
U126	765-34-4	Glycidylaldehyde
U163	70-25-7	Guanidine, N-methyl-N'-nitro-N-nitroso-
U127	118-74-1	Hexachlorobenzene
U128	87-68-3	Hexachlorobutadiene
U130	77-47-4	Hexachlorocyclopentadiene
U130	67-72-1	Hexachloroethane
U131 U132	70-30-4	
		Hexachlorophene Hexachloropropene
U243	1888-71-7	* *
U133	302-01-2	Hydrazine (R,T)
U086	1615-80-1	Hydrazine, 1,2-diethyl-
U098	57-14-7	Hydrazine, 1,1-dimethyl-
U099	540-73-8	Hydrazine, 1,2-dimethyl-
U109	122-66-7	Hydrazine, 1,2-diphenyl-
U134	7664-39-3	Hydrofluoric acid (C,T)
U134	7664-39-3	Hydrogen fluoride (C,T)
U135	7783-06-4	Hydrogen sulfide
U135	7783-06-4	Hydrogen sulfide H2S
U096	80-15-9	Hydroperoxide, 1-methyl-1-phenylethyl- (R)
U116	96-45-7	2-Imidazolidinethione
U137	193-39-5	Indeno[1,2,3-cd]pyrene
U190	85-44-9	1,3-lsobenzofurandione
U140	78-83-1	Isobutyl alcohol (I,T)
U141	120-58-1	Isosafrole
U142	143-50-0	Kepone
U143	303-34-4	Lasiocarpine
U144	301-04-2	Lead acetate
U146	1335-32-6	Lead, bis (acetato-O) tetrahydroxytri-
U145	7446-27-7	Lead phosphate
U146	1335-32-6	Lead subacetate
U129	58-89-9	Lindane
U163	70-25-7	MNNG
U147	108-31-6	Maleic anhydride
U148	123-33-1	Maleic hydrazide
U149	109-77-3	Malononitrile
U150	148-82-3	Melphalan
U151	7439-97-6	Mercury
U152	126-98-7	Methacrylonitrile (I,T)
U092	124-40-3	Methanamine, N-methyl- (I)
U029	74-83-9	Methane, bromo-

30.133: continued

Haz.	Chemical	
Waste	Abstracts	
Number	Numbers	Substance
U046	107-30-2	Methane, chloromethoxy-
U068	74-95-3	Methane, dibromo-
U080	75-09-2	Methane, dichloro-
U075	75-71-8	Methane, dichlorodifluoro-
U138	74-88-4	Methane, lodo-
U119	62-50-0	Methanesulfonic acid, ethyl ester
U211	56-23-5	Methane, tetrachloro-
U153	74-93-1	Methanethiol (I,T)
U225	75-25-2	Methane, tribromo-
U044	67-66-3	Methane, trichloro-
U121	75-69-4	Methane, trichlorofluoro-
U036	57-74-9	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octa-
0030	31-14-9	chloro-2,3,3a,4,7,7a-hexahydro-
U154	67-56-1	• • • • • •
		Methanol (I)
U155	91-80-5	Methapyrilene
U142	143-50-0	1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-
		one, 1,1a,3,3a,4,5,5,5a,5b,6-decachloro-
		octahydro-
U247	72-43-5	Methoxychlor
U154	67-56-1	Methyl alcohol (I)
U029	74-83-9	Methyl bromide
U186	504-60-9	1-Methylbutadiene (I)
U045	74-87-3	Methyl chloride (I,T)
U156	79-22-1	Methyl chlorocarbonate (I,T)
U226	71-55-6	Methyl chloroform
U157	56-49-5	3-Methylcholanthrene
U158	101-14-4	4,4'-Methylenebis(2-chloroaniline)
U068	74-95-3	Methylene bromide
U080	75-09-2	Methylene chloride
U159	78-93-3	Methyl ethyl ketone (MEK) (I,T)
U160	1338-23-4	Methyl ethyl ketone peroxide (R,T)
U138	74-88-4	Methyl iodide
U161	108-10-1	Methyl isobutyl ketone (I)
U162	80-62-6	Methyl methacrylate (I,T)
U161	108-10-1	4-Methyl-2-pentanone (I)
U164	56-04-2	Methylthiouracil
U010	50-07-7	Mitomycin C
U059	20830-81-3	5,12-Naphthacenedione, 8-acetyl-10-
0039	20030-01-3	[(3-amino-2,3,6-trideoxy)-alpha-L-lyxo-hexo-
		pyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-
11167	124 22 7	trihydroxy-1-methoxy (8S-cis)-
U167	134-32-7	1-Naphthalenamine
U168	91-59-8	2-Naphthalenamine
U026	494-03-1	Naphthalenamine, N,N'-bis(2-chloroethyl)-
U165	91-20-3	Naphthalene
U047	91-58-7	Naphthalene, 2-chloro-
U166	130-15-4	1,4-Naphthalenedione
U236	72-57-1	2,7-Naphthalenedisulfonic acid, 3,3'-[(3.3'-
		dimethyl[1,1'-biphenyl]-4,4'-diyl)bis
		(azo)bis[5-amino-4-hydroxy]-, tetrasodium
		salt
U279	63-25-2	1-Naphthalenol, methylcarbamate
U166	130-15-4	1,4-Naphthoquinone
U167	134-32-7	alpha-Naphthylamine
U168	91-59-8	beta-Naphthylamine
U217	10102-45-1	Nitric acid, thallium(1+) salt
30.133:	continued	

Haz.	Chemical	
Waste	Abstracts	
Number	Numbers	Substance
U169	98-95-3	Nitrobenzene (I,T)
U170	100-02-7	p-Nitrophenol
U171	79-46-9	2-Nitropropane (I,T)
U172	924-16-3	N-Nitrosodi-n-butylamine
U173	1116-54-7	N-Nitrosodiethanolamine
U174	55-18-5	N-Nitrosodiethylamine
U176	759-73-9	N-Nitroso-N-ethylurea
U177	684-93-5	N-Nitroso-N-methylurea
U178	615-53-2	N-Nitroso-N-methylurethane
U179	100-75-4	N-Nitrosopiperidine
U180	930-55-2	N-Nitrosopyrrolidine
U181	99-55-8	5-Nitro-o-toluidine
U193	1120-71-4	1,2-Oxathiolane, 2,2-dioxide
U058	50-18-0	2H-1,3,2-Oxazaphosphor in-2-amine, N,N-bis
		(2-chloroethyl)tetrahydro-, 2-oxide
U115	75-21-8	Oxirane (I,T)
U126	765-34-4	Oxiranecarboxyaldehyde
U041	106-89-8	Oxirane, (chloromethyl)-
U182	123-63-7	Paraldehyde
U183	608-93-5	Pentachlorobenzene
U184	76-01-7	Pentachloroethane
U185	82-68-8	Pentachloronitrobenzene (PCNB)
see F027	87-86-5	Pentachlorophenol
U161	108-10-1	Pentanol, 4-methyl-
U186	504-60-9	1,3-Pentadiene (I)
U187	62-44-2	Phenacetin
U188	108-95-2	Phenol
U048	95-57-8	Phenol, 2-chloro-
U039	59-50-7	Phenol, 4-chloro-3-methyl-
U081	120-83-2	Phenol, 2,4-dichloro-
U082	87-65-0	Phenol, 2,6-dichloro-
U089	56-53-1	Phenol, 4,4'-(1,2-diethyl-1,2-
		ethenediyl)bis-, (E)-
U101	105-67-9	Phenol, 2,4-dimethyl-
U052	1319-77-3	Phenol, methyl-
U132	70-30-4	Phenol, 2,2'-methylenebis[3,4,6-trichloro-
U411	114-26-1	Phenol, 2-(1-methylethoxy)-, methylcarbamate
U170	100-02-7	Phenol, 4-nitro-
see F027	87-86-5	Phenol, pentachloro-,
see F027	58-90-2	Phenol, 2,3,4,6-tetrachloro-
see F027	95-95-4	Phenol, 2,4,6-trichloro-
see F027	88-06-2	Phenol, 2,4,6-trichloro-
U150	148-82-3	L-Phenylalanine, 4-[bis(2-chloroethyl)amino]-
U145	7446-27-7	Phosphoric acid, lead(2+) salt (2:3)
U087	3288-58-2	Phosphorodithioic acid, O,O-diethyl
		S-methyl ester
U189	1314-80-3	Phosphorus sulfide (R)
U190	85-44-9	Phthalic anhydride
U191	109-06-8	2-Picoline
U179	100-75-4	Piperidine, 1-nitroso-
U192	23950-58-5	Pronamide
U194	107-10-8	1-Propanamine (I,T)
U111	621-64-7	1-Propanamine, N-nitroso-N-propyl-
U110	142-84-7	1-Propanamine, N-propyl- (I)
U066	96-12-8	Propane, 1,2-dibromo-3-chloro-
U083	78-87-5	Propane, 1,2-dichloro-

30.133: continued

Haz.	Chemical	
Waste	Abstracts	
Number	Numbers	Substance
U149	109-77-3	Propanedinitrile
U171	79-46-9	Propane, 2-nitro- (I,T)
U027	108-60-1	Propane, 2,2'-oxybis[2-chloro-
U193	1120-71-4	1,3-Propane sultone
see F027	93-72-1	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-
U235	126-72-7	1-Propanol, 2,3-dibromo-, phosphate (3:1)
U140	78-83-1	1-Propanol, 2-methyl- (I,T)
U002	67-64-1	2-Propanone (I)
U007	79-06-1	2-Propenamide
U084	542-75-6	1-Propene, 1,3-dichloro-
U243	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-
U009	107-13-1	2-Propenenitrile
U152	126-98-7	2-Propenenitrile, 2-methyl- (I,T)
U008	79-10-7	2-Propenoic acid (I)
U113	140-88-5	2-Propenoic acid, ethyl ester (I)
U118	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester
U162	80-62-6	2-Propenoic acid, 2-methyl-, methyl ester (I,T)
U373	122-42-9	Propham
U411	114-26-1	Propoxur
U194	107-10-8	n-Propylamine (I,T)
U083	78-87-5	Propylene dichloride
U148	123-33-1	3,6-Pyridazinedione, 1,2-dihydro-
U196	110-86-1	Pyridine
U191	109-06-8	Pyridine, 2-methyl-
U237	66-75-1	2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloro-
0237	00 70 1	ethyl)amino]-
U164	56-04-2	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-
		thioxo-
U180	930-55-2	Pyrrolidine, 1-nitroso-
U200	50-55-5	Reserpine
U201	108-46-3	Resorcinol
U203	94-59-7	Safrole
U204	7783-00-8	Selenious acid
U204	7783-00-8	Selenium dioxide
U205	7488-56-4	Selenium sulfide
U205	7488-56-4	Selenium sulfide SeS2 (R,T)
U015	115-02-6	L-Serine, diazoacetate (ester)
see F027	93-72-1	Silvex (2,4,5-TP)
U206	18883-66-4	Streptozotocin
U103	77-78-1	Sulfuric acid, dimethyl ester
U189	1314-80-3	Sulfur phosphide (R)
see F027	93-76-5	2,4,5-T
U207	95-94-3	1,2,4,5-Tetrachlorobenzene
U208	630-20-6	1,1,1,2-Tetrachloroethane
U209	79-34-5	1,1,2,2-Tetrachloroethane
U210	127-18-4	Tetrachloroethylene
see F027	58-90-2	2,3,4,6-Tetrachlorophenol
U213	109-99-9	Tetrahydrofuran (I)
U214	563-68-8	Thallium(I) acetate
U215	6533-73-9	Thallium(I) carbonate
U216	7791-12-0	Thallium(l) chloride
U216	7791-12-0	Thallium chloride TlCl
U217	10102-45-1	Thallium(I) nitrate
U218	62-55-5	Thioacetamide
U410	59669-26-0	Thiodicarb
U153	74-93-1	Thiomethanol (I)
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30.133: continued

Haz.	Chemical	
Waste	Abstracts	
Number	Numbers	Substance
rumoer	1 tuniocis	Substance
U244	137-26-8	Thioperoxydicarbonic diamide [(H2N)C(S)]2S2, tetramethyl-
U409	23564-05-8	Thiophanate-methyl
U219	62-56-6	Thiourea
U244	137-26-8	Thiram
U220	108-88-3	Toluene
U221	25376-45-8	Toluenediamine
U223	26471-62-5	Toluene diisocyanate (R,T)
U328	95-53-4	o-Toluidine
U353	106-49-0	p-Toluidine
U222	636-21-5	o-Toluidine hydrochloride
U389	2303-17-5	Triallate
U011	61-82-5	1H-1,2,4-Triazol-3-amine
U227	79-00-5	1,1,2-Trichloroethane
U228	79-01-6	Trichloroethylene
U121	75-69-4	Trichloromonofluoromethane
see F027	95-95-4	2,4,5-Trichlorophenol
see F027	88-06-2	2,4,6-Trichlorophenol
U404	121-44-8	Triethylamine
U234	99-35-4	1,3,5-Trinitrobenzene (R,T)
U182	123-63-7	1,3,5-Trioxane, 2,4,6-trimethyl-
U235	126-72-7	Tris(2,3-dibromopropyl) phosphate
U236	72-57-1	Trypan blue
U237	66-75-1	Uracil mustard
U176	759-73-9	Urea, N-ethyl-N-nitroso-
U177	684-93-5	Urea, N-methyl-N-nitroso-
U043	75-01-4	Vinyl chloride
U248	81-81-2*	Warfarin, & salts, when present at
		concentrations of 0.3% or less
U239	1330-20-7	Xylene (1)
U200	50-55-5	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-, methyl ester, (3beta,16beta,17alpha,18beta,20alpha)-
U249	1314-84-7	Zinc phosphide, Zn3P2 when present at concentrations of 10% or less

<sup>\*</sup> CAS Number given for parent compound only.

# 30.136: Acutely Hazardous Wastes

A waste is an acutely hazardous waste if it is listed in 310 CMR 30.136, or if it listed in 310 CMR 30.131 with EPA Hazardous Waste No. F020, F021, F022, F023, F026, or F027.

- (1) In addition to the wastes listed in 310 CMR 30.131 with EPA Hazardous Waste No. F020, F021, F022, F023, F026, or F027, the following materials or items are acutely hazardous waste if and when they are, or are intended to be, discarded:
  - (a) Any commercial chemical product or manufacturing chemical intermediate having the generic name listed in 310 CMR 30.136.
  - (b) Any off-specification commercial chemical product or manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in 310 CMR 30.136.
  - (c) Any residue remaining in a container or an inner liner removed from a container that has held any commercial chemical product or manufacturing chemical intermediate having the generic name listed in 310 CMR 30.136, unless the container is an empty container as defined in 310 CMR 30.106.

- (d) Residues or hazardous waste constituents contained in media. Any residue or contaminated soil, water, or other debris resulting from the clean-up of a spill, into or on any land or water, of any commercial chemical product or manufacturing chemical intermediate having the generic name listed in 310 CMR 30.136, or any residue or contaminated soil, water or other debris resulting from the cleanup of a spill, into or on any land or water, of any off-specification chemical product or manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in 310 CMR 30.136.
- (e) Any paper bag which has contained any material described in 310 CMR 30.136(1)(a) through (d).
- (f) Any residue containing a chemical intermediate or chemical product having the generic name listed in 310 CMR 30.136 that is mixed with any other hazardous waste.
- (2) The acutely hazardous wastes and their corresponding EPA Hazardous Waste Numbers are:

Haz.	Chemical	
паz. Waste	Abstracts	
Number	Numbers	Substance
Number	Nulliocis	Substance
P023	107-20-0	Acetaldehyde, chloro-
P002	591-08-2	Acetamide, N-(aminothioxomethyl)-
P057	640-19-7	Acetamide, 2-fluoro-
P058	62-74-8	Acetic acid, fluoro-, sodium salt
P002	591-08-2	1-Acetyl-2-thiourea
P003	107-02-8	Acrolein
P070	116-06-3	Aldicarb
P203	1646-88-4	Aldicarb sulfone
P004	309-00-2	Aldrin
P005	107-18-6	Allyl alcohol
P006	20859-73-8	Aluminum phosphide (R,T)
P007	763-96-4	5-(Aminomethyl)-3-isoxazolol
P008	504-24-5	4-Aminopyridine
P009	131-74-8	Ammonium picrate (R)
P119	7803-55-6	Ammonium vanadate
P099	506-61-6	Argentate(1-), bis(cyano-C)-, potassium
P010	7778-39-4	Arsenic acid H3AsO4
P012	1327-53-3	Arsenic oxide As2O3
P011	1303-28-2	Arsenic oxide As2O5
P011	1303-28-2	Arsenic pentoxide
P012	1327-53-3	Arsenic trioxide
P038	692-42-2	Arsine, diethyl-
P036	696-28-6	Arsonous dichloride, phenyl-
P054	151-56-4	Aziridine
P067	75-55-8	Aziridine, 2-methyl-
P013	542-62-1	Barium cyanide
P024	106-47-8	Benzenamine, 4-chloro-
P077	100-01-6	Benzenamine, 4-nitro-
P028	100-44-7	Benzene, (chloromethyl)-
P042	51-43-4	1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)-
		ethyl]-, (R)-
P046	122-09-8	Benzeneethanamine, alpha,alpha-dimethyl-
P014	108-98-5	Benzenethiol
P127	1563-66-2	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-,methylcarbamate
P001	81-81-2*	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-
		1-phenylbutyl)-, & salts, when present at
		concentrations greater than 0.3%
P028	100-44-7	Benzyl chloride
P015	7440-41-7	Beryllium
P017	598-31-2	Bromoacetone
P018	357-57-3	Brucine

30.136: continued

Haz.	Chemical	
Waste	Abstracts	
Number	Numbers	Substance
2012		
P045	39196-18-4	2-Butanone, 3,3-dimethyl-1-(methylthio)-,
D021	500 01 0	O-[(methylamino)carbonyl] oxime
P021	592-01-8	Calcium cyanide
P021	592-01-8	Calcium cyanide Ca(CN)2
P189	555285-14-8	Carbamic acid, [(dibutylamino)- thio]methyl-, 2,3-dihydro-2,2-dimethyl-7-benzofuranyl ester
P191	644-64-4	Carbamic acid, dimethyl-, 1-[(dimethyl-amino)carbonyl]-5-methyl-1H-pyrazol-3-yl ester
P192	119-38-0	Carbamic acid, dimethyl-, 3-methyl-1- (1-methylethyl)-1H-pyrazol-5-yl ester
P190	1129-41-5	Carbamic acid, methyl-, 3-methylphenyl ester
P127	1563-66-2	Carbofuran
P189	55285-14-8	Carbosulfan
P022	75-15-0	Carbon disulfide
P095	75-44-5	Carbonic dichloride
P023	107-20-0	Chloroacetaldehyde
P024	106-47-8	p-Chloroaniline
P026	5344-82-1	1-(o-Chlorophenyl)thiourea
P027	542-76-7	3-Chloropropionitrile
P029	544-92-3	Copper cyanide
P029	544-92-3	Copper cyanide CuCN
P202	64-00-6	m-Cumenyl methylcarbamate
P030		Cyanides (soluble cyanide salts), not
		otherwise specified
P031	460-19-5	Cyanogen
P033	506-77-4	Cyanogen chloride
P033	506-77-4	Cyanogen chloride CNCl
P034	131-89-5	2-Cyclohexyl-4,6-dinitrophenol
P016	542-88-1	Dichloromethyl ether
P036	696-28-6	Dichlorophenylarsine
P037	60-57-1	Dieldrin
P038	692-42-2	Diethylarsine
P041	311-45-5	Diethyl-p-nitrophenyl phosphate
P040	297-97-2	O,O-Diethyl O-pyrazinyl phosphorothioate
P043	55-91-4	Diisopropylfluorophosphate (DFP)
P004	309-00-2	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-
		hexachloro-1,4,4a,5,8,8a-hexahydro-,
		(1alpha,4alpha,4abeta,5alpha,8alpha,8abeta)-
P060	465-73-6	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-
		hexachloro-1,4,4a,5,8,8a-hexahydro-,
		(1alpha,4alpha,4abeta,5beta,8beta,8abeta)-
P037	60-57-1	2,7:3,6-Dimethanonaphth[2,3-b]oxirene,
		3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-
		octahydro-, (1aalpha,2beta,2aalpha,3beta,
		6beta,6aalpha,7beta,7aalpha)-
P051	72-20-8*	2,7:3,6-Dimethanonaphth[2,3-b]oxirene,
		3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-
		octahydro-, (1aalpha,2beta,2abeta,3alpha,
		6alpha,6abeta,7beta,7aalpha)-, & metabolites
P044	60-51-5	Dimethoate
P191	644-64-4	Dimetilan
P046	122-09-8	
		alpha,alpha-Dimethylphenethylamine
P047	534-52-1*	4,6-Dinitro-o-cresol, & salts
P048	51-28-5	2,4-Dinitrophenol
P020	88-85-7	Dinoseb

30.136: continued

Haz.	Chemical	
Waste	Abstracts	
Number	Numbers	Substance
P085	152-16-9	Diphosphoramide, octamethyl-
P111	107-49-3	Diphosphoric acid, tetraethyl ester
P039	298-04-4	Disulfoton
P049	541-53-7	Dithiobiuret
P185	26419-73-8	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-,
		O-[(methylamino)-carbonyl]oxime
P050	115-29-7	Endosulfan
P088	145-73-3	Endothall
P051	72-20-8	Endrin
P051	72-20-8	Endrin, & metabolites
P042	51-43-4	Epinephrine
P031	460-19-5	Ethanedinitrile
P194	23135-22-0	Ethanimidothioc acid, 2-(dimethylamino)-N-[[(methylamino)
		carbonyl]oxy]-2-oxo-, methyl ester
P066	16752-77-5	Ethanimidothioic acid, N-[[(methylamino)-
		carbonyl]oxy]-, methyl ester
P101	107-12-0	Ethyl cyanide
P054	151-56-4	Ethyleneimine
P097	52-85-7	Famphur
P056	7782-41-4	Fluorine
P057	640-19-7	Fluoroacetamide
P058	62-74-8	Fluoroacetic acid, sodium salt
P198	23422-53-9	Formetanate hydrochloride
P197	17702-57-7	Formparanate
P065	628-86-4	-
P063 P059	76-44-8	Fulminic acid, mercury(2+) salt (R,T) Heptachlor
P039 P062	757-58-4	•
	79-19-6	Hexaethyl tetraphosphate
P116		Hydrazinecarbothioamide
P068	60-34-4 74-90-8	Hydrazine, methyl-
P063		Hydrocyanic acid
P063	74-90-8	Hydrogen cyanide
P096	7803-51-2	Hydrogen phosphide
P060	465-73-6	Isodrin
P192	119-38-0	Isolan
P202	64-00-6	3-Isopropylphenyl N-methylcarbamate
P007	2763-96-4	3(2H)-Isoxazolone, 5-(aminomethyl)-
P196	15339-36-3	Manganese, bis(dimethylcarbamodithioato-S,S')-,
P196	15339-36-3	Manganese dimethyldithiocarbamate
P092	62-38-4	Mercury, (acetato-O)phenyl-
P065	628-86-4	Mercury fulminate (R,T)
P082	62-75-9	Methanamine, N-methyl-N-nitroso-
P064	624-83-9	Methane, isocyanato-
P016	542-88-1	Methane, oxybis[chloro-
P112	509-14-8	Methane, tetranitro- (R)
P118	75-70-7	Methanethiol, trichloro-
P198	23422-53-9	Methanimidamide, N,N-dimethyl-N'-[3-[[(methylamino)-
		carbonyl]oxy]phenyl]-, monohydrochloride
P197	17702-57-7	Methanimidamide, N,N-dimethyl-N'-[2-methyl-4-
		[[(methylamino)carbonyl]oxy]phenyl]-
P050	115-29-7	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,
		9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-,
		3-oxide
P059	76-44-8	4,7-Methano-1H-indene,
		1,4,5,6,7,8,8-heptachloro-
		3a,4,7,7a-tetrahydro-

30.136: continued

Haz.	Chemical	
Waste	Abstracts	
Number	Numbers	Substance
P199	2032-65-7	Methiocarb
P066	16752-77-5	Methomyl
P068	60-34-4	Methyl hydrazine
P064	624-83-9	Methyl isocyanate
P069	75-86-5	2-Methyllactonitrile
P071	298-00-0	Methyl parathion
P072	86-88-4	alpha-Naphthylthiourea
P190	1129-41-5	Metolcarb
P128	315-18-4	Mexacarbate
P073	13463-39-3	Nickel carbonyl
P073	13463-39-3	Nickel carbonyl Ni(CO)4, (T-4)-
P074	557-19-7	Nickel cyanide
P074	557-19-7	Nickel cyanide Ni(CN)2
P075	54-11-5 *	Nicotine, & salts
P076	10102-43-9	Nitric oxide
P077	100-01-6	p-Nitroaniline
P078	10102-44-0	Nitrogen dioxide
P076	10102-43-9	Nitrogen oxide NO
P078	10102-44-0	Nitrogen oxide NO2
P081	55-63-0	Nitroglycerine (R)
P082	62-75-9	N-Nitrosodimethylamine
P084	4549-40-0	N-Nitrosomethylvinylamine
P085	152-16-9	Octamethylpyrophosphoramide
P087	20816-12-0	Osmium oxide $O(s)O(4)$ , $(1-4)$ -
P087	20816-12-0	Osmium tetroxide
P088	145-73-3	7-Oxabicyclo[2,2,1]heptane-2,3-dicarboxylic acid
P194	23135-22-0	Oxamyl
P089	56-38-2	Parathion
P034	131-89-5	Phenol, 2-cyclohexyl-4,6-dinitro-
P128	315-18-4	Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate(ester)
P199	2032-65-7	Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate
P202	64-00-6	Phenol, 3-(1-methylethyl)-, methyl carbamate
P201	2631-37-0	Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate
P048	51-28-5	Phenol, 2,4-dinitro-
P047	534-52-1*	Phenol, 2-methyl-4,6-dinitro-, & salts
P020	88-85-7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-
P009	131-74-8	Phenol, 2,4,6-trinitro-, ammonium salt (R)
P092	62-38-4	Phenylmercury acetate
P093	103-85-5	Phenylthiourea
P094	298-02-2	Phorate
P095	75-44-5	Phosgene
P096	7803-51-2	Phosphine
P041	311-45-5	Phosphoric acid, diethyl 4-nitrophenyl ester
P201	2631-37-0	Promecarb
P203	1646-88-4	Propanal, 2-methyl-2-(methyl-sulfonyl)-, O-[(methylamino)carbonyl] oxime
P039	298-04-4	Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl] ester
P094	298-02-2	Phosphorodithioic acid, O,O-diethyl S-[(ethyl-thio)methyl] ester
P044	60-51-5	Phosphorodithioic acid, O,O-dimethyl S-[2- (methylamino)-2-oxoethyl] ester
P043	55-91-4	Phosphorofluoridic acid, bis(1-methylethyl) ester

30.136: continued

Haz.	Chemical	
Waste	Abstracts	
Number	Numbers	Substance
		<del></del>
P089	56-38-2	Phosphorothioic acid, O,O-diethyl
		O-(4-nitro- phenyl) ester
P040	297-97-2	Phosphorothioic acid, O,O-diethyl
		O-pyrazinyl ester
P097	52-85-7	Phosphorothioic acid, O-[4-[(dimethylamino)-
		sulfonyl]phenyl] O,O-dimethyl ester
P071	298-00-0	Phosphorothioic acid, O,O-dimethyl
		O-(4-nitro-phenyl) ester
P204	57-47-6	Physostigmine
P188	57-64-7	Physostigmine salicylate
P110	78-00-2	Plumbane, tetraethyl-
P098	151-50-8	Potassium cyanide
P098	151-50-8	Potassium cyanide K(CN)
P099	506-61-6	Potassium silver cyanide
P070	116-06-3	Propanal, 2-methyl-2-(methylthio)-,
		O-[(methyl- amino)carbonyl]oxime
P101	107-12-0	Propanenitrile
P027	542-76-7	Propanenitrile, 3-chloro-
P069	75-86-5	Propanenitrile, 2-hydroxy-2-methyl-
P081	55-63-0	1,2,3-Propanetriol, trinitrate (R)
P017	598-31-2	2-Propanone, 1-bromo-
P102	107-19-7	Propargyl alcohol
P003	107-02-8	2-Propenal
P005	107-18-6	2-Propen-1-ol
P067	75-55-8	1,2-Propylenimine
P102	107-19-7	2-Propyn-1-ol
P008	504-24-5	4-Pyridinamine
P075	54-11-5 *	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-,
		(S)-, & salts
P114	12039-52-0	Selenious acid, dithallium(1+) salt
P103	630-10-4	Selenourea
P104	506-64-9	Silver cyanide
P104	506-64-9	Silver cyanide Ag(CN)
P105	26628-22-8	Sodium azide
P106	143-33-9	Sodium cyanide
P106	143-33-9	Sodium cyanide Na(CN)
P108	57-24-9 *	Strychnidin-10-one, & salts
P018	357-57-3	Strychnidin-10-one, 2,3-dimethoxy-
P108	57-24-9 *	Strychnine, & salts
P115	7446-18-6	Sulfuric acid, dithallium(1+) salt
P109	3689-24-5	Tetraethyldithiopyrophosphate
P110	78-00-2	Tetraethyl lead
P111	107-49-3	Tetraethyl pyrophosphate
P112	509-14-8	Tetranitromethane (R)
P062 P113	757-58-4 1314-32-5	Tetraphosphoric acid, hexaethyl ester Thallic oxide
P113	1314-32-5	Thallium oxide Tl2O3
P113 P114	12039-52-0	
P114 P115	7446-18-6	Thallium(l) selenite Thallium(l) sulfate
P109	3689-24-5	Thiodiphosphoric acid, tetraethyl ester
P045	39196-18-4	Thiofanox
P049	541-53-7	Thioimidodicarbonic diamide [(H2N)C(S)]2NH
P014	108-98-5	Thiophenol
P116	79-19-6	Thiosemicarbazide
P026	5344-82-1	Thiourea, (2-chlorophenyl)-
		· · · · · · · · · · · · · · · · · · ·

30.136: continued

Haz.	Chemical	
Waste	Abstracts	
Number	Numbers	Substance
P072	86-88-4	Thiourea, 1-naphthalenyl-
P093	103-85-5	Thiourea, phenyl-
P185	26419-73-8	Tirpate
P123	8001-35-2	Toxaphene
P118	75-70-7	Trichloromethanethiol
P119	7803-55-6	Vanadic acid, ammonium salt
P120	1314-62-1	Vanadium oxide V2O5
P120	1314-62-1	Vanadium pentoxide
P084	4549-40-0	Vinylamine, N-methyl-N-nitroso-
P001	81-81-2 *	Warfarin, & salts, when present at
		concentrations greater than 0.3%
P205	137-30-4	Zinc, bis(dimethylcarbamodithioato-S,S')-
P121	557-21-1	Zinc cyanide
P121	557-21-1	Zinc cyanide Zn(CN)2
P122	1314-84-7	Zinc phosphide Zn3P2 (R,T), when present at
		concentrations greater than 10%
P205	137-30-4	Ziram

<sup>\*</sup> CAS Number given for parent compound only.

### 30.140: When a Waste Becomes a Hazardous Waste

- (1) A waste which is not exempted from regulation pursuant to 310 CMR 30.104, becomes a hazardous waste when any of the following occurs:
  - (a) In the case of a waste listed in 310 CMR 30.131 or 30.132, when the waste first meets a listing description set forth in those sections.
  - (b) In the case of a waste listed in 310 CMR 30.133 or 30.136 when the waste first meets a listing description set forth in those sections and either a decision is made to discard the material or it is discarded.
  - (c) In the case of a mixture of nonhazardous waste and one or more listed hazardous wastes, when a hazardous waste listed in 310 CMR 30.130 through 30.136 is first added to the non-hazardous waste.
  - (d) In the case of a waste not listed in 310 CMR 30.130 through 30.136, including mixtures of wastes not listed in 310 CMR 30.130 through 30.136, when the waste exhibits any of the characteristics identified in 310 CMR 30.120 through 30.125.
  - (e) In the case of residue remaining in an empty container, as defined in 310 CMR 30.106, after the residue has first been removed if it exhibits any of the characteristics identified in 310 CMR 30.120 through 30.125 or contains a waste listed in 310 CMR 30.130 through 30.136.
  - (f) When the hazardous waste is generated in a product or raw material storage tank, a product or raw material transport vehicle or vessel, a product or raw material pipeline, or in a manufacturing process unit, it shall become subject to regulation as a hazardous waste when it exits the unit in which it was generated, except that:
    - 1. if the unit is a surface impoundment, the hazardous waste shall become subject to regulation as a hazardous waste upon generation; and
    - 2. if the hazardous waste remains in the unit, other than a surface impoundment, for more than 90 days after the unit ceases to be operated for manufacturing, storage or transportation of the product or raw material, the hazardous waste shall become subject to regulation as a hazardous waste upon the expiration of said 90 days.

#### 30.141: When a Hazardous Waste Ceases to Be a Hazardous Waste

Unless and until it meets the criteria in 310 CMR 30.141, a hazardous waste shall remain subject to regulation as a hazardous waste. Any hazardous waste described in 310 CMR 30.140 ceases to be a hazardous waste and need no longer be regulated as such when:

- (1) In the case of any waste or mixture which is regulated solely by virtue of the characteristics in 310 CMR 30.120 through 30.125, it no longer exhibits any of said characteristics. However, wastes that exhibit a characteristic at the point of generation may still be subject to the requirements of 310 CMR 30.750, even if they no longer exhibit a characteristic at the point of land disposal.
- (2) In the case of any waste which is a listed waste in 310 CMR 30.130 through 30.136, or waste which is derived from a waste listed in 310 CMR 30.130 through 30.136, it has been determined that the waste is not a hazardous waste pursuant to 310 CMR 30.142.
- (3) In the case of a mixture of nonhazardous waste and one or more hazardous wastes listed in 310 CMR 30.130 through 30.136 solely because the waste(s) exhibit(s) one or more characteristics of hazardous waste identified in 310 CMR 30.122 (ignitable), 30.123 (corrosive), or 310 CMR 30.124 (reactive), the resultant mixture no longer exhibits any such characteristic of hazardous waste. Any mixing process to render a waste nonhazardous is treatment of hazardous waste subject to the applicable requirements of 310 CMR 30.500 through 30.900.
- (4) In the case of a waste which can be recycled, the Department has approved that recycling pursuant to 310 CMR 30.200, provided that it is recycled in compliance with 310 CMR 30.200 and the terms and conditions of such approval.

### 30.142: Petition to Classify a Waste as Nonhazardous

- (1) Any person seeking to exclude a waste, which is designated by an EPA Hazardous Waste Number at a particular generating facility from the lists in 310 CMR 30.131 through 30.136 may petition the EPA Administrator for a regulatory amendment. To be successful, the petitioner shall comply with 40 CFR §§ 260.20(b) through (e) and 260.22 which are hereby incorporated by reference, with respect to delisting petitions only, with the following additions, modifications and exceptions:
  - 40 CFR 260.20(b) is hereby modified to read as follows: "Each petition shall be submitted to the Administrator by certified mail, with a copy of the petition sent to the Department either by certified mail or hand delivery, and shall include:";
  - All references to federal citations within 40 CFR 260.22 are substituted with the analogous state regulation as follows:
    - 1. "\\$ 261.3(a)(2)(ii) or (c)" is hereby replaced with "310 CMR 30.102(2)(a) or (d)";
    - 2. "subpart D" is hereby replaced with "310 CMR 30.131 through 30.136"
    - "paragraph (a) of this section" is hereby replaced with "310 CMR 30.142(1)";

    - 4. "subpart C of part 261" is hereby replaced with "310 CMR 30.120 through 30.125";
      5. "§ 261.21, § 261.22, § 261.23, or § 261.24" are hereby replaced with "310 CMR 30.122, 30.123, 30.124, or 30.125";
    - 6. "Appendix VII of part 261 of this chapter" is hereby replaced with "Appendix VII of part 261 as adopted at 310 CMR 30.162".
    - 7. "260.11" is hereby replaced with "310 CMR 30.012";
    - 8. "\\$ 261.11(a)(3)" is hereby replaced with "310 CMR 30.112(1)(c)";
    - 9. "\\$ 261.11(a)(3)(i) through (xi)" is hereby replaced with "310 CMR 30.112(1)(c)1. through 11."; and
    - 10. "261.11(a)(2)" is hereby replaced with "310 CMR 30.112(1)(b)".
- (2) A waste which is excluded by the EPA pursuant to 310 CMR 30.142(1) is still a hazardous waste subject to 310 CMR 30.000 if:
  - (a) the Department has accepted the EPA exclusion decision with a modification to impose additional, more stringent requirements; or
  - (b) the Department has prohibited the EPA exclusion decision from taking effect within the Commonwealth of Massachusetts.
- (3) Any person seeking to exclude a waste which is designated by a Massachusetts Hazardous Waste Number at a particular generating facility from the lists in 310 CMR 30.131 through 30.136 may petition the Department for a waiver. To be successful, the petitioner shall comply with 310 CMR 30.142(3)(a) through (c).

#### 30.142: continued

- (a) Each petition shall be submitted to the Department by certified mail or by hand delivery and shall include the following:
  - 1. The petitioner's name and address;
  - 2. A description of the waste or wastes for which the determination is requested pursuant to 310 CMR 30.142(3);
  - 3. Any relevant data, studies, or other information;
  - 4. The certification required by 310 CMR 30.009; and
  - 5. The petitioner's signature.
- (b) After receipt of any such petition, the Department may request any additional information which it may reasonably require to evaluate the petition.
- (c) The determination of the Department shall apply only to the particular waste generated at the individual plant covered by the petition.

### 30.143: Special Requirements for Regulated Recycled Materials and Universal Wastes

- (1) Materials that would be hazardous wastes if disposed of, but are recycled in compliance with 310 CMR 30.200 instead of being disposed of, are subject to the provisions of 310 CMR 30.200.
- (2) The materials listed in 310 CMR 30.143(2)(a) through (e), and further described in 310 CMR 30.1020, are exempt from regulation under 310 CMR 30.200 through 30.900, provided such wastes are managed in compliance with 310 CMR 30.1000:
  - (a) Batteries;
  - (b) Pesticides;
  - (c) Thermostats;
  - (d) Mercury-containing devices; and
  - (e) Mercury-containing lamps.

#### 30.144: Authority to Further Identify Hazardous Waste

A waste which is not identified or otherwise described in 310 CMR 30.120 through 30.125 or 30.130 through 30.136 becomes subject to 310 CMR 30.000 if:

- (1) The Department, in the course of inspecting any premises, has reason to believe that the waste being generated, transported, stored, treated, used, or disposed of meets the general criteria of a hazardous waste as set forth in 310 CMR 30.111; and
- (2) The Department believes that an imminent threat pursuant to M.G.L. c. 21C, §§ 9 and 11, may exist.

#### 30.151: Representative Sampling Methods

The methods and equipment used for sampling waste materials will vary with the form and consistency of the waste materials to be sampled. For sampling waste with properties similar to the indicated material, the Department will consider samples collected using the sampling protocols listed in 40 CFR Part 261, Appendix I, which is hereby incorporated by reference, or equivalent methods to be representative of the waste.

Copies of ASTM Standards referred to in 40 CFR Part 261, Appendix I are available from: ASTM, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.

### 30.152: Test for Ignitability of Waste

- (1) The flash point of liquids shall be determined by any of the following methods:
  - (a) A Pensky-Martens Closed Cup Tester, using the test method specified in ASTM Standard D-93-79 or D-93-80, and/or "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", as incorporated by reference at 310 CMR 30.012;
  - (b) A Setaflash Closed Cup Tester, using the test method specified in ASTM Standard D-3278-78; or
  - (c) An equivalent method.

#### 30.153: Test for Corrosivity of Waste

- (1) pH shall be determined by a pH meter using either method 9040C in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA Publication *SW-846*, as incorporated by reference at 310 CMR 30.012, or by an equivalent method.
- (2) The rate of corrosion of steel shall be determined by Method 1110A in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA Publication *SW-846*, as incorporated by reference at 310 CMR 30.012, 3or by an equivalent method.

### 30.154: Test for Reactivity of Waste

No test is specified. Refer to criteria in 310 CMR 30.124.

### 30.155: Toxicity Characteristic Leaching Procedure (TCLP)

To determine whether a waste exhibits the characteristic of toxicity, the following procedure shall be used: Toxicity Characteristic Leaching Procedure, Method 1311, as specified in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication *SW-846*, as incorporated by reference in 310 CMR 30.012.

### 30.156: Paint Filter Liquids Test

To determine the presence or absence of free liquids in waste, the following procedure shall be used: Paint Filter Liquid Test, Method 9095B, as specified in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods." EPA Publication *SW-846*, as incorporated by reference at 310 CMR 30.012.

#### 30.157: Test Methods

Appropriate analytical procedures to determine whether a sample contains a given toxic constituent or a given physical characteristic are specified in Chapter Two, "Choosing the Correct Procedure" found in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication *SW*-846, as incorporated by reference in 310 CMR 30.012. Prior to final sampling and analysis method selection, the individual should consult the specific section or method described in *SW*-846 for additional guidance on which of the approved methods should be employed for a specific sample analysis situation.

#### 30.160: Hazardous Constituents

Common Name	Chemical Abstracts Name	Chemical Abstracts Number	Haz. Waste No.
A2213	Ethanimidothioic acid, 2- (dimethylamino) -N-hydroxy -2-oxo-, methyl ester	30558-43-1	U394
Acetonitrile	Same	75-05-8	U003
Acetophenone	Ethanone, 1-phenyl-	98-86-2	U004
2-Acetylamino- fluorene	Acetamide, N-9H-fluoren-2-yl	53-96-3	U005
Acetyl chloride	Same	75-36-5	U006
1-Acetyl-2-thio-	Acetamide,	591-08-2	P002
urea	N-(aminothioxomethyl)-		
Acrolein	2-Propenal	107-02-8	P003
Acrylamide	2-Propenamide	79-06-1	U007
Acrylonitrile	2-Propenenitrile	107-13-1	U009
Aflatoxins	Same	1402-68-2	
Aldicarb	Propanal, 2-methyl-2- (methylthio)-, O- [(methylamino)carbonyl]oxime	116-06-3	P070

	Chemical	Chemical	Haz.
Common	Abstracts	Abstracts	Waste
Name	Name	Number	No.
Aldicarb sulfone	Propanal, 2-methyl-2 - (methylsulfonyl)-, O- [(methylamino) carbonyl] oxime	1646-88-4	P203
Aldrin	1, 4, 5, 8-Dimethanonaphthalene, 1, 2, 3, 4, 10, 10-hexachloro-1, 4, 4a, 5, 8, 8a-hexahydro-, (1alpha, 4alpha, 4abeta, 5alpha, 8alpha, 8abeta)-	309-00-2	P004
Allyl alcohol	2-Propen-1-ol	107-18-6	P005
Allyl chloride	1-Propene, 3-chloro-	00107-05-1	see F024
Aluminum phos- phide	Same	20859-73-8	P006
4-Aminobiphenyl	[1,1'-Biphenyl]-4-amine	92-67-1	
5-(Aminomethyl)-	3(2H)-Isoxazolone,	2763-96-4	P007
3-isoxazolol	5-(aminomethyl)-		
4-Aminopyridine	4-Pyridinamine	504-24-5	P008
Amitrole	1H-1,2,4-Triazol-3-amine	61-82-5	U011
Ammonium	Vanadic acid, ammonium salt	7803-55-6	P119
vanadate		, , , , , , , , , , , , , , , , , , , ,	
Aniline	Benzenamine	62-53-3	U012
o-Anisidine (2-methoxyaniline)	Benzenamine, 2-Methoxy-	90-04-0	
Antimony	Same	7440-36-0	
Antimony compounds, N.O.S. *			
Aramite	Sulfurous acid, 2-chloroethyl 2-[4-(1,1-dimethylethyl) phenoxy]-1-methylethyl ester	140-57-8	
Arsenic	Same	7440-38-2	
Arsenic			
compounds, N.O.S. *			
Arsenic acid	Arsenic acid H3AsO4	7778-39-4	P010
Arsenic trioxide	Arsenic oxide As2O3	1327-53-3	P012
Arsenic pent-	Arsenic oxide As2O5	1303-28-2	P011
oxide			
Auramine	Benzenamine, 4,4'-carbonimidoylbis[N,N-dimethyl	492-80-8	U014
Azaserine	L-Serine, diazoacetate (ester)	115-02-6	U015
Barban	Carbamic acid, (3-chlorophenyl)-, 4-chloro-2 butynyl ester	101-27-9	U280
Barium	Same	7440-39-3	
Barium compounds,			
N.O.S. *			
Barium cyanide	Same	542-62-1	P013
Bendiocarb	1,3-Benzodioxol-4-ol, 2,2	22781-23-3	U278
Bendiocarb phenol	-dimethyl-, methyl carbamate 1,3-Benzodioxol-4-ol, 2,2	22961-82-6	U364
_	-dimethyl-,		
Benomyl	Carbamic acid, [1 [(butylamino) carbonyl]-1H-benzimidazol 2 yl]-,	17804-35-2	U271
Danefalassi 4issa	methyl ester	225 51 4	11017
Benz[c]acridine	Same	225-51-4	U016

Common	Chemical Abstracts	Chemical Abstracts	Haz. Waste
Name	Name	Number	No.
D 5.1 4 G	56.55.0	11010	
Benz[a]anthracene Same	56-55-3	U018	11017
Benzal chloride	Benzene, (dichloromethyl)-	98-87-3	U017
Benzene	Same	71-43-2	U019
Benzenearsonic acid	Arsonic acid, phenyl-	98-05-5	
Benzidine [	1,1'-Biphenyl]-4,4'-diamine	92-87-5	U021
Benzo[b]fluor anthene	Benz[e]acephenanthrylene	205-99-2	
Benzo[j]fluor anthene	Same	205-82-3	
Benzo(k)fluoranthene	Same	207-08-9	
Benzo[a]pyrene	Same	50-32-8	U022
p-Benzoquinone	2,5-Cyclohexadiene-1,4-dione	106-51-4	U197
Benzotrichloride	Benzene, (trichloromethyl)-	98-07-7	U023
Benzyl chloride	Benzene, (chloromethyl)-	100-44-7	P028
Beryllium	Same	7440-41-7	P015
Beryllium com-			
pounds, N.O.S. *			
Bromoacetone	2-Propanone, 1-bromo-	598-31-2	P017
Bromoform	Methane, tribromo-	75-25-2	U225
4-Bromophenyl	Benzene, 1-bromo-4-phenoxy-	101-55-3	U030
phenyl ether	•		
Brucine	Strychnidin-10-one, 2,3-3 dimethoxy-	57-57-3	P018
Butyl benzyl	1,2-Benzenedicarboxylic acid,	85-68-7	
phthalate	butyl phenylmethyl ester		
Cacodylic acid	Arsinic acid, dimethyl-	75-60-5	U136
Cadmium	Same	7440-43-9	
Cadmium			
compounds, N.O.S. *			
Calcium chromate calcium salt	Chromic acid H2CrO4,	13765-19-0	U032
Calcium cyanide	Calcium cyanide Ca(CN)2	592-01-8	P021
Carbaryl	1-Naphthalenol, methylcarbamate	63-25-2	U279
Carbendazim	Carbamic acid, 1H-benzimidazol	10605-21-7	U372
	-2-yl, methyl ester		
Carbofuran	7-Benzofuranol, 2,3-dihydro-2,2 -dimethyl-, methylcarbamate	1563-66-2	P127
Carbofuran phenol	7-Benzofuranol, 2,3-dihydro-2, 2-dimethyl-	1563-38-8	U367
Carbon disulfide	Same	75-15-0	P022
Carbon oxyfluor	Carbonic difluoride	353-50-4	U033
ide			
Carbon tetrachloride	Methane, tetrachloro-	56-23-5	U211
Carbosulfan	Carbamic acid, [(dibutylamino)	55285-14-8	P189
	thio] methyl-, 2,3-dihydro-2, 2-dimethyl-7-benzofuranyl ester	-	
Chloral	Acetaldehyde, trichloro-	75-87-6	U034
Chlorambucil	Benzenebutanoic acid,	305-03-3	U035
	4-[bis(2-chloroethyl)amino]-		3033
Chlordane	4,7-Methano-1H-indene,	57-74-9	U036
	1,2,4.5,6,7,8,8-octachloro- 2,3,3a,4,7,7a- hexahydro-		

	Chemical	Chemical	Haz.
Common	Abstracts	Abstracts	Waste
Name	Name	Number	No.
Ivame	Name	rumoci	110.
Chlordane (alpha and gamma isomers			U036
Chlorinated benzenes, N.O.S *			
Chlorinated ethane, N.O.S. *			
Chlorinated fluorocarbons, N.O.S. *			
Chlorinated naphthalene, N.O.S. *			
Chlorinated phenol, N.O.S. *			
Chlornaphazin	Naphthalenamine, N,N'-bis(2-chloroethyl)-	494-03-1	U026
Chloroacetal	Acetaldehyde, chloro- dehyde	107-20-0	P023
Chloroalkyl			
ethers, N.O.S. *			
p-Chloroaniline	Benzenamine, 4-chloro-	106-47-8	P024
Chlorobenzene	Benzene, chloro-	108-90-7	U037
Chlorobenzilate	Benzeneacetic acid, 4-chloro- alpha-(4-chlorophenyl)-alpha- hydroxy-, ethyl ester	510-15-6	U038
p-Chloro-m-cresol	Phenol, 4-chloro-3-methyl-	59-50-7	U039
2-Chloroethyl	Ethene, (2-chloroethoxy)-	110-75-8	U042
vinyl ether	Ethene, (2 emoroethoxy)	110 /5 0	0042
Chloroform	Methane, trichloro-	67-66-3	U044
Chloromethyl	Methane, chloromethoxy-	107-30-2	U046
beta-Chloro	methyl ether Naphthalene, 2-chloro-	91-58-7	U047
beta-Cinoro	naphthalene	91-38-7	0047
o-Chlorophenol	Phenol, 2-chloro-	95-57-8	U048
1-(o-Chloro	Thiourea, (2-chlorophenyl)-	5344-82-1	P026
phenyl)thiourea			
Chloroprene	1,3-Butadiene, 2-chloro-	126-99-8	
3-Chloropropio nitrile	Propanenitrile, 3-chloro-	542-76-7	P027
Chromium	Same	7440-47-3	
Chromium			
compounds, N.O.S. *			
Chrysene	Same	218-01-9	U050
Citrus red No. 2	2-Naphthalenol, 1-[(2,5-dimethoxyphenyl)azo]-	6358-53-8	
Coal tar creosote		8007-45-2	
Copper cyanide	Copper cyanide CuCN	544-92-3	P029
Creosote	Same		U051
p-Cresidine	2-Methoxy-5-methylbenzenamine	120-71-8	
Cresol	Phenol, methyl-	1319-77-3	U052
(Cresylic acid)		44 80 00 0	***
Crotonaldehyde m-Cumenyl methylcarbamate	2-Butenal Phenol, 3-(methylethyl)-, methyl carbamate	4170-30-3 64-00-6	U053 P202
	our ournaid		

Common	Chemical Abstracts	Chemical Abstracts	Haz. Waste
Name	Name	Number	No.
Cyanides (soluble salts and complexes) N.O.S. *			P030
Cyanogen	Ethanedinitrile	460-19-5	P031
Cyanogen bromide	Cyanogen bromide5	06-68-3	U246
Cyanogen chloride	Cyanogen chloride CNCl	506-77-4	P033
Cycasin	beta-D-Glucopyranoside, (methyl-ONN-azoxy)methyl	14901-08-7	
2-Cyclohexyl-	Phenol, 2-cyclohexyl-	131-89-5	P034
4,6-dinitro	4,6-dinitro-		
phenol Cyclophosphamide	2H-1,3,2-Oxazaphosphorin-2- amine, N,N-bis(2-chloroethyl) tetrahydro-, 2-oxide	50-18-0	U058
2,4-D	Acetic acid, (2,4-	94-75-7	U240
<b>-,</b> · -	dichlorophenoxy)-		
2,4-D salts &			U240
esters			
Daunomycin	5,12-Naphthacenedione, 8-acetyl-10-[(3-amino-2,3,6-trideoxy-alpha-L-lyxo-hexopyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)-	20830-81-3	U059
DDD	Benzene, 1,1'-(2,2-dichloro ethylidene)bis[4-chloro-	72-54-8	U060
DDE	Benzene, 1,1'-(dichloro ethenylidene)bis[4-chloro-	72-55-9	
DDT	Benzene, 1,1'-(2,2,2-tri-chloroethylidene)bis[4-chloro-	50-29-3	U061
Diallate	Carbamothioic acid, bis(1-methylethyl)-, S- (2,3-dichloro-2-propenyl) ester	2303-16-4	U062
Dibenz[a,h] acridine	Same	226-36-8	
Dibenz[a,j] acridine	Same	224-42-0	
Dibenz[a,h] anthracene	Same	53-70-3	U063
7H-Dibenzo[c,g] carbazole	Same	194-59-2	
Dibenzo[a,e] pyrene	Naphtho[1,2,3,4-def]chrysene	192-65-4	
Dibenzo[a,h] pyrene	Dibenzo[b,def]chrysene	189-64-0	
Dibenzo[a,i] pyrene	Benzo[rst]pentaphene	189-55-9	U064
1,2-Dibromo-3- chloropropane	Propane, 1,2-dibromo-3-chloro-	96-12-8	U066

Common Name	Chemical Abstracts Name	Chemical Abstracts Number	Haz. Waste No.
Dibutyl phthalate	1,2-Benzenedicarboxylic acid, dibutyl ester	84-74-2	U069
o-Dichlorobenzene m-Dichlorobenzene p-Dichlorobenzene Dichlorobenzene,	Benzene, 1,2-dichloro- Benzene, 1,3-dichloro- Benzene, 1,4-dichloro- Benzene, dichloro-	95-50-1 541-73-1 106-46-7 25321-22-6	U070 U071 U072
N.O.S. * 3,3'-Dichloro benzidine	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro-	91-94-1	U073
1,4-Dichloro-2- butene	2-Butene, 1,4-dichloro-	764-41-0	U074
Dichlorodi fluoromethane	Methane, dichlorodifluoro-	75-71-8	U075
Dichloroethylene, N.O.S. *	Dichloroethylene	25323-30-2	
1,1-Dichloro ethylene	Ethene, 1,1-dichloro-	75-35-4	U078
1,2-Dichloro	Ethene, 1,2-dichloro-, (E)-	156-60-5	U079
ethylene Dichloroethyl ether	Ethane, 1,1'-oxybis[2-chloro-	111-44-4	U025
Dichloroisopropyl	Propane, 2,2'-oxybis[2-chloro-	108-60-1	U027
ether Dichloromethoxy	Ethane, 1,1'-[methylenebis	111-91-1	U024
ethane Dichloromethyl	(oxy)]bis[2-chloro- Methane, oxybis[chloro-	542-88-1	P016
ether 2,4-Dichloro	Phenol, 2,4-dichloro-	120-83-2	U081
phenol 2,6-Dichloro	Phenol, 2,6-dichloro-	87-65-0	U082
phenol Dichlorophenyl	Arsonous dichloride, phenyl-	696-28-6	P036
arsine Dichloropropane,	Propane, dichloro-	26638-19-7	
N.O.S. * Dichloropropanol,	Propanol, dichloro-	26545-73-3	
N.O.S. * Dichloropropene,	1-Propene, dichloro-	26952-23-8	
N.O.S. * 1,3-Dichloro	1-Propene, 1,3-dichloro-	542-75-6	U084
propene Dieldrin	2,7:3,6-Dimethanonaphth[2,3-b] oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7, 7a-octahydro-, (1aalpha,2beta, 2aalpha,3beta,6beta,6aalpha, 7beta,7aalpha)-	60-57-1	P037
1,2:3,4-Di	2,2'-Bioxirane	1464-53-5	U085
epoxybutane Diethylarsine Diethylene glycol,	Arsine, diethyl- Ethanol, 2,2'-oxybis-, dicarbamate	692-42-2 5952-26-1	P038 U395
dicarbamate 1,4-Diethylene oxide	1,4-Dioxane	123-91-1	U108
Diethylhexyl phthalate	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	117-81-7	U028

Common Name	Chemical Abstracts Name	Chemical Abstracts Number	Haz. Waste <u>No.</u>
N,N'-Diethyl hydrazine	Hydrazine, 1,2-diethyl-	1615-80-1	U086
O,O-Diethyl S- methyl dithio phosphate	Phosphorodithioic acid, O,O-diethyl S-methyl ester	3288-58-2	U087
Diethyl-p-nitro phenyl phosphate	Phosphoric acid, diethyl 4-nitrophenyl ester	311-45-5	P041
Diethyl phthalate	1,2-Benzenedicarboxylic acid, diethyl ester	84-66-2	U088
O,O-Diethyl O- pyrazinyl phos phorothioate	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester	297-97-2	P040
Diethylstil besterol	Phenol, 4,4'-(1,2-diethyl-1, 2-ethenediyl)bis-(E)-	56-53-1	U089
Dihydrosafrole Diisopropyl fluorophosphate (DFP)	1,3-Benzodioxole, 5-propyl- Phosphorofluoridic acid, bis(1-methylethyl) ester	94-58-6 55-91-4	U090 P043
Dimethoate	Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)-2-oxoethyl] ester	60-51-5	P044
3,3'-Dimethoxy	[1,1'-Biphenyl]-4,4'-diamine, benzidine 3,3'-dimethoxy-	119-90-4	U091
p-Dimethylamino	Benzenamine, N,N-dimethyl-4-azobenzene(phenylazo)-	60-11-7	U093
2,4-Dimethylaniline (2,4-xylidine)	Benzenamine, 2,4-dimethyl-	95-68-1	
7,12-Dimethyl benz[a]anthra cene	Benz[a]anthracene, 7,12-dimethyl-	57-97-6	U094
3,3'-Dimethyl	[1,1'-Biphenyl]-4,4'-diamine, benzidine 3,3'-dimethyl-	119-93-7	U095
Dimethylcar	Carbamic chloride, dimethyl- bamoyl chloride	79-44-7	U097
1,1-Dimethyl	Hydrazine, 1,1-dimethyl- hydrazine	57-14-7	U098
1,2-Dimethyl hydrazine	Hydrazine, 1,2-dimethyl-	540-73-8	U099
alpha,alpha-Di methylphen ethylamine	Benzeneethanamine, alpha, alpha-dimethyl-	122-09-8	P046
2,4-Dimethyl phenol	Phenol, 2,4-dimethyl-	105-67-9	U101
Dimethyl phthal ate	1,2-Benzenedicarboxylic acid, dimethyl ester	131-11-3	U102
Dimethyl sulfate Dimetilan	Sulfuric acid, dimethyl ester Carbamic acid, dimethyl-, 1-[(dimethylamino) carbonyl]-5 -methyl-1H-pyrazol-3-yl ester	77-78-1 644-64-4	U103 P191
Dinitrobenzene, N.O.S. *	Benzene, dinitro-	25154-54-5	
4,6-Dinitro-o- cresol	Phenol, 2-methyl-4,6-dinitro-	534-52-1	P047
4,6-Dinitro-o- cresol salts			P047
2,4-Dinitrophenol 2,4-Dinitro toluene	Phenol, 2,4-dinitro- Benzene, 1-methyl-2,4-dinitro-	51-28-5 121-14-2	P048 U105

Common	Chemical Abstracts	Chemical Abstracts	Haz. Waste
Name	Name	Number	No.
2,6-Dinitro toluene	Benzene, 2-methyl-1,3-dinitro-	606-20-2	U106
Dinoseb	Phenol,2-(1-methylpropyl)-4,6-dinitro-	88-85-7	P020
Di-n-octyl phthalate	1,2-Benzenedicarboxylic acid, dioctyl ester	117-84-0	U107
Diphenylamine	Benzenamine, N-phenyl-	122-39-4	
1,2-Diphenyl hydrazine	Hydrazine, 1,2-diphenyl-	122-66-7	U109
Di-n-propyl nitrosamine	1-Propanamine, N-nitroso-N-propyl-	621-64-7	U111
Disulfoton	Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl] ester	298-04-4	P039
DithiobiuretT	hioimidodicarbonic diamide [(H2N)C(S)]2NH	541-53-7	P049
Endosulfan	6,9-Methano-2,4,3- benzodioxathiepin, 6,7,8,9,10, 10-hexachloro-1,5,5a,6,9,9a- hexahydro-, 3-oxide	115-29-7	P050
Endothall	7-Oxabicyclo[2.2.1]heptane- 2,3-dicarboxylic acid	145-73-3	P088
Endrin	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta, 2abeta,3alpha,6alpha,6abeta, 7beta,7aalpha)-	72-20-8	P051
Endrin metabo lites			P051
Epichlorohydrin Epinephrine	Oxirane, (chloromethyl)- 1,2-Benzenediol, 4-[1-hydroxy-	106-89-8 51-43-4	U041 P042
Ethyl carbamate	2-(methylamino)ethyl]-, (R)- Carbamic acid, ethyl ester (urethane)	51-79-6	U238
Ethyl cyanide Ethylenebis dithiocarbamic	Propanenitrile Carbamodithioic acid, 1,2-ethanediylbis- acid	107-12-0 111-54-6	P101 U114
Ethylenebis dithiocarbamic acid, salts & esters			U114
Ethylene dibro mide	Ethane, 1,2-dibromo-	106-93-4	U067
Ethylene dichloride	Ethane, 1,2-dichloro-	107-06-2	U077
Ethylene glycol monoethyl ether	Ethanol, 2-ethoxy-	110-80-5	U359
Ethyleneimine	Aziridine	151-56-4	P054
Ethylene oxide	Oxirane	75-21-8	U115
Ethylidana Ethylidana	2-Imidazolidinethione	96-45-7 75-34-3	U116
Ethylidene dichloride	Ethane, 1,1-dichloro-	15-54-5	U076

	Chemical	Chemical	Haz.
Common	Abstracts	Abstracts	Waste
Name	Name	Number	No.
Ethyd math	2 Duamanaia asid 2 mathyd	97-63-2	U118
Ethyl meth	2-Propenoic acid, 2-methyl-,	97-03-2	0118
acrylate	ethyl ester	62-50-0	11110
Ethyl methane sulfonate	Methanesulfonic acid,	62-30-0	U119
	ethyl ester	52 95 7	D007
Famphur	Phosphorothioic acid, O-[4-	52-85-7	P097
	[(dimethylamino)sulfonyl]		
Fluoranthene	phenyl] O,O-dimethyl ester Same	206-44-0	U120
Fluorine	Same	7782-41-4	P056
Fluoroacetamide		640-19-7	P050 P057
	Acetamide, 2-fluoro-	62-74-8	P057 P058
Fluoroacetic	Acetic acid, fluoro-, sodium salt	62-74-8	P038
acid, sodium	salt		
Formaldahyda	Same	50-00-0	U122
Formaldehyde Formetanate		23422-53-9	P198
	Methanimidamide, N,N-dimethyl	23422-33-9	P198
hydro-chloride	-N'-[3-[[(methylamino) carbonyl]		
Formic acid	oxy]phenyl]-, monohydrochloride Same	64-18-6	U123
		04-18-0	0123
Formparanate	Methanimidamide, N,N-dimethyl	17702 57 7	D107
	-N'-[2-methyl-4-[[(methylamino)	17702-57-7	P197
Chroidelaldaharda	carbonyl]oxy]phenyl]-	765 24 4	11126
Glycidylaldehyde	Oxiranecarboxyaldehyde	765-34-4	U126
Halomethanes, N.O.S. *			
	4.7 Mathana III indona 1.4.5	76-44-8	P059
Heptachlor	4,7-Methano-1H-indene, 1,4,5,	/0-44-8	P039
	6,7,8,8-heptachloro-3a,4,7,		
Hantachlar	7a-tetrahydro- 2,5-Methano-2H-indeno[1,2-	1024-57-3	
Heptachlor epoxide	b]oxirene, 2,3,4,5,6,7,7-	1024-37-3	
epoxide	heptachloro-1a,1b,5,5a,6,6a-		
	hexahydro-,(1aalpha,1bbeta,		
	2alpha,5alpha,5abeta,6beta,		
	6aalpha)-		
Heptachlor			
epoxide (alpha,			
beta, & gamma			
isomers)			
Heptachlorodibenzofurans			
Heptachlorodibenzo-p-dioxi	ns		
Hexachloro	Benzene, hexachloro-	118-74-1	U127
benzene	Benzene, nexacmore	110 /4 1	0127
Hexachloro	1,3-Butadiene, 1,1,2,3,4,4-	87-68-3	U128
butadiene	hexachloro-	07 00 5	0120
Hexachloro	1,3-Cyclopentadiene, 1,2,3,4,	77-47-4	U130
cyclopentadiene	5,5-hexachloro-	// 4/ 4	0130
Hexachlorodi			
benzo-p-dioxins			
Hexachlorodi			
benzofurans			
Hexachloro	Ethane, hexachloro-	67-72-1	U131
ethane		-, , <b>-</b> -	0.10.1
Hexachloro	Phenol, 2,2'-methylenebis[3,	70-30-4	U132
phene	4,6-trichloro-	-	<b>-</b>
1 -	) <del>-</del>		

30.160: continued

Common	Chemical Abstracts	Chemical Abstracts	Haz. Waste
Name	Name	Number	No.
Hexachloro	1-Propene, 1,1,2,3,3,3-	1888-71-7	U243
propene	hexachloro-	757 50 4	D0.62
Hexaethyl tetra	Tetraphosphoric acid,	757-58-4	P062
phosphate	hexaethyl ester	202.01.2	11122
Hydrazine	Same	302-01-2	U133
Hydrogen cyanide	Hydrocyanic acid	74-90-8	P063
Hydrogen fluoride	Hydrofluoric acid	7664-39-3	U134
Hydrogen sulfide	Hydrogen sulfide H2S Same	7783-06-4	U135
Indeno[1,2,3-cd]	Same	193-39-5	U137
pyrene	1 December 2 mothers	78-83-1	U140
Isobutyl alcohol Isodrin	1-Propanol, 2-methyl-	465-73-6	P060
ISOCITII	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,	403-73-0	P000
	4a,5,8,8a-hexahydro-, (1alpha,		
	4alpha,4abeta,5beta,8beta,		
	8abeta)-		
Isolan	Carbamic acid, dimethyl-,	119-38-0	P192
isolali	3-methyl-1 (1-methylethyl)-1H	117-30-0	1172
	pyrazol-5-yl ester		
Isosafrole	1,3-Benzodioxole, 5-(1-	120-58-1	U141
isosanore	propenyl)-	120 30 1	0141
Kepone	1,3,4-Metheno-2H-cyclobuta	143-50-0	U142
Керопе	[cd]pentalen-2-one, 1,1a,3,3a,	143-30-0	0142
	4,5,5,5a,5b,6-decachloro		
	octahydro-		
Lasiocarpine	2-Butenoic acid, 2-methyl-,	303-34-1	U143
Zusiovarpino	7-[[2,3-dihydroxy-2-(1-		01.0
	methoxyethyl)-3-methyl-1-oxo		
	butoxy]methyl]-2,3,5,7a-		
	tetrahydro-1H-pyrrolizin-1-yl		
	ester, [1S-[1alpha(Z),7 (2S * ,		
	3R * ),7aalpha]]-		
Lead	Same	7439-92-1	
Lead compounds,			
N.O.S. *			
Lead acetate	Acetic acid, lead(2+) salt	301-04-2	U144
Lead phosphate	Phosphoric acid, lead(2+)	7446-27-7	U145
	salt (2:3)		
Lead subacetate	Lead, bis(acetato-O)	1335-32-6	U146
	tetrahydroxytri-		
Lindane	Cyclohexane, 1,2,3,4,5,6-	58-89-9	U129
	hexachloro-, (1alpha,2alpha,		
	3beta,4alpha,5alpha,6beta)-		
Maleic anhydride	2,5-Furandione	108-31-6	U147
Maleic hydrazide	3,6-Pyridazinedione,	123-33-1	U148
	1,2-dihydro-		
Malononitrile	Propanedinitrile	109-77-3	U149
Manganese	Manganese, bis(dimethylcarba-	15339-36-3	P196
dimethyldithiocarbamate	modithioato-S,S')-,		

Chemical Common Abstracts Name Name		Chemical Abstracts Number	Haz. Waste No.	
Name	Name	Number	<u> </u>	
Melphalan	L-Phenylalanine, 4-[bis(2-chloroethyl)amino]-	148-82-3	U150	
Mercury	Same	7439-97-6	U151	
Mercury				
compounds, N.O.S. *				
Mercury fulminate	Fulminic acid, mercury(2+)	628-86-4	P065	
Methacrylo nitrile	salt 2-Propenenitrile, 2-methyl-	126-98-7	U152	
Methapyrilene	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-	91-80-5	U155	
Methiocarb	(2-thienylmethyl)- Phenol, (3,5-dimethyl-4-	2032-65-7	P199	
Methomyl	(methylthio)-, methylcarbamate Ethanimidothioic acid, N- [[(methylamino)carbonyl]oxy]-,	16752-77-5	P066	
Methoxychlor	methyl ester Benzene, 1,1'-(2,2,2-tri chloroethylidene)	72-43-5	U247	
Methyl bromide	bis[4-methoxy- Methane, bromo-	74-83-9	U029	
Methyl chloride	Methane, chloro-	74-87-3	U045	
Methyl chloro	Carbonochloridic acid, methyl	79-22-1	U156	
carbonate	ester			
Methyl chloroform	Ethane, 1,1,1-trichloro-	71-55-6	U226	
3-Methylchol anthrene	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-	56-49-5	U157	
4,4'-Methylene	Benzenamine, 4,4'-methylene	101-14-4	U158	
bis(2-chloro aniline)	bis[2-chloro-			
Methylene bromide	Methane, dibromo-	74-95-3	U068	
Methylene	Methane, dichloro-	75-09-2	U080	
chloride Methyl ethyl ketone (MEK)	2-Butanone	78-93-3	U159	
Methyl ethyl ketone peroxide	2-Butanone, peroxide	1338-23-4	U160	
Methyl hydrazine	Hydrazine, methyl-	60-34-4	P068	
Methyl iodide	Methane, iodo-	74-88-4	U138	
Methyl iso cyanate	Methane, isocyanato-	624-83-9	P064	
2-Methyllacto nitrile	Propanenitrile, 2-hydroxy-2-methyl-	75-86-5	P069	
Methyl meth acrylate	2-Propenoic acid, 2-methyl-, methyl ester	80-62-6	U162	
Methyl methane sulfonate	Methanesulfonic acid, methyl ester	66-27-3		
Methyl parathion	Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester	298-00-0	P071	
Methylthiouracil	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-	56-04-2	U164	
Metolcarb	Carbamic acid, methyl-, 3-methylphenyl ester	1129-41-5	P190	

Common	Chemical Abstracts	Chemical Abstracts	Haz. Waste
Name	Name	Number	No.
Mexacarbate	Phenol, 4-(dimethylamino)-3, 5-dimethyl-, methylcarbamate (ester)	315-18-4	P128
Mitomycin C	Azirino[2',3':3,4]pyrrolo[1, 2-a]indole-4,7- dione, 6- amino-8-[[(aminocarbonyl)oxy] methyl]-1,1a,2,8,8a,8b hexahydro-8a-methoxy-5- methyl-, [1aS-(1aalpha,8beta, 8aalpha,8balpha)]-	50-07-7	U010
MNNG	Guanidine, N-methyl-N'-nitro- N-nitroso-	70-25-7	U163
Mustard gas	Ethane, 1,1'-thiobis[2-chloro-	505-60-2	
Naphthalene	Same	91-20-3	U165
1,4-Naphtho quinone	1,4-Naphthalenedione	130-15-4	U166
alpha-Naphthyl amine	1-Naphthalenamine	134-32-7	U167
beta-Naphthyl amine	2-Naphthalenamine	91-59-8	U168
	Thiours 1 nonhtholonyl	86-88-4	P072
alpha-Naphthyl thiourea	Thiourea, 1-naphthalenyl-		FU/2
Nickel	Same	7440-02-0	
Nickel compounds, N.O.S. *			
Nickel carbonyl	Nickel carbonyl Ni(CO)4, (T-4)-	13463-39-3	P073
Nickel cyanide	Nickel cyanide Ni(CN)2	557-19-7	P074
Nicotine	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-	54-11-5	P075
Nicotine salts			P075
Nitric oxide	Nitrogen oxide NO	10102-43-9	P076
p-Nitroaniline	Benzenamine, 4-nitro-	100-01-6	P077
Nitrobenzene	Benzene, nitro-	98-95-3	U169
Nitrogen dioxide	Nitrogen oxide NO2	10102-44-0	P078
Nitrogen mustard	Ethanamine, 2-chloro-N-(2-chloroethyl)-N-methyl-	51-75-2	
Nitrogen mustard, hydrochloride salt	N-oxide		
Nitrogen mustard	Ethanamine, 2-chloro-N-(2-chloroethyl)-N-methyl-, N-oxide	126-85-2	
Nitrogen mustard, hydrochloride salt			
Nitroglycerin	1,2,3-Propanetriol, trinitrate	55-63-0	P081
p-Nitrophenol	Phenol, 4-nitro-	100-02-7	U170
2-Nitropropane	Propane, 2-nitro-	79-46-9	U171
Nitrosamines, N.O.S. *		35576-91-10	
N-Nitrosodi-n-	1-Butanamine, N-butyl-N-	924-16-3	U172
butylamine	nitroso-	1116 54 7	11172
N-Nitrosodi	Ethanol, 2,2'-(nitrosoimino)	1116-54-7	U173
ethanolamine N-Nitrosodi	bis- Ethanamine, N-ethyl-N-nitroso-	55-18-5	U174
ethylamine			
N-Nitrosodi methylamine	Methanamine, N-methyl-N-nitroso-	62-75-9	P082

	Chemical	Chemical	Haz.
Common	Abstracts	Abstracts	Waste
Name	Name	Number	No.
N-Nitroso-N-	Urea, N-ethyl-N-nitroso-	759-73-9	U176
ethylurea	•		
N-Nitrosomethyl	Ethanamine, N-methyl-N-	10595-95-6	
ethylamine	nitroso-		
N-Nitroso-N-	Urea, N-methyl-N-nitroso-	684-93-5	U177
methylurea			
N-Nitroso-N-	Carbamic acid, methylnitroso-,	615-53-2	U178
methylurethane	ethyl ester		
N-Nitrosomethyl	Vinylamine, N-methyl-N-	4549-40-0	P084
vinylamine	nitroso-	<b>7</b> 0.00 <b>.0</b>	
N-Nitrosomor	Morpholine, 4-nitroso-	59-89-2	
pholine N-Nitrosonor	Demiding 2 (1 mitmage 2	16542 55 0	
n-Nitrosonor nicotine	Pyridine, 3-(1-nitroso-2-	16543-55-8	
N-Nitrosopip	pyrrolidinyl)-, (S)- Piperidine, 1-nitroso-	100-75-4	U179
eridine	1 iperiume, 1-introso-	100-75-4	0179
N-Nitrosopyrro	Pyrrolidine, 1-nitroso-	930-55-2	U180
lidine	1 yironame, 1 muoso	750 55 2	0100
N-Nitrososar	Glycine, N-methyl-N-nitroso-	13256-22-9	
cosine	- January		
5-Nitro-o-tol	Benzenamine, 2-methyl-5-nitro-	99-55-8	U181
uidine	•		
Octachlorodibenzo-p-	1,2,3,4,6,7,8,9-Octachlorodibenzo	3268-87-9	
dioxin (OCDD)	-p-dioxin		
Octachlorodibenzofuran	1,2,3,4,6,7,8,9-Octachlorodi-	39001-02-0	
(OCDF)	benzofuran	1.70 1.60	D00.5
Octamethylpyro	Diphosphoramide, octamethyl-	152-16-9	P085
phosphoramide	Oiid- O-O4 (T.4)	20016 12 0	D007
Osmium tetroxide Oxamyl	Osmium oxide OsO4, (T-4)- Ethanimidothioc acid,	20816-12-0 23135-22-0	P087 P194
Oxamyi	2-(dimethylamino)-N-	23133-22-0	F19 <del>4</del>
	[[(methylamino) carbonyl]oxy]		
	-2-oxo-, methyl ester		
Paraldehyde	1,3,5-Trioxane, 2,4,6-	123-63-7	U182
•	trimethyl-		
Parathion	Phosphorothioic acid,	56-38-2	P089
	O,O-diethyl O-(4-nitrophenyl)		
	ester		
Pentachloro	Benzene, pentachloro-	608-93-5	U183
benzene			
Pentachlorodi	<del></del>		
benzo-p-dioxins Pentachlorodi			
benzofurans			
Pentachloroethane	Ethane, pentachloro-	76-01-7	U184
Pentachloro=	Benzene, pentachloronitro-	82-68-8	U185
nitrobenzne	Denzene, penmemoremare	0 <b>2</b> 00 0	0100
(PCNB)			
Pentachlorophenol	Phenol, pentachloro-	87-86-5	see F027
Phenacetin	Acetamide, N-(4-ethoxyphenyl)-	62-44-2	U187
Phenol	Same	108-95-2	U188
1,2-Phenylenediamine	1,2-Benzenediamine	95-54-5	
1,3-Phenylenediamine	1,3-Benzenediamine	108-45-2	
Phenylenediamine	Benzenediamine	25265-76-3	
Phenylmercury	Mercury, (acetato-O)phenyl-	62-38-4	P092
acetate	Chemical	Chemical	Haz.

Common Name	Abstracts Name	Abstracts Number	Waste No.
Dhamalthianna	Thiospea mhonyd	103-85-5	D002
Phenylthiourea	Thiourea, phenyl- Carbonic dichloride		P093
Phosgene Phosphine	Same	75-44-5 7803-51-2	P095 P096
Phorate		7803-31-2 298-02-2	P096 P094
Phorate	Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester	298-02-2	P094
Phthalic acid esters, N.O.S. *			
Phthalic anhy dride	1,3-Isobenzofurandione	85-44-9	U190
Physostigmine	Pyrrolo[2,3-b]indol-5-01, 1,2,3,3a,8,8a-hexahydro-1,3a, 8-trimethyl-,methylcarbamate (ester), (3aS-cis)-	57-47-6	P204
Physostigmine	Benzoic acid, 2-hydroxy-, compd	57-64-7	P188
salicylate	with (3aS-cis)-		
•	1,2,3,3a,8,8a-hexahydro-1,3a, 8-trimethylpyrrolo [2,3-b]indol- 5-yl methylcarbamate ester (1:1)		
2-Picoline	Pyridine, 2-methyl-	109-06-8	U191
Polychlorinated			
biphenyls N.O.S. *			
Potassium	Potassium cyanide K(CN)	151-50-8	P098
cyanide		<b>7</b> 06646	<b>D</b> 000
Potassium silver	Argentate(1-), bis(cyano-C)-,	506-61-6	P099
cyanide	potassium	2621 27 0	D201
Promecarb	Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate	2631-37-0	P201
Pronamide	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-	23950-58-5	U192
1,3-Propane	1,2-Oxathiolane, 2,2-dioxide	1120-71-4	U193
sultone			
n-Propylamine	1-Propanamine	107-10-8	U194
Propargyl	2-Propyn-1-o	1107-19-7	P102
alcohol			
Propham	Carbamic acid, phenyl-, 1-methylethyl ester	122-42-9	U373
Propoxur	Phenol, 2-(1-methylethoxy)-, methylcarbamate	114-26-1	U411
Propylene dichloride	Propane, 1,2-dichloro-	78-87-5	U083
1,2-Propylenimine	Aziridine, 2-methyl-	75-55-8	P067
Propylthiouracil	4(1H)-Pyrimidinone, 2,3-	51-52-5	
Prosulfocarb	Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester dihydro-6-propyl-2-thioxo-	52888-80-9	U387
Pyridine	Same	110-86-1	U196
Reserpine	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-, methyl ester, (3beta,16beta, 17alpha,18beta,20alpha)-	50-55-5	U200

	Chemical	Chemical	Haz.
Common	Abstracts	Abstracts	Waste
Name	Name	Number	No.
Daganain al	1.2 Dansanadial	100 46 2	11201
Resorcinol	1,3-Benzenediol	108-46-3	U201
Safrole	1,3-Benzodioxole,	94-59-7	U203
Calanina	5-(2-propenyl)- Same	7792 40 2	
Selenium Selenium com-		7782-49-2	
pounds, N.O.S. * Selenium dioxide	Selenious acid	7783-00-8	U204
Selenium sulfide	Selenium sulfide SeS2	7488-56-4	U204 U205
Selenourea	Same	630-10-4	P103
Silver	Same	7440-22-4	1 103
Silver compounds,			
N.O.S. *			
Silver cyanide	Silver cyanide Ag(CN)	506-64-9	P104
Silvex (2,4,5-TP)	Propanoic acid, 2-(2,4,5-	93-72-1	see F027
511 (2, 1,5 11)	trichlorophenoxy)-	95 7 <b>2</b> 1	500 1 027
Sodium cyanide	Sodium cyanide Na(CN)	143-33-9	P106
Streptozotocin	D-Glucose, 2-deoxy-2-	18883-66-4	U206
	[[(methylnitrosoamino)		0_00
	carbonyl]amino]-		
Strychnine	Strychnidin-10-one	57-24-9	P108
Strychnine salts			P108
TCDD	Dibenzo[b,e][1,4]dioxin,	1746-01-6	
	2,3,7,8-tetrachloro-		
1,2,4,5-Tetra	Benzene, 1,2,4,5-tetrachloro-	95-94-3	U207
chlorobenzene			
Tetrachlorodi			
benzo-p-dioxins			
Tetrachlorodi			
benzofurans			
Tetrachloro	Ethane, tetrachloro-, N.O.S.	25322-20-7	
ethane, N.O.S. *			***
1,1,1,2-Tetra	Ethane, 1,1,1,2-tetrachloro-	630-20-6	U208
chloroethane	Ed. 1100 11	70.24.5	11200
1,1,2,2-Tetra	Ethane, 1,1,2,2-tetrachloro-	79-34-5	U209
chloroethane	E41	107 10 4	11210
Tetrachloro	Ethene, tetrachloro-	127-18-4	U210
ethylene 2,3,4,6-Tetra	Phenol, 2,3,4,6-tetrachloro-	58-90-2	see F027
chlorophenol	Filehol, 2,3,4,0-tetracinolo-	36-90-2	see FU27
Tetraethyldi	Thiodiphosphoric acid,	3689-24-5	P109
thiopyrophos	teraethyl ester	3007 24 3	1107
phate	torucing rester		
Tetraethyl lead	Plumbane, tetraethyl-	78-00-2	P110
Tetraethyl pyro	Diphosphoric acid, tetraethyl	107-49-3	P111
phosphate	ester		
Tetranitromethane	Methane, tetranitro-	509-14-8	P112
Thallium	Same	7440-28-0	
Thallium			
compounds, N.O.S. *			
Thallic oxide	Thallium oxide Tl2O3	1314-32-5	P113
Thallium(I)	Acetic acid, thallium(1+) salt	563-68-8	U214
acetate			
Thallium(I)	Carbonic acid, dithallium(1+)	6533-73-9	U215
carbonate	salt		

Common	Chemical Abstracts	Chemical Abstracts	Haz. Waste
Name	Name	Number	No.
Thallium(I) chloride	Thallium chloride TlCl	7791-12-0	U216
Thallium(I) nitrate	Nitric acid, thallium(1+) salt	10102-45-1	U217
Thallium selenite	Selenious acid, dithallium(1+) salt	12039-52-0	P114
Thallium(I) sulfate	Sulfuric acid, dithallium(1+) salt	7446-18-6	P115
Thioacetamide	Ethanethioamide	62-55-5	U218
Thiodicarb	Ethanimidothioic acid, N,N'- [thiobis [(methylimino) carbonyloxy]] bis-, dimethyl ester	59669-26-0	U410
Thiofanox	2-Butanone, 3,3-dimethyl-1- (methylthio)-, O-[(methylamino)carbonyl] oxime	39196-18-4	P045
Thiomethanol	Methanethiol	74-93-1	U153
Thiophanate-methyl	Carbamic acid, [1,2-phyenylenebis (iminocarbonothioyl)] bis, dimethyl ester	23564-05-8	U409
Thiophenol	Benzenethiol	108-98-5	P014
Thiosemicarbazide	Hydrazinecarbothioamide	79-19-6	P116
Thiourea	Same	62-56-6	U219
Thiram	Thioperoxydicarbonic diamide [H2N)C(S)]2S2, tetramethyl-	137-26-8	U244
Tirpate	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-,O{(methylamino) carbonyl} oxime	26419-73-8	P185
Toluene	Benzene, methyl-	108-88-3	U220
Toluenediamine	Benzenediamine, ar-methyl-	25376-45-8	U221
Toluene-2,4- diamine	1,3-Benzenediamine, 4-methyl-	95-80-7	
Toluene-2,6- diamine	1,3-Benzenediamine, 2-methyl-	823-40-5	
Toluene-3,4- diamine	1,2-Benzenediamine, 4-methyl-	496-72-0	
Toluene diiso cyanate	Benzene, 1,3-diisocyanato methyl-	26471-62-5	U223
o-Toluidine	Benzenamine, 2-methyl-	95-53-4	U328
o-Toluidine hydrochloride	Benzenamine, 2-methyl-, hydrochloride	636-21-5	U222
p-Toluidine	Benzenamine, 4-methyl-	106-49-0	U353
Toxaphene	Same	8001-35-2	P123
Triallate	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-	2303-17-5	U389
1,2,4-Trichloro benzene	2-propenyl) ester Benzene, 1,2,4-trichloro-	120-82-1	
1,1,2-Trichloro ethane	Ethane, 1,1,2-trichloro-	79-00-5	U227
Trichloro ethylene	Ethene, trichloro-	79-01-6	U228
Trichloro methanethiol	Methanethiol, trichloro-	75-70-7	P118
Trichloromono fluoromethane	Methane, trichlorofluoro-	75-69-4	U121

	CI I		**
Common	Chemical Abstracts	Chemical Abstracts	Haz. Waste
Name	Name	Number	No.
2,4,5-Trichloro phenol	Phenol, 2,4,5-trichloro-	95-95-4	see F027
2,4,6-Trichloro phenol	Phenol, 2,4,6-trichloro-	88-06-2	see F027
2,4,5-T	Acetic acid, (2,4,5-	93-76-5	see F027
Trichloro	trichlorophenoxy)-	25735-29-9	
propane, N.O.S. * 1,2,3-Trichloro	Propane, 1,2,3-trichloro-	96-18-4	
propane	• • • • •		
Triethylamine	Ethanamine, N,N-diethyl-	121-44-8	U404
O,O,O-Triethyl phosphoro	Phosphorothioic acid, O,O,O-triethyl ester	126-68-1	
thioate	trictify ester		
1,3,5-Trinitro	Benzene, 1,3,5-trinitro-	99-35-4	U234
benzene			
Tris(1-aziri	Aziridine, 1,1',1"-	52-24-4	
dinyl)phosphine sulfide	phosphinothioylidynetris-		
Tris(2,3-di	1-Propanol, 2,3-dibromo-,	126-72-7	U235
bromopropyl)	phosphate (3:1)		
phosphate			
Trypan blue	2,7-Naphthalenedisulfonic	72-57-1	U236
	acid, 3,3'-[(3,3'-dimethyl [1,1'-biphenyl]-4,4'-diyl)		
	bis(azo)]bis[5-amino-4-		
	hydroxy-, tetrasodium salt		
Uracil mustard	2,4-(1H,3H)-Pyrimidinedione,	66-75-1	U237
4	5-[bis(2-chloroethyl)amino]-		
Vanadium pent oxide	Vanadium oxide V2O5	1314-62-1	P120
Vinyl chloride	Ethene, chloro-	75-01-4	U043
Warfarin	2H-1-Benzopyran-2-one,	81-81-2	U248
	4-hydroxy-3-(3-oxo-1-		
	phenylbutyl)-, when present at		
Warfarin	concentrations less than 0.3% 2H-1-Benzopyran-2-one,		P001
vv arrariii	4-hydroxy-3-(3-oxo-1-		1001
	phenylbutyl)-, when present at		
	concentrations greater		
	than 0.3%		
Warfarin salts	when present at		U248
	concentrations less than 0.3%		
Warfarin salts	when present at		P001
	concentrations greater		
	than 0.3%		
Zinc cyanide	Zinc cyanide Zn(CN)2	557-21-1	P121
Zinc phosphide	Zinc phosphide Zn3P2, when	1314-84-7	P122
	present at concentrations greater than 10%		
Zinc phosphide	Zinc phosphide, Zn3P2, when		U249
1 1	present at concentrations of 10%		
	less		
Ziram	Zinc, bis(dimethylcarbamo-	137-30-4	P205
	dithioato-S,S')-, (T-4)-		

<sup>\*</sup> The abbreviation N.O.S. (not otherwise specified) signifies those members of the general class not specifically listed by name in this appendix.

#### 30.161: Ground Water Monitoring List

40 CFR Part 264, Appendix IX is hereby incorporated by reference.

## 30.162: Bases for Listing

40 CFR Part 261, Appendix IX is hereby adopted and incorporated by reference.

## 30.200: Provisions for Recyclable Materials and for Waste Oil

## 30.201: Applicability

- (1) 310 CMR 30.201 through 30.299, cited collectively as 310 CMR 30.200, are intended to protect public health, safety, and welfare, and the environment, by regulating the handling of waste oil, and of other materials which would be hazardous wastes if they were disposed of, or stored or treated prior to being disposed of. 310 CMR 30.200 applies to materials that would be hazardous wastes if disposed of, but are recycled in compliance with 310 CMR 30.200 instead of being disposed of. 310 CMR 30.200 does not apply to nonhazardous materials being recycled. Except as provided in 310 CMR 30.201, 30.211, and 30.250, 310 CMR 30.200 does not apply to the disposal of hazardous waste, or to the accumulation, storage, or treatment of hazardous waste prior to being disposed of (such activities are regulated elsewhere in 310 CMR 30.000). 310 CMR 30.200 does not apply to inherently waste-like materials even when such materials are recycled.
- (2) 310 CMR 30.200 is promulgated pursuant to the authority set forth in 310 CMR 30.001. With respect to recyclable material, 310 CMR 30.200 is also promulgated pursuant to the authority given by M.G.L. c. 21C, § 4 to waive regulation where there is no significant potential hazard to the public health, safety, or welfare, or the environment. If an action is taken with respect to recyclable material which is consistent with 310 CMR 30.200 but creates a significant potential hazard to public health, safety, or welfare, or the environment, 310 CMR 30.200 shall cease to be applicable to that action, and that action shall be subject to all other provisions of 310 CMR 30.000.

## 30.202: Other Applicable Provisions

- (1) Unless specifically exempted, all activities regulated by 310 CMR 30.200 shall also be subject to, and shall be done in compliance with, 310 CMR 30.001 through 30.064, 30.100 through 30.199, 30.303, 30.351(1) and (2), 30.353(1) and (2).
- (2) Except as provided in 310 CMR 30.202(3) and 30.271(4), all materials that are subject to management in compliance with a recycling permit issued pursuant to 310 CMR 30.200 are subject to and shall be managed in compliance with, 310 CMR 30.001 through 30.064, 30.100 through 30.199, 30.200 [including, without limitation, 310 CMR 30.202(1)], 30.303, the conditions of the permit, and no other provisions of 310 CMR 30.000 not specifically stated as conditions. The Department may issue a permit pursuant to 310 CMR 30.200, and allow a permit issued pursuant to 310 CMR 30.200 to remain in effect, only to the extent, and only while, the Department is persuaded that such action would not lead to a significant potential hazard to public health, safety, or welfare, or the environment, or be in noncompliance with 310 CMR 30.200. In addition to any permit conditions required pursuant to 310 CMR 30.200, the Department may impose any other conditions that the Department determines may be appropriate to assure that the activity authorized by the Department does not and will not constitute a significant potential hazard to public health, safety, or welfare, or the environment.
- (3) Notwithstanding the provisions of 310 CMR 30.202(2), if any material subject to management in compliance with a recycling permit issued pursuant to 310 CMR 30.200 is managed in a way that is not in compliance with 310 CMR 30.200 or any condition of the permit, the material is subject to all provisions of 310 CMR 30.000.
- (4) Recyclable material managed in a Completely Enclosed Recycling System that is directly connected via pipes or the equivalent to an industrial production process is not subject to 310 CMR 30.200, or any other provision of 310 CMR 30.000, provided that:

#### 30.202: continued

- (a) only accumulation in tanks is involved, and the entire process through completion of reclamation is closed by means of being entirely connected with pipes or other comparable closed means of conveyance;
- (b) reclamation does not involve controlled flame combustion (such as occurs in boilers, industrial furnaces, or incinerators);
- (c) the secondary materials are never accumulated in such tanks for over 12 months without being reclaimed; and,
- (d) the reclaimed material is not used to produce a fuel, or used to produce products that are used in a manner constituting disposal.
- (5) The following materials are not subject to 310 CMR 30.200, or any other provision of 310 CMR 30.000:
  - (a) Pulping liquors (*i.e.*, black liquors) that are reclaimed in a pulping liquor recovery furnace and then reused in the pulping process, unless it is accumulated in a manner that constitutes speculative accumulation.
  - (b) Spent sulfuric acid used to produce virgin sulfuric acid, unless it is accumulated in a manner that constitutes speculative accumulation.
  - (c) Used chlorofluorocarbon refrigerants from totally enclosed heat transfer equipment, including mobile air conditioning systems, mobile refrigeration, and commercial and industrial air conditioning and refrigeration systems that use chlorofluorocarbons as the heat transfer fluid in a refrigeration cycle, provided the refrigerant is reclaimed for further use.
  - (d) Whole used circuit boards being recycled provided they are free of mercury switches, mercury relays, nickel-cadmium batteries, or lithium batteries.
  - (e) Shredded circuit boards being recycled, provided that they are:
    - 1. managed in containers sufficient to prevent a release to the environment prior to recovery; and
    - 2. free of mercury switches, mercury relays and nickel-cadmium batteries and lithium batteries.
  - (f) All scrap metal items being recycled.
  - (g) Used, intact CRTs.
    - 1. Used intact CRTs are not hazardous wastes within Massachusetts if speculative accumulation is deemed not to be occurring pursuant to the speculative accumulation definition described at 310 CMR 30.010, and they are not disposed.
    - 2. In addition, exporters of used intact CRTs shall comply with the EPA administered requirements in 40 CFR 261.40 and 261.41.

#### 30.203: Signatories

All permit applications and all permits issued pursuant to 310 CMR 30.200 shall be signed as follows:

- (1) If the applicant is a corporation, by an individual who is a responsible corporate officer of the corporation and who is authorized by the corporation, in accordance with corporate procedures, to sign such documents on behalf of the corporation. As used in 310 CMR 30.203, "responsible corporate officer" shall mean a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other individual who performs for the corporation policy-making or decision-making functions similar to those performed by a president, secretary, treasurer, or vice-president.
- (2) If the applicant is a partnership, by a general partner.
- (3) If the applicant is a sole proprietorship, by the proprietor.
- (4) If the applicant is a municipality or public agency, by a principal executive officer or ranking elected official who is empowered to enter into contracts on behalf of the municipality or public agency.

#### 30.204: Requirements for All Applications for Recycling Permits

All applications for recycling permits pursuant to 310 CMR 30.200 shall include at least the following:

- (1) The name, address, and EPA identification number, as required by 310 CMR 30.061, or state designated identification number, if applicable, of the applicant.
- (2) The name and telephone number of an individual responsible for supervising the permitted activity.
- (3) A description of the material to be recycled, including waste code.
- (4) A description of the recycling activity, including the estimated quantity to be recycled annually.
- (5) A description of the management and other procedures to be used to prevent speculative accumulation.
- (6) If the material is to be stored prior to recycling, a complete description of the storage facility.
- (7) A signature pursuant to 310 CMR 30.203, certified pursuant to 310 CMR 30.009.
- (8) Such other information as the Department may require to determine that the proposed activity will be in compliance with 310 CMR 30.200 and will not constitute a significant potential hazard to the public health, safety, or welfare, or the environment.
- (9) If the applicant generates the material to be recycled, a statement that the applicant has evaluated whether there are opportunities to reduce or prevent the generation of the material to be recycled. In addition, a statement that the applicant has read and followed the guidance pertaining to toxics use reduction provided with the Department application.

#### 30.205: General Conditions for All Recycling Permits

The following conditions shall apply to all permits issued pursuant to 310 CMR 30.200, regardless of whether or not such conditions are written into the permit. Failure to comply shall be grounds for an enforcement action including, without limitation, permit suspension or revocation.

- (1) <u>Duty to Comply</u>. The permittee shall comply at all times with the terms and conditions of the permit, 310 CMR 30.000, M.G.L. c. 21C, and all other applicable State and Federal statutes and regulations.
- (2) <u>Duty to Maintain</u>. The permittee shall always properly operate and maintain all facilities, equipment, control systems, and vehicles which the permittee installs or uses.
- (3) <u>Duty to Halt or Reduce Activity</u>. The permittee shall halt or reduce activity whenever necessary to maintain compliance with 310 CMR 30.200 or the permit conditions, or to prevent an actual or potential threat to public health, safety, or welfare, or the environment.
- (4) <u>Duty to Mitigate</u>. The permittee shall remedy and shall act to prevent all potential and actual adverse impacts to persons and the environment resulting from noncompliance with the terms and conditions of the permit. The permittee shall repair at his own expense all damages caused by such noncompliance.
- (5) <u>Duty to Provide Information</u>. The permittee shall provide the Department, within a reasonable time, any information which the Department may request and which is deemed by the Department to be relevant in determining whether a cause exists to modify, revoke, or suspend a permit, or to determine whether the permittee is complying with the terms and conditions of the permit.

#### 30.205: continued

- (6) <u>Entries and Inspections</u>. The permittee shall allow personnel or other authorized agents of the Department or authorized EPA representatives, upon presentation of credentials or other documents as may be required by law, to:
  - (a) Enter at all reasonable times any premises, public or private, for the purposes of investigating, sampling or inspecting any records, condition, equipment, practice, or property relating to activities subject to M.G.L. c. 21C, or RCRA; and
  - (b) Enter at any time such premises for the purpose of protecting the public health, safety or welfare, or the environment; and
  - (c) Have access to and copy at all reasonable times all records that are required to be kept pursuant to the conditions of the permit, and all other records relevant to the permittee's hazardous waste activity or to the permittee's activity involving regulated recyclable material.

# (7) Records.

- (a) All records and copies of all applications, reports, and other documents required by 310 CMR 30.200 shall be kept by the permittee for at least three years from the expiration of the permit or, for persons recycling Class A regulated recyclable materials in compliance with applicable performance standards, all records and documents shall be kept for at least three years from the date on which each batch of the material is completely recycled on-site or the date on which each batch of the material is sent offsite for recycling. This three-year period may be extended by order of the Department for the duration of any enforcement action. All record-keeping shall be in compliance with 310 CMR 30.007.
- (b) All persons who claim that a material is subject to 310 CMR 30.200 shall retain documentation establishing that there is a known market for the recycled material and that the material is or will be recycled.
  - 1. A person who recycles materials generated on-site shall retain documentation that the recycling of materials yields a material that is within a specification range acceptable for use as a product.
  - 2. A person who sends materials destined for recycling to an off-site facility shall retain records regarding the capability of the off-site facility to conduct recycling, including that the recycling yields a material that is within a specification range acceptable for use as a product and that the materials sent to the facility have in fact been recycled.
  - 3. A person who accepts materials for recycling from off-site sources shall retain records regarding its capability to conduct recycling, including that the recycling yields a material that is within a specification range acceptable for use as a product and that the materials have in fact been recycled.
- (8) Continuing Duty to Inform. The permittee shall have a continuing duty to immediately:
  - (a) correct any incorrect facts in an application; and
  - (b) report or provide any omitted facts which should have been submitted; and
  - (c) in advance, report to the Department each planned change in the permitted facility or activity which might result in noncompliance with 310 CMR 30.200 or with a term or condition of the permit; and
  - (d) report to the Department any cessation of the permitted activity.
- (9) Preventing and Reporting Releases into the Environment. No materials that are to be recycled shall be intentionally released into the environment or otherwise disposed of within Massachusetts except in full compliance with all applicable provisions of 310 CMR 30.000. All accidental releases of recyclable material shall be immediately reported to the Department and to all other persons to whom such releases must be reported pursuant to State or Federal laws or regulations.
- (10) Compliance with the Application and the Terms of the Permit. Except where 310 CMR 30.200 or other conditions of the permit provide otherwise, the materials that are to be recycled shall be recycled in the manner described in the application for the permit and in no other manner, and in compliance with all conditions of the permit. There shall be no change in the procedure of recycling without the prior express written approval of the Department for those permittees whose activities require a written permit. For those permittees whose activities do not require a written permit, a written notification to the Department is required.

#### 30.205: continued

- (11) <u>Transportation of Recyclable Material</u>. Unless otherwise specified, all transportation of recyclable material, and preparation of all recyclable material for transportation, shall be in full compliance with all DOT and other Federal regulations, and all State regulations, governing the transportation of hazardous materials.
- (12) <u>Annual Reporting</u>. All permittees shall prepare and maintain on-site an annual report, on a form prescribed by the Department, covering all recyclable material they handle. Each annual report shall be completed no later than March 1<sup>st</sup> for the preceding calendar year. The report shall include, at a minimum, the following information:
  - (a) The EPA identification number, or state-only identification number, of the permittee; and
  - (b) The name, address, and EPA identification number, or state-only identification number, of the facility to which recyclable material was sent; and
  - (c) Identification of all recyclable material recycled by the permittee. Such identification shall include the EPA listed name or description, the EPA hazardous waste number, the DOT hazard class, the amount of material recycled; and
  - (d) Identification of all recyclable material shipped to off-site facilities. Such identification shall include the EPA listed name or description, the EPA hazardous waste number, the DOT hazard class, the amount of recyclable material transported, and the facility to which it was transported; and
  - (e) The name and EPA identification number of the transporters used.
- (13) <u>Dust Suppression and Road Treatment</u>. The use of regulated recyclable material for dust suppression or road treatment is prohibited. The provisions set forth in 310 CMR 30.205(9) shall apply to such activity.
- (14) <u>Speculative Accumulation</u>. Speculative accumulation is prohibited. The permittee shall make and keep records that will adequately demonstrate that no speculative accumulation, as defined in 310 CMR 30.010, has occurred. Such records shall include, but not be limited to, the following:
  - (a) records showing the amount of material being accumulated or stored at the beginning of the calendar year;
  - (b) records showing the amount of material received and generated during the calendar year;
  - (c) records showing the amount of material being accumulated or stored at the end of the calendar year; and,
  - (d) records showing the amount of material that is recycled on-site, and/or that is transferred to a different site for recycling.
- (15) <u>Personnel Training</u>. The permittee shall instruct, or give on-the-job training to, personnel involved in any activity authorized by the permit, so that such instruction or on-the-job training teaches such personnel how to comply with the conditions of the permit and to carry out the authorized activity in a manner that is not hazardous to public health, safety, or welfare, or the environment.
- (16) Emergency Prevention and Response. The permittee shall plan and prepare for fires, explosions, or other occurrences that might result in release of oil or hazardous materials to the environment or otherwise constitute a potential hazard to public health, safety, or welfare, or the environment. Without limiting the generality of the foregoing, if the permit authorizes the operation of a recycling facility, the design and operation of the recycling facility shall be in compliance with the requirements set forth in 310 CMR 30.341(1)(e)1.
- (17) <u>Transfer of Permits</u>. Each permit issued pursuant to 310 CMR 30.200 shall be valid only for the person to whom it is issued and may not be transferred. Operation by an owner or operator other than those named in the permit shall be in violation of 310 CMR 30.000, and a basis for suspension or revocation of the permit, or for other enforcement action.

#### 30.205: continued

- (18) <u>Permit Expiration</u>. Permits issued pursuant to 310 CMR 30.200 are in effect for a period of up to five years from the date of issuance. To continue the specified activity beyond this five-year period, the permittee must reapply for a permit during the effective period of the existing permit. If the permittee wishes to engage in an activity different from the one specified in the permit, the permittee must receive a permit for the new activity prior to engaging in that activity.
- (19) Storage and Accumulation in Tanks and Containers. Regulated recyclable materials shall be stored or accumulated only in tanks or containers. Generators of regulated recyclable materials that are waste oil or used oil fuel shall comply with applicable container and tank requirements in 310 CMR 30.253. Generators of all other regulated recyclable materials shall comply with applicable container and tank requirements in 310 CMR 30.340 (for large quantity generators), 30.351 (small quantity generators), or 310 CMR 30.353 (very small quantity generators), respectively. Each tank or container in which regulated recyclable material is being accumulated or stored and each outside container into which small containers are packed shall be clearly marked and labeled throughout the period of accumulation or storage with the following:
  - (a) the words "Regulated Recyclable Material";
  - (b) regulated recyclable material(s) identified in words (e.g., acetone, toluene);
  - (c) type of hazard(s) associated with the material(s) indicated in words (e.g., ignitable, toxic, dangerous when wet);
  - (d) the date upon which each period of accumulation or storage begins, marked on each tank or container at the time accumulation or storage begins in that tank or container, except that tanks containing regulated recyclable materials to be lawfully recycled are exempt from dating requirements if hard-piped and integrally connected to a used oil fired space heater. Marks and labels shall be placed on the sides of each tank or container in such a manner that they are clearly visible for inspection.

# 30.206: Additional General Permit Conditions for Recyclers Who Receive Regulated Recyclable Materials from Off-site

The following additional conditions shall apply to each permit issued pursuant to 310 CMR 30.200 for recyclers who receive regulated recyclable materials from off-site, regardless of whether or not such conditions are written into the permit. Failure to comply shall be grounds for an enforcement action including, without limitation, permit suspension or revocation.

- (1) <u>Security</u>. The design and operation of the recycling facility shall be in compliance with the requirements set forth in 310 CMR 30.514 or with general security standards of equivalent stringency.
- (2) <u>Inspections</u>. The permittee shall inspect the recycling facility and remedy malfunctions in compliance with requirements set forth in 310 CMR 30.515(1)(a) and (b).
- (3) <u>Wastewater Treatment Units</u>. If a wastewater treatment unit is part of the recycling activity for which the permit is issued, such wastewater treatment unit shall be in compliance with the requirements set forth or referred to in 310 CMR 30.605.

# 30.210: General Provisions for Classifying and Handling Waste Oil and Regulated Recyclable Materials

310 CMR 30.210 through 30.219, cited collectively as 310 CMR 30.210, set forth the various classifications of waste oil and of regulated recyclable materials, and set forth general requirements for the handling of regulated recyclable materials.

# 30.211: Handling Regulated Recyclable Material

Regulated recyclable materials that are recycled and otherwise handled in compliance with 310 CMR 30.200 and the conditions of the relevant recycling permit are subject to 310 CMR 30.200 and the conditions of the relevant recycling permit, and are not subject to any other requirements. Regulated recyclable materials that are not recycled or otherwise handled in compliance with 310 CMR 30.200 and the conditions of the relevant recycling permit

## 30.211: continued

- (1) are hazardous wastes; and
- (2) shall not be subject to any provisions of 310 CMR 30.200, except for 310 CMR 30.201, 30.211, 30.221, 30.231, 30.241, 30.251, 30.261, 30.271 and 30.291; and
- (3) shall be accumulated, collected, transported, stored, treated, and disposed of in compliance with all the requirements of 310 CMR 30.000, other than 310 CMR 30.200.

NON-TEXT PAGE

## 30.212: Class A Regulated Recyclable Materials

Class A regulated recyclable materials are those regulated recyclable materials that, because of some inherent property of the materials, or because of some inherent property of the recycling process, or because the conditions of the recycling are such as to motivate the recycler to manage the recycling with minimum hazard to public health, safety, and welfare, and the environment, have been determined by the Department to require a degree of regulation sufficiently stringent to protect public health, safety, and welfare, and the environment, from any significant potential hazard, but not so stringent as to discourage the recycling of these materials as a socially and environmentally desirable alternative to disposal. The following are Class A recyclable materials:

- (1) Those regulated recyclable materials that are neither used in a manner constituting disposal nor burned for energy recovery nor accumulated speculatively and are either:
  - (a) used or reused as ingredients in an industrial process to make a product, provided that the materials are not being reclaimed; or
  - (b) used or reused as substitutes for commercial products; or
  - (c) generated onsite, removed from the original production process, and returned as substitutes for feedstock in the original production process without being reclaimed.
- (2) Industrial ethyl alcohol that is reused or reclaimed; however, persons initiating a shipment for reclamation in a foreign country, and any intermediary arranging for such a shipment shall also comply with the requirements of 40 CFR 261.6(a)(3)(i)(A) and transporters transporting such a shipment for export shall comply with 40 CFR 261.6(a)(3)(i)(B) and which are incorporated by reference with the following additions, modifications and exceptions:
  - (a) The following text is added after "262.57": "as adopted at 310 CMR 30.361".
  - (b) The following text is added after "subpart E of part 262": "as adopted at 310 CMR 30.361".
- (3) (Reserved).
- (4) Used oil fuel burned at the site of generation for energy recovery in a used oil fuel fired space heater and in compliance with the applicable provisions of 310 CMR 30.222 and 30.256.
- (5) A sludge having the characteristics of a hazardous waste when being reclaimed.
- (6) A by-product having the characteristics of a hazardous waste when being reclaimed.
- (7) A commercial chemical product listed in 310 CMR 30.133 or 30.136, or that exhibits a hazardous waste characteristic described at 310 CMR 30.120, which has never been used and which is being reclaimed.
- (8) Waste oil including, but not limited to, waste oil that has the characteristics of a hazardous waste and is not hazardous waste fuel, if recycled in some other manner than being burned for energy recovery.
- (9) Specification used oil fuel burned for energy recovery in a fossil fuel utilization facility other than a used oil fuel fired space heater, and otherwise handled in compliance with 310 CMR 30.250.
- (10) A material recycled in a completely enclosed recycling system at the site of generation (e.g., stills, silver recovery units), except such material recycled at a photo processor subject to 310 CMR 71.00, and except such material recycled at a printer subject to 310 CMR 71.00, provided:
  - (a) Reclamation does not involve controlled flame combustion (such as occurs in boilers, industrial furnaces, or incinerators); and
  - (b) The reclaimed material is not used to produce:
    - 1. a fuel, including a hazardous waste fuel, or
    - 2. products that are used in a manner constituting disposal.

#### 30.213: Class B Regulated Recyclable Materials

Class B regulated recyclable materials are those regulated recyclable materials which have been determined by the Department to require some specific management practices in order to be recycled or otherwise managed without constituting a significant potential hazard to the public health, safety, or welfare, or the environment. The following are Class B regulated recyclable materials:

- (1) Class B(1) regulated recyclable materials that are not intended to be, and are not, used for the production of heat or power by burning, and that are intended to be, or that are, used in a manner constituting disposal. *See* 310 CMR 30.010: *Definitions*.
- (2) Class B(2) hazardous waste fuels that are intended to be, and that are, used for the production of heat or power by burning.
- (3) Class B(3) used oil fuels that are intended to be, and that are, used for the production of heat or power by burning.
- (4) Class B(4) spent materials and hazardous wastes that are listed in 310 CMR 30.131 or 310 CMR 30.132 or that are characteristic for D011 pursuant to 310 CMR 30.125(2): *Table 1*, and that have an economically recoverable quantity of precious metals, except that a silver recovery cartridge that has been utilized for wastewater treatment destined for reclamation of its silver content, can be managed as a Class A regulated recyclable material. *See* 310 CMR 30.212(5) sludge having the characteristics of a hazardous waste when being reclaimed. In order to be managed as a Class A regulated recyclable material, silver recovery cartridges sent for reclamation shall be shipped directly to a reclaimer or to a hazardous waste facility with authority in its license to accept, for consolidation and shipment to a reclaimer, silver recovery cartridges destined for reclamation. For purposes of implementing 310 CMR 30.000, quantities of precious metals are "economically recoverable" only if the person generating the material containing the precious metals can obtain greater economic benefit by recovering the precious metals than by causing the material to be handled in any other way.
- (5) Class B(5) spent lead-acid batteries that are intended to be, and that are, reclaimed for recovery of lead.

## 30.214: Class C Regulated Recyclable Materials

Class C regulated recyclable materials are those regulated recyclable materials which are neither Class A nor Class B. 310 CMR 30.214: *Table 1* sets forth some specific examples of Class C regulated recyclable materials.

Table 1 - Examples of Class Designations

Type of material being recycled	What happens to the material burned or used in a manner constituting disposal	Reclaimed
Spent material	В	C(1)(2)(3)
Sludge listed in 310 CMR 30.131 or		
310 CMR 30.132	В	C(2)
Sludge which is hazardous pursuant to		
310 CMR 30.120 through 30.125	В	A
By-product listed in 310 CMR 30.131		
or 310 CMR 30.132	В	C(1)(2)
By-product which is hazardous pursuant		
to 310 CMR 30.120 through 30.125	В	A
Commercial chemical product listed in		
310 CMR 30.133 or 310 CMR 30.136	В	A
Scrap metal	A	A(4)

Notes:

(1) Except that industrial ethyl alcohol is Class A, unless provided otherwise by 40 CFR 261.6(a)(3)(i) as adopted and amended at 310 CMR 30.212(2).

#### 30.214: continued

- (2) Except that materials with precious metal are Class B.
- (3) Except that lead-acid batteries sent for reclamation are Class B
- (4) Except that certain scrap metal is excluded pursuant to 310 CMR 30.202(5).

# 30.215: Distinguishing Waste Oil that is Used Oil Fuel from Waste Oil that is not Used Oil Fuel

- (1) Any batch or lot of waste oil that is not used oil fuel is either hazardous waste fuel, used waste oil, or unused waste oil. Unless and until the Department is persuaded otherwise pursuant to the application and permitting requirements set forth in 310 CMR 30.250, a batch or lot of waste oil shall be presumed to be mixed with hazardous waste, and therefore not used oil fuel, if:
  - (a) The waste oil is "transformer oil", *i.e.* oil that has been used in a transformer, capacitor, switch, or other electrical device for insulation or heat transfer purposes. Transformer oil shall be presumed to be mixed with PCBs in concentrations equal to or exceeding 50 parts per million unless and until the Department is persuaded otherwise pursuant to the application and permitting requirements set forth in 310 CMR 30.250.
  - (b) The waste oil contains 1,000 or more parts per million of total halogens, in which case the waste oil shall be presumed to be a mixture of oil and halogenated hazardous wastes unless and until the Department is persuaded, pursuant to the application and permitting requirements set forth in 310 CMR 30.250, that the waste oil contains no halogenated constituent listed in 310 CMR 30.160 in a significant amount.
- (2) In any event, the Department may deem any particular batch or lot of used oil fuel to be hazardous waste, and make that material subject to all applicable provisions of 310 CMR 30.000 other than 310 CMR 30.200, if the Department determines that such action is necessary or appropriate to protect public health, safety, or welfare, or the environment.

# 30.216: Distinguishing Specification Used Oil Fuel from Off-specification Used Oil Fuel

Any waste oil, and any mixture of waste oil with any other material, that is used oil fuel is either specification used oil fuel or off-specification used oil fuel. If used oil fuel does not exceed the allowable level of any constituent or property as set forth in 310 CMR 30.216: *Table 1*, such used oil fuel is specification used oil fuel. If used oil fuel does exceed the allowable level of any constituent or property as set forth in 310 CMR 30.216: *Table 1*, such used oil fuel is off-specification used oil fuel.

Table 1.

# Constituent or Property

Arsenic Cadmium Chromium Lead Flash point Total Halogens Allowable Level

5 ppm maximum 2 ppm maximum 10 ppm maximum 100 ppm maximum 100°F minimum 4,000 ppm maximum \*

[\* see also 310 CMR 30.215(1)(b)]

# 30.220: Requirements Governing Class A Regulated Recyclable Materials

310 CMR 30.220 through 30.229, cited collectively as 310 CMR 30.220, sets forth: standards for handling Class A regulated recyclable materials; the procedures for obtaining a permit to recycle Class A regulated recyclable materials and the conditions for such permits; as well as the performance standards for certain categories of Class A materials for which a permit is not required.

## 30.221: General Provisions

(1) No person shall recycle Class A regulated recyclable material except in compliance with 310 CMR 30.200.

#### 30.221: continued

- (2) 310 CMR 30.221: *Table 1* identifies the permit and approval categories for Class A Regulated Recyclable Materials.
- (3) Recycling of Class A regulated recyclable material shall be done in compliance with the applicable permitting requirements of 310 CMR 30.220 or, for those activities specifically excluded from permitting in 310 CMR 30.221(3)(a), the performance standards described at 310 CMR 30.222.
  - (a) Class A recycling activities for which a recycling permit need not be obtained are as follows:
    - 1. The recycling of Class A regulated recyclable materials at the site of generation;
    - 2. The shipment off the site of generation for recycling within any calendar month of 200 kilograms or less of Class A regulated recyclable materials by a Very Small Quantity Generator of regulated recyclable material, excluding acutely hazardous regulated recyclable material, provided that material is managed in compliance with the requirements described at 310 CMR 30.222(4)(b);
    - 3. The onsite recovery of silver from wastewater at the site of generation, provided such recycling is done in compliance with the Environmental Results Program regulations, 310 CMR 71.00; and
    - 4. The shipment off the site of generation of specification used oil fuel (MA97) with a transporter/marketer authorized pursuant to 310 CMR 30.255.
- (4) Class A regulated recyclable materials recycled in compliance with 310 CMR 30.200 are not included or counted in the determination of rate of hazardous waste generation and accumulation and corresponding hazardous waste generator status, however, such materials must be included and counted to determine a generators corresponding Class A RRM status.

Table 1.
Approval Categories for Class A Recyclers

Citation	Description	Generator recycles on-site	Large or small quantity generator sends regulated recyclable material off-site for recycling	Receiver of regulated recyclable materials
310 CMR	30.212			
(1) (a)	Used or reused as an ingredient in a product without reclamation	PS	N	N
(1) (b)	Substitute for commercial product being reclaimed	PS	N	N
(1) (c)	Substitute for feedstock in original process without reclamation	PS	N/A	N/A
(2)	Industrial Ethyl Alcohol being reclaimed	PS	N	N
(3)	Reserved			
(4)	Used oil fuel burned at the site of generation for energy recovery in a used oil fuel fired space heater in compliance with 310 CMR 30.222 and 310 CMR 30.256.	PS	N/A	N/A
(5)	Characteristic sludge being reclaimed	PS	N	P
(6)	Characteristic by-product being reclaimed	PS	N	P
(7)	Unused commercial chemical product being reclaimed	PS	N	P
(8)	Waste oil recycled by other than burning for energy recovery	PS	N	P

30.221: continued

Table 1.
Approval Categories for Class A Recyclers (continued)

Citation	Description	Generator recycles on-site	Large or small quantity generator sends regulated recyclable material off-site for recycling	Receiver of regulated recyclable materials
(9)	Specification used oil fuel burned for energy recovery in a fossil fuel utilization facility other than a used oil fuel fired space heater and otherwise handled in compliance with 310 CMR 30.250	PS	N	N
(10)	Material recycled in a completely enclosed recycling system at site of generation, except such material recycled at a photo processor or a printer subject to 310 CMR 71.00 (e.g., stand-alone solvent stills, stand-alone silver recovery units).	PS	N/A	N/A

N/A – Not Applicable

N -21 Day Presumptive Approval

P - Written Permit

PS - Performance Standard

# 30.222: Generator Standards

- (1) Except as otherwise specifically provided in 310 CMR 30.222 and 310 CMR 30.353 a generator of Class A regulated recyclable material may sell or otherwise transfer such material, or contract to sell or otherwise transfer such material, or cause or allow such material to be transported off the site of generation, directly to either
  - (a) a facility described in 310 CMR 30.305;
  - (b) a facility that has a Class A permit pursuant to 310 CMR 30.220; or
  - (c) a facility outside of Massachusetts that is properly authorized under that state's applicable authority and is identified in the generator's Class A recycling permit to receive Class A regulated recyclable material from that generator pursuant to 310 CMR 30.224(1)(c).
- (2) Except as otherwise specifically provided in 310 CMR 30.222 and 310 CMR 30.255, a generator of Class A regulated recyclable material may sell or otherwise transfer custody or possession of such material only to a transporter in compliance with 310 CMR 30.223.
- (3) A generator of material that the generator claims is specification used oil fuel shall not sell or otherwise transfer, or offer to sell or otherwise transfer, such material to any other person unless the generator:
  - (a) has ascertained, by appropriate analytical methods contained in EPA's Test Methods for Evaluating Solid Waste, *SW-846*, as incorporated by reference at 310 CMR 30.012, or by an equivalent method accepted by EPA, that it meets the conditions provided in 310 CMR 30.215 and the parameters provided in 310 CMR 30.216 for specification used oil fuel, and

<sup>\*</sup> Shipments of 200 kilograms or less of Class A regulated recyclable materials, sent off-site for recycling within any calendar month by a VSQG of regulated recyclable material, are specifically excluded from permitting. See 310 CMR 30.221(3)(a)2.

#### 30.222: continued

- (b) has kept documentation showing compliance with the requirements in 310 CMR 30.222(3)(a), and makes and keeps records for each batch or quantity of such material that is sold or otherwise transferred, stating for each such batch or quantity the name and address of the facility to which the material is sold or otherwise transferred, the quantity of such material sold or otherwise transferred, the date when the material was collected, and a cross-reference to the documentation described in 310 CMR 30.222(3)(b).
- (4) Very Small Quantity Generators of Class A regulated recyclable material excluded from Class A permit requirements at 310 CMR 30.221(3)(a)1. and 2. shall not accumulate at any one time 1000 kilograms or more of regulated recyclable material.
  - (a) Very Small Quantity Generators of Class A regulated recyclable material that recycle at the site of generation in accordance with 310 CMR 30.221(3)(a)1. shall also manage such regulated recyclable material in a manner which neither could nor does endanger public health, safety, or welfare or the environment, and in compliance with 310 CMR 30.222(5)(c), 30.222(5)(d)2., 30.222(5)(d)7., 30.222(5)(e), 30.222(5)(i) and the applicable performance standards at 310 CMR 30.222(6).
  - (b) For shipments off the site of generation of 200 kilograms or less of Class A regulated recyclable material by a Very Small Quantity Generator of regulated recyclable material, excluded at 310 CMR 30.221(3)(a)2., the generator shall:
    - 1. keep, for a period of at least three years from the date of recycling:
      - a. a record from the recycling facility, certified pursuant to 310 CMR 30.009, that the materials were recycled in compliance with applicable State and Federal laws and regulations; and
      - b. a record of each shipment sent off-site that satisfies the requirements described at 310 CMR 30.223(4)(b).
    - 2. accumulate the material prior to shipping in containers that are sealed, structurally sound, and labeled as a "Regulated Recyclable Material" and with the material identified with words and the type of hazard(s) associated with the material(s) indicated in words (e.g., ignitable, toxic, dangerous when wet).
    - 3. comply with 310 CMR 30.222(1)a. and b., except that shipments of regulated recyclable material being sent off the site of generation to an out-of-state facility need not be managed in compliance with 310 CMR 30.305(2), but shall instead be sent directly to a facility that is authorized by that state to recycle that material.
- (5) <u>General Performance Standards</u>. A Small Quantity Generator or Large Quantity Generator of Class A regulated recyclable material exempt from Class A permit requirements at 310 CMR 30.221(3)(a)1. shall:
  - (a) Notify and obtain a generator identification number in compliance with 310 CMR 30.061, unless the generator has previously notified and obtained a generator identification number;
  - (b) Submit a onetime notification to the Department on a form prescribed by the Department prior to or upon commencing a Class A recycling operation, unless the generator has a valid Class A recycling permit for that recycling operation as of February 27, 2004;
  - (c) Manage regulated recyclable materials that are not recycled or otherwise handled in compliance with 310 CMR 30.220 as hazardous wastes which shall be accumulated, collected, transported, stored, treated, and disposed of in compliance with all the requirements of 310 CMR 30.000 other than 310 CMR 30.200;
  - (d) Comply with the following conditions cited in 310 CMR 30.205:
    - 1. Duty to provide information 310 CMR 30.205(5);
    - 2. Record-keeping 310 CMR 30.205(7), except that 310 CMR 30.205(7)(b) does not apply to used oil fuel fired space heaters;
    - 3. Preventing and reporting releases to the environment 310 CMR 30.205(9);
    - 4. Speculative accumulation requirements 310 CMR 30.205(14);
    - 5. Personnel training 310 CMR 30.205(15);
    - 6. Emergency prevention 310 CMR 30.205(16); and
    - 7. Storage and accumulation only in tanks and containers 310 CMR 30.205(19), except that generators recycling silver-bearing Class A regulated recyclable material in stand-alone silver recovery units at the site of generation are subject to the tank and container requirements at 310 CMR 71.00.
  - (e) Use, operate and maintain recycling units that are appropriately designed for the material being recycled in accordance with manufacturer's recommended operating and maintenance procedures;

#### 30.222: continued

- (f) Retain documentation that any recycling unit used to recycle Class A regulated recyclable materials has been tested and listed in accordance with the applicable UL Standard or has been otherwise approved by or designed in accordance with the standards of any nationally recognized engineering organization or testing laboratory, as applicable;
- (g) Manage as a hazardous waste any residual material produced by recycling Class A RRMs at the site of generation pursuant to 310 CMR 30.102(2)(d), if the residual is a listed waste or exhibits the characteristics of a hazardous waste;
- (h) Do not mix either regulated recyclable material or residual material produced by recycling Class A RRMs at the site of generation with hazardous waste;
- (i) Maintain documentation that the material is a Class A regulated recyclable material described in 310 CMR 30.212 and that it would be a hazardous waste if discarded (*see* 310 CMR 30.302); and
- (j) If reclaiming a Class A RRM at the site of generation, recover a useable product that meets commercial specifications for the product's intended use, and that requires no further reclamation prior to being used as a commercial ingredient in an on-site manufacturing process or being sold commercially.

[Note: 310 CMR 30.222(5)(j) applies to categories of Class A Regulated Recyclable Materials defined in 310 CMR 30. 212 (2), (5) through (8) and (10) provided that, for solvents recycled at the site of generation in stand-alone solvent stills, the reclaimed solvent may not be sold commercially.]

- (k) Keep, for a period of at least three years from the date on which each batch of the material was sent off-site for recycling, the shipping paper provided by the transporter pursuant to 310 CMR 30.223(7).
- (6) <u>Specific Performance Standards</u>. All generators of Class A regulated recyclable material exempt from Class A permit requirements pursuant to 310 CMR 30.221(3)(a)1. and 310 CMR 30.221(3)(a)2. shall comply with the following, as applicable:
  - (a) Used oil fuel fired space heaters. A generator of used oil fuel burned in a used oil fuel fired space heater for energy recovery at the site of generation shall ensure that:
    - 1. only used oil fuel is burned in the space heater and such used oil fuel is generated at the site where the space heater is located, supplemental fuel sources may include used oil fuel generated by:
      - a. a person who is a very small quantity generator pursuant to 310 CMR 30.353 and transported by that person from the site of generation to the site where the heater is located; or
      - b. generated by a household as described in 310 CMR 30.104(6) and received from the person at whose household the oil became used oil;
    - 2. the used oil fuel has a flash point of 100°F or greater;
    - 3. the energy input capacity of the space heater is equal to or less than 500,000 BTU per hour;
    - 4. the space heater is integrally connected to a tank that supplies the used oil fuel to the space heater and combustion gases from the space heater are vented vertically to the ambient air;
    - 5. the space heater is not operated during the period from June 15<sup>th</sup> through September 15<sup>th</sup>; and
    - 6. the space heater is operated in compliance with all other applicable regulations including those of the local fire department and the Massachusetts Office of the State Fire Marshall.
  - (b) Stand-alone solvent still. A generator of Class A regulated recyclable solvent recycled in a stand-alone solvent still at the site of generation, shall ensure that:
    - 1. the process of reclamation is conducted in a "completely enclosed recycling system", as defined in 310 CMR 30.010;
    - 2. reclaimed solvent is returned to an on-site process similar to the one in which it was generated:
    - 3. reclaimed solvent is not used to produce a fuel or products that are used in a manner constituting disposal;
    - 4. the solvent still is operated in compliance with all other applicable regulations, including those of the local fire department and the Massachusetts Office of the State Fire Marshall; and
    - 5. the reclamation does not involve controlled flame combustion.

#### 30.222: continued

- (c) <u>Silver Recovery Units</u>. A generator of silver-bearing Class A regulated recyclable material recycled in stand-alone silver recovery units at the site of generation shall ensure that:
  - 1. the process of reclamation is conducted in a "completely enclosed recycling system" as defined in 310 CMR 30.010;
  - 2. if the generator is a photoprocessor or printer subject to the Environmental Results Program (ERP), 310 CMR 71.00: *Industrial Wastewater Regulations for Photo Processors and Printers*, it shall comply with 310 CMR 71.00;
  - 3. if the generator is a photoprocessor or printer that is not subject to ERP, the generator shall comply with all applicable federal, state, and local waste water regulations, including those of the local POTW and shall not discharge or transport industrial wastewater to a POTW unless:
    - a. the wastewater contains less than or equal to 2 mg/l (*i.e.*, 2 ppm) silver, however this provision shall not excuse a generator from compliance with a lower, locally enforceable limit; or
    - b. the wastewater is in compliance with a local limit greater than 2 ppm and such limit is established pursuant to a locally enforceable permit.
- (d) <u>Specification Used Oil Fuel Burned for Energy Recovery in a Fossil Fuel Utilization Facility Other than a Used Oil Fuel Fired Space Heater</u>. A generator of specification used oil fuel burned for energy recovery in a fossil fuel utilization facility other than a used oil fuel fired space heater shall:
  - 1. manage the material in compliance with 310 CMR 30.250;
  - 2. retain at the site of generation documentation of compliance with 310 CMR 30.250 and include the following:
    - a. information that shows that the material burned at the facility is specification used oil fuel and meets the parameters of specification used oil fuel as defined in 310 CMR 30.216 and that the generator uses sampling and analytical methods in compliance with 310 CMR 30.151 for representative sample methods and 30.152 for flash point determination. For determining approved analytical procedures, *see* EPA's "Test Methods for Evaluating Solid Waste, *SW-846*";
    - b. a copy of the Department's air quality approval to burn the used oil fuel pursuant to 310 CMR 7.00: *Air Pollution Control*; and
  - 3. not mix specification used oil fuel with any off-specification used oil fuel, with any waste oil, or with any hazardous waste fuel, unless such mixing is incidental to the filling or emptying of a tank or container.
- (e) Recyclable Material Described at 310 CMR 30.212(1)(a), (b) and (c). A generator of Class A regulated recyclable material described at 310 CMR 30.212(1)(a) through (c) and used/reused as an ingredient to make a product, substitutes for a commercial product, or substitutes for feedstock in the original production process, shall ensure that such material is present in the resulting product or process within a specification range typical for the product or process. The Department may consider use of excess regulated recyclable material as a form of treatment and/or disposal subject to the licensing requirements of 310 CMR 30.800.

## 30.223: Transport and Manifest Standards

[Note: A transporter of Class A Regulated Recyclable Material (RRM), including specification used oil fuel, is required to comply with all US DOT regulations applicable to the shipment of hazardous materials.]

- (1) A transporter of specification used oil fuel shall be licensed to transport hazardous waste pursuant to  $310~\mathrm{CMR}~30.000$
- (2) A transporter of any Class A regulated recyclable material other than specification used oil fuel shall be either:
  - (a) licensed to transport hazardous waste pursuant to 310 CMR 30.000, or
  - (b) a person who
    - 1. transports Class A regulated recyclable material in full compliance with all applicable State and Federal regulations including, but not limited to, M.G.L. c. 159B, and
    - 2. transports, from or to any point in Massachusetts, no hazardous waste, and no regulated recyclable material other than Class A regulated recyclable material.

#### 30.223: continued

- (3) A transporter of Class A regulated recyclable material may cause or allow such material to be transported off the site of generation directly to either
  - (a) a facility described in 310 CMR 30.222(1), or
  - (b) a transporter described in 310 CMR 30.223(1).
- (4) Class A regulated recyclable material transported by a transporter described in 310 CMR 30.223(1) or 310 CMR 30.223(2)(a) shall be accompanied by either:
  - (a) a manifest filled out, signed, and distributed in compliance with all provisions of 310 CMR 30.000 governing the filling out, signing, and distribution of copies of manifests; or
  - (b) a shipping paper which shall describe the transportation of the material, shall accompany the material at all times while it is being transported, shall be made available to the Department by the generator, transporters or recycling facility on request, and shall contain at least the following:
    - 1. the transporter's name, address, EPA identification number, and hazardous waste transporter license number;
    - 2. the date of collection of the Class A regulated, recyclable material from the generator;
    - 3. the name and address of the generator from whom Class A regulated, recyclablematerial was collected on that date;
    - 4. the amount of Class A regulated, recyclable material collected from the generator;
    - 5. the location of the recycling facility taking delivery and custody of the Class A regulated, recyclable material from the last transporter, including the facility's name, address, EPA identification number, and license or permit identification;
    - 6. the dated signature of the generator from whom Class A regulated, recyclable material was collected;
    - 7. the dated signature of the transporter's employee making the collection, and of all subsequent transporters;
    - 8. the dated signature of the recycling facility's owner or operator, or his or her designee; and
    - 9. for any specification used oil fuel being transported, the shipping paper shall identify the material as "specification used oil fuel".
- (5) Class A regulated recyclable material transported by a transporter described in 310 CMR 30.223(2)(b) shall be accompanied by a shipping paper filled out and signed pursuant to 310 CMR 30.223(4)(b).
- (6) A transporter of Class A regulated recyclable material described in 310 CMR 30.223(1) or 30.223(2) shall retain for at least three years from the date it accepts Class A regulated recyclable material from a generator, a copy of the shipping paper or manifest used to comply with 310 CMR 30.223(4). All record-keeping shall be in compliance with 310 CMR 30.007.
- (7) A transporter of Class A regulated recyclable material using the shipping paper required by 310 CMR 30.223(4)(b) shall provide the generator of the regulated recyclable material with a copy of the shipping paper after it is signed by the recycling facility pursuant to 30.223(4)(b)8.

## 30.224: Applications for Class A Permits

- (1) Generators and recyclers of Class A regulated recyclable material, other than those exempt from permit requirements pursuant to 310 CMR 30.221(3)(a), shall determine their appropriate permit category according to 310 CMR 30.221: *Table 1* and submit a permit application for that category on a form prescribed by the Department. In addition to what is set forth 310 CMR 30.204, the application shall include:
  - (a) for a generator intending to send materials off the site of generation, the names, addresses, and EPA identification numbers of the recycler(s) to whom the materials are to be sent.
  - (b) for a recycler intending to receive materials from off the site of recycling, the names, addresses, and EPA identification numbers of the generator(s) located outside of Massachusetts from whom the materials are to be received.
  - (c) for a generator intending to send materials outside of Massachusetts, a statement from those persons outside of Massachusetts who are referred to in the application, certified pursuant to 310 CMR 30.009, that:

#### 30.224: continued

- 1. the information contained in the application is correct and accurate, and
- 2. the activity they intend to engage in is in compliance with applicable State and Federal laws and regulations.
- (2) For a generator intending to recycle specification used oil fuel by burning it in a fossil fuel utilization facility other than a used oil fuel fired space heater, documentation that the burning of specification used oil fuel in that facility has been approved as applicable by the Department pursuant to 310 CMR 7.00: *Air Pollution Control*.

# 30.225: Conditions for Class A Recycling Permits

In addition to conditions imposed pursuant to 310 CMR 30.202(2), the conditions set forth in 310 CMR 30.205 and 30.206, and the provisions set forth in 310 CMR 30.221 and 310 CMR 30.222 and 30.250, the following conditions shall apply to each Class A recycling permit, regardless of whether or not such conditions are written into the permit.

- (1) The permittee shall immediately notify the Department of any change in the characteristics, composition, or source of any Class A regulated recyclable material that would require that said material be managed differently, that the conditions of the permit be changed, or that the permit be suspended or revoked.
- (2) If the permittee is a generator who is a "marketer" [that term is defined in 310 CMR 30.255(1)] of specification used oil fuel by selling or otherwise transferring such fuel, or offering to sell or otherwise transfer such fuel, to other persons who burn that fuel, or who intend or plan to burn that fuel, for energy recovery, the permittee shall determine that the used oil fuel is specification used oil fuel by causing samples of such fuel to be analyzed only by laboratories meeting standards of quality control and quality assurance acceptable to the Department.
- (3) If the permittee is authorized to burn specification used oil fuel, the permittee shall not mix such used oil fuel with any off-specification used oil fuel, with any waste oil, with any hazardous waste fuel, or with unused fuel oil unless such mixing is incidental to the filling or emptying of a tank or container.
- (4) If the permittee is authorized to burn specification used oil fuel, the permittee shall not receive from off the site of generation, and shall not contract to receive from off the site of generation, any off-specification used oil fuel, any waste oil, or any hazardous waste fuel. If the permittee receives or otherwise comes to possess any off-specification used oil fuel not generated at the site of burning, any waste oil not generated at the site of burning, or any hazardous waste fuel not generated at the site of burning, the permittee shall immediately so notify the Department and shall manage such material as hazardous waste in compliance with all applicable provisions of 310 CMR 30.000.

## 30.230: Requirements Governing Class B(1) Regulated Recyclable Materials

 $310\,\mathrm{CMR}$   $30.230\,\mathrm{through}$  30.239, cited collectively as  $310\,\mathrm{CMR}$  30.230, set forth standards for the handling of Class B(1) regulated recyclable materials, describe procedures for obtaining a permit to recycle Class B(1) regulated recyclable materials, and set forth the basic and optional conditions that may be imposed in such permits.

## 30.231: General Provisions

- (1) Except for those regulated recyclable materials described in 310 CMR 30.231(2), all regulated recyclable materials used in a manner constituting disposal
  - (a) shall not be subject to any provisions of 310 CMR 30.200 other than 30.201, 30.211, and 30.231(1), and
  - (b) shall be recycled and otherwise handled in full compliance with all applicable provisions of 310 CMR 30.000 other than 310 CMR 30.200.
- (2) When used in a manner constituting disposal, regulated recyclable materials shall be subject to 310 CMR 30.230 if they:

#### 30.231: continued

- (a) are listed or otherwise described in 310 CMR 30.133 or 310 CMR 30.136, and
- (b) have never been used, and
- (c) are ordinarily used on the land.
- (3) No person shall recycle any Class B(1) regulated recyclable material described in 310 CMR 30.231(2), or engage in any other activity involving Class B(1) regulated recyclable material described in 310 CMR 30.231(2) if a Class B(1) permit is required for that activity, unless either
  - (a) that person has applied for and obtained a Class B(1) permit, said permit is in effect when the recycling or other activity is being done, and said permit authorizes the recycling or other activity being done; or

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#### 30.231: continued

- (b) the Class B(1) regulated recyclable material is recycled or otherwise handled in compliance with all provisions of 310 CMR 30.000 other than 310 CMR 30.200.
- (4) If a person described in 310 CMR 30.231(3) has a Class B(1) permit issued pursuant to 310 CMR 30.230, and does not have a license issued pursuant to 310 CMR 30.500, 30.600, 30.700, and 30.800, that person shall
  - (a) not recycle any Class A, Class B(2), Class B(3), Class B(4), Class B(5), or Class C regulated recyclable material, or any other material that is regulated pursuant to 310 CMR 30.000, unless that person also has whatever license or permit is required by 310 CMR 30.000 for such activity; and
  - (b) not receive from off the site of generation, or contract to receive from off the site of generation, any Class A, Class B(1), Class B(2), Class B(3), Class B(4), Class B(5), or Class C regulated recyclable material, or any other material that is regulated pursuant to 310 CMR 30.000, unless that person also has whatever license or permit is required by 310 CMR 30.000 for such activity, and
  - (c) notify the EPA and the Department pursuant to 310 CMR 30.060 through 30.064.
- (5) Generators and transporters of Class B(1) regulated recyclable material described in 310 CMR 30.231(2) shall handle such material in compliance with all provisions set forth in 310 CMR 30.000 for the generation and transportation of hazardous waste. Without limiting the generality of the foregoing,
  - (a) such material shall be accompanied by a manifest filled out, signed, and distributed in compliance with all provisions of 310 CMR 30.000 governing the filling out, signing, and distribution of copies of manifests; and
  - (b) a generator of such material may sell or otherwise transfer custody or possession of such material only to a transporter in compliance with 310 CMR 30.304; and
  - (c) a generator of such material may sell or otherwise transfer such material, or contract to sell or otherwise transfer such material, or cause or allow such material to be transported off the site of generation, only to either
    - 1. a facility described in 310 CMR 30.305 or
    - 2. a facility that has a Class B(1) permit pursuant to 310 CMR 30.232(2) or
    - 3. a facility outside of Massachusetts that has been designated by the Department pursuant to 310 CMR 30.232(3); and
  - (d) a transporter of Class B(1) regulated recyclable material may cause or allow such material to be transported off the site of generation only to either
    - 1. a person described in 310 CMR 30.404 or
    - 2. a facility that has a Class B(1) permit pursuant to 310 CMR 30.232(2) or
    - 3. a facility outside of Massachusetts that has been designated by the Department pursuant to 310 CMR 30.232(3).
- (6) Products produced for the general public's use that are used in a manner that constitutes disposal and that contain recyclable materials are not presently subject to the land disposal restrictions of 310 CMR 30.750 (see 40 CFR 268.7(b)(6)) if the regulated recyclable materials have undergone a chemical reaction in the course of producing the products so as to become inseparable by physical means and if such products meet the applicable treatment standards in subpart D of 40 CFR 268, as incorporated by reference at 310 CMR 30.750, or meet the requirements of 40 CFR § 268.32, as incorporated by reference at 310 CMR 30.750, or RCRA section 3004(d) where no treatment standards have been established for the constituents that they contain.

# 30.232: Class B(1) Permits and Permit Applications

(1) Any person wishing to recycle Class B(1) regulated recyclable material in compliance with a Class B(1) permit shall apply to the Department for a Class B(1) permit to do so. The application shall be on a form acceptable to the Department. In addition to what is set forth in 310 CMR 30.204, the application shall include:

#### 30.232: continued

- (a) The names, addresses, and EPA identification numbers of all generators generating the material to be recycled, and
- (b) The location of the recycling, if it is not the given address of the recycler, and
- (c) A complete description of the material to be recycled, including any hazardous constituent listed in 310 CMR 30.160 present in a concentration greater than 1.0 mg/kg (dry weight) and not ordinarily present in the material when in commercial distribution, and
- (d) A complete description of the proposed method of use, specifically including, without limitation, any departures from the ordinary method of use or the method approved by the manufacturer, and
- (e) A complete description of all sensitive receptors and environmentally sensitive activities at or near the site of use, including, without limitation residences, schools, and drinking water supplies.
- (2) Conditions imposed pursuant to 310 CMR 30.202(2), the general conditions set forth in 310 CMR 30.205 and 310 CMR 30.206, and the provisions set forth in 310 CMR 30.231 shall apply to each Class B(1) permit, regardless of whether or not such conditions are written into the permit. Permittees shall comply with such conditions whether or not they are written into the permit. Failure to comply shall be grounds for an enforcement action, including, without limitation, permit suspension or revocation.
- (3) Any person who wishes to recycle, at a facility outside of Massachusetts, Class B(1) regulated recyclable material generated in Massachusetts shall apply to the Department to be considered a designated facility for the purpose of receiving Class B(1) regulated recyclable material. The application shall be on a form acceptable to the Department. In addition to what is set forth in 310 CMR 30.204, the application shall include:
  - (a) The names, addresses and EPA identification numbers of the generators located in Massachusetts from whom the recycler intends to obtain regulated recyclable material, and
  - (b) A statement that
    - 1. the State in which the recycling would be done, if applicable, or the EPA, has approved such recycling, or
    - 2. approval of the recycling is not required by State or Federal law in effect where the recycling would be done.

## 30.240: Requirements Governing Class B(2) Regulated Recyclable Materials

310 CMR 30.240 through 30.249, cited collectively as 310 CMR 30.240, set forth standards for the handling of Class B(2) regulated recyclable materials, describe procedures for obtaining a permit to recycle Class B(2) regulated recyclable materials, and set forth the basic and optional conditions that may be imposed in such permits.

## 30.241: General Provisions

- (1) No person shall recycle any Class B(2) regulated recyclable material, or engage in any other activity involving Class B(2) regulated recyclable material if a Class B(2) permit is required for that activity, unless either
  - (a) that person has applied for and obtained a Class B(2) permit, said permit is in effect when the recycling or other activity is being done, and said permit authorizes the recycling or other activity being done, or
  - (b) the Class B(2) regulated recyclable material is recycled or otherwise handled in compliance with all provisions of 310 CMR 30.000 other than 310 CMR 30.200.
- (2) If a person described in 310 CMR 30.241(1) has a Class B(2) permit issued pursuant to 310 CMR 30.240, and does not have a license issued pursuant to 310 CMR 30.500, 30.600, 30.700, and 30.800, that person shall
  - (a) not recycle any Class A, Class B(1), Class B(3), Class B(4), Class B(5), or Class C regulated recyclable material, or any other material that is regulated pursuant to 310 CMR 30.000, unless that person also has whatever license or permit is required by 310 CMR 30.000 for such activity; and

#### 30.241: continued

- (b) not receive from off the site of generation, or contract to receive from off the site of generation, any Class A, Class B(1), Class B(2), Class B(3), Class B(4), Class B(5), or Class C regulated recyclable material, or any other material that is regulated pursuant to 310 CMR 30.000, unless that person also has whatever license or permit is required by 310 CMR 30.000 for such activity; and
- (c) notify the EPA and the Department pursuant to 310 CMR 30.060 through 30.064.

## 30.242: Generator Standards

- (1) Each person who generates hazardous waste fuel, regardless of what else he does or wishes to do with that material, shall handle such material in compliance with all applicable provisions set forth in 310 CMR 30.000 for the generation of hazardous waste. Without limiting the generality of the foregoing,
  - (a) such material shall be accompanied by a manifest filled out, signed, and distributed in compliance with all provisions of 310 CMR 30.000 governing the filling out, signing, and distribution of copies of manifests; and
  - (b) a generator of such material may sell or otherwise transfer custody or possession of such material only to a transporter in compliance with 310 CMR 30.304; and
  - (c) a generator of such material may sell or otherwise transfer such material, or contract to sell or otherwise transfer such material, or cause or allow such material to be transported off the site of generation, only to a facility described in 310 CMR 30.305.
- (2) Each generator of hazardous waste fuel who is a "marketer" of hazardous waste fuel shall be subject to, and shall comply with, 310 CMR 30.244 and 310 CMR 30.245.
- (3) All generators of hazardous waste fuel who burn the hazardous waste fuel they generate shall be subject to, and shall comply with, 310 CMR 30.246 and 310 CMR 30.247.

## 30.243: Transport and Manifest Standards

Each transporter of hazardous waste fuel shall handle such material in compliance with all applicable provisions set forth in 310 CMR 30.000 for the transport of hazardous waste. Without limiting the generality of the foregoing,

- (1) such material shall be accompanied by a manifest filled out, signed, and distributed in compliance with all provisions of 310 CMR 30.000 governing the filling out, signing, and distribution of copies of manifests; and
- (2) a transporter of such material may cause or allow such material to be transported off the site of generation only to a person described in 310 CMR 30.404.

# 30.244: "Marketer" Standards

- (1) As used in 310 CMR 30.240, the term "marketer" means a person who intends to or does sell or otherwise transfer, or offer to sell or otherwise transfer, a hazardous waste fuel to another person who wishes to or does burn it. The term "marketer" does not include a person who transfers hazardous waste to another person for conversion by that other person to a hazardous waste fuel by blending or other treatment if the person doing the blending or other treatment does not wish to, and does not, burn the hazardous waste fuel.
- (2) In addition to complying with all other applicable requirements, each "marketer" of hazardous waste fuel shall:
  - (a) comply with 310 CMR 30.001 through 30.059 and all applicable provisions of 310 CMR 30.100 through 30.199, and
  - (b) notify the EPA and the Department of his hazardous waste fuel activity pursuant to 310 CMR 30.060 through 30.064 before engaging in such activity, or constructing or operating any site or works for engaging in such activity, and
  - (c) before sending the first shipment of hazardous waste fuel to a person who wishes to or does burn it, receive from said person a certification that said person

#### 30.244: continued

- 1. has notified the EPA and the Department of his hazardous waste fuel activity pursuant to 310 CMR 30.060 through 30.064 and
- 2. has a currently valid license or permit for that activity, and
- (d) in addition to complying with all other applicable record-keeping requirements, keep a copy of each certification of hazardous waste fuel activity that he sends or receives.
- (3) Except for generators described in 310 CMR 30.244(4), each "marketer" who blends or otherwise treats hazardous waste or hazardous waste fuel, or who receives hazardous waste or hazardous waste fuel from off the site of generation thereof for the purpose of transferring it to another "marketer" of hazardous waste fuel, or who stores, and not just accumulates, hazardous waste fuels at the site of generation thereof, shall do so at a facility that is either
  - (a) licensed pursuant to 310 CMR 30.800 and in compliance with all applicable provisions of 310 CMR 30.500 through 30.900, or
  - (b) a facility having interim status pursuant to RCRA.
- (4) The provisions of 310 CMR 30.244(3) shall not apply to a "marketer" of hazardous waste fuel who is a generator who
  - (a) does not receive hazardous waste or hazardous waste fuel from off the site of generation thereof, and
  - (b) does not burn or store hazardous waste or hazardous waste fuel, and
  - (c) does not blend or otherwise treat hazardous waste or hazardous waste fuel.
- (5) Each "marketer" described in 310 CMR 30.244(4) shall manage the hazardous waste fuel he generates in compliance with either
  - (a) 310 CMR 30.200 and a Class B(2) permit issued pursuant to 310 CMR 30.245, or
  - (b) all provisions of 310 CMR 30.000 other than 310 CMR 30.200.

## 30.245: Permits and Permit Applications for Those Who are "Marketers" of Hazardous Waste Fuel

- (1) Any generator described in 310 CMR 30.244(4) who wishes to be a "marketer" of hazardous waste fuel in compliance with a Class B(2) permit shall apply to the Department for a Class B(2) permit to do so. The application shall be on a form acceptable to the Department. In addition to what is set forth in 310 CMR 30.204, the application shall include:
  - (a) The names, addresses, and EPA identification numbers of the persons to whom the hazardous waste fuel is to be sold or otherwise transferred, or offered for sale or other transfer.
  - (b) Copies of the certifications required pursuant to 310 CMR 30.246(2)(c).
- (2) Conditions imposed pursuant to 310 CMR 30.202(2), the general conditions set forth in 310 CMR 30.205 and 30.206, and the provisions set forth in 310 CMR 30.241, 30.242, 30.243, and 30.244 shall apply to each Class B(2) permit issued pursuant to 310 CMR 30.245, regardless of whether or not such conditions are written into the permit. Permittees shall comply with such conditions whether or not they are written into the permit. Failure to comply shall be grounds for an enforcement action, including, without limitation, permit suspension or revocation.

# 30.246: Standards for Persons Who Burn Hazardous Waste Fuels

- (1) The burning of hazardous waste fuel is prohibited except in
  - (a) an industrial and utility boiler or an industrial furnace permitted or licensed by the Department for that burning, or
  - (b) a hazardous waste incinerator licensed pursuant to 310 CMR 7.00 and 30.000, or
  - (c) a cement kiln located within the boundaries of a municipality with a population less than 500,000 (based on the most recent census statistics) if such cement kiln is in full compliance with all requirements of 310 CMR 30.000 and 7.00 applicable to hazardous waste incinerators.
- (2) In addition to complying with all other applicable requirements, each person who burns hazardous waste fuel shall:

#### 30.246: continued

- (a) comply with 310 CMR 30.001 through 30.059 and all applicable provisions of 310 CMR 30.100 through 30.199, and
- (b) notify the EPA and the Department of his hazardous waste fuel activity pursuant to 310 CMR 30.060 through 30.064 before engaging in such activity, or constructing or operating any site or works for engaging in such activity, and
- (c) before accepting the first shipment of hazardous waste fuel, provide to the "marketer" a certification that the marketer:
  - 1. has notified the EPA and the Department of his hazardous waste fuel activity pursuant to 310 CMR 30.060 through 30.064, and
  - 2. has a currently valid license or permit for that activity, and
  - 3. is in compliance with the requirements of 310 CMR 30.240.
- (d) In addition to complying with all other applicable record-keeping requirements, keep a copy of each certification of hazardous waste fuel activity that he sends or receives.
- (3) All persons who intend to or do burn hazardous waste fuel and who receive hazardous waste fuel not generated at the site where they intend to burn it, or who store hazardous waste fuel at the site of generation prior to burning it at the site of generation, shall do so at a facility that is either:
  - (a) licensed pursuant to 310 CMR 30.800 and in compliance with all applicable provisions of 310 CMR 30.500 through 30.900, or
  - (b) a facility having interim status pursuant to RCRA, provided that the owner or operator shall have filed a Part A permit application for the hazardous waste fuel activity, or have applied to amend an existing Part A permit application to include the hazardous waste fuel activity, by no later than May 29, 1986.
- (4) Generators who burn hazardous waste fuel that is generated only at the site of burning, and that is only accumulated, and not stored, prior to being burned, shall manage that material in compliance with either
  - (a) 310 CMR 30.200 and a Class B(2) permit issued pursuant to 310 CMR 30.247, or
  - (b) all provisions of 310 CMR 30.000 other than 310 CMR 30.200.

# 30.247: Permits and Permit Applications for Those Who Burn Hazardous Waste Fuel at the Site of Generation

- (1) Any generator described in 310 CMR 30.246(4) who wishes to burn hazardous waste fuel at the site of generation in compliance with a Class B(2) permit shall apply to the Department for a Class B(2) permit to do so. The application shall be on a form acceptable to the Department. In addition to what is set forth in 310 CMR 30.204, the application shall include:
  - (a) a complete description of:
    - 1. the hazardous waste fuel to be burned, and
    - 2. how the fuel will be blended or otherwise treated, and
    - 3. with what the fuel will be blended. (Note that after hazardous waste fuel is blended, the mixture is hazardous waste fuel.)
  - (b) a complete description of each facility for accumulating and blending or otherwise treating hazardous waste fuels, showing that the construction and operation of each such facility shall be in compliance with applicable requirements set forth or referred to in 310 CMR 30.300.
  - (c) a complete description of how the hazardous waste fuel shall be managed so that it will be accumulated and not stored.
  - (d) a complete description of the facility in which the hazardous waste fuel is to be burned, and of the management of sludges and other residues from the burning.
  - (e) a copy of the Department's approval of the burning pursuant to 310 CMR 7.00.
- (2) In addition to conditions imposed pursuant to 310 CMR 30.202(2), the general conditions set forth in 310 CMR 30.205 and 30.206, and the provisions set forth in 310 CMR 30.241, 30.242, 30.243, and 30.246, the following conditions shall apply to each Class B(2) permit issued pursuant to 310 CMR 30.247, regardless of whether or not such conditions are written into the permit. Permittees shall comply with such conditions whether or not they are written into the permit. Failure to comply shall be grounds for an enforcement action, including, without limitation, permit suspension or revocation.

#### 30.247: continued

- (a) the hazardous waste fuel shall at all times be managed as hazardous waste in compliance with all applicable requirements of 310 CMR 30.300 through 30.399.
- (b) all sludges and residues of the burning shall be presumed to be hazardous waste unless and until the Department is persuaded otherwise, and the Department has so determined in writing.
- (c) the facility shall be operated at all times in compliance with the terms and conditions of the approval given by the Department pursuant to 310 CMR 7.00.

# 30.248: Standards for Other Persons Who Handle Hazardous Waste Fuel

Each person who is not a "marketer" of hazardous waste fuel and who handles hazardous waste fuel he does not generate by doing something with it other than transporting it or burning it shall handle such material only at a facility that is either

- (1) licensed pursuant to 310 CMR 30.800 and in compliance with all applicable provisions of 310 CMR 30.500 through 30.900, or
- (2) a facility having interim status pursuant to RCRA.

## 30.250: Requirements Governing Waste Oil and Used Oil Fuel

310 CMR 30.250 through 30.269, cited collectively as 310 CMR 30.250, set forth standards for the handling of used waste oil, of unused waste oil, and of Class B(3) regulated recyclable materials, describe procedures for obtaining a permit to recycle Class B(3) regulated recyclable materials, and set forth the basic and optional conditions that may be imposed in such permits.

# 30.251: General Provisions Governing Class B(3) Regulated Recyclable Materials

- (1) No person shall engage in any activity involving Class B(3) regulated recyclable material if a Class B(3) permit is required for that activity unless either
  - (a) that person has applied for and obtained a Class B(3) permit, said permit is in effect when the activity is being done, and said permit authorizes the activity being done, or
  - (b) the Class B(3) regulated recyclable material is recycled or otherwise handled in compliance with all provisions of 310 CMR 30.000 other than 310 CMR 30.200.
- (2) If a person described in 310 CMR 30.251(1) has a Class B(3) permit issued pursuant to 310 CMR 30.250, and does not have a license issued pursuant to 310 CMR 30.500, 30.600, 30.700, and 30.800, that person shall
  - (a) not recycle any Class A, Class B(1), Class B(2), Class B(4), Class B(5), or Class C regulated recyclable material, or any other material that is regulated pursuant to 310 CMR 30.000, unless that person also has whatever license or permit is required by 310 CMR 30.000 for such activity; and
  - (b) not receive from off the site of generation, or contract to receive from off the site of generation, any Class A, Class B(1), Class B(2), Class B(3), Class B(4), Class B(5), or Class C regulated recyclable material, or any other material that is regulated pursuant to 310 CMR 30.000, unless that person also has whatever license or permit is required by 310 CMR 30.000 for such activity; and
  - (c) notify the EPA and the Department pursuant to 310 CMR 30.060 through 30.064.
- (3) Except as otherwise provided in 310 CMR 30.251(3), off-specification used oil fuel may be blended with specification used oil fuel or unused fuel oil for the purpose of producing used oil fuel only at a facility licensed pursuant to 310 CMR 30.800. Mixing that is incidental to the filling or emptying of a tank or container is not blending. Off-specification used oil fuel may be blended with specification used oil fuel or unused fuel oil for the purpose of producing used oil fuel at a facility that has a Class B(3) permit issued pursuant to 310 CMR 30.266 or 310 CMR 30.268 if the blending is done for the purpose of making fuel which, at the time the blending occurs, may be lawfully burned at the site of blending pursuant to 310 CMR 7.00 and 30.000.

#### 30.251: continued

- (4) Waste oil and used oil fuel shall not be blended, mixed, commingled, or otherwise treated with any other hazardous waste identified or otherwise described in 310 CMR 30.100 unless such blending, mixing, commingling, or other treatment is done in compliance with either
  - (a) 310 CMR 30.240 and a Class B(2) recycling permit issued pursuant to 310 CMR 30.240, or
  - (b) 310 CMR 30.290 and a Class C recycling permit issued pursuant to 310 CMR 30.290, or
  - (c) all provisions of 310 CMR 30.000 other than 310 CMR 30.200

# 30.252: General Provisions Governing Waste Oil That Is Not Used Oil Fuel

- (1) Except as provided in 310 CMR 30.252(2) and (3), waste oil that is not used oil fuel shall be managed either:
  - (a) as hazardous waste fuel (if it is hazardous waste fuel) in compliance with 310 CMR 30.240; or as
  - (b) regulated recyclable material if recycled in some manner other than being burned for energy recovery, in compliance with 310 CMR 30.220 and 310 CMR 30.212(8); or as
  - (c) waste oil or hazardous waste in compliance with 310 CMR 30.201, 30.250, and all provisions 310 CMR 30.000 other than 310 CMR 30.200.
- (2) Except as otherwise provided in 310 CMR 30.252, as defined in 310 CMR 40.0000: *Massachusetts Contingency Plan*, that contain used or unused waste oil, and that are not otherwise a hazardous waste pursuant to 310 CMR 30.120 through 30.136, generated as the result of a response action pursuant to 310 CMR 40.0000, as defined in 310 CMR 40.0000, shall be managed pursuant to 310 CMR 30.000 as a hazardous waste with a waste code of MA01.
  - (a) Such Remediation Waste, Remedial Waste Water, Soil, and Sediment that are subject to the requirements of M.G.L. c. 21E, and 310 CMR 40.0000: *Massachusetts Contingency Plan* may be managed by the generator in compliance with the requirements of 310 CMR 40.0030: *Management Procedures for Remediation Waste*, and the receiving facility's permit issued pursuant to 310 CMR 30.000 or 310 CMR 19.000: *Solid Waste Management* rather than as MA01 hazardous waste.
  - (b) Such Remediation Waste, Remedial Waste Water, Soil, and Sediment that are subject to the requirements of M.G.L. c. 21E, and 310 CMR 40.0000: *Massachusetts Contingency Plan* may be managed by the generator in compliance with the requirements of 310 CMR 40.0030: *Management Procedures for Remediation Waste* and transported to an out-of-state facility permitted for the receipt of such wastes rather than as MA01 hazardous waste.
  - (c) Such Remediation Waste, Remedial Waste Water, Soil, and Sediment generated at an out-of-state response action may be shipped to a Massachusetts receiving facility as a non-hazardous waste provided such management is in compliance with the facility's permit issued pursuant to 310 CMR 30.000 or 310 CMR 19.00: *Solid Waste Management*, and the requirements of the state of generation.
  - (d) Notwithstanding any provision of 310 CMR 30.252, the Department may require, in order to protect the public health, safety, and welfare, or the environment, any Remediation Waste, Remedial Waste Water, Soil, or Sediment subject to the provisions of 310 CMR 30.252 to be managed, stored, transported, treated or disposed of as a hazardous waste.
  - (e) For any Uncontainerized Hazardous Waste, as defined in 310 CMR 40.0000: *Massachusetts Contingency Plan*, no provision of 310 CMR 30.252(2) shall limit the ability of the Department to require compliance, pursuant to 310 CMR 40.0031(3), with all or portions of the requirements of 310 CMR 30.000 including, but not limited to, those of 310 CMR 30.200 or 310 CMR 30.800.
- (3) Notwithstanding the provisions of 310 CMR 30.252(1), unused waste oil that is to be used for the original purpose for which it was produced with no other processing than separation from a nonhazardous material at the site of generation or at a facility licensed pursuant to 310 CMR 30.800 is not a waste if it is sold or otherwise transferred as a commercial product.
- (4) The separation of waste oil from a nonhazardous waste or nonhazardous material at the site of generation is not treatment and does not require a license pursuant to 310 CMR 30.800. The sludge from such a process is either a hazardous waste or wastewater or both and shall be subject to regulation as such.

#### 30.252: continued

(5) Waste oil that is subject to the provisions of 310 CMR 30.104(2)(g) shall be deemed to be generated when it is accumulated or stored by a generator who is subject to 310 CMR 30.060 through 30.064, including, without limitation, a generator described in 310 CMR 30.353(8).

## 30.253: Generator Standards Governing Waste Oil and Used Oil Fuel

- (1) All generators of waste oil and all generators of used oil fuel:
  - (a) shall be subject to 310 CMR 30.301(1) and (2).
  - (b) shall comply with 310 CMR 30.302.
  - (c) may sell or otherwise transfer custody or possession of such waste oil only to a transporter in compliance with 310 CMR 30.304.
  - (d) may sell or otherwise transfer custody or possession of off-specification used oil fuel (specification used oil fuel is subject to 310 CMR 30.222) only to a transporter in compliance with 310 CMR 30.304.
  - (e) may sell or otherwise transfer such waste oil, or contract to sell or otherwise transfer such waste oil, or cause or allow such waste oil to be transported off the site of generation, only to a facility described in 310 CMR 30.305.
  - (f) may sell or otherwise transfer off-specification used oil fuel (specification used oil fuel is subject to 310 CMR 30.222), or contract to sell or otherwise transfer off-specification used oil fuel, or cause or allow off-specification used oil fuel to be transported off the site of generation, only to either:
    - 1. a facility described in 310 CMR 30.305, or
    - 2. a facility that has a Class B(3) permit pursuant to 310 CMR 30.268, or
    - 3. a marketer authorized pursuant to 310 CMR 30.255.
  - (g) may accumulate or store waste oil or used oil fuel in an underground tank only if the tank is installed, designed, constructed, operated, and monitored in compliance with the applicable requirements of 310 CMR 80.00: *Underground Storage Tank Systems*.
- (2) Any process at the site of generation which separates waste oil from a non-hazardous waste does not constitute treatment. Such activity shall be conducted in such a way as to prevent the release of waste oil into the environment.
- (3) A generator of waste oil or of used oil fuel who is a "marketer" is also subject to, and shall comply with, 310 CMR 30.255.
- (4) A generator of waste oil or of used oil fuel who burns waste oil or used oil fuel is also subject to, and shall comply with, 310 CMR 30.256.
- (5) A generator subject to 310 CMR 30.253 may obtain dual status if hazardous waste as well as waste oil and/or used oil fuel are generated or accumulated on-site. A generator of hazardous waste that is also subject to 310 CMR 30.253 shall determine its status with respect to such hazardous waste pursuant to the generator requirements of 310 CMR 30.300. (*See* 310 CMR 30.340(1); 30.351(1) and (2); and 30.353(1) and (2).) A generator of hazardous waste may exclude waste oil and/or used oil fuels from the hazardous waste status calculations in 310 CMR 30.300 provided these regulated recyclable materials are counted towards a generator's status with respect to waste oil and/or used oil fuels as follows:
  - (a) A generator is a Very Small Quantity Generator of waste oil and/or used oil fuels if that generator:
    - 1. does not generate in a calendar month 100 kg or more of such regulated recyclable materials; and
    - 2. does not accumulate a total quantity of 1,000 kg or more of any regulated recyclable material, hazardous waste, or combination of hazardous waste and regulated recyclable material, including waste oil and/or used oil fuels.
  - (b) A generator is a Small Quantity Generator of waste oil and/or used oil fuels if that generator:
    - 1. does not generate in a calendar month 1,000 kg or more of such regulated recyclable materials; and
    - 2. does not accumulate a total quantity of 6,000 kg or more of any hazardous waste, regulated recyclable material, or combination including waste oil and/or used oil fuels.

#### 30.253: continued

- (c) A generator is a large quantity generator of waste oil and/or used oil fuels if that generator is not a Small Quantity Generator of waste oil and/or used oil fuels pursuant to 310 CMR 30.253(5)(b) or a Very Small Quantity Generator of waste oil and/or used oil fuels pursuant to 310 CMR 30.253(5)(a).
- (6) Generators of waste oil and/or used oil fuel shall comply with the following regulations, except that in implementing and enforcing said regulations with respect to used oil fuel, the term "used oil fuel" shall be used instead of the terms "waste" or "hazardous waste" wherever the latter two terms are used in said regulations, or in any other regulations referred to therein:
  - (a) All large quantity generators of waste oil and/or used oil fuel shall comply with 310 CMR 30.322, 30.323, 30.340(6), 30.341(2), (3), (5), (6), (7) and (8) as well as 310 CMR 30.342, and 310 CMR 30.343(1)(d), (e), (g) and (i). All areas where waste oil and/or used oil fuel is accumulated or stored, except for satellite accumulation areas, shall have posted at all times a sign with the words "WASTE OIL" in capital letters at least one inch high.
  - (b) All Small Quantity Generators of waste oil and/or used oil fuel shall comply with 310 CMR 30.351, including all regulations referred to therein, except that a Small Quantity Generator of waste oil and/or used oil fuel:
    - 1. need not comply with the signage requirement of 310 CMR 30.341(4) referenced in 310 CMR 30.351(8)(a). Instead, all areas where waste oil and/or used oil fuel is accumulated or stored, except for satellite accumulation areas, shall have posted at all times a sign with the words "WASTE OIL" in capital letters at least one inch high.
    - 2. need only comply with the following requirements of 310 CMR 30.343 referenced in 310 CMR 30.351(8)(c) regarding accumulation in tanks:
      - a. 310 CMR 30.343(1)(d) regarding Containment;
      - b. 310 CMR 30.343(1)(e) regarding General Operating Requirements;
      - c. 310 CMR 30.343(1)(g) relating to Response to Leaks or Spills and Disposition of Leaking Tank Systems; and
      - d. 310 CMR 30.343(1)(i) relating to Closure and Post-Closure Care.
  - (c) All Very Small Quantity Generators of waste oil and/or used oil fuel shall comply with 310 CMR 30.353, including all other regulations referred to therein, except that a Very Small Quantity Generator of waste oil and/or used oil fuel need not comply with the signage requirement of 310 CMR 30.341(4) referenced in 310 CMR 30.353(6)(h). Instead, all areas where waste oil and/or used oil fuel is accumulated or stored, except for satellite accumulation areas, shall have posted at all times a sign with the words "WASTE OIL" in capital letters at least one inch high.
- (7) Generators of waste oil and/or used oil fuel shall be subject to the following preparedness and emergency procedure requirements:
  - (a) Large Quantity Generators of waste oil and/or used oil fuel only, as defined in 310 CMR 30.253(5), Large Quantity Generators of waste oil and/or used oil fuel who generate and accumulate all other regulated recyclable materials and all other hazardous wastes in quantities entitling them to the status of either a Small Quantity Generator pursuant to 310 CMR 30.351 or a Very Small Quantity Generator pursuant to 310 CMR 30.353, shall comply with the requirements set forth or referred to in 310 CMR 30.351(9).
  - (b) All Small Quantity Generators of waste oil and/or used oil fuel, as defined in 310 CMR 30.253(5), shall comply with requirements set forth or referred to in 310 CMR 30.351(9).
  - (c) All Very Small Quantity Generators of waste oil and/or used oil fuel, as defined in 310 CMR 30.253(5), shall comply with requirements set forth or referred to in 310 CMR 30.353(4).
- (8) Persons who generate or accumulate waste oil and/or used oil fuel, and who generate or accumulate any other hazardous waste, shall comply with all applicable provisions of 310 CMR 30.200 with respect to the waste oil and/or used oil fuel, and shall comply with all applicable provisions of 310 CMR 30.000 with respect to all the other hazardous waste they generate.

## 30.253: continued

- (9) Except for the generators described in 310 CMR 30.253(10), all generators of waste oil and/or off-specification used oil fuel (specification used oil fuel is subject to 310 CMR 30.222) shall cause such waste oil or used oil fuel, when it is collected and transported, to be accompanied by a hazardous waste manifest which shall be filled out, signed, and distributed, and copies of which shall be kept, in compliance with all provisions of 310 CMR 30.000 governing the filling out, signing, distribution, and keeping of copies of manifests. Generators subject to 310 CMR 30.253(9) shall notify the Department and obtain an identification number pursuant to 310 CMR 30.060 through 30.064.
- (10) Persons who generate and accumulate waste oil or off-specification used oil fuel (specification used oil fuel is subject to 310 CMR 30.222) in quantities entitling them to the status of either a Small Quantity Generator pursuant to 310 CMR 30.351 or a Very Small Quantity Generator pursuant to 310 CMR 30.353, and who generate and accumulate all other regulated recyclable materials and all other hazardous wastes in quantities entitling them to the status of a Very Small Quantity Generator pursuant to 310 CMR 30.353 need not handle such waste oil or off-specification used oil in compliance with 310 CMR 30.253(9), and instead shall cause such waste oil or off-specification used oil fuel to be handled in compliance with the following requirements:
  - (a) Generators subject to 310 CMR 30.253(10) shall register with the Department by notifying the Department in writing of their activity involving waste oil, off-specification used oil fuel, other regulated recyclable material, and other hazardous waste. Except as specifically provided elsewhere in 310 CMR 30.253(10), such registration shall be in compliance with requirements set forth or referred to in 310 CMR 30.353(5) (requirements governing Very Small Quantity Generators of hazardous waste).
  - (b) Generators subject to 310 CMR 30.253(10) shall cause waste oil or off-specification used oil fuel, when it is collected and transported, to be accompanied by a hazardous waste manifest filled out, signed, and distributed in compliance with all provisions of 310 CMR 30.000 governing the filling out, signing, and distribution of copies of manifests.

## 30.254: Transport and Manifest Standards Governing Waste Oil and Used Oil Fuel

- (1) A transporter of waste oil or of off-specification used oil fuel (specification used oil fuel is subject to 310 CMR 30.223) shall be licensed to transport hazardous waste pursuant to 310 CMR 30.000.
- (2) A transporter of waste oil may cause or allow such material to be transported off the site of generation only to a person described in 310 CMR 30.404.
- (3) A transporter of off-specification used oil fuel (specification used oil fuel is subject to 310 CMR 30.223) may cause or allow such material to be transported off the site of generation only to either
  - (a) a person described in 310 CMR 30.404, or
  - (b) a facility that has a Class B(3) permit pursuant to 310 CMR 30.268.
- (4) When waste oil or off-specification used oil fuel (specification used oil fuel is subject to 310 CMR 30.223) generated by a generator described in 310 CMR 30.253(6) is collected and transported, such waste oil or used oil fuel shall be accompanied by a manifest filled out, signed, and distributed in compliance with all provisions of 310 CMR 30.000 governing the filling out, signing, and distribution of manifests.
- (5) A transporter of waste oil or off-specification used oil fuel shall report monthly to the Department the source, amount, and destination of all waste oil and off-specification used oil fuel transported during the month. Each such monthly report shall be submitted to the Department no later than the last day of the following month. Such reports shall be on a machine readable file in a format prescribed by the Department. Such reports shall be subject to 310 CMR 30.006 and 30.007, certified pursuant to 310 CMR 30.009, and in compliance with 310 CMR 30.407.

#### 30.254: continued

- (6) A person who contracts to perform an activity which results in the generation of waste oil may transport such waste oil without a license pursuant to 310 CMR 30.402 only if such person:
  - (a) has generated, as a result of his activity at the site at which such person performed contracted work, the waste oil that he intends to transport from the site at which he performed the activity;
  - (b) transports no more than 100 kilograms per month of waste oil from any single site;
  - (c) transports waste oil in containers whose capacity does not exceed, in the aggregate, 200 kilograms in any one vehicle at any one time;
  - (d) registers such activity with the Department in compliance with 310 CMR 30.353(5);
  - (e) is in compliance with 310 CMR 30.353(7)(g), and (h); and
  - (f) delivers the waste oil either to a facility described in 310 CMR 30.305(1) or accumulates and manages the waste oil in compliance with 310 CMR 30.340 through 30.343, 30.351, or 30.353, as applicable.

#### 30.255: "Marketer" Standards

- (1) The following criteria shall be used to determine whether or not a person is a "marketer" of used oil fuel. A person is a "marketer" of used oil fuel if that person is any of the following:
  - (a) A generator of used oil fuel who sells or otherwise transfers, or offers to sell or otherwise transfer, used oil fuel to persons authorized to market used oil fuel or to other persons authorized to burn that fuel for energy recovery.
  - (b) Said person is the owner or operator of a facility at which used oil fuel is blended for the purpose of preparing either specification or off-specification used oil fuel.
  - (c) Said person is a transporter licensed pursuant to 310 CMR 30.800 and who transports used oil fuel to other authorized marketers, or to persons who are authorized to burn that used oil fuel for energy recovery.
- (2) A person who is a "marketer" of off-specification used oil fuel may sell or otherwise transfer such material, or contract to sell or otherwise transfer such material, or cause or allow such material to be transported off the site of generation, only to owners or operators of facilities that meet all the following requirements:
  - (a) For each facility located in Massachusetts, the requirements are:
    - 1. the owner or operator must have notified the EPA and the Department of the facility's used oil fuel activity pursuant to 310 CMR 30.060 through 30.064.
    - 2. the facility must have an EPA identification number.
    - 3. the facility must be either:
      - a. licensed pursuant to 310 CMR 30.800 and in addition possess a B(3) permit or a specific license condition authorizing it to be a marketer, or
      - b. a marketer authorized to receive off-specification used oil fuel, or
      - c. a facility for which the Department has issued a Class B(3) recycling permit for burning pursuant to 310 CMR 30.268.
  - (b) For each facility located outside of Massachusetts, the requirements are:
    - 1. the facility must have the legal authority to accept the used oil pursuant to applicable statutes and regulations in effect where the facility is located.
    - 2. the transport of the used oil fuel must be in compliance with applicable statutes and regulations in effect in all places where such transport is to occur.
- (3) A "marketer" who burns used oil fuel shall be subject to, and shall comply with, 310 CMR 30.256.
- (4) A "marketer" shall, pursuant to 310 CMR 30.060 through 30.064, notify the Department of his activities as a "marketer" prior to engaging in those activities, regardless of whether or not said "marketer" has previously given notice of other activity pursuant to 310 CMR 30.060 through 30.064.
- (5) Whenever a "marketer" causes off-specification used oil fuel to be transferred to a person who intends to, or does market or burn it for energy recovery, said off-specification used oil fuel shall be accompanied by a hazardous waste manifest filled out, signed, and distributed in compliance with all provisions of 310 CMR 30.000 governing the filling out, signing, and distribution of copies of manifests. On the manifest, the off-specification used oil fuel shall be identified as "off-specification used oil fuel", and the waste code "MA98" shall be used.

#### 30.255: continued

- (6) Whenever a "marketer" causes specification used oil fuel to be transferred to a person who is authorized to burn specification used oil fuel, or to another marketer, said specification used oil fuel shall be accompanied either by:
  - (a) a shipping paper on which the specification used oil fuel shall be identified as "specification used oil fuel", or by
  - (b) a hazardous waste manifest on which the specification used oil fuel shall be identified as "specification used oil fuel", and the waste code "MA97" shall be used.
- (7) No person shall be a "marketer" of any used oil fuel he claims is specification used oil fuel unless said person:
  - (a) has ascertained, by appropriate analytical methods contained in EPA's Test Methods for Evaluating Solid Waste, SW-846, as incorporated by reference at 310 CMR 30.012, or by an equivalent method, that it meets the conditions provided in 310 CMR 30.215 and the parameters provided in 310 CMR 30.216 for specification used oil fuel,
  - (b) has obtained and kept documentation showing compliance with the requirements in 310 CMR 30.255(7)(a), and
  - (c) makes and keeps records for each batch or quantity of specification used oil fuel sold or otherwise transferred to a facility or to a person who is authorized to burn it for energy recovery, or to market, specification used oil fuel, stating for each such batch or quantity the name and address of the facility to which the specification used oil fuel is sold or otherwise transferred, the quantity of specification used oil fuel sold or otherwise transferred, the date when the used oil fuel was collected, and a cross-reference to the documentation described in 310 CMR 30.255(7)(b).
- (8) Every "marketer" shall maintain copies of all notices, shipping papers, and manifests, and all other records he is required to make, send, or receive pursuant to 310 CMR 30.200, for at least three years after the date of his last used oil fuel activity. This period shall be automatically extended for the duration of any enforcement action. This period may be extended by order of the Department. All record keeping shall be in compliance with 310 CMR 30.007.
- (9) A generator of specification used oil fuel who is a "marketer" of used oil fuel shall either:
  - (a) be licensed pursuant to 310 CMR 30.800, and possess a special license condition authorizing it to be a marketer, or
  - (b) have a Class A recycling permit issued pursuant to 310 CMR 30.220.
- (10) A generator of off-specification used oil fuel who is a "marketer" of off-specification used oil fuel shall either:
  - (a) be licensed pursuant to 310 CMR 30.800, or
  - (b) have a Class B(3) recycling permit issued pursuant to 310 CMR 30.262.
- (11) No person shall be a "marketer" of any used oil fuel he claims is off-specification used oil fuel unless said person:
  - (a) has ascertained, by appropriate analytical methods contained in EPA's Test Methods for Evaluating Solid Waste, SW-846, as incorporated by reference at 310 CMR 30.012, such as the field screening tests described in method 9077, or by an alternate method accepted by EPA, that it meets the conditions for used oil fuel provided in 310 CMR 30.215.
  - (b) has obtained and kept documentation showing compliance with the requirements in 310 CMR 30.255(11)(a), and
  - (c) makes and keeps records for each batch or quantity of off-specification used oil fuel sold or otherwise transferred to a facility or to a person who burns off-specification used oil fuel, stating for each such batch or quantity the name and address of the facility to which the off-specification used oil fuel is sold or otherwise transferred, the quantity of off-specification used oil fuel sold or otherwise transferred, the date when the used oil fuel was collected, and a cross-reference to the documentation described in 310 CMR 30.255(11)(b).
- (12) A person who is a "marketer" of specification used oil fuel may sell or otherwise transfer such material, or contract to sell or otherwise transfer such material, or cause or allow such material to be transported off the site of generation, only to owners or operators of facilities that meet all the following requirements:
  - (a) For each facility located in Massachusetts, the requirements are:

#### 30.255: continued

- 1. the facility must have an EPA identification number or a state-only Massachusetts identification number.
- 2. the facility must be
  - a. licensed pursuant to 310 CMR 30.800, and possess a special license condition authorizing it to be a marketer, or
  - b. a facility for which the Department has issued a Class B(3) recycling permit pursuant to 310 CMR 30.264, or
  - c. a person with a Class A regulated recyclable materials permit issued pursuant to 310 CMR 30.220 who is authorized to burn used oil fuel.
  - d. or an authorized marketer.
- (b) For each facility located outside of Massachusetts, the requirements are:
  - 1. the facility must have the legal authority to accept the used oil fuel pursuant to applicable statutes and regulations in effect where the facility is located.
  - 2. the transport of the used oil fuel must be in compliance with applicable statutes and regulations in effect in all places where such transport is to occur.

## 30.256: Standards for Persons Who Burn Used Oil Fuels

- (1) Persons who receive used oil fuel and burn it for energy recovery are subject to 310 CMR 30.256, other requirements referred to in 310 CMR 30.256, and the conditions of any required license or permit.
- (2) Persons who burn specification used oil fuel shall either:
  - (a) be licensed pursuant to 310 CMR 30.800 and in compliance with 310 CMR 30.500, 30.600, 30.700, and 30.900, or
  - (b) have a Class A recycling permit issued pursuant to and in compliance with 310 CMR 30.220, or,
  - (c) comply with performance standards established at 310 CMR 30.222.
- (3) Specification used oil fuel may be burned only in:
  - (a) an industrial or utility boiler or industrial furnace which is specifically approved by the Department for such burning pursuant to 310 CMR 7.00; or
  - (b) a used oil fuel fired space heater, provided that the space heater is operated in compliance with 310 CMR 30.222.
- (4) Off-specification used oil fuel may be burned only in:
  - (a) an industrial or utility boiler or industrial furnace which is specifically approved by the Department for such burning pursuant to 310 CMR 7.00; or
  - (b) a used oil fuel fired space heater, provided that the space heater is operated in compliance with 310 CMR 30.222.
- (5) Generators who intend to or do burn off-specification used oil fuel that is generated at the site of burning, and that is burned or intended to be burned in a fossil fuel utilization facility, shall burn such used oil fuel only at a facility that either
  - (a) is licensed pursuant to 310 CMR 30.800 and in compliance with 310 CMR 30.500, 30.600, 30.700, and 30.900, or
  - (b) has a Class B(3) recycling permit issued pursuant to 310 CMR 30.265 and 30.266, and is in compliance with 310 CMR 30.250.
- (6) Persons who burn, or who receive and intend to burn, off-specification used oil fuel not generated at the site of burning, shall do so only at a facility that either
  - (a) is licensed pursuant to 310 CMR 30.800 and in compliance with 310 CMR 30.500, 30.600, 30.700, and 30.900, or
  - (b) has a Class B(3) recycling permit issued pursuant to 310 CMR 30.267 and 30.268, and is in compliance with 310 CMR 30.250.
- (7) Before a person burns, or receives with intent to burn, off-specification used oil fuel received from a "marketer", said person shall receive from said "marketer" a written notice saying that the "marketer" has notified the EPA and the Department of his used oil fuel activity.

#### 30.256: continued

- (8) No person who intends to or does burn off-specification used oil fuel shall accept any such fuel from a "marketer" unless said person has previously given to said "marketer" a written certification that said person:
  - (a) has notified the EPA and the Department of his used oil fuel activity, and
  - (b) will burn off-specification used oil fuel only in an industrial or utility boiler or industrial furnace, and
  - (c) has a valid license or recycling permit appropriate to the activity for which certification is being given. The certification shall specify the type of license or recycling permit the person has.
- (9) No person shall burn any batch or lot of specification used oil fuel unless said person
  - (a) has ascertained, by some means acceptable to the Department, *e.g.* by obtaining either an analysis of the oil done by a procedure acceptable to the Department or a certification from a "marketer", that the oil in that batch or lot meets the specifications set forth in Table 310 CMR 30.216, and
    - (b) has obtained and kept documentation showing compliance with the requirements in 310 CMR 30.256(9)(a).
- (10) No person who burns used oil fuel shall mix used oil fuel with any other material unless such mixing is done for the purpose of making fuel which the permittee is lawfully burning pursuant to 310 CMR 7.00 and 310 CMR 30.000.

# 30.260: Activities for Which Class B(3) Recycling Permits are Required

Before engaging in the following activities, the following persons shall apply for, obtain, and have in effect either a hazardous waste license issued pursuant to 310 CMR 30.800 or a Class B(3) recycling permit:

- (1) A generator who intends to be, or who is, a "marketer" of off-specification used oil fuel by selling or otherwise transferring such fuel, or offering to sell or otherwise transfer such fuel, to other persons who burn that fuel, or who intend or plan to burn that fuel, for energy recovery. Such a generator shall comply with 310 CMR 30.261 and 310 CMR 30.262 in applying for a Class B(3) recycling permit for this activity.
- (2) A "marketer", other than a transporter/marketer, who receives only specification used oil fuel from off the site of generation thereof, and who receives no other used oil fuel or waste oil or other hazardous wastes, and who intends to or does sell or otherwise transfer such fuel, or offer to sell or otherwise transfer such fuel, to any person authorized to market used oil fuel, or to other persons who burn that fuel, or who intend or plan to burn that fuel, for energy recovery in a fossil fuel utilization facility and have all required legal authority to burn such fuel in said fossil fuel utilization facility. Such a "marketer" shall comply with 310 CMR 30.263 and 310 CMR 30.264 in applying for and obtaining a Class B(3) recycling permit for this activity.
- (3) A generator who intends to or does burn off-specification used oil fuel that is generated at the site of burning, and that is burned or intended to be burned in a fossil fuel utilization facility. Such a generator shall comply with 310 CMR 30.265 and 310 CMR 30.266 in applying for and obtaining a Class B(3) recycling permit for this activity.
- (4) A person who burns, or who receives and intends to burn, off-specification used oil fuel not generated at the site of burning, and blended at the site of burning only in compliance with 310 CMR 30.251(3). Such a person shall comply with 310 CMR 30.267 and 310 CMR 30.268 in applying for and obtaining a Class B(3) recycling permit for this activity.

## 30.261: Applications for Class B(3) Permits for Generators to Market Off-specification Used Oil Fuel

Any generator wishing to be a "marketer" of off-specification used oil fuel by selling or otherwise transferring such fuel, or offering to sell or otherwise transfer such fuel, in compliance with a Class B(3) permit, to other persons who burn that fuel, or who intend or plan to burn that fuel, for energy recovery shall apply to the Department for a Class B(3) permit to do so. The application shall be on a form acceptable to the Department. In addition to what is set forth in 310 CMR 30.204, the application shall include:

#### 30.261: continued

- (1) The name, address, and EPA identification number of each person to whom the used oil fuel is to be sold or otherwise transferred, or offered for sale or other transfer. For each such person, the application shall include a reference to the approval that person has to burn the used oil fuel, or to be a "marketer" of the used oil fuel.
- (2) A copy of each certification provided to the generator pursuant to 310 CMR 30.255(8) by each person described in 310 CMR 30.261(1).

## 30.262: Class B(3) Permits for Generators to Market Off-specification Used Oil Fuel

Conditions imposed pursuant to 310 CMR 30.202(2), the general conditions set forth in 310 CMR 30.205 and 310 CMR 30.206, and the standards set forth or referred to in 310 CMR 30.253, 30.254, and 30.255 shall apply to each Class B(3) permit for generators to market off-specification used oil fuel, regardless of whether or not such conditions are written into the permit. Permittees shall comply with such conditions whether or not they are written into the permit. Failure to comply shall be grounds for an enforcement action, including, without limitation, permit suspension or revocation.

## 30.263: Applications for Class B(3) Permits to Market Specification Used Oil Fuel

Any "marketer" wishing to receive specification used oil fuel from off the site of generation thereof, and then sell or otherwise transfer such fuel, or offer to sell or otherwise transfer such fuel, in compliance with a Class B(3) permit, to any person authorized to market used oil fuel, or to other persons who burn that fuel, or who intend or plan to burn that fuel, for energy recovery in a fossil fuel utilization facility and who have all required legal authority to burn such fuel in said fossil fuel utilization facility, shall apply to the Department for a Class B(3) permit to do so. The application shall be on a form acceptable to the Department. In addition to what is set forth in 310 CMR 30.204, the application shall include:

- (1) The name, address, and EPA identification number of each generator and each "marketer" from whom the specification used oil fuel is to be obtained. For each "marketer", the application shall include a reference to the recycling permit issued to that "marketer". If a generator is also a "marketer", the application shall so state and shall include a reference to the recycling permit issued to that "marketer".
- (2) The name, address, and EPA identification number of each person to whom the specification used oil fuel is to be sold or otherwise transferred, or offered for sale or other transfer. For each such person, the application shall include a reference to the approval that person has to market or burn the specification used oil fuel.
- (3) A statement of how the used oil fuel will be determined to be specification used oil fuel. If the applicant intends to use laboratory analysis to determine that used oil fuel is specification used oil fuel, the application shall include a statement naming each laboratory at which samples of the used oil fuel will be analyzed, whether and if so by whom each such laboratory is certified, and the quality assurance procedures to be used. If the applicant intends to rely on the representation of the generator that the material in question is specification used oil fuel, the application shall include a copy of the documentation obtained and kept by the generator pursuant to 310 CMR 30.222(3)(b).

## 30.264: Class B(3) Permits to Market Specification Used Oil Fuel

In addition to conditions imposed pursuant to 310 CMR 30.202(2), the general conditions set forth in 310 CMR 30.205 and 310 CMR 30.206, and the standards set forth or referred to in 310 CMR 30.253, 30.254, and 30.255, the following conditions shall apply to each Class B(3) permit to market specification used oil fuel, regardless of whether or not such conditions are written into the permit. Permittees shall comply with such conditions whether or not they are written into the permit. Failure to comply shall be grounds for an enforcement action, including, without limitation, permit suspension or revocation.

(1) The permittee shall not receive, and shall not contract to receive, any off-specification used oil fuel, any waste oil, or any hazardous waste fuel.

#### 30.264: continued

- (2) If the permittee receives or otherwise comes to possess any off-specification used oil fuel, any waste oil, or any hazardous waste fuel, the permittee shall immediately so notify the Department and shall manage such material as hazardous waste in compliance with all applicable provisions of 310 CMR 30.000.
- (3) The permittee shall not sell or otherwise transfer, and shall not contract to sell or otherwise transfer, any specification used oil fuel to any person other than a person authorized to market used oil fuel, or to other persons who intend to burn such fuel for energy recovery in a fossil fuel utilization facility, and who has all required legal authority to burn such fuel in said fossil fuel utilization facility. If the fossil fuel utilization facility is located in Massachusetts, the approval of the Department is required pursuant to 310 CMR 7.00.
- (4) If the permittee is required to use laboratory analysis to determine that used oil fuel is specification used oil fuel, the permittee shall determine that the used oil fuel is specification used oil fuel by causing samples of such fuel to be analyzed only by laboratories certified by the Department or by laboratories meeting standards of quality control and quality assurance acceptable to the Department.

# 30.265: Applications for Class B(3) Permits to Burn Off-specification Used Oil Fuel Generated at the Site of Burning

Any person who generates off-specification used oil fuel, and who wishes to burn such material at the site of generation for energy recovery in any device other than a used oil fired space heater, all in compliance with a Class B(3) permit, shall apply to the Department for a Class B(3) permit to do so. The application shall be on a form acceptable to the Department. In addition to what is set forth in 310 CMR 30.204, the application shall include:

- (1) Proof that the burning of the fuel in question in that facility has been approved by the Department pursuant to 310 CMR 7.00, and
- (2) A complete description of the characteristics of the fuel, and the variation in those characteristics, if appropriate, and
- (3) A complete description of the analysis procedure used to obtain the information described in 310 CMR 30.265(2), including, but not limited to, a statement naming each laboratory at which samples of the fuel were analyzed, whether and if so by whom each such laboratory is certified, and the quality assurance procedures to be used.
- (4) A complete description of how the fuel will be managed so that it will not be speculatively accumulated.
- (5) If the fuel is to be mixed with other fuels, a complete description of how such mixing will occur in compliance with 310 CMR 30.000.

## 30.266: Class B(3) Permits to Burn Off-specification Used Oil Fuel Generated at the Site of Burning

In addition to conditions imposed pursuant to 310 CMR 30.202(2), the general conditions set forth in 310 CMR 30.205 and 310 CMR 30.206, and the standards set forth or referred to in 310 CMR 30.253, 30.254, and 30.256, the following conditions shall apply to each Class B(3) permit to burn used oil fuel at the site of generation, regardless of whether or not such conditions are written into the permit. Permittees shall comply with such conditions whether or not they are written into the permit. Failure to comply shall be grounds for an enforcement action, including, without limitation, permit suspension or revocation.

(1) The permittee shall not burn any waste oil or other hazardous waste, regardless of where it is generated. Except for used oil fuel approved in the permit by the Department, the permittee shall not burn any used oil fuel or hazardous waste fuel, regardless of where it is generated.

#### 30.266: continued

- (2) The permittee shall not receive from off the site of generation, and shall not contract to receive from off the site of generation, any material described in 310 CMR 30.266(1) as material the permittee is not authorized to burn. If the permittee receives or otherwise comes to possess any such material not generated at the site of burning, the permittee shall immediately so notify the Department and shall manage such material as hazardous waste in compliance with all applicable provisions of 310 CMR 30.000.
- (3) The permittee shall not mix used oil fuel with any other material unless such mixing is done for the purpose of making fuel which, at the time the mixing occurs, the permittee may lawfully burn pursuant to 310 CMR 7.00 and 310 CMR 30.000.
- (4) The permittee shall immediately notify the Department of any change in the characteristics, composition, or source of any used oil fuel that would require that the used oil fuel be managed differently, that the conditions of the permit be changed, or that the permit be suspended or revoked.
- (5) If the permittee is required to use laboratory analysis to determine that used oil fuel is specification used oil fuel, the permittee shall determine that the used oil fuel is specification used oil fuel by causing samples of such fuel to be analyzed only by laboratories certified by the Department or by laboratories meeting standards of quality control and quality assurance acceptable to the Department.
- (6) The permittee shall at all times be in compliance with 310 CMR 7.00.

# 30.267: Applications for Class B(3) Permits to Burn Off-specification Used Oil Fuel Generated Off The Site of Burning

Any person who wishes to burn, in compliance with a Class B(3) permit, off-specification used oil fuel generated off the site of burning shall apply to the Department for a Class B(3) permit to do so. The application shall be on a form acceptable to the Department. In addition to what is set forth in 310 CMR 30.204, the application shall include:

- (1) A copy of the approval given by the Department to the applicant to burn off-specification used oil fuel pursuant to 310 CMR 7.00.
- (2) The name, address, and EPA identification number of each "marketer" from whom used oil fuel is to be obtained. For each "marketer" the application shall include a reference to the recycling permit issued to that "marketer".
- (3) A copy of each certification provided to the applicant pursuant to 310 CMR 30.256(6) by each person described in 310 CMR 30.267(2).
- (4) If the fuel is to be mixed with other fuels, a complete description of how such mixing will occur in compliance with 310 CMR 30.000.

# 30.268: Class B(3) Permits to Burn Off-specification Used Oil Fuel Generated Off the Site of Burning

In addition to conditions imposed pursuant to 310 CMR 30.202(2), the general conditions set forth in 310 CMR 30.205 and 30.206, and the standards set forth or referred to in 310 CMR 30.254 and 30.256, the following conditions shall apply to each Class B(3) permit to burn off-specification used oil fuel generated off the site of burning, regardless of whether or not such conditions are written into the permit. Permittees shall comply with such conditions whether or not they are written into the permit. Failure to comply shall be grounds for an enforcement action, including, without limitation, permit suspension or revocation.

(1) The permittee shall at all times be in compliance with 310 CMR 7.00.

#### 30.268: continued

- (2) The permittee shall not receive from off the site of generation, and shall not contract to receive from off the site of generation, any waste oil or other hazardous waste, any hazardous waste fuel, or any used oil fuel which the permittee is not authorized to receive. If the permittee receives or otherwise comes to possess any such material not generated at the site of burning, the permittee shall immediately so notify the Department and shall manage such material as hazardous waste in compliance with all applicable provisions of 310 CMR 30.000.
- (3) The permittee shall not mix used oil fuel with any other material unless such mixing is done for the purpose of making fuel which, at the time the mixing occurs, the permittee may lawfully burn pursuant to 310 CMR 7.00 and 310 CMR 30.000.
- (4) The permittee shall immediately notify the Department of any change in the characteristics, composition, or source of any used oil fuel that would require that the used oil fuel be managed differently, that the conditions of the permit be changed, or that the permit be suspended or revoked.
- (5) The permittee shall at all times comply with 310 CMR 30.530 through 30.534 (use of manifests by facilities).

## 30.270: Requirements Governing Class B(4) Regulated Recyclable Materials

310 CMR 30.270 through 30.279, cited collectively as 310 CMR 30.270, set forth standards for the handling of Class B(4) regulated recyclable materials, describe procedures for obtaining a permit to recycle Class B(4) regulated recyclable materials, and set forth the basic and optional conditions that may be imposed in such permits.

# 30.271: General Provisions

- (1) No person shall recycle any Class B(4) regulated recyclable material, or engage in any other activity involving Class B(4) regulated recyclable material if a Class B(4) permit is required for that activity, unless either
  - (a) that person has applied for and obtained a Class B(4) permit, said permit is in effect when the recycling or other activity is being done, and said permit authorizes the recycling or other activity being done, or
  - (b) the Class B(4) regulated recyclable material is recycled or otherwise handled in compliance with all provisions of 310 CMR 30.000 other than 310 CMR 30.200; or
  - (c) the Class B(4) regulated recyclable material is D011 silver fixer solution, the generator is a Very Small Quantity Generator and operates in compliance with 310 CMR 30.353, the generator need not apply for or obtain a Class B(4) permit.
- (2) If a person described in 310 CMR 30.271(1) has a Class B(4) permit issued pursuant to 310 CMR 30.270, and does not have a license issued pursuant to 310 CMR 30.500, 30.600, 30.700, and 30.800, that person shall
  - (a) not recycle any Class A, Class B(1), Class B(2), Class B(3), Class B(5), or Class C regulated recyclable material, or any other material that is regulated pursuant to 310 CMR 30.000, unless that person also has whatever license or permit is required by 310 CMR 30.000 for such activity; and
  - (b) not receive from off the site of generation, or contract to receive from off the site of generation, any Class A, Class B(1), Class B(2), Class B(3), Class B(5), or Class C regulated recyclable material, or any other material that is regulated pursuant to 310 CMR 30.000, unless that person also has whatever license or permit is required by 310 CMR 30.000 for such activity; and
  - (c) notify the EPA and the Department pursuant to 310 CMR 30.060 through 30.064.
- (3) A permit may be granted pursuant to 310 CMR 30.270 for the handling of Class B(4) regulated recyclable material only if the precious metals are actually recovered in the form of either a metal or an economically valuable chemical combination or compound. If precious metals are not intended to be, or are not, recovered from Class B(4) regulated recyclable material, such material shall be handled in compliance with 310 CMR 30.213 and 310 CMR 30.271, shall not be subject to any other provisions of 310 CMR 30.200, and shall be handled in compliance with all other applicable provisions of 310 CMR 30.000.

#### 30.271: continued

- (4) Notwithstanding the provisions of 310 CMR 30.202(2) and 310 CMR 30.271(1), the Department may decide on a case-by-case basis that any person who intends to or does engage in any activity described in 310 CMR 30.271(1) shall comply with all provisions of 310 CMR 30.000 in *lieu* of the provisions of a Class B(4) permit.
  - (a) In every proceeding, the burden shall be on the applicant for, or the holder of, a Class B(4) permit to persuade the Department that the applicant or permittee intends to or does engage in any activity described in 310 CMR 30.271(1) in a manner that protects public health, safety, and welfare, and the environment.
  - (b) A Class B(4) permit shall be granted, and shall be allowed to remain in effect, only to the extent, and only while, the Department is persuaded that the applicant or permittee engages in, and will continue to engage in, the activity described in 310 CMR 30.271(1) in a manner that protects public health, safety, and welfare, and the environment.
  - (c) In making this decision, the Department may consider, among other things:
    - 1. The types and amounts of materials that are, or are intended to be, accumulated or stored;
    - 2. The method by which materials are, or are intended to be, accumulated or stored;
    - 3. The length of time the materials have been, or are intended to be, accumulated or stored:
    - 4. Whether any contaminants are being released into the environment, or are likely to be so released; and
    - 5. Other relevant factors.
  - (d) If the Department decides that an applicant or permittee shall be regulated pursuant to all provisions of 310 CMR 30.000, the Department shall send to the applicant or permittee a brief written response giving a reason for the Department's decision. Except as provided in 310 CMR 30.890, the Department's decision shall not be subject to public notice, public comment, or public hearings.
  - (e) The applicant or permittee shall comply with the Department's decision and with all applicable provisions of 310 CMR 30.000 pursuant to a compliance schedule set forth in the decision, provided that transporters and owners or operators of facilities shall submit applicable permit applications within no less than 60 days and no more than six months after the date of the Department's final decision.

## 30.272: Generator Standards

- (1) A generator of Class B(4) regulated recyclable material may sell or otherwise transfer such material, or contract to sell or otherwise transfer such material, or cause or allow such material to be transported off the site of generation, only to either
  - (a) a facility described in 310 CMR 30.305, or
  - (b) a facility that has a Class B(4) permit pursuant to 310 CMR 30.270, or
  - (c) a facility outside of Massachusetts that:
    - 1. either is designated a facility by the EPA pursuant to 40 CFR Part 266 Subpart F, or that has an equivalent State designation or authorization; and
    - 2. has in writing notified the generator and the Department, in compliance with 310 CMR 30.009, that it is in compliance with the requirements set forth in 310 CMR 30.272(1)(c)1.
- (2) A generator of Class B(4) regulated recyclable material may sell or otherwise transfer custody or possession of such material only to a transporter in compliance with 310 CMR 30.274.
- (3) A generator of Class B(4) regulated recyclable material who intends to or does sell or otherwise transfer, or contract to sell or otherwise transfer, such material to any other person, or who intends to or does cause or allow such material to be transported off the site of generation, shall at all times manage such material
  - (a) as hazardous waste in full compliance with 310 CMR 30.300 and all other applicable provisions of 310 CMR 30.000, or
  - (b) in full compliance with a Class B(4) recycling permit issued by the Department.

#### 30.273: Generator Permits and Permit Applications

- (1) Any generator wishing to manage Class B(4) regulated recyclable material in compliance with a Class B(4) permit shall apply to the Department for a Class B(4) permit to do so. The application shall be on a form acceptable to the Department. In addition to what is set forth in 310 CMR 30.204, the application shall include a complete description of how the material will be managed in compliance with the requirements set forth or referred to in 310 CMR 30.270.
- (2) In addition to conditions imposed pursuant to 310 CMR 30.202(2), the general conditions set forth in 310 CMR 30.205 and 30.206, and the standards set forth in 310 CMR 30.271, 30.272, and 30.274, the following conditions shall apply to each Class B(4) permit issued to generators, regardless of whether or not such conditions are written into the permit. Permittees shall comply with such conditions whether or not they are written into the permit. Failure to comply shall be grounds for an enforcement action, including, without limitation, permit suspension or revocation.
  - (a) Except as specifically provided in 310 CMR 30.273(2)(b), the permittee shall accumulate and otherwise manage the material in compliance with 310 CMR 30.300.
  - (b) The material may be accumulated at the site of generation for up to one calendar year without such accumulation being deemed storage, but only if such accumulation is not speculative accumulation.

## 30.274: Transport and Manifest Standards

- (1) A transporter of Class B(4) regulated recyclable material shall either
  - (a) be licensed to transport hazardous waste pursuant to 310 CMR 30.000, or
  - (b) have a Class B(4) permit issued pursuant to 310 CMR 30.275.
- (2) Any person who intends to or does transport Class B(4) regulated recyclable material shall at all times manage such material
  - (a) as hazardous waste in full compliance with 310 CMR 30.400 and all other applicable provisions of 310 CMR 30.000, or
  - (b) in full compliance with 310 CMR 30.274 and a Class B(4) recycling permit issued pursuant to 310 CMR 30.275.
- (3) Unless otherwise specifically provided in 310 CMR 30.274(3), all Class B(4) regulated recyclable material shall at all times be accompanied by a hazardous waste manifest filled out, signed, and distributed in compliance with all provisions of 310 CMR 30.000 governing the filling out, signing, and distribution of copies of manifests. The following material need not be accompanied by a manifest:
  - (a) Useable end products (e.g. metal ingots) of the recycling of Class B(4) regulated recyclable material when such end products are returned to trade use.
  - (b) Intermediate products of the recycling of Class B(4) regulated recyclable material if such products neither appear in the lists set forth in 310 CMR 30.131 through 30.136 nor have the characteristics of a hazardous waste set forth in 310 CMR 30.120 through 30.125.
- (4) A transporter of Class B(4) regulated recyclable material may transport such material, or cause or allow such material to be transported, only to a facility or transporter that is
  - (a) a Massachusetts facility that has a facility license pursuant to 310 CMR 30.800, or
  - (b) a Massachusetts facility that has a Class B(4) permit pursuant to 310 CMR 30.277, or
  - (c) a facility outside of Massachusetts that either is designated a facility by the EPA pursuant to 40 CFR Part 266 Subpart F, or that has an equivalent State designation or authorization, or
  - (d) another transporter who is either described in 310 CMR 30.403(2), (3), or (4), or who has a Class B(4) permit issued pursuant to 310 CMR 30.275.
- (5) If Class B(4) regulated recyclable material is accompanied by a manifest, a transporter of such material may transport such material, or cause or allow such material to be transported, only to a facility or transporter that is described in 310 CMR 30.274(4) and that is specified on the manifest accompanying the material.
- (6) If the transporter has a Class B(4) permit issued pursuant to 310 CMR 30.275 and does not have a license issued pursuant to 310 CMR 30.400 and 310 CMR 30.800, the transporter shall:

#### 30.274: continued

- (a) not collect or transport any Class A, Class B(1), Class B(2), Class B(3), Class B(5), or Class C regulated recyclable material, or any other material that is regulated pursuant to 310 CMR 30.000, unless the transporter also has whatever license or permit is required by 310 CMR 30.000 for such activity, and
- (b) collect such material, or cause or allow such material to be collected, only from
  - 1. any generator in compliance with 310 CMR 30.300 or who has a Class B(4) permit pursuant to 310 CMR 30.273 or a person who generates only D011 silver fixer solution as described in 310 CMR 30.271(1)(c), or
  - 2. a Massachusetts facility that has a facility license pursuant to 310 CMR 30.800, or
  - 3. a Massachusetts facility that has a Class B(4) permit pursuant to 310 CMR 30.277, or
  - 4. a facility outside of Massachusetts that either is designated a facility by the EPA pursuant to 40 CFR Part 266 Subpart F, or that has an equivalent State designation or authorization, or
  - 5. a transporter who is either described in 310 CMR 30.403(2), (3), or (4), or who has a Class B(4) permit issued pursuant to 310 CMR 30.275, and
- (c) notify the EPA and the Department pursuant to 310 CMR 30.060 through 30.064, and
- (d) obtain and maintain in effect a certification or other written statement by and from the Massachusetts Department of Public Utilities that the transporter is in compliance with M.G.L. c. 159B, and
- (e) comply with the requirements set forth in 310 CMR 30.404 through 30.406, 30.408 through 30.409, 30.413, and 30.415, and
- (f) have at all times on all vehicles used for the transport of Class B(4) regulated recyclable materials, while such materials are in the vehicles, all markings, including placards, required by statute or regulation applicable to such materials, and
- (g) obtain and maintain in effect at all times evidence of financial responsibility acceptable to the Department, and
- (h) have at all times in the cab of all vehicles used for transport of Class B(4) regulated recyclable materials, while such materials are in the vehicles information, in a form satisfactory to the Department, identifying the owner and operator of each vehicle.

## 30.275: Transporter Permits and Permit Applications

- (1) Any person wishing to transport Class B(4) regulated recyclable material in compliance with a Class B(4) permit shall apply to the Department for a Class B(4) permit to do so. The application shall be on a form acceptable to the Department. In addition to what is set forth in 310 CMR 30.204, the application shall include a complete description of how the applicant intends to comply with the requirements set forth or referred to in 310 CMR 30.270, including, without limitation, a complete description showing how the applicant proposes to meet the requirements set forth in 310 CMR 30.274(6)(f), (g), and (h).
- (2) Conditions imposed pursuant to 310 CMR 30.202(2), the general conditions set forth in 310 CMR 30.205 and 30.206, and the standards set forth in 310 CMR 30.271 and 30.274 shall apply to each Class B(4) permit issued to transporters, regardless of whether or not such conditions are written into the permit. Permittees shall comply with such conditions whether or not they are written into the permit. Failure to comply shall be grounds for an enforcement action, including, without limitation, permit suspension or revocation.

# 30.276: Recycling and Transfer Station Standards

- (1) The provisions of 310 CMR 30.276 and 30.277 shall apply to any person who intends to or does:
  - (a) recycle Class B(4) regulated recyclable material, including but not limited to any generator who intends to or does recycle Class B(4) regulated recyclable material at the site of generation, or
  - (b) receive and store Class B(4) regulated recyclable material not generated at the site of storage.
- (2) Any person who intends to or does engage in any activity described in 310 CMR 30.276(1) shall at all times manage Class B(4) regulated recyclable material.

#### 30.276: continued

- (a) as hazardous waste in full compliance with 310 CMR 30.500, 30.600, 30.700, 30.800, and 30.900, and all other applicable provisions of 310 CMR 30.000, or
- (b) in full compliance with a Class B(4) recycling permit issued by the Department.
- (3) If a person described in 310 CMR 30.276(1) has a Class B(4) permit issued pursuant to 310 CMR 30.277, and does not have a license issued pursuant to 310 CMR 30.500, 30.600, 30.700, and 30.800, that person shall:
  - (a) comply with the requirements set forth in 310 CMR 30.512(1), and
  - (b) have the capability of quickly obtaining the results of a timely analysis of incoming materials to assess their hazardous characteristics and the quantity of recoverable precious metals they contain, and
  - (c) comply with the requirements set forth in 310 CMR 30.514(1) and
  - (d) comply with the requirements set forth in 310 CMR 30.515(1)(a) and (b), and
  - (e) have and properly carry out a program of instruction or on-the-job training for employees who deal with hazardous regulated recyclable materials and wastes that teaches those employees to perform their duties in a way that ensures compliance with 310 CMR 30.000 and the conditions of the permit, and in a way that does not constitute or result in a significant potential or actual hazard to public health, safety, or welfare, or the environment, and
  - (f) have, and properly carry out if and when necessary, a plan for emergencies and contingencies that prevents and minimizes hazards to public health, safety, and welfare, and the environment, from fires explosions, spills, or any other unplanned sudden or non-sudden release of hazardous constituents into air, soil, or surface or ground water, and
  - (g) comply with the requirements set forth in 310 CMR 30.530 through 30.534, and
  - (h) comply with the requirements set forth in 310 CMR 30.560.
- (4) If the person recycling or receiving the Class B(4) regulated recyclable material receives from off the site of generation, or otherwise comes to possess, any Class A, Class B(1), Class B(2), Class B(3), Class B(5), or Class C regulated recyclable material, or any other material that is regulated pursuant to 310 CMR 30.000, which that person is not authorized to receive or otherwise possess, that person shall immediately so notify the Department and shall manage such material as hazardous waste in compliance with all applicable provisions of 310 CMR 30.000.

## 30.277: Recycling and Transfer Station Permits and Permit Applications

- (1) Any person wishing to engage in any activity described in 310 CMR 30.276(1) in compliance with a Class B(4) permit, including but not limited to any generator wishing to recycle Class B(4) regulated recyclable material at the site of generation, shall apply to the Department for a Class B(4) permit to do so. The application shall be on a form acceptable to the Department. In addition to what is set forth in 310 CMR 30.204, the application shall include a complete description of how the applicant intends to comply with the requirements set forth or referred to in 310 CMR 30.270, including, without limitation, a complete description showing how the applicant proposes to meet the requirements set forth in 310 CMR 30.276.
- (2) Conditions imposed pursuant to 310 CMR 30.202(2), the general conditions set forth in 310 CMR 30.205 and 30.206, and the standards set forth in 310 CMR 30.270 shall apply to each Class B(4) permit issued to persons who engage in any activity described in 310 CMR 30.276(1), regardless of whether or not such conditions are written into the permit. Permittees shall comply with such conditions whether or not they are written into the permit. Failure to comply shall be grounds for an enforcement action, including, without limitation, permit suspension or revocation.

# 30.280: Requirements for Recycling Class B(5) Regulated Recyclable Materials

(1) Persons who own or operate facilities which receive Class B(5) regulated recyclable materials from offsite for the storage of spent lead-acid batteries and subsequently recycles them onsite for lead value shall maintain such facilities in compliance with all applicable provisions of 310 CMR 30.500, 30.600, 30.700, 30.800 and 30.900, and all other applicable provisions of 310 CMR 30.000.

#### 30.280: continued

- (2) Except as otherwise provided in 30.280, the provisions of 310 CMR 30.000 shall not apply to the generation, accumulation, storage, collection, and transport of spent lead-acid batteries if:
  - (a) said batteries are not, and are not intended to be, reclaimed for their lead content onsite, and
  - (b) the electrolyte is safely contained within said batteries.
- (3) Open or leaking lead-acid batteries, and electrolyte removed from lead-acid batteries, shall not be handled as regulated recyclable material and shall be handled as hazardous waste in compliance with all applicable provisions of 310 CMR 30.000.
- (4) Any person who intends to or does recycle Class B(5) regulated recyclable material, and who does not intend to and does not store such material before recycling it, shall at all times manage Class B(5) regulated recyclable material in full compliance with a Class C recycling permit issued by the Department pursuant to 310 CMR 30.296.

## 30.290: Requirements for Recycling Class C Regulated Recyclable Materials

310 CMR 30.290 through 30.299, cited collectively as 310 CMR 30.290, set forth standards for the handling of Class C regulated recyclable materials, describe procedures for obtaining a permit to recycle Class C regulated recyclable materials, and set forth the basic and optional conditions that may be imposed in such permits.

# 30.291: General Provisions

- (1) No person shall recycle any Class C regulated recyclable material, or engage in any other activity involving Class C regulated recyclable material if a Class C permit is required for that activity, unless either:
  - (a) that person has applied for and obtained a Class C permit, said permit is in effect when the recycling or other activity is being done, and said permit authorizes the recycling or other activity being done, or
  - (b) the Class C regulated recyclable material is recycled or otherwise handled in compliance with all provisions of 310 CMR 30.000 other than 310 CMR 30.200.
- (2) If a person described in 310 CMR 30.291(1) has a Class C permit issued pursuant to 310 CMR 30.290, and does not have a license issued pursuant to 310 CMR 30.500, 30.600, 30.700, and 30.800, that person shall:
  - (a) not recycle any Class A, Class B(1), Class B(2), Class B(3), Class B(4), or Class B(5) regulated recyclable material, or any other material that is regulated pursuant to 310 CMR 30.000, unless that person also has whatever license or permit is required by 310 CMR 30.000 for such activity, and
  - (b) not receive from off the site of generation, or contract to receive from off the site of generation, any Class A, Class B(1), Class B(2), Class B(3), Class B(4), or Class B(5) regulated recyclable material, or any other material that is regulated pursuant to 310 CMR 30.000, unless that person also has whatever license or permit is required by 310 CMR 30.000 for such activity, and
  - (c) notify the EPA and the Department pursuant to 310 CMR 30.060 through 30.064.
- (3) Unless otherwise specified in 310 CMR 30.290, Class C regulated recyclable materials shall not be handled as recyclable material and shall be handled as hazardous waste in compliance with all applicable provisions of 310 CMR 30.000.

# 30.292: Generator Standards for Class C Regulated Recyclable Materials

Generators of Class C regulated recyclable material shall at all times manage such material in full compliance with 310 CMR 30.300 and all other applicable provisions of 310 CMR 30.000.

## 30.293: Transporter Standards for Class C Regulated Recyclable Materials

Transporters of Class C regulated recyclable material shall at all times manage such material in full compliance with 310 CMR 30.400 and all other applicable provisions of 310 CMR 30.000.

# 30.294: Standards for Those Who Store Class C Regulated Recyclable Materials before Those Materials Are Recycled

- (1) The provisions of 310 CMR 30.294 shall apply to any person who intends to or does
  - (a) recycle Class C regulated recyclable material not generated at the site of recycling, and receive and store such material at the site of recycling before recycling it, or
  - (b) receive and store Class C regulated recyclable material not generated at the site of storage.
- (2) Any person who intends to or does engage in any activity described in 310 CMR 30.294(1) shall at all times manage Class C regulated recyclable material as hazardous waste in full compliance with 310 CMR 30.001 through 30.064, 30.100, 30.500, 30.600, 30.700, 30.800, and 30.900.

## 30.295: Standards for Those Who Recycle Class C Regulated Recyclable Materials without Prior Storage

- (1) Any person who intends to or does recycle Class C regulated recyclable material not generated at the site of recycling, and who intends to or does receive that material from off the site of generation directly into the recycling process so that there is no storage of that material at the site of recycling before that material is recycled, shall at all times manage all such materials in the recycling process, and all such materials received from off the site of generation, in compliance with either:
  - (a) a hazardous waste license issued pursuant to 310 CMR 30.800, and all provisions of 310 CMR 30.000 other than 310 CMR 30.200, or
  - (b) a Class C permit issued pursuant to 310 CMR 30.296.
- (2) Any person who intends to or does recycle Class C regulated recyclable material not generated at the site of recycling, and who intends to or does receive that material from off the site of generation directly into the recycling process so that there is no storage of that material at the site of recycling before that material is recycled, all in compliance with a Class C permit issued pursuant to 310 CMR 30.296, shall at all times
  - (a) be in compliance with requirements set forth in 310 CMR 30.001 through 30.064 and 30.100; and
  - (b) be in compliance with requirements set forth in 310 CMR 30.502, 30.511 through 30.516, 30.521 through 30.524, 30.530 through 30.534, 30.540 through 30.544, 30.560, 30.561, and 30.580 through 30.586; and
  - (c) be in compliance with requirements set forth in 310 CMR 30.602, 30.605, 30.660 through 30.675, and 30.680 through 30.698, provided that no Class C regulated recyclable material shall be placed into any waste pile or surface impoundment; and
  - (d) be in compliance with requirements set forth in 310 CMR 30.700 with regard to new facilities or modifications of existing facilities; and
  - (e) obtain and maintain in effect evidence of financial responsibility acceptable to the Department.

# 30.296: Recycling Permits and Permit Applications for Those Who Recycle Class C Regulated Recyclable Materials without Prior Storage

(1) Any person wishing to recycle Class C regulated recyclable material not generated at the site of recycling, and who intends to receive that material from off the site of generation directly into the recycling process so that there is no storage of that material at the site of recycling before that material is recycled, all in compliance with a Class C permit, shall apply to the Department for a Class C permit to do so. The application shall be on a form acceptable to the Department. In addition to what is set forth in 310 CMR 30.204, the application shall include:

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- (a) a complete description of how the applicant intends to comply with the requirements set forth or referred to in 310 CMR 30.295(2), including, without limitation, a complete description showing how the applicant proposes to meet the requirements set forth in 310 CMR 30.295(2)(e); and
- (b) a complete description of how the applicant intends to receive the Class C regulated recyclable material from off the site of generation directly into the recycling process so that there will be no storage of that material at the site of recycling before that material is recycled; and
- (c) the information required by 310 CMR 30.803 and 30.804(1) through (5), (24) and (25).
- (2) Conditions imposed pursuant to 310 CMR 30.202(2), the general conditions set forth in 310 CMR 30.205 and 310 CMR 30.206, the standards set forth in 310 CMR 30.295(2), and the provisions set forth in 310 CMR 30.810 through 30.829 and 30.850 through 30.890 shall apply to each Class C permit issued to persons who engage in any activity described in 310 CMR 30.296(1), regardless of whether or not such conditions are written into the permit. Permittees shall comply with such conditions whether or not they are written into the permit. Failure to comply shall be grounds for an enforcement action, including, without limitation, permit suspension or revocation.
- (3) A permit issued pursuant to 310 CMR 30.296 shall be issued in compliance with the following public notice and public comment requirements.
  - (a) <u>Public Notice</u>. The Department shall cause public notice to be given when:
    - 1. a Class C recycling permit application has been tentatively denied;
    - 2. a draft Class C recycling permit has been prepared;
    - 3. a public hearing on a draft Class C recycling permit has been scheduled. Public notice in this case shall be given at least 21 days prior to the hearing date.
  - (b) <u>Notice of More Than One Permit</u>. Public notices may describe more than one permit or permit action.
  - (c) <u>Comment Period</u>. Public notices issued pursuant to 310 CMR 30.296(3)(a) shall allow at least 30 days for public comment, except for notices pursuant to 310 CMR 30.296(3)(a)3.
  - (d) Method of Notice. Public notice shall be given by the following methods:
    - 1. By mailing notice to:
      - a. the applicant;
      - b. the board of health of the city or town in which the facility is to be located or the permitted activity is proposed;
      - c. abutters of the facility site.
    - 2. By publication, paid for by the applicant, in a daily or weekly newspaper of general circulation in the locality affected by the facility.
  - (e) <u>Content of Notice</u>. All public notices shall, at a minimum, contain the following information:
    - 1. a description of the proposed facility including the type of facility, location and hours of operation;
    - 2. the identity and mailing address of the applicant;
    - 3. the public location where the draft Class C recycling permit can be inspected; and
  - 4. either the time period for written comments on the draft Class C recycling permit and the address to which comments should be mailed, or the public hearing information set forth at 310 CMR 30.296(3)(f);
  - (f) Comment Period.
    - 1. Written Comments. During the public comment period provided for in 310 CMR 30.296(3)(c) any interested person may submit written comments on the draft decision to the office of the Department processing the permit request.
    - 2. Extending or Reopening the Public Comment Period. The Department may extend or reopen the public comment period prescribed in 310 CMR 30.296(3)(c) to allow for the issuance of a modified draft permit or to give interested persons an opportunity to comment on the information or arguments submitted. If the Department gives such an extension, notice thereof shall be given in the manner prescribed in 310 CMR 30.296(3)(a) through (e). Such notice shall specify any new issues to be considered.

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## (g) Public Hearing.

- 1. <u>Circumstances Requiring Hearing</u>. The Department shall schedule a public hearing within the community wherein the proposed facility is to be located when:
  - a. the applicant requests a public hearing;
  - b. the Commissioner determines that there is sufficient public interest in unresolved issues of concern;
  - c. the Department prepares a modified draft permit with substantial revisions from the original draft permit issued pursuant to 310 CMR 30.296(3)(h) as a result of comments received pursuant to 310 CMR 30.296(3)(f). Copies of the revised draft permit shall be distributed to the applicant, local board of health and, upon written request, to any other person.
- 2. <u>Content of Public Hearing Notice</u>. Public notice of the public hearing shall be given in the manner described in 310 CMR 30.296(3) and shall include:
  - a. the date, time, and place of the public hearing; and
  - b. the nature and purpose of the public hearing.

## 3. Public Hearing Procedures.

- a. The Department shall designate a representative to conduct the public hearing who shall have the authority to ensure an orderly presentation of issues, comments, data, and arguments, and to ensure an adequate and comprehensible record of the proceedings.
- b. <u>Conduct of Hearings</u>. Hearings shall be as informal as may be reasonable and appropriate under the circumstances. The Department shall ensure that the conduct of persons at the hearing will at all times be orderly.
- c. Withdrawal of Request for Hearing. The applicant or any other person who requested a hearing may withdraw the request, or may elect to submit any comments or documents without a hearing, by filing with the Department a written withdrawal. If notice of a hearing has already been published pursuant to 310 CMR 30.296(3)(a) through (e), such withdrawal must be filed at least ten days prior to the scheduled hearing, and notice of the withdrawal provided in the same manner specified in 310 CMR 30.296(3)(a) through (e).

## (h) <u>Issuance of a Draft Permit</u>.

- 1. The Department shall prepare either a draft Class C recycling permit or draft denial. A draft Class C recycling permit shall include all appropriate conditions, standards, and requirements necessary to establish a new facility or to conduct approved activities at an existing facility.
- 2. If the Department decides to deny the facility a Class C recycling permit, it shall issue a draft denial.
- 3. Each draft Class C recycling permit or denial shall be accompanied by a fact sheet briefly describing:
  - a. the facility or activity which is the subject of the Class C recycling permit;
  - b. the type and quantity of wastes which are to be handled;
  - c. the reasons for the terms and conditions set forth therein; and
  - d. the reasons why requested variances or alternatives to required standards are or are not approved.

## (i) Issuance of the Final Permit Decision.

- 1. <u>Issuance and Public Notice</u>. After the close of the public comment period, or, if applicable, the close of the public hearing, whichever is later, the Department shall issue a final decision on the permit application. Notice of the Department's final decision and summary response to comments shall be given to the applicant by first class mail. Notice shall also be provided to the board of health and each person who has requested notice of the final permit decision.
- 2. <u>Effective Date</u>. A final license determination shall become effective 21 days after the date of the notice of determination given pursuant to 310 CMR 30.296(3)(i), unless a request for adjudicatory hearing is made pursuant to M.G.L. c. 21C, M.G.L. c.30A and 310 CMR 1.00.
- 3. <u>Summary Response to Comments</u>. At the time the permit decision is issued, the Department shall prepare a summary of the major comments on the draft permit or denial and a response and shall describe any major changes made to the draft permit or denial as a result of the public hearing.

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4. <u>Legal Challenges</u>. Pursuant to M.G.L. c. 21C, § 11, any person aggrieved by a determination by the Department to issue, deny, modify, revoke, or suspend any license or approval, or to issue an order, may request an adjudicatory hearing before the Department pursuant to the provisions of M.G.L. c. 30A. For the purposes of 310 CMR 30.000, an "aggrieved person" shall be deemed to be any person who is or may become a "party" or "intervenor" pursuant to 310 CMR 1.00. A person aggrieved by a final decision in any adjudicatory proceeding may obtain judicial review thereof pursuant to the provisions of M.G.L. c. 30A.

# 30.297: Standards for Those Who Recycle Class C Regulated Recyclable Materials at the Site of Generation

- (1) Any person who intends to or does recycle Class C regulated recyclable material generated only at the site of recycling shall at all times manage all such material in compliance with either
  - (a) a hazardous waste license issued pursuant to  $310\,\mathrm{CMR}$  30.800, and all provisions of  $310\,\mathrm{CMR}$  30.000 other than  $310\,\mathrm{CMR}$  30.200, or
  - (b) a Class C permit issued pursuant to 310 CMR 30.298.
- (2) Any person who intends to or does recycle Class C regulated recyclable material generated only at the site of recycling in compliance with a Class C permit issued pursuant to 310 CMR 30.298 shall at all times
  - (a) be in compliance with requirements set forth in 310 CMR 30.001 through 30.064 and 30.100; and
  - (b) be in compliance with requirements set forth in 310 CMR 30.300, provided that requirements set forth in 310 CMR 30.500 through 30.900 shall not apply by virtue of any usage of the Class C regulated recyclable material; and
  - (c) be in compliance with requirements set forth in 310 CMR 30.602, 30.605, and 30.680 through 30.699, provided that no Class C regulated recyclable material shall be placed into any waste pile or surface impoundment.

# 30.298: Recycling Permits and Permit Applications for Those Who Recycle Class C Regulated Recyclable Materials at the Site of Generation

- (1) Any person wishing to recycle Class C regulated recyclable material generated only at the site of recycling in compliance with a Class C permit shall apply to the Department for a Class C permit to do so. The application shall be on a form acceptable to the Department. In addition to what is set forth in 310 CMR 30.204, the application shall include:
  - (a) a complete description of how the applicant intends to comply with the requirements set forth or referred to in 310 CMR 30.297(2); and
  - (b) a complete description of the recycling process and an explanation of why the recycling system cannot be, and should not be required to be, designed to be a completely enclosed system qualifying for a Class A recycling permit.
- (2) Conditions imposed pursuant to 310 CMR 30.202(2), the general conditions set forth in 310 CMR 30.205 and 30.206, and the standards set forth in 310 CMR 30.297(2) shall apply to each Class C permit issued to persons who engage in any activity described in 310 CMR 30.298(1), regardless of whether or not such conditions are written into the permit. Permittees shall comply with such conditions whether or not they are written into the permit. Failure to comply shall be grounds for an enforcement action, including, without limitation, permit suspension or revocation.

# 30.300: REQUIREMENTS FOR GENERATORS OF HAZARDOUS WASTES

# 30.301: Purpose, Scope, and Applicability

- (1) 310 CMR 30.301 through 30.399, cited collectively as 310 CMR 30.300, prescribe standards for generators of hazardous waste.
- (2) Any person who imports hazardous waste into Massachusetts from outside the United States shall comply with the standards applicable to generators prescribed in 310 CMR 30.300.

#### 30.301: continued

- (3) A person who generates a hazardous waste, as identified or otherwise described in 310 CMR 30.100, is subject to the compliance requirements and penalties prescribed in M.G.L. c. 21C, § 10 if that person does not comply with 310 CMR 30.000. Such noncompliance may also subject a person who generates a hazardous waste to the federal penalties prescribed in § 3008 of RCRA.
- (4) An owner or operator of a facility who initiates a shipment of hazardous waste from a facility shall comply with the generator requirements prescribed in 310 CMR 30.300.
- (5) Any laboratory, as defined in 310 CMR 30.010, that generates unwanted material (as defined in 310 CMR 30.010), some of which will be hazardous wastes, and that complies with all of the requirements of 310 CMR 30.354, is not subject to the following generator provisions with respect to unwanted material:
  - (a) 310 CMR 30.302 Hazardous Waste Determination; and
  - (b) 310 CMR 30.340(6) or 310 CMR 30.351(4), or 310 CMR 30.353(6)(i), as applicable Satellite Accumulation for Large Quantity Generators, Small Quantity Generators or Very Small Quantity Generators.

## 30.302: Determination of Whether a Waste is Hazardous

Any person who generates a waste shall determine if that waste is a hazardous waste, as identified or otherwise described in 310 CMR 30.100, as follows:

- (1) First, determine whether the waste is excluded from 310 CMR 30.104.
- (2) Next, determine if the waste is listed as a hazardous waste in 310 CMR 30.130 through 30.136.
- (3) For purposes of compliance with the land disposal restrictions set forth in 310 CMR 30.750 or if the waste is not listed as a hazardous waste in 310 CMR 30.130 through 30.136, determine whether the waste is hazardous waste pursuant to 310 CMR 30.120 through 30.125 by doing either of the following:
  - (a) Testing the waste according to the methods set forth in 310 CMR 30.151 through 30.157 or according to an equivalent method.
  - (b) Applying knowledge of the hazardous characteristics of the waste in light of the materials or the process used.
- (4) Except as provided by 310 CMR 30.302(5), if a generator determines that a waste exhibits one or more characteristics, that generator shall further determine whether there are any underlying hazardous constituents of the waste that are specified in 40 CFR 268.48, Table UTS, as incorporated by reference at 310 CMR 30.750.
- (5) A generator need not determine the underlying hazardous constituents of a waste if:
  - (a) the waste is hazardous solely because it is a D001 nonwastewater; and
  - (b) it is treated by CMBST, RORGS, OR POLYM (See 40 CFR 268.42: Table 1, as incorporated by reference at 310 CMR 30.750(1)).

## 30.303: Requirements Governing Notification, Identification Numbers, and Change of Status Requests

- (1) A generator shall not treat, store, use, dispose of, transport, or offer for transportation, hazardous waste without having received either an EPA identification number from the Department in compliance with 310 CMR 30.060 through 30.064 or a Massachusetts identification number from the Department in compliance with 310 CMR 30.353(5).
- (2) A generator who has not received an identification number may obtain one by applying to the Department on a form prescribed by the Department as follows:
  - (a) a Small Quantity Generator of waste having only Massachusetts hazardous waste numbers and a Very Small Quantity Generator shall register with the Department pursuant to 310 CMR 30.353(5); and
  - (b) all other generators shall notify the Department pursuant to 310 CMR 30.060 through 30.064.
- (3) The following generators shall promptly submit to the Department, in writing, a change of status notification:
  - (a) A Small Quantity Generator pursuant to 310 CMR 30.351 who becomes a Large Quantity Generator subject to 310 CMR 30.340.
  - (b) A Very Small Quantity Generator pursuant to 310 CMR 30.353 who becomes a Small Quantity Generator pursuant to 310 CMR 30.351 or a Large Quantity Generator subject to 310 CMR 30.340.
- (4) Each change of status notification submitted pursuant to 310 CMR 30.303(3) shall be signed and submitted in compliance with 310 CMR 30.006 and 30.009. If the Department prescribes a form for such a notification, the generator submitting the notification shall use such form when making the notification. Such a notification shall specify that the generator's new status is a Small Quantity Generator, or a Large Quantity Generator, whichever is the case. The generator shall not thereafter change status except as provided in 310 CMR 30.303 and all other applicable requirements.
- (5) A Large Quantity Generator subject to 310 CMR 30.340 who ceases to be a Large Quantity Generator and instead becomes a Small Quantity Generator pursuant to 310 CMR 30.351 may submit to the Department, in writing, a change of status request.
- (6) No change of status described in 310 CMR 30.303(5) shall take effect unless and until a change of status request is submitted to the Department in compliance with 310 CMR 30.303. A request submitted in compliance with 310 CMR 30.303 shall include a certification by the generator that the generator is in compliance with 310 CMR 30.351. Such a request and certification shall be signed and submitted in compliance with 310 CMR 30.006 and 30.009. If the Department prescribes a form for such a request and certification, the generator shall use such form when making the request and certification. The generator shall follow such procedures as may be required, requested, or authorized by the Department to change its status to Small Quantity Generator.
- (7) A Large Quantity Generator subject to 310 CMR 30.340 or a Small Quantity Generator subject to 310 CMR 30.351 who becomes a Very Small Quantity Generator pursuant to 310 CMR 30.353 may submit to the Department, in writing, a change of status request.

#### 30.303: continued

- (8) No change of status described in 310 CMR 30.303(7) shall take effect unless and until a change of status request is submitted to the Department in compliance with 310 CMR 30.303 and a registration of Very Small Quantity Generator activity is submitted to the Department in compliance with 310 CMR 30.353(5). A request submitted in compliance with 310 CMR 30.303 shall include a certification by the generator that the generator is in compliance with 310 CMR 30.353. Such a request and certification shall be signed and submitted in compliance with 310 CMR 30.006 and 310 CMR 30.009. If the Department prescribes a form for such a request and certification, the generator shall use such form when making the request and certification. The generator shall follow such procedures as may be required, requested, or authorized by the Department to change his status to Very Small Quantity Generator.
- (9) Any person who is a hazardous waste generator who ceases to be a generator at a particular site, and who wishes to cease having the status of a generator at that site, may submit to the Department, in writing, a change of status request. No such change of status shall take effect unless and until a change of status request is submitted to the Department in compliance with 310 CMR 30.303(9). Such a request shall include a certification that no hazardous waste or regulated recyclable material is being generated or accumulated at the site for which notification is required, and that the generator has complied with the closure requirements of 310 CMR 30.689. Such a request and certification shall be signed and submitted in compliance with 310 CMR 30.006 and 30.009. The generator shall use a form prescribed by the Department when making the request and certification. The generator shall follow such procedures as may be required, requested, or authorized by the Department to cease his status as a generator at that site. The generator shall not thereafter generate any hazardous waste or regulated recyclable material at that site except in compliance with 310 CMR 30.060 through 30.064 and all other applicable requirements. In addition, the generator shall not accumulate 5,000 kg or more total of universal waste at that site unless such universal wastes are managed in compliance with 310 CMR 30.1000.

## 30.304: Offering Hazardous Wastes for Transportation

- (1) A generator shall not transfer custody or possession of hazardous waste to any person unless that person has at that time both an EPA identification number and a valid license from the Department for the transport of that hazardous waste.
- (2) A generator shall not itself transport hazardous waste off the site of generation unless that generator has at that time a valid license from the Department to transport that hazardous waste.
- (3) All vehicles used for transportation of hazardous waste shall have at that time a valid vehicle identification device issued by the Department and shall be in compliance with the requirement of 310 CMR 30.416.

## 30.305: Destination of Hazardous Waste or Regulated Recyclable Material Sent Off-site

A generator sending hazardous waste or regulated recyclable material off the site of generation shall send such waste or material only to the following facilities or persons:

- (1) Except as specifically provided otherwise in 310 CMR 30.305(1)(d) or 30.353, hazardous waste shall be sent only to a facility having a valid EPA Identification Number for the treatment, storage, or disposal of those wastes.
  - (a) If in Massachusetts, the facility shall have at that time:
    - 1. interim status or a valid license issued by the Department pursuant to M.G.L. c. 21C to receive such hazardous waste; or
    - 2. interim status from EPA issued pursuant to 310 CMR 30.099, if required pursuant to § 3006(g) of RCRA; or
    - 3. a valid permit from EPA, if required pursuant to § 3006(g) of RCRA, issued in compliance with 310 CMR 30.800; and
    - 4. complied with 310 CMR 30.512; or
  - (b) If in a State other than Massachusetts, the facility shall have at that time:
    - 1. interim status from EPA issued pursuant to 40 CFR Parts 270, or
    - 2. a valid permit issued by EPA pursuant to 40 CFR Part 270, or

#### 30.305: continued

- 3. interim status or a valid permit issued by a State authorized pursuant to 40 CFR Part 271, or
- (c) If the facility is in a State other than Massachusetts and if the wastes are not hazardous waste in that State, the facility shall at that time have the authority to receive such waste.
- (d) For facilities that reject waste in accordance with 310 CMR 30.533(6), the hazardous waste shall be sent as a return shipment, with the generator's permission, to the generator site designated on the manifest to receive the waste.
- (2) Regulated recyclable material shall be sent only to a facility or person authorized to receive that material in compliance with 310 CMR 30.200.
- (3) A person outside the United States, in accordance with the provisions of 310 CMR 30.361.
- (4) A facility having at that time a research, development, and/or demonstration permit issued by the EPA pursuant to § 3005(g) of RCRA.
  - (a) If the facility is located in Massachusetts, the facility shall also at that time be approved by the Department pursuant to 310 CMR 30.863, and the hazardous waste delivered to the facility shall be handled in full compliance with the applicable provisions of 310 CMR 30.000 prior to its delivery to the facility.
  - (b) If the facility is located outside of Massachusetts, the facility shall at that time be lawfully in existence pursuant to laws and regulations in effect in the place where the facility is located, and the hazardous waste delivered to the facility shall be handled in full compliance with the applicable provisions of 310 CMR 30.000 prior to its delivery to the facility.
- (5) Generators of hazardous wastes which contain PCBs in concentrations equal to or greater than 50 parts per million shall send such wastes only to facilities which meet all the requirements in 310 CMR 30.501(3)(a) through (c), or shall, with the approval of the Department, otherwise cause such hazardous wastes to be managed in compliance with the provisions of 40 CFR Part 761 and 310 CMR 30.750.

## 30.310: THE MANIFEST

310 CMR 30.311 through 30.317, cited collectively as 310 CMR 30.310, establish the general requirements for hazardous waste manifest forms 8700-22 and 8700-22A and requirements for manifest completion and distribution.

# 30.311: General Requirements

- (1) A generator who transports, or offers for transportation, hazardous waste for off-site treatment, storage, disposal or use, must prepare a manifest on EPA form 8700-22, and 8700-22A if necessary, and shall ensure that all required information has been provided in accordance with the Appendix to Part 262--Uniform Hazardous Waste Manifest and Instructions (EPA Forms 8700-22 and 8700-22A and their Instructions), as in effect on July 1, 2006, before the waste is transported off-site. Failure to complete any applicable portion of the manifest in compliance with 310 CMR 30.000 and the instructions on the manifest shall be a violation of M.G.L. c. 21C and of 310 CMR 30.000.
- (2) The generator shall designate on the manifest the primary transporter and all continuing transporters.
- (3) The generator shall designate on the manifest one facility to receive the hazardous waste described on the manifest. The designated facility shall meet the requirements of 310 CMR 30.305.
- (4) The generator may also designate on the manifest one alternate facility to receive the hazardous waste described on the manifest in the event an emergency prevents delivery of the waste to the primary designated facility. The alternate facility shall meet the requirements of 310 CMR 30.305.

#### 30.311: continued

(5) If the transporter is unable to deliver the hazardous waste to the designated facility or the alternate facility, the generator shall either designate another facility, which shall meet the requirements of 310 CMR 30.305, or instruct the transporter to return the waste to the generator. In such a case, the generator shall keep a record of all communications with the transporter regarding what happened to any hazardous waste which has left the generator's custody or possession. The generator shall promptly submit this record to the Department.

## 30.312: Form of the Manifest

A generator shall use EPA form 8700-22, and form 8700-22A if necessary, in compliance with 310 CMR 30.311 through 30.315, as applicable, and 310 CMR 30.317.

## 30.313: Number and Distribution of Copies for Six-part Manifest (EPA form 8700-22)

The manifest shall consist of six copies, numbered from top to bottom as, respectively, Copy 1, Copy 2, Copy 3, Copy 4, Copy 5 and Copy 6. Except as provided at 310 CMR 30.314 and 30.315, these copies shall be signed, distributed, and retained as set forth in 310 CMR 30.313(1) through (6).

- (1) Copy 6 shall be: [(bottom copy): "Generator's initial copy".]
  - (a) signed by the generator and transporter, and then
  - (b) retained by the generator.
- (2) Copy 5 shall be: ["Transporter's copy".]
  - (a) signed by the generator and transporter, and by either the continuing transporter (if any) or by the facility owner or operator or his designee, and then
  - (b) retained by the first transporter. If the hazardous waste is transported by a continuing transporter, said continuing transporter shall:
    - 1. photocopy Copy 1 of the manifest after the facility owner or operator or his designee has signed it; and
    - 2. retain the photocopy.
- (3) Copy 4 shall be: ["Designated facility's copy".] signed by the generator, the transporter(s), and the facility owner or operator or his designee, and then retained by the facility.
- (4) Copy 3 shall: ["Designated facility to generator".]
  - (a) be signed by the generator, the transporter(s), and the facility owner or operator or his designee, and then transmitted by the facility to the generator within 30 days of the shipment being received by the designated facility; and
  - (b) for shipments by a generator to an out-of-state designated facility, the generator shall submit a photocopy of Copy 3 to the Department within 30 days of receiving the copy from the designated facility.
- (5) Copy 2 shall be: ["Designated facility to generator State".] signed by the generator, the transporter(s), and the facility owner or operator or his designee, and then transmitted by the facility to the Department, or otherwise the Agency of the generator state (if required by such Agency), within 30 days of the shipment being received by the designated facility.
- (6) Copy 1 shall be: [(top copy): "Designated facility to destination State (if required by such destination State)".] signed by the generator, the transporter(s), and the facility owner or operator or his designee, and then transmitted by the facility to the Department, if the facility is located in Massachusetts, within 30 days of the shipment being received by the designated facility.
- (7) For the purposes of complying with the requirements in 310 CMR 30.313(5) and (6) to submit a manifest copy to the Department, Massachusetts designated facilities receiving shipments of hazardous waste from in-state generators need only submit one manifest copy, either Copy 2 or Copy 1, to the Department.
- (8) If a generator sends hazardous waste to a designated facility in an authorized State which has not yet obtained authorization to regulate that particular waste as hazardous, the generator shall assure that:

#### 30.313: continued

- (a) any out-of-state transporter signs and forwards the manifest to the designated facility; and
- (b) any such facility signs the manifest and forwards copy 3 of the manifest to the generator.
- (9) For shipments of hazardous waste within the United States solely by water (bulk shipments only), the generator shall send three copies of the manifest, dated and signed in compliance with 310 CMR 30.311 through 30.314, to the owner or operator of the designated facility or the last water (bulk shipment) transporter to handle the waste in the United States if exported by water. Copies of the manifest are not required for each transporter.
- (10) For rail shipments of hazardous waste within the United States which originate at the site of generation, the generator shall send at least three copies of the manifest, dated and signed in compliance with 310 CMR 30.311 through 30.313, to:
  - (a) The next non-rail transporter, if any; or
  - (b) The designated facility, if transported solely by rail; or
  - (c) The last rail transporter to handle the waste in the United States if exported by rail.

## 30.314: Manifest Distribution Requirements for Waste Reclaimed Pursuant to a Contractual Agreement

- (1) A generator operating in compliance with 310 CMR 30.300 that ships waste off-site for reclamation pursuant to a contractual agreement shall comply with 310 CMR 30.314 if such wastes are reclaimed and the material thus reclaimed is returned to the generator pursuant to a contractual agreement in which:
  - (a) the type of waste and frequency of shipments are specified in the agreement; and
  - (b) the vehicles used to transport the waste to the recycling facility and to deliver the reclaimed material back to the generator are owned and operated by the person who reclaims the waste.
- (2) The manifest shall be signed, distributed, and retained as follows:
  - (a) Copy 6 shall be
    - 1. signed by the generator and transporter, and then
    - 2. retained by the generator in compliance with 310 CMR 30.331(1)(b).
  - (b) Copy 4 shall be
    - 1. signed by the generator and the facility owner or operator or his designee, and then
    - 2. retained by the facility.
- (3) The Department may prescribe a form for recording the information required pursuant to 310 CMR 30.311. If the Department prescribes such a form, it shall be used by the generator to record such information.
- (4) The generator shall retain a copy of all information required by 310 CMR 30.311 and the reclamation agreement in compliance with 310 CMR 30.331.
- (5) The provisions of 310 CMR 30.311, 30.312 and 30.314 shall apply whenever a manifest for waste reclaimed pursuant to a contractual agreement is required, and whenever such a manifest is used even if not required.
- 30.315: Manifest Distribution Requirements for Intrastate Shipments of Waste Oil, Intrastate Shipments by

  Very Small Quantity Generators, Wastes Sent to Research Demonstration and Development

  Facilities, and Research Study Waste
  - (1) The manifest shall be signed, distributed and retained as set forth in 310 CMR 30.315(1)(a) through (d).
    - (a) Copy 6 shall be:
      - 1. signed by the generator and transporter, and then
      - 2. retained by the generator in compliance with the applicable provisions of 310 CMR 30.331(1)(a) or (b).
    - (b) Copy 5 shall be:
      - 1. signed by the generator and transporter, and by either the continuing transporter (if any) or by the facility owner or operator or his designee, and then

#### 30.315: continued

- 2. retained by the transporter. If the hazardous waste is transported by a continuing transporter, said continuing transporter shall:
  - a. photocopy Copy 1 of the manifest after the facility owner or operator or his designee has signed it; and
  - b. retain the photocopy.
- (c) Copy 4 shall be:
  - 1. signed by the generator, the transporter(s), and the facility owner or operator or his designee, and then
  - 2. retained by the facility.
- (d) Copy 3 shall be:
  - 1. signed by the generator, the transporter(s), and the facility owner or operator or his designee, and then
  - 2. within 30 days of the date of the shipment is received by the facility, transmitted by the facility to the generator.
- (e) Either Copy 1 or Copy 2 shall be: signed by the generator, the transporter(s), and the facility owner or operator or his designee, and then transmitted by the facility to the Department within 30 days of the date the shipment is received by the designated facility.

## 30.316: Manifest Tracking Numbers, Manifest Printing and Obtaining Manifests

A registrant may not print, or have printed, the manifest for use or distribution unless it has received approval from the EPA Director of the Office of Solid Waste to do so pursuant to 40 CFR 262.21 which is hereby incorporated by reference.

## 30.317: Waste Minimization Certification

A generator who initiates a shipment of hazardous waste must certify to one of the waste minimization certification requirements at 40 CFR 262.27, which are hereby incorporated by reference.

## 30.320: PRE-TRANSPORT REQUIREMENTS

#### 30.321: Packaging

Before transporting hazardous waste or offering hazardous waste for transportation off-site, the generator shall package the waste in compliance with applicable regulations of the DOT, 49 CFR Parts 173, 178, and 179.

# 30.322: Labelling

Before transporting or offering hazardous waste for transportation off-site, the generator shall label each package in compliance with the applicable regulations of the DOT, 49 CFR Part 172.

## 30.323: Marking

- (1) Before transporting or offering hazardous waste for transportation off-site, the generator shall mark each package of hazardous waste in compliance with the applicable regulations of the DOT, 49 CFR Part 172.
- (2) Before transporting hazardous waste or offering hazardous waste for transportation off-site, the generator shall mark each container of 119 gallons or less used in such transportation with the following words and information displayed in compliance with the requirements of 49 CFR § 172.304.

HAZARDOUS WASTE - Federal Law Prohibits Improper Disposal. If found, contact the nearest
police or public safety authority or the U.S. Environmental Protection Agency.

Generator's Name and Address	
Generator's EPA ID Number	
Manifest Tracking Number	

#### 30.324: Placarding

Before transporting hazardous waste or offering hazardous waste for transportation off-site, the generator shall placard, or offer the initial transporter the appropriate placards, in compliance with regulations of the DOT, 49 CFR Part 172, Subpart F.

## 30.330: Recordkeeping and Reporting

## 30.331: Recordkeeping

- (1) Retention of manifest documents.
  - (a) Whenever required or whenever used even if not required, the following manifests shall be kept by the generator for three years from the date the waste was accepted by the initial transporter: Copy 6 of the form referenced in 310 CMR 30.312; however, once a fully executed copy 3 is received by the generator, then this copy shall be kept on file instead of or in addition to the partially executed copy 6.
  - (b) Whenever required or whenever used even if not required, the following manifests shall be kept by the generator for three years after the termination or expiration of the applicable agreement:
    - 1. Copy 3 of the form referenced in 310 CMR 30.315.
    - 2. Copy 6 of the form referenced in 310 CMR 30.314.

# (2) Agreements.

- (a) A generator that reclaims wastes pursuant to a contractual agreement and uses a form pursuant to 310 CMR 30.314 shall retain a copy of the reclamation agreement referenced therein for three years after its termination or expiration.
- (b) A generator that sends research study samples to a research facility pursuant to a contractual agreement and uses a manifest pursuant to 310 CMR 30.315 shall retain a copy of the agreement referenced therein for three years after its termination or expiration.
- (3) A generator shall keep a copy of all reports required pursuant to 310 CMR 30.332 or 310 CMR 30.333 as follows:
  - (a) Each Biennial Report shall be kept for a period of at least three years from the due date of the report.
  - (b) Each Exception Report shall be kept for a period of at least three years from the due date of the report.
- (4) A generator shall keep records of any test results, waste analyses, or other determinations made in compliance with 310 CMR 30.302 for at least three years from the date that the hazardous waste was last sent to treatment, use, storage, disposal, at or off the site of generation.

# 30.332: Biennial Reporting

- (1) A Large Quantity Generator, as described in 310 CMR 30.340(1), who transports or offers for transportation any hazardous waste off the site of generation shall prepare and submit a copy of a Biennial Report to the Commissioner by March 1<sup>st</sup> of each even-numbered year. The Biennial Report shall be submitted in compliance with 310 CMR 30.006 on EPA Form 8700-13A. The report shall cover activities during the previous calendar year and shall include at least the following information:
  - (a) The EPA identification number, name and address of the generator;
  - (b) The calendar year covered by the report;
  - (c) The EPA identification number, name and address of each off-site facility in the United States to which hazardous waste was sent during the year;
  - (d) The name and EPA identification number of the transporters used during the reporting year for shipments to an off-site facility within the United States;
  - (e) A description, EPA hazardous waste number, DOT hazard class, and the quantity of each hazardous waste sent to an off-site facility within the United States. This information shall be listed by the EPA identification number of each such off-site facility to which waste was sent
  - (f) A description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated.

#### 30.332: continued

- (g) A description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years going back to 1984. This comparison shall also be made to years prior to 1984 to the extent such information is available for years prior to 1984.
- (h) The information described in 310 CMR 30.104(3)(b)2.g.(iii) and 310 CMR 30.104(3)(d)2.f.(iii) on the waste involved in any treatability or research studies.
- (i) The certification signed by the generator or authorized representative in compliance with 310 CMR 30.009.
- (2) Any Large Quantity Generator who treats, stores, or disposes of hazardous waste at the site of generation shall submit a Biennial Report covering those wastes in compliance with the provisions of 310 CMR 30.544.
- (3) Reporting for exports of hazardous waste is not required on the Biennial Report form. A separate annual report requirement is set forth at 40 CFR 262.56, as adopted at 310 CMR 30.361.
- (4) Reporting for waste managed in a wastewater treatment unit in compliance with 310 CMR 30.605 is not required on the Biennial Report form.
- (5) Reporting for all Class A and state-only regulated Class B and Class C regulated recyclable materials, managed in compliance with 310 CMR 30.200, is not required on the Biennial Report form. Reporting for all federally regulated Class B and Class C regulated recyclable materials, managed in compliance with 310 CMR 30.200, is required on the Biennial Report form.

## 30.333: Exception Reporting

- (1) If a generator does not receive a copy of the manifest with the handwritten signature of the owner or operator of the designated facility within 35 days of the date the hazardous waste was accepted by the initial transporter, the generator shall contact the transporter or the owner or operator of the designated facility, or both if necessary, to determine the status of the hazardous waste.
- (2) If a generator does not receive a copy of the manifest with the handwritten signature of the owner or operator of the designated facility within 45 days of the date the hazardous waste was accepted by the initial transporter, the generator shall submit an Exception Report to the Department. If the designated facility is located outside of Massachusetts, the generator shall also submit an Exception Report to the State in which the designated facility is located. The Exception Report shall include the following:
  - (a) A legible copy of the manifest for which the generator does not have confirmation of delivery; and
  - (b) A cover letter signed by the generator or an authorized representative of the generator explaining the efforts taken to locate the hazardous waste and the results of those efforts.

## 30.334: Additional Reporting

- (1) The Department may require generators to furnish additional reports concerning the quantities and disposition of wastes identified or otherwise described in 310 CMR 30.120 through 30.125 and 30.130 through 30.136.
- (2) <u>Duty to Provide Information</u>. Any generator shall provide the Department, within a reasonable time, any information which the Department may request and which is deemed by the Department to be relevant in determining whether the generator is in compliance with 310 CMR 30.000 as applicable. All reports providing such requested information shall be signed and submitted to the Department in compliance with 310 CMR 30.006 and 310 CMR 30.009.

## 30.340: Large Quantity Generators

(1) A generator who is not a Small Quantity Generator pursuant to 310 CMR 30.351 or a Very Small Quantity Generator pursuant to 310 CMR 30.353 is a Large Quantity Generator.

- (2) A Large Quantity Generator shall comply with the requirements set forth or referred to in 310 CMR 30.340 through 30.343, and with all other applicable requirements of 310 CMR 30.000, including the land disposal restrictions set forth in 310 CMR 30.750.
- (3) A Large Quantity Generator may manage its regulated recyclable materials in compliance with 310 CMR 30.200 and manage its universal wastes in compliance with 310 CMR 30.1000.
- (4) A Large Quantity Generator may accumulate hazardous waste at the site of generation for 90 days or less without a storage license from the Department and without obtaining interim status provided that the following requirements are complied with:
  - (a) The waste shall be accumulated in compliance with the general accumulation standards of 310 CMR 30.341.
  - (b) The waste shall be accumulated in containers or tanks or both.
    - 1. Waste placed in containers shall be managed in compliance with 310 CMR 30.342.
    - 2. Waste placed in tanks shall be managed in compliance with 310 CMR 30.343.
- (5) A Large Quantity Generator may accumulate wastewater treatment sludges from electroplating operations identified in 310 CMR 30.133 as EPA Hazardous Waste No. F006 at the site of generation for 180 days or less without a storage license and without obtaining interim status provided:
  - (a) The F006 waste is accumulated in containers or tanks or both.
    - 1. F006 waste placed in containers shall be managed in compliance with 310 CMR 30.342.
    - 2. F006 waste placed in tanks shall be managed in compliance with 310 CMR 30.343.
  - (b) The F006 waste is legitimately recycled off-site through metals recovery;
  - (c) The generator has implemented pollution prevention practices that reduce the amount of any hazardous substances, pollutants or contaminants entering the F006 waste or otherwise released to the environment prior to recycling;
  - (d) No more than 20,000 kg of F006 waste is accumulated on-site at any one time.
- (6) A generator may, for any length of time, without being licensed pursuant to 310 CMR 30.000 or having interim status, and without complying with 310 CMR 30.341 or 30.342 except as specified in 310 CMR 30.340(6), accumulate hazardous waste or waste oil in containers at or near each specific point of generation where wastes initially accumulate, provided that all of the following requirements are met:
  - (a) The wastes must be generated as a result of a process occurring at the specific point of generation where the wastes are initially accumulated.
  - (b) Each such specific point of generation where wastes initially accumulate, and each satellite accumulation container, shall be under the control of the key staff individual directly responsible for the process resulting in the generation of such wastes.
  - (c) For each specific point of generation, only one container per wastestream may be used at any one time. The maximum capacity of said container shall be as follows:
    - 1. 55 gallons if the hazardous waste or waste oil being accumulated is non-acutely hazardous waste identified or otherwise described in 310 CMR 30.120 through 30.135; or
    - 2. one quart if the hazardous waste being accumulated is acutely hazardous waste listed or otherwise described in 310 CMR 30.136.
  - (d) Within three days of the time a generator fills a container or accumulates a quantity of hazardous waste or waste oil in excess of the applicable limit described in 310 CMR 30.340(6)(c), whichever comes first, the generator shall, with respect to that container and all the hazardous waste or waste oil accumulated therein, come into full compliance, and thereafter remain in full compliance, with 310 CMR 30.340 through 30.342. If a generator is subject to the preceding sentence, said generator shall, until it comes into full compliance with 310 CMR 30.340 through 30.342, continue to comply with 310 CMR 30.340(6).
  - (e) The generator shall at all times comply with the requirements set forth in 310 CMR 30.341(2)(a) through (c), as well as 30.342(1)(a) through (d)1. and (e)1., and 30.688(4).
- (7) A generator may operate a wastewater treatment unit in compliance with the requirements set forth or referred to in 310 CMR 30.605.

#### 30.340: continued

- (8) A large quantity generator may conduct elementary neutralization of corrosive hazardous wastes at the site of generation in an elementary neutralization unit in compliance with 310 CMR 30.1103, without a license to treat hazardous waste, but shall comply with all applicable provisions of 310 CMR 30.0000 while such waste remains hazardous.
- (9) A generator who sends a shipment of hazardous waste to a designated facility with the understanding that the designated facility can accept and manage the waste and later receives that shipment back as a rejected load or residue in accordance with the manifest discrepancy provisions of 310 CMR 30.533 or 310 CMR 30.099(6)(a) may accumulate the returned waste on-site in accordance with paragraphs 310 CMR 30.341, 30.351 or 30.353, depending on the amount of hazardous waste on-site in that calendar month. Upon receipt of the returned shipment, the generator shall:
  - (a) Sign Item 18c of the manifest, if the transporter returned the shipment using the original manifest; or
  - (b) Sign Item 20 of the manifest, if the transporter returned the shipment using a new manifest.

## 30.341: General Accumulation Standards for Large Quantity Generators

- (1) A generator shall comply with the following management standards for facilities:
  - (a) 310 CMR 30.516, requiring personnel training, subject to the following exceptions, additions, and modifications:
    - 1. All references to "facility" shall be substituted with "site."
    - 2. The phrase "and the conditions of the facility's license" in 310 CMR 30.516(1)(a) (first sentence) is eliminated.
    - 3. All references to "owner and operator" shall be substituted with "generator".
    - 4. 310 CMR 30.516(1)(e) is replaced with the following: A current copy of the training plan and training records on current personnel shall be kept on-site and remain available for inspection by the Department at all times while the generator is subject to 310 CMR 30.000. Training records on former personnel shall be kept on-site and remain available for inspection by the Department for at least three years from the date such personnel last worked at the facility or until the generator is no longer subject to 310 CMR 30.000, whichever comes first.
  - (b) 310 CMR 30.521 governing the purpose, content and implementation of the contingency plan, subject to the following exceptions, additions and modifications:
    - 1. All references to owner or operator shall be substituted with "generator".
    - 2. All references to "facility" shall be substituted with "site".
    - 3. 310 CMR 30.521(1)(first sentence) is eliminated and replaced with the following: Each generator shall have a contingency plan that addresses all on-site hazardous waste management units. The contingency plan shall be kept by the generator at an accessible on-site location at all times while the generator is subject to 310 CMR 30.000.
    - 4. 310 CMR 30.521(6) is modified to read as follows: If any organization referred to in 310 CMR 30.521(5) refuses to enter into an arrangement listed therein, the generator shall document the refusal in the contingency plan.
    - 5. 310 CMR 30.521(8) is modified to read as follows: The contingency plan shall list the names, addresses, and the office and home telephone numbers of all individuals qualified to act as emergency coordinator, and this list shall be kept up-to-date. If more than one individual is listed, one shall be named as primary emergency coordinator and others shall be listed in the order in which they will assume responsibility as alternates.
    - 6. 310 CMR 30.521(10)(d) is revised to read as follows: Prevent flooding or comply with the floodproofing standard established pursuant to 310 CMR 30.341(1)(g).
  - (c) 310 CMR 30.522 governing the distribution of copies of the contingency plan is modified to read as follows: A copy of the contingency plan and all revisions to the plan shall be submitted to local police departments, local fire departments, hospitals, local boards of health, the chief executive officer of the community, state and local emergency response teams that may be called upon to provide emergency services. A copy of the contingency plan shall be kept on-site and be made available for inspection by the Department at all times while the generator is subject to 310 CMR 30.000.

- (d) 310 CMR 30.523 governing amendments of the contingency plan is modified to read as follows: The contingency plan shall be reviewed, and immediately amended, if necessary, whenever:
  - 1. The plan fails in an emergency;
  - 2. The list of emergency coordinators changes;
  - 3. The list of emergency equipment changes;
  - 4. There is any change in the operation or maintenance of any hazardous waste management unit; or
  - 5. There occurs any other circumstance which indicates the need for a change in the contingency plan.
- (e) 310 CMR 30.524 governing the standards for emergency prevention and response, subject to the following exceptions, additions, and modifications:
  - 1. 310 CMR 30.524(1) is revised to read as follows: Design and Operation of Hazardous Waste Management Units. Hazardous waste management units shall be designed and operated to prevent, and constructed and maintained to minimize, the possibility of any threat to public health, safety, or welfare, or the environment from a fire, explosion, or any other unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, surface water, or ground water.
  - 2. All references to "owner or operator" shall be substituted with "generator".
  - 3. All references to "facility" shall be substituted with "site"; "facilities" shall be substituted with "sites".
  - 4. 310 CMR 30.524(2) (first sentence) is revised to read as follows: All hazardous waste management units shall be equipped with at least the following, unless the generator determines and documents in its files that none of the hazards posed by waste handled at the site could require a particular kind of equipment specified in 310 CMR 30.341(1)(e)5.a. and b.:
  - 5. 310 CMR 30.524(4) is revised as follows:
    - a. 310 CMR 30.524(4)(a) shall read as follows: Whenever hazardous waste is being poured, mixed, spread, or otherwise handled, the generator shall ensure that all personnel involved in the operation always have immediate access to an internal alarm or emergency communications device, either directly or through visual or voice contact with another employee, unless such a device is not required pursuant to 310 CMR 30.524(2).
    - b. 310 CMR 30.524(4)(b) shall read as follows: If, at any time, only one employee is on the premises while hazardous waste management activities are taking place, the generator shall ensure that the employee always has immediate access to a device prescribed in 310 CMR 30.524(2)(b), unless such a device is not required pursuant to 310 CMR 30.524(2).
  - 6. 310 CMR 30.524(5) is revised to read as follows: Required Aisle Space. The generator shall maintain sufficient aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area within the hazardous waste management unit in an emergency, unless the generator determines and documents in its files that aisle space is not needed for any of these purposes.
  - 7. In *lieu* of 310 CMR 30.524(6), <u>Emergency Procedures</u>, a generator shall comply with the following:
    - a. Whenever there is an imminent or actual emergency, the emergency coordinator shall immediately:
      - (i) Activate internal facility alarms or communication systems, where applicable, to notify all facility personnel;
      - (ii) Notify the Bureau of Waste Prevention when there is an imminent or actual emergency which triggers the need to implement the contingency plan even if it does not result in a reportable release pursuant to 310 CMR 40.0000; and
      - (iii) Notify other appropriate State or local agencies with designated response roles if their help is needed.
    - b. Whenever there is a fire, explosion, spill or other release, the emergency coordinator shall:
      - (i) Immediately identify the character, exact source, amount, and extent of all released materials, and concurrently;

- (ii) Assess possible hazards to public health, safety, or welfare, or the environment that may result from the fire, explosion, spill or other release. This assessment shall consider both direct and indirect effects of the fire, explosion, or other release, e.g. the effects of any hazardous surface water run-off from water or chemical agents used to control fire or heat-induced explosions.
- c. If the emergency coordinator determines that there has been a fire, explosion, spill or other release, which could threaten public health, safety, welfare, or the environment, the emergency coordinator shall:
  - (i) Immediately notify appropriate officials as identified in the contingency plan if the emergency coordinator's assessment indicates that evacuation of local areas may be advisable. The coordinator shall be available to help appropriate officials decide whether local areas should be evacuated;
  - (ii) Call the Bureau of Waste Site Clean-up at the Department's Regional Office serving the location where the release or threat of release occurred when required by and within the time frames established pursuant to 310 CMR 40.0311 through 40.0317. To report a release after normal business hours, dial (617) 556-1133, (888) 304-1133 (or such other telephone number as may be designated by the Department) or follow any instructions provided on the answering message for the Regional Office; and
  - (iii) Immediately notify the National Response Center using its 24-hour toll free telephone number 800-424-8802. The generator shall provide the information required pursuant to 310 CMR 30.351(9)(i)2.a. through g.
- d. During an emergency, the emergency coordinator shall take all reasonable measures necessary to ensure that fires, explosions, runoff, and other releases do not occur, recur, or spread off the site or to other hazardous waste at the facility. These measures shall include, where applicable, stopping processes and operations, collecting and containing released waste, and removing or isolating containers.
- e. If the facility stops operations in response to a potential or actual fire, explosion, or other release,
  - (i) The emergency coordinator shall monitor for leaks, pressure buildup, gas generation, and ruptures in valves, pipes, or other equipment, wherever this is appropriate.
  - (ii) The emergency coordinator shall, immediately after an emergency, provide for the treatment, storage, or disposal of recovered waste, contaminated soil or surface water, or any other material that results from a fire, explosion, or other release at the facility. Unless the owner or operator can demonstrate pursuant to 310 CMR 30.100 that the recovered material is not hazardous waste, the owner or operator also becomes a generator of hazardous waste and shall manage it in compliance with all applicable requirements of 310 CMR 30.000.
  - (iii) The emergency coordinator shall ensure that, in the affected area(s) of the site:
    - (A) no waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and
    - (B) all emergency equipment and systems listed in the contingency plan are cleaned, recharged, reactivated, and fit for their intended use before facility operations are resumed.
  - (iv) Operations shall not be resumed at the site until the generator notifies the Department that the site is in compliance with 310 CMR 30.341(1)(e)7.e.(iii).
- f. The generator shall note the time, date, and details of any incident that requires implementing the contingency plan. This record shall be kept by the generator at a readily accessible on-site location at all times while the generator is subject to 310 CMR 30.000. If the incident resulted in a release to the environment requiring notification pursuant to 310 CMR 40.0000, notification to the Bureau of Waste Site Clean-up in compliance with 310 CMR 40.000 shall constitute notice to the Department. If the incident did not require notification pursuant to 310 CMR 40.0000, then the generator shall provide a written report within seven days to the Bureau of Waste Prevention at the Regional Office of the Department where the incident occurred which includes:
  - (i) Name, address, and telephone number of the generator;
  - (ii) Date, time and type of incident (e.g., fire explosion);

- (iii) Name and quantity of material(s) involved;
- (iv) The extent of injuries, if any;
- (v) An assessment of actual or potential hazards to public health, safety, welfare and the environment, where applicable; and
- (vi) Estimated quantity and disposition of recovered materials that resulted from the incident.
- (f) 310 CMR 30.560(1), (2), and (3), and 310 CMR 30.561, governing ignitable, reactive, or incompatible wastes.
- (g) 310 CMR 30.701(2)(a) and (b), establishing a floodproofing standard; however, these requirements shall only be applicable if a portion of the site is within the boundary of land subject to flooding from the statistical 100-year frequency storm.
- (2) Each tank or container in which hazardous waste is being accumulated shall be clearly marked and labelled throughout the period of accumulation. Marks and labels shall be clearly visible for inspection. For aboveground tanks and containers, marks and labels shall be made on the side of each tank or container. For underground tanks, marks and labels shall be made on the aboveground portion of the tanks or on a sign in close proximity to the tank. Each tank or container shall be marked and labeled with the following:
  - (a) The words "Hazardous Waste";
  - (b) The hazardous waste(s) identified in words (e.g., acetone, toluene);
  - (c) The type of hazard(s) associated with the waste(s) indicated in words (e.g., ignitable, toxic, dangerous when wet);
  - (d) The date upon which each period of accumulation begins.
- (3) All areas where wastes are accumulated shall be operated with appropriate security measures at all times to prevent the unknowing entry of persons, reduce as much as possible the unauthorized entry of persons, and prevent the entry of livestock into such areas.
- (4) All areas where wastes are accumulated shall have posted at all times a sign with the words "HAZARDOUS WASTE" in capital letters at least one inch high.
- (5) All areas where wastes are accumulated for purposes of complying with 310 CMR 30.000 generally shall be clearly marked (*e.g.*, by a clearly visible line or piece of tape on the floor, or by a gate or fence, or by a sign at the boundary of a clearly distinguishable area) so that they are clearly distinguishable at all times from all specific points of generation where wastes are initially accumulated solely for purposes of 310 CMR 30.340(6), and from all areas at the site of generation where wastes are not accumulated.
- (6) The period of accumulation begins:
  - (a) for hazardous waste subject to 310 CMR 30.340(6), on the date which is three days after the applicable limit described in 310 CMR 30.340(6)(c) is reached (*i.e.*, 55 gallons or one quart) or on the date when the container is moved into a centralized accumulation area, whichever comes first;
  - (b) for hazardous waste received from a Very Small Quantity Generator in compliance with 310 CMR 30.353(8), or hazardous waste received as a rejected load or residue from a designated facility in compliance with 310 CMR 30.340(9), on the date the waste was received; and
  - (c) for all other hazardous wastes, on the date the waste first becomes subject to 310 CMR 30.140(1).

If the applicable date described in the preceding sentence is not marked and labeled, in compliance with 310 CMR 30.341(2), on any tank or container in which such hazardous waste is accumulated, then the period of accumulation of the hazardous waste in that tank or container shall be deemed to have commenced on the date on which that hazardous waste is originally generated or accumulated.

- (7) Before the end of the applicable 90 day accumulation period, as described in 310 CMR 30.340(4), or the 180 day accumulation period, as described in 310 CMR 30.340(5), the waste shall be either:
  - (a) Transported off-site to a facility, or person that meets the criteria of 310 CMR 30.305; or

- (b) Transferred to an on-site facility that meets the criteria of 310 CMR 30.305(1)(a)1., 2. or 3., 30.305(4) or 310 CMR 30.305(5).
- (8) A Large Quantity Generator who accumulates hazardous waste at the site of generation in excess of the 90 day accumulation period, as described in 310 CMR 30.340(4), or the 180 day accumulation period, as described in 310 CMR 30.340(5), is an operator of a storage facility and shall comply with the requirements of 310 CMR 30.500 through 30.900, or if eligible, the interim status provisions of 310 CMR 30.099.

# 30.342: On-site Accumulation by Large Quantity Generators in Containers

- (1) Throughout the period of accumulation, the generator shall comply with the standards for the use and management of containers set forth in the following regulations subject to the exceptions, additions or modifications, if any, as noted:
  - (a) 310 CMR 30.683: Condition of Containers.
  - (b) 310 CMR 30.684: Compatibility of Waste with Containers.
  - (c) 310 CMR 30.685: Management of Containers.
  - (d) 310 CMR 30.686: Inspections.
    - 1. In addition to the requirements of 310 CMR 30.686, a generator shall remedy all malfunctions, deteriorations, operator errors, and discharges which any inspection reveals.
    - 2. A generator shall record every inspection in an inspection log or summary.
    - 3. A generator shall keep the records of each inspection at the site of generation for at least three years from the date of inspection or until final closure pursuant to 310 CMR 30.342(1)(g), whichever period is longer. These records shall be furnished to the Department upon request. At a minimum, these records shall include the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions.
  - (e) 310 CMR 30.687: Containment; except that a generator shall comply with the following in *lieu* of 310 CMR 30.687(1) and (2):
    - 1. Underlying all containers shall be a base which is free of cracks and gaps and is sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed.
    - 2. All outdoor containers shall be provided with a containment system that has the capacity to contain either 10% of the total possible contained volume of the containers, or 110% of the volume of the largest container, whichever is greater.
    - 3. A generator shall remove all accumulated spillage and/or precipitation from the containment area within 24 hours or in as timely a manner as possible.
  - (f) 310 CMR 30.688: Special Requirements for Ignitable, Reactive and Incompatible Hazardous Wastes, and Hazardous Wastes That Are Polyhalogenated Aromatic Hydrocarbons, and
  - (g) 310 CMR 30.689: Closure.

## 30.343: On-site Accumulation by Large Quantity Generators in Tanks

- (1) Throughout the period of accumulation, the generator shall comply with the standards for storage and treatment in tanks set forth in the following regulations subject to the exceptions, additions or modifications, if any, as noted:
  - (a) 310 CMR 30.691: Applicability.
  - (b) 310 CMR 30.692(1) through (4): Assessment of Existing Tank System's Integrity;
  - (c) 310 CMR 30.693: Design and Installation of New Tank Systems or Components.
    - 1. 310 CMR 30.693(1) (first sentence) is replaced with the following: Generators with new tank systems or components shall obtain a written assessment, reviewed and certified by an independent, qualified, registered professional engineer, in accordance with 310 CMR 30.009, attesting that the tank system has sufficient structural integrity and is acceptable for the storing and treating of hazardous waste. The generator shall keep such assessment on file at the site of generation until final closure pursuant to 310 CMR 30.343(1)(i).
  - (d) 310 CMR 30.694: Containment and Detection of Releases.
    - 1. Notwithstanding the requirements of 310 CMR 30.694(1) and 310 CMR 30.692(5), a generator shall provide secondary containment that meets the requirements of 310 CMR 30.694 for all new and existing tank systems except as provided in 310 CMR 30.694(6).

- 2. A Large Quantity Generator shall comply with the following in *lieu* of 30.694(5):
  - a. All aboveground tanks shall have a containment system which is free of cracks and gaps and is sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed.
    - i. All indoor above ground tank systems shall have the capacity to contain 100% of the volume of the largest above ground tank;
    - ii. All outdoor aboveground tanks systems shall have the capacity to contain either 10% of the total possible contained volume of the aboveground tanks, or 110% of the volume of the largest aboveground tank, whichever is greater.
  - b. A generator shall remove all accumulated spillage and/or precipitation from the containment area within 24 hours or in as timely a manner as possible.
- (e) 310 CMR 30.695: General Operating Requirements.
- (f) 310 CMR 30.696: Inspections.
  - 1. In addition, a generator shall also record every inspection in an inspection log or summary.
  - 2. A generator shall keep the records of each inspection at the site of generation for at least three years from the date of inspection or until final closure pursuant to 310 CMR 30.343(1)(i), whichever period is longer. These records shall be furnished to the Department upon request.
  - 3. At a minimum, these records shall include the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions.
  - 4. All aboveground tanks shall be placed so that all the surface beneath each such tank can be inspected for spills and structural integrity.
- (g) 310 CMR 30.697: Response to Leaks or Spills and Disposition of Leaking Tank Systems.
- (h) 310 CMR 30.698: Special Requirements for Ignitable, Reactive, and Incompatible Hazardous Wastes, and Hazardous Wastes That Are Polyhalogenated Aromatic Hydrocarbons.
- (i) 310 CMR 30.699(1) and (2): Closure and Post-closure Care, except that:
  - 1. a generator need only comply with the following closure requirements of 310 CMR 30.580:
    - a. 310 CMR 30.582: Closure Performance Standard; and
    - b. 310 CMR 30.585: Disposal or Decontamination of Equipment.
  - 2. a generator need not comply with the requirements of 310 CMR 30.590: Post-closure and 310 CMR 30.900: Financial Responsibility.

# 30.350: Special Generator Requirements

# 30.351: Small Quantity Generators

- (1) Except as provided in 310 CMR 30.353, a generator is a Small Quantity Generator if that generator:
  - (a) Does not generate in a calendar month a total of 1,000 kilograms or more of any hazardous waste, regulated recyclable material, or combination of hazardous waste and regulated recyclable material; and
  - (b) Does not accumulate, at any one time, any hazardous waste, regulated recyclable material, or combination of hazardous waste and regulated recyclable material in quantities exceeding 6,000 kilograms; and
  - (c) Except as provided in 310 CMR 30.351(1)(e) and (g), does not generate in a calendar month one kilogram or more of acutely hazardous waste, acutely hazardous regulated recyclable material, or combination of acutely hazardous waste and acutely hazardous regulated recyclable material; and
  - (d) Except as provided in 310 CMR 30.351(1)(f) and (h), does not accumulate, at any one time, one kilogram or more of acutely hazardous waste, acutely hazardous regulated recyclable material, or combination of acutely hazardous waste and acutely hazardous regulated recyclable material; and
  - (e) Except as provided in 310 CMR 30.351(1)(g), does not generate in a calendar month ten kilograms or more of inner liners removed from containers, or of paper bags containing residues of acutely hazardous waste or acutely hazardous regulated recyclable material; and

- (f) Except as provided in 310 CMR 30.351(1)(h), does not accumulate, at any one time, a total of 10 kilograms or more of inner liners removed from containers, or of paper bags containing residues of acutely hazardous waste or acutely hazardous regulated recyclable material; and
- (g) Does not generate in a calendar month a total of 100 kilograms or more of any residue, contaminated soil, water, or other debris resulting from the clean-up of a spill, into or on any land or water, of any acutely hazardous waste or any acutely hazardous regulated recyclable material; and
- (h) Does not accumulate, at any one time, a total of 100 kilograms or more of any residue, contaminated soil, water, or other debris resulting from the clean-up of a spill, into or on any land or water, of any acutely hazardous waste or acutely hazardous regulated recyclable material
- (2) For the purpose of determining the quantities in 310 CMR 30.351(1):
  - (a) a generator shall include:
    - 1. all hazardous waste and regulated recyclable material produced on-site (*i.e.*, at the site of generation), unless excluded pursuant to 310 CMR 30.351(2)(b) or (c);
    - 2. hazardous waste received from off the site of generation including, but not limited to, hazardous waste received from Very Small Quantity Generators pursuant to 310 CMR 30.353(8), and for the purposes of complying with 310 CMR 30.351(1)(b) only;
    - 3. hazardous waste received as a rejected load or residue from a designated facility in compliance with 310 CMR 30.340(9); and
  - (b) a generator need not include:
    - 1. hazardous waste not subject to 310 CMR 30.000;
    - 2. hazardous waste that is managed upon generation in one of the following units and without first being accumulated:
      - a. a wastewater treatment unit; or
      - b. a unit that provides treatment which is an integral part of the manufacturing process;
    - 3. Class A regulated recyclable material, as defined in 310 CMR 30.212, provided such material is handled in compliance with 310 CMR 30.200;
    - 4. waste that is universal waste managed in compliance with 310 CMR 30.143(2) and 310 CMR 30.1000;
    - 5. waste oil and used oil fuels handled in compliance with 310 CMR 30.253 provided such materials are included in dual status calculations. (See 310 CMR 30.253(5)); or
    - 6. for purposes of establishing compliance with 310 CMR 30.351(1)(b), (d), (f) and (h), hazardous waste located in satellite accumulation areas in compliance with 310 CMR 30.351(4). (A generator shall, however, count all satellite accumulation area wastes towards the generation rate limitations of 310 CMR 30.351(1)(a), (c), (e) and (g). See also 310 CMR 30.351(5)(a));
    - 7. a hazardous waste that is an unused commercial chemical product (listed in 310 CMR 30.133 or 310 CMR 30.136, or exhibiting one or more of the characteristics in 310 CMR 30.120 through 30.125) that is generated solely as a result of a laboratory clean-out conducted at an eligible academic entity pursuant to 310 CMR 30.354(13). For purposes of 310 CMR 30.351(2)(b)7., the term eligible academic entity shall have the meaning as defined in 310 CMR 30.010; and
  - (c) a generator, for purposes of establishing compliance with 310 CMR 30.351(1)(a), (c), (e) and (g) only, need not include the following wastes, provided such wastes have already been counted once upon generation:
    - 1. hazardous waste which is removed from on-site accumulation;
    - 2. hazardous waste produced by on-site recycling of regulated recyclable material;
    - 3. spent material that is either a Class B or C regulated recyclable material, provided such material is generated, reclaimed, and subsequently reused at the site of generation; or
    - 4. hazardous waste received as a rejected load or residue from a designated facility in compliance with 310 CMR 30.340(9).
- (3) A Small Quantity Generator shall comply with the requirements set forth or referred to in 310 CMR 30.351, and need not comply with any other generator requirements of 310 CMR 30.300. However, a Small Quantity Generator may manage its regulated recyclable materials in compliance with 310 CMR 30.200 and manage its universal wastes in compliance with 310 CMR 30.1000.

- (4) A Small Quantity Generator may, for any length of time, without being licensed pursuant to 310 CMR 30.000 or having interim status, and without complying with 310 CMR 30.351 except as specified in 310 CMR 30.351(4), accumulate hazardous waste or waste oil in containers at or near each specific point of generation where wastes initially accumulate, provided that all of the following requirements are met:
  - (a) The wastes must be generated as a result of a process occurring at the specific point of generation where the wastes are initially accumulated.
  - (b) Each such specific point of generation where wastes initially accumulate, and each satellite accumulation container, shall be under the control of the key staff individual directly responsible for the process resulting in the generation of such wastes.
  - (c) For each specific point of generation, only one container per wastestream may be used at any one time. The maximum capacity of said container shall be as follows:
    - 1. 55 gallons if the hazardous waste or waste oil being accumulated is non-acutely hazardous waste identified or otherwise described in 310 CMR 30.120 through 30.135; or
    - 2. one quart if the hazardous waste being accumulated is acutely hazardous waste listed or otherwise described in 310 CMR 30.136.
  - (d) Within three days of the time a generator fills a container or accumulates a quantity of hazardous waste or waste oil in excess of the applicable limit described in 310 CMR 30.351(4)(c), whichever comes first, the generator shall, with respect to that container and all the hazardous waste or waste oil accumulated therein, come into full compliance, and thereafter remain in full compliance, with 310 CMR 30.351. If a generator is subject to the preceding sentence, said generator shall, until it comes into full compliance with 310 CMR 30.351, continue to comply with 310 CMR 30.351(4).
  - (e) The generator shall at all times comply with the requirements set forth in 310 CMR 30.341(2)(a) through (c), as well as 310 CMR 30.342(1)(a) through (d)1. and (e)1., and 310 CMR 30.688(4).
- (5) A Small Quantity Generator may accumulate the amounts of hazardous waste stated in 310 CMR 30.351(1) at the site of generation for up to 180 days without having to obtain a storage license from the Department and without having interim status provided that the date when the accumulation period begins shall be clearly marked and labeled, in compliance with 310 CMR 30.341(2), on every tank and container in which hazardous waste is accumulated.
  - (a) This 180-day period begins:
    - 1. for hazardous waste subject to 310 CMR 30.351(4), on the date which is three days after the applicable limit described in 310 CMR 30.351(4)(c) (*i.e.*, 55 gallons or one quart) is reached or on the date when the container is moved into a centralized accumulation area, whichever comes first;
    - 2. for hazardous waste received from a Very Small Quantity Generator in compliance with 310 CMR 30.353(8), or hazardous waste received as a rejected load or residue from a designated facility in compliance with 310 CMR 30.340(9), on the date the waste was received;
    - 3. for hazardous waste produced by a generator that no longer satisfies all of the requirements of 310 CMR 30.353(1), on the date the generator first becomes subject to 310 CMR 30.351; and
    - 4. for all other hazardous wastes, on the date the waste first becomes subject to regulation pursuant to 310 CMR 30.140(1).
  - (b) If the applicable date described in the preceding sentence is not marked and labeled, in compliance with 310 CMR 30.341(2), on any tank or container in which such hazardous waste is accumulated, then the period of accumulation of the hazardous waste in that tank or container shall be deemed to have commenced on the date on which that hazardous waste is originally generated or accumulated.
- (6) Before the end of the 180 day period of accumulation, as described in 310 CMR 30.351(5), the waste shall be either:
  - (a) Transported off-site to a facility, or person that meets the criteria of 310 CMR 30.305; or
  - (b) Transferred to an on-site facility that meets the criteria of 310 CMR 30.305(1)(a)1., 2. or 3., 310 CMR 30.305(4) or 310 CMR 30.305(5).

- (c) A Small Quantity Generator who accumulates hazardous waste in excess of the 180 day period of accumulation, as described in 310 CMR 30.351(5), is an operator of a storage facility and shall comply with the requirements in 310 CMR 30.500, 30.600, 30.700, 30.800, and 30.900 applicable to storage of hazardous waste, or if eligible, the interim status provisions of 310 CMR 30.099.
- (7) A generator who generates in any calendar month, or accumulates hazardous waste for any length of time, in amounts exceeding the amounts stated in 310 CMR 30.351(1) is a Large Quantity Generator, and shall comply with 310 CMR 30.303 and with all requirements in 310 CMR 30.000 applicable to Large Quantity Generators.
- (8) A Small Quantity Generator shall comply with the following additional requirements governing accumulation:
  - (a) 310 CMR 30.341(2) through (5) marking and labeling, security, signs, and lines. However, for purposes of complying with 310 CMR 30.341(2)(d), the date upon which each period of accumulation begins shall be determined as set forth in 310 CMR 30.351(5).
  - (b) 310 CMR 30.342 accumulation in containers. However, in *lieu* of complying with 310 CMR 30.342(1)(f), referencing the requirements of 310 CMR 30.688 for managing ignitable, reactive or incompatible wastes, a Small Quantity Generator shall comply with the following:
    - 1. Containers holding ignitable or reactive hazardous waste shall be located at least 15 meters from the property line of the site of generation, unless this is not possible or practical, in which case the generator shall locate such containers in compliance with applicable city and town ordinances and by-laws
    - 2. Incompatible hazardous wastes or materials incompatible with hazardous wastes (*see* 310 CMR 30.561 for examples) shall not be placed in the same container unless the requirement set forth in 310 CMR 30.560(3) is complied with.
    - 3. Hazardous waste shall not be placed in an unwashed container that previously held waste or material incompatible with such hazardous waste.
    - 4. A container holding a hazardous waste that is incompatible with any waste or other material stored nearby in other containers or in piles, open tanks or surface impoundments shall be separated from the other waste or other material or protected from it by means of a dike, berm, wall, or other device.
  - (c) 310 CMR 30.343 accumulation in tanks; and
  - (d) 310 CMR 30.560(1), (2), and (3), and 310 CMR 30.561 general requirements for ignitable, reactive and incompatible wastes.
- (9) A Small Quantity Generator shall comply with the following requirements governing emergency procedures, prevention, and response:
  - (a) A Small Quantity Generator shall accumulate hazardous waste only in areas that are designed and constructed to prevent, and maintained and operated to minimize the possibility of any threat to public health, safety, or welfare, or the environment, from a fire, explosion, or any other unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, surface water, or ground water.
  - (b) There shall be at all times at least one employee either on the premises or on call and available to respond to an emergency by reaching the site of generation or accumulation within a short period of time. Each such employee shall be known as the emergency coordinator. The emergency coordinator shall have the responsibility for coordinating all emergency response measures specified in 310 CMR 30.351(9)(h) and (i). Each emergency coordinator shall be thoroughly familiar with all aspects of whatever plans the generator has for responding to an emergency, all operations and activities at the site of generation, the location and characteristics of waste handled, the location of all records at the site of generation, and the layout of the site of generation. Each emergency coordinator shall have access to all areas of the site of generation. Each emergency coordinator shall have the authority to spend or use whatever is necessary to adequately respond to an emergency.
  - (c) A Small Quantity Generator shall have the following equipment on the premises, unless none of the hazards posed by hazardous waste handled on the premises could require a particular type of equipment specified in 310 CMR 30.351(9)(c)1. through 6.d.:
    - 1. An internal communications or alarm system capable of providing immediate emergency instruction, by voice or signal, to facility personnel; and

- 2. A device, immediately available at all areas where hazardous waste is generated or accumulated, such as a telephone or a hand-held two-way radio, call box, or other instrument capable of summoning emergency assistance from, and which is acceptable to, local police departments, fire departments, or Federal, State, or local emergency response teams; and
- 3. Portable fire extinguishers, fire control equipment, including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals; spill control equipment; and decontamination equipment; and
- 4. Water at adequate volume and pressure to supply water hose streams or foam producing equipment, or automatic sprinklers or water spray systems.
- 5. Clear markings identifying all exits so that everyone in the premises during an emergency can quickly find their way out of the premises during the emergency.
- 6. An up-to-date written list containing the following information, a copy of which shall be prominently posted next to every telephone at the site of generation:
  - a. The name(s) and telephone number(s) of the emergency coordinator(s).
  - b. The location(s) of the fire extinguisher(s) and spill control material(s), and, if present, the fire alarms.
  - c. The telephone number of the fire department, and, if there is a direct alarm system, instructions on how to activate it.
  - d. Evacuation routes, where applicable.
- (d) All communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, shall be tested and maintained as necessary to ensure its proper operation in time of emergency.
- (e) Whenever hazardous waste is being poured, mixed, spread, or otherwise handled, the generator shall ensure that all personnel involved in the operation always have immediate access to an internal alarm or emergency communications device, either directly or through visual or voice contact with another employee, unless such a device is not required pursuant to 310 CMR 30.351(9)(c). If hazardous waste is being poured, mixed, spread, or otherwise handled at a time when there is only one individual at the area where this activity is occurring, the generator shall ensure that this individual has immediate access to a device, such as a telephone or a hand-held two-way radio, that is capable of summoning whatever emergency assistance is necessary from other areas, unless such a device is not required pursuant to 310 CMR 30.351(9)(c).
- (f) The generator shall maintain sufficient aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless aisle space is not needed for any of these purposes.
- (g) The generator shall ensure that all employees are properly trained so that they know how to perform their duties so that hazardous waste handling practices and emergency procedures are performed properly and in compliance with all applicable requirements of 310 CMR 30.000.
- (h) The emergency coordinator or designee shall respond promptly and properly to any emergencies that arise. The applicable responses shall be as follows:
  - 1. In the event of a fire, attempt to extinguish it using a fire extinguisher or other suitable fire control equipment or call the fire department.
  - 2. In the event of a spill, contain the flow of spilled material to the extent possible, and as soon as practicable, clean up the spilled material and contaminated materials or soil.
- (i) In the event of a fire, explosion, spill or other release or threat of release of oil, hazardous waste, or hazardous material into the environment, the generator shall do the following:
  - 1. Call the Bureau of Waste Site Clean-up at the Department's Regional Office serving the location where the release or threat of release occurred when required by and within the time frames established pursuant to 310 CMR 40.0311 through 40.0317. To report a release after normal business hours, dial (617) 556-1133, (888) 304-1133 (or such other telephone number as may be designated by the Department) or follow any instructions provided on the answering message for the Regional Office.
  - 2. In addition to the notification requirements of 310 CMR 30.351(9)(i)1., when a fire, explosion, spill or other release could threaten public health, safety, welfare or the environment, the generator shall immediately notify the National Response Center at its 24-hour toll-free number (1-800-424-8802) and provide the following information:

- a. the name and telephone number of the reporter;
- b. the name, address, and U.S. EPA Identification Number of the generator;
- c. the date, time, and type of incident (e.g., spill or fire);
- d. the name and quantity of hazardous material(s) involved in the incident;
- e. the extent of injuries, if any;
- f. the estimated quantity and disposition of recovered material(s), if any; and
- g. the possible hazards to human health or the environment.
- (j) The generator shall make every reasonable attempt to make the following arrangements, as appropriate for the type of hazardous waste handled at the site of generation or accumulation and the potential need for the services of the persons or organizations referred to in 310 CMR 30.351(9)(j)1. through 4.:
  - 1. Arrangements to familiarize police departments, fire departments, local boards of health, and emergency response teams with the layout of the site, properties of hazardous waste handled at the site, hazards associated with such wastes, places where personnel at the site would normally be working, entrances to and roads inside the site, and possible evacuation routes.
  - 2. If more than one police department and/or fire department might respond to an emergency, agreements designating the specific police department and/or specific fire department which shall have primary emergency authority, and agreements with any other police department(s) and/or fire department(s) to provide support to whoever has primary emergency authority.
  - 3. Agreements with State emergency response teams, emergency response contractors, local boards of health, and equipment suppliers.
  - 4. Arrangements to familiarize local hospitals with the properties of hazardous waste handled at the site and the types of injuries or illnesses which could result from fires, explosions, or other releases at the site.
- (k) For the purposes of 310 CMR 30.351(9)(j), a signed and dated letter that is from the generator to a person set forth in 310 CMR 30.351(9)(j) and that attempts to make arrangements required pursuant to 310 CMR 30.351(9)(j) shall be deemed sufficient documentation of an attempt to make the required arrangements with that person. The generator shall keep these records for as long as the generator is at the site. Such records shall be furnished upon request of, and made available at all reasonable times for inspection by, any duly designated officer, employee, or representative of the Department or of the EPA.
- (10) A Small Quantity Generator shall comply with the following:
  - (a) 310 CMR 30.301(1) through (3) Purpose, Scope, and Applicability of Generator regulations.
  - (b) 310 CMR 30.302 Determine whether the waste is hazardous.
  - (c) 310 CMR 30.303 Requirements governing notification, identification numbers, and change of status requests.
  - (d) 310 CMR 30.304 and 30.305 Transfer of hazardous waste.
  - (e) 310 CMR 30.310 through 30.317 Manifest Requirements.
  - (f) 310 CMR 30.331(1), (2), (3)(b), and (4), 30.333, and 30.334 Recordkeeping and reporting.
  - (g) 310 CMR 30.352 and 30.361.
  - (h) 310 CMR 30.001 through 30.100, 30.605, and the land disposal restrictions set forth in 310 CMR 30.750.
  - (i) 310 CMR 30.321 through 30.324 (pre-transport requirements).
- (11) A small quantity generator may conduct elementary neutralization of corrosive hazardous wastes at the site of generation in an elementary neutralization unit in compliance with 310 CMR 30.1103 without a license to treat hazardous waste, but shall comply with all applicable provisions of 310 CMR 30.0000 while such waste remains hazardous.

## 30.352: Inclusion of Acutely Hazardous Waste

In determining whether the limits of 310 CMR 30.351(1)(a) or (b) are met, a generator shall include acutely hazardous waste and acutely hazardous regulated recyclable materials. A generator who so exceeds the limits in 310 CMR 30.351(1)(a) or (b), is a Large Quantity Generator and the limits for acutely hazardous wastes in 310 CMR 30.351(1)(c) through (h) do not apply. Very Small Quantity Generators are prohibited from generating or accumulating any acutely hazardous waste or acutely hazardous regulated recyclable materials.

## 30.353: Very Small Quantity Generators

- (1) A generator is a Very Small Quantity Generator if that generator:
  - (a) Does not generate in a calendar month a total of 100 kilograms or more of hazardous waste, regulated recyclable material, or combination of hazardous waste and regulated recyclable material; and
  - (b) Does not accumulate, at any one time, any hazardous waste, regulated recyclable material, or combination of hazardous waste and regulated recyclable material in quantities exceeding 1,000 kilograms; and
  - (c) Does not generate or accumulate any acutely hazardous waste or acutely hazardous regulated recyclable material; and
  - (d) Does not generate or accumulate any inner liners removed from containers, or of paper bags containing residues of acutely hazardous waste or acutely hazardous regulated recyclable material; and
  - (e) Does not generate or accumulate any residue, contaminated soil, water, or other debris resulting from the clean-up of a spill, into or on any land or water, of any acutely hazardous waste or acutely hazardous regulated recyclable material.
- (2) For the purpose of determining the quantities in 310 CMR 30.353(1):
  - (a) a generator shall include
    - 1. all hazardous waste and regulated recyclable material produced on-site (*i.e.*, at the site of generation), unless excluded pursuant to 310 CMR 30.353(2)(b) or (c);
    - 2. hazardous waste received from off the site of generation including, but not limited to, hazardous waste received from other Very Small Quantity Generators pursuant to 310 CMR 30.353(8); and, for the purposes of complying with 310 CMR 30.353(1)(b) only;
    - 3. hazardous waste received as a rejected load or residue from a designated facility in compliance with 310 CMR 30.340(9); and
  - (b) a generator need not include:
    - 1. hazardous waste not subject to 310 CMR 30.000;
    - 2. hazardous waste that is managed upon generation in one of the following units and without first being accumulated:
      - a. a wastewater treatment unit; or
      - b. a unit that provides treatment which is an integral part of the manufacturing process;
    - 3. Class A regulated recyclable material, as defined in 310 CMR 30.212, provided such material is handled in compliance with 310 CMR 30.200;
    - 4. waste that is universal waste managed in compliance with 310 CMR 30.143(2) and 310 CMR 30.1000; or
    - 5. waste oil and used oil fuels handled in compliance with 310 CMR 30.253 provided such materials are included in dual status calculations. (See 310 CMR 30.253(5)); or
    - 6. for purposes of establishing compliance with 310 CMR 30.353(1)(b), hazardous waste located in satellite accumulation areas in compliance with 310 CMR 30.353(6)(i). (A generator shall, however, count all satellite accumulation area wastes towards the generation rate limitations of 310 CMR 30.353(1)(a));
    - 7. a hazardous waste that is an unused commercial chemical product (listed in 310 CMR 30.133 or 310 CMR 30.136, or exhibiting one or more of the characteristics in 310 CMR 30.120 through 30.125) that is generated solely as a result of a laboratory clean-out conducted at an eligible academic entity pursuant to 310 CMR 30.354(13). For purposes of 310 CMR 30.353(2)(b)7., the term eligible academic entity shall have the meaning as defined in 310 CMR 30.010; and
  - (c) a generator, for purposes of establishing compliance with 310 CMR 30.353(1)(a) only, need not include the following wastes, provided such wastes have already been counted once upon generation:
    - 1. hazardous waste which is removed from on-site accumulation;
    - 2. hazardous waste produced by on-site treatment of hazardous waste;
    - 3. hazardous waste produced by on-site recycling of regulated recyclable material;
    - 4. spent material that is either a Class B or C regulated recyclable material, provided such material is generated, reclaimed, and subsequently reused at the site of generation; or
    - 5. hazardous waste received as a rejected load or residue from a designated facility in compliance with 310 CMR 30.340(9).

- (3) A Very Small Quantity Generator shall comply with the requirements set forth or referred to in 310 CMR 30.353, and need not comply with any other generator requirements of 310 CMR 30.300. However, a Very Small Quantity Generator may manage its regulated recyclable materials in compliance with 310 CMR 30.200 and manage its universal wastes in compliance with 310 CMR 30.1000. A person who is not in compliance with the requirements set forth or referred to in 310 CMR 30.353 shall have the status of a Small Quantity Generator, a Large Quantity Generator, or the owner or operator of a facility, as the case may be, and shall comply with all requirements in 310 CMR 30.000 applicable to the status he has at the time.
- (4) A Very Small Quantity Generator shall handle all hazardous waste generated, accumulated or treated in a manner which neither could nor does endanger public health, safety, or welfare, or the environment, and in compliance with all applicable local, State, and Federal laws and regulations.
- (5) A Very Small Quantity Generator shall register with the Department by notifying the Department in writing of its activity involving hazardous waste or regulated recyclable material. If the Department prescribes a form for such registration, the generator shall use such form when submitting such registration. Such a registration shall be signed and submitted in compliance with 310 CMR 30.006 and 30.009. The generator shall follow such procedures as may be required, requested or authorized by the Department to obtain and keep its status as a Very Small Quantity Generator. If the Very Small Quantity Generator intends to transfer custody or possession of the hazardous waste or regulated recyclable material to another person or persons, the registration shall set forth the name, address, and EPA identification number, if applicable, of each such person. If the Very Small Quantity Generator intends to itself treat or recycle the hazardous waste or regulated recyclable material, the registration shall set forth the process by which the hazardous waste or regulated recyclable material shall be treated or recycled. If the site has an EPA identification number or a Massachusetts identification number, that number shall be included in the registration. An identification number for the site is required if the Very Small Quantity Generator is using a manifest.
- (6) A Very Small Quantity Generator shall comply with the following:
  - (a) 310 CMR 30.001 through 30.040 General provisions, definitions, imminent threats and presumption of irreparable harm, and 30.100 Identification and Listing.
  - (b) 310 CMR 30.301(1) through (3) Purpose, scope, and applicability of generator regulations.
  - (c) 310 CMR 30.302 Determine whether the waste is hazardous. However, a Very Small Quantity Generator need not comply with the land disposal restrictions set forth in 310 CMR 30.750, including the use of multiple waste codes and the determination of underlying hazardous constituents. (See 310 CMR 30.302 and 30.103.)
  - (d) 310 CMR 30.303(1), (2), (3)(b) and (9) Requirements governing identification numbers and change of status requests.
  - (e) 310 CMR 30.310 through 30.315 (as applicable), as well as 310 CMR 30.331(1), (2), (3)(b), (4) and 30.333 (provided a manifest is required or otherwise used), and 310 CMR 30.334 manifesting, recordkeeping and reporting.
  - (f) 310 CMR 30.351(5)(a)3., 30.352 and 30.361.
  - (g) The container management standards at 310 CMR 30.682 through 30.684, and 30.685(1) and (2), 30.688(2) through (4), and 30.689 as well as the tank management standards at 310 CMR 30.695(3) and (5).
  - (h) 310 CMR 30.341(3) through (5) (general accumulation standards), 30.342(1)(e) (containment for accumulation in containers), and 30.343(1)(d) (containment for accumulation in tanks).
  - (i) A Very Small Quantity Generator may, for any length of time, without being licensed pursuant to 310 CMR 30.000, or having interim status, and without complying with 310 CMR 30.353(6)(g) and (h), accumulate hazardous waste or waste oil in containers at or near each specific point of generation where wastes initially accumulate, provided that all of the following requirements are met:
    - 1. The wastes must be generated as a result of a process occurring at the specific point of generation where the wastes are initially accumulated;

- 2. Each specific point of generation where wastes initially accumulate, and each satellite accumulation container, shall be under the control of the key staff individual directly responsible for the process resulting in the generation of such wastes;
- 3. For each specific point of generation, only one container per wastestream may be used at any one time. The maximum capacity of said container shall be 55 gallons;
- 4. Within three days of the time a generator fills a container, the generator shall, with respect to that container and all the hazardous waste or waste oil accumulated therein, come into full compliance, and thereafter remain in full compliance, with 310 CMR 30.353(6)(g) and (h). If a generator is subject to the preceding sentence, said generator shall, until it comes under full compliance with 310 CMR 30.353(6)(g) and (h) continue to comply with 310 CMR 30.353(6)(i).
- 5. The generator shall at all times comply with the requirements set forth in 310 CMR 30.342(1)(e)1., 30.682 through 30.685(1) and (2), and 30.688(4).
- (7) A Very Small Quantity Generator may transport hazardous waste off the site of generation without having to obtain a license to transport hazardous waste or a vehicle identification device for the vehicle in which the hazardous waste is transported, and without having to use a hazardous waste manifest, but only if all of the following requirements are met:
  - (a) The generator may not collect or transport any hazardous waste except hazardous waste generated by that generator.
  - (b) Notwithstanding 310 CMR 30.353(7)(a), a generator may collect and transport hazardous wastes from another generator provided that such transport is done in compliance with 310 CMR 30.353(7) and:
    - 1. every generator from whom waste is collected is a registered VSQG; and
    - 2. every generator has the same owner or operator as the generator who collects and transports the waste.
  - (c) the transport of the hazardous waste is not prohibited by the DOT pursuant to 49 CFR 172.101(d).
  - (d) The generator may deliver the hazardous waste only to a destination described in 310 CMR 30.353(8).
  - (e) The generator may not transport more, in the aggregate, than 200 kilograms of hazardous waste in any one vehicle at any one time. Such hazardous waste may be transported only in containers.
  - (f) The generator shall transport the hazardous waste only in containers that are
    - 1. compatible with the waste; and
    - 2. tightly sealed; and
    - 3. tightly secured to the vehicle in which they are transported; and
    - 4. clearly marked and labelled in a manner which identifies, in words, the hazardous waste(s) in the container (*e.g.*, acetone, toluene) and the hazard(s) associated with the waste (*e.g.*, ignitable, toxic, dangerous when wet); and
    - 5. clearly marked with the words "Hazardous Waste"; and
    - 6. in compliance with applicable regulations and standards of the DOT and the Massachusetts Department of Public Works, and the Massachusetts Board of Fire Prevention Regulations, 527 CMR 1.00 through 24.00.
  - (g) Hazardous wastes that are incompatible with each other shall not be transported in the same vehicle at the same time.
  - (h) At all times while hazardous waste is in the vehicle, a copy of the generator's most recent registration with the Department shall be in the vehicle at a location where the operator of the vehicle can obtain quick and easy access to it. Said registration shall be made available to Department or law enforcement personnel on request. If the generator transports hazardous wastes to an event or center pursuant to 310 CMR 30.353(8)(e), said registration shall be made available to the transporter at the event or the attendant at the center.
  - (i) In the event that a fire, explosion, spill or other release or threat of release of oil, hazardous waste, or hazardous material occurs during transport, the generator shall take all appropriate action to protect public health, safety, and welfare and the environment, and shall
    - 1. Immediately notify the local fire and police departments; and

- 2. Call the Bureau of Waste Site Clean-up at the Department's Regional Office serving the location where the release or threat of release occurred when required by and within the time frames established pursuant to 310 CMR 40.0311 through 40.0317. To report a release after normal business hours, dial (617) 556-1133, (888) 304-1133 (or such other telephone number as may be designated by the Department) or follow any instructions provided on the answering message for the Regional Office.
- 3. In addition to the notification requirements of 310 CMR 30.353(7)(i)1. and 2., when a fire, explosion, spill or other release could threaten public health, safety, welfare, or the environment, the generator shall immediately notify the National Response Center at its 24-hour toll-free number (1-800-424-8802) and provide the information required pursuant to 310 CMR 30.351(9)(i)2.a. through g.
- (j) The vehicle in which the hazardous waste is transported shall go directly to the intended destination, without any stops or detours in between except those allowed pursuant to 310 CMR 30.353(7)(b) and those reasonably and immediately necessary in response to road conditions, the driver's need for nourishment or rest, the vehicle's need for service or maintenance, or emergencies.
- (k) The generator shall comply with the requirements set forth or referred to in 310 CMR 30.353(9).
- (l) The generator shall placard the vehicle when so required by DOT pursuant to 49 CFR 172.504.
- (8) A Very Small Quantity Generator sending hazardous waste off the site of generation shall send that material only to:
  - (a) A facility or person listed or described in 310 CMR 30.305;
  - (b) A Large Quantity Generator who is in compliance with 310 CMR 30.340;
  - (c) A Small Quantity Generator who is in compliance with 310 CMR 30.351;
  - (d) A Very Small Quantity Generator who is in compliance with 310 CMR 30.353; or
  - (e) An event pursuant to 310 CMR 30.392 or a center pursuant to 310 CMR 30.393.
- (9) A Very Small Quantity Generator shall prepare shipping papers if a hazardous waste manifest does not accompany a shipment of hazardous waste. The shipping papers shall identify the generator of the hazardous waste being transported, the quantity and name of the hazardous waste being transported, and the destination to where the hazardous waste is being transported. The Very Small Quantity Generator shall present two copies of the shipping papers together with the hazardous waste being shipped to the person receiving the material. The person receiving that material shall mark the two copies of the shipping papers provided with the date the delivery was accepted. Both the person receiving the material and the Very Small Quantity Generator delivering the material shall sign both copies of the shipping papers to acknowledge acceptance of the materials described. The person receiving the material and the Very Small Quantity Generator delivering the material shall each keep one copy of the signed shipping papers in their records for at least three years after possession of the material is transferred from the Very Small Quantity Generator to the person receiving the material. Such records shall be furnished upon request of, and made available at all reasonable times for inspection by, any duly designated officer, employee, or representative of the Department or of the EPA.
- (10) A Very Small Quantity Generator may treat hazardous waste without having to obtain a license or interim status but only if all of the following requirements are met:
  - (a) The Very Small Quantity Generator shall treat only hazardous waste it generates.
  - (b) The Very Small Quantity Generator shall treat the hazardous waste only at the site of generation of that waste.
  - (c) The intended and actual result of the treatment shall be only neutralizing the waste or rendering the waste less hazardous or nonhazardous by means other than thermal treatment. All other treatment, including thermal treatment and all disposal, shall be subject to 310 CMR 30.353(12).
  - (d) The Very Small Quantity Generator shall maintain its status as a Very Small Quantity Generator in good standing at all times in compliance with 310 CMR 30.353.
  - (e) Waste oil and used oil fuel shall not be blended, mixed, commingled, or otherwise treated with any other hazardous waste identified or otherwise described in 310 CMR 30.100.

#### 30.353: continued

- (f) On and after November 15, 2019, a Very Small Quantity Generator shall not newly acquire and utilize a drum-top crusher to crush mercury-containing lamps without first obtaining a license to treat hazardous waste. One year after November 15, 2019, a Very Small Quantity Generator that acquired a drum top crusher prior to November 15, 2019, may not continue to utilize the drum top crusher to crush mercury-containing lamps without obtaining a license to treat hazardous waste.
- (11) A Very Small Quantity Generator may recycle regulated recyclable materials without having to obtain a license, interim status, or any recycling permit, but only if all of the following requirements are met:
  - (a) The Very Small Quantity Generator shall recycle only regulated recyclable material it generates.
  - (b) The Very Small Quantity Generator shall recycle the regulated recyclable material only at the site of generation of that material.
  - (c) The Very Small Quantity Generator shall comply with all applicable standards and requirements set forth in 310 CMR 30.200 governing the activity in question except the requirements for obtaining a recycling permit or a license.
  - (d) The Very Small Quantity Generator shall maintain its status as a Very Small Quantity Generator in good standing at all times in compliance with 310 CMR 30.353.
  - (e) Regulated recyclable materials, other than those described at 310 CMR 30.231(2), shall not be used in a manner constituting disposal unless managed in compliance with 310 CMR 30.353(12).
  - (f) Waste oil and used oil fuel shall not be blended, mixed, commingled, or otherwise treated with any other hazardous waste identified or otherwise described in 310 CMR 30.100.
- (12) Except as provided in 310 CMR 30.353(7), (8), (10) and (11),
  - (a) the collection, transport, storage, treatment, and disposal of hazardous waste generated by a Very Small Quantity Generator shall be in compliance with 310 CMR 30.304, 30.305, 30.400 through 30.900, and all other applicable provisions of 310 CMR 30.000; and
  - (b) the recycling of regulated recyclable materials generated by a Very Small Quantity Generator shall be in compliance with 310 CMR 30.200, and all other applicable provisions of 310 CMR 30.000.

# 30.354: Alternative Requirements for Hazardous Waste Determination and Accumulation of Unwanted Material for Laboratories Owned by Eligible Academic Entities: Academic Laboratories Rule

310 CMR 30.354 provides alternative requirements to the requirements in 310 CMR 30.340, 30.351 and 30.353 for the hazardous waste determination and accumulation of hazardous waste in laboratories owned by eligible academic entities that choose to be subject to 310 CMR 30.354. 310 CMR 30.354 is optional.

- (1) <u>Applicability</u>. The provisions of 310 CMR 30.354 apply to any laboratory, as defined in 310 CMR 30.010, where laboratory activities result in unwanted material (as defined in 310 CMR 30.010) and where such laboratory:
  - (a) submits the notice required by 310 CMR 30.354(3);
  - (b) is covered by a laboratory management plan in accordance with 310 CMR 30.354(14); and
  - (c) operates in compliance with 310 CMR 30.354.
- (2) <u>Purpose</u>. The purpose of 310 CMR 30.354 is to provide an alternative management system for wastes that are generated in college and university laboratories.
- (3) How an eligible academic entity indicates it will be subject to the requirements of 310 CMR 30.354.

- (a) An eligible academic entity shall notify the Department in writing, using the RCRA Subtitle C Site Identification Form (EPA Form 8700-12), that it is electing to be subject to the requirements of 310 CMR 30.354 for all the laboratories owned by the eligible academic entity under the same EPA Identification Number. An eligible academic entity that is a very Small Quantity Generator and does not have an EPA Identification Number must notify the Department that it is electing to be subject to the requirements of 310 CMR 30.354 for all the laboratories owned by the eligible academic entity that are on-site, as defined by 310 CMR 30.010. An eligible academic entity must submit a separate notification (Site Identification Form) for each EPA Identification Number that it is electing to be subject to the requirements of 310 CMR 30.354, and must submit the Site Identification Form to the Department before it begins operating under 310 CMR 30.354.
- (b) When submitting the Site Identification Form, the eligible academic entity shall, at a minimum, fill out the following fields on the form:
  - 1. Reason for Submittal;
  - 2. Site EPA Identification Number;
  - 3. Site Name;
  - 4. Site Location Information;
  - 5. Site Land Type;
  - 6. North American Industry Classification System (NAICS) Code(s) for the Site;
  - 7. Site Mailing Address;
  - 8. Site Contact Person;
  - 9. Operator and Legal Owner of the Site;
  - 10. Type of Regulated Waste Activity; and
  - 11. Certification.
- (c) An eligible academic entity shall keep a copy of the notification on file at the eligible academic entity for as long as its laboratories are subject to 310 CMR 30.354.
- (d) A teaching hospital that is not owned by a college or university shall keep a copy of its formal written affiliation agreement with a college or university on file at the teaching hospital with the Director of Laboratories (or person of similar title responsible for overseeing operation of the laboratories) for as long as its laboratories are subject to 310 CMR 30.354.
- (e) A nonprofit research institute that is not owned by a college or university shall keep a copy of its formal written affiliation agreement with a college or university on file at the nonprofit research institute with the Director of Laboratories (or person of similar title responsible for overseeing operation of the laboratories) for as long as its laboratories are subject to 310 CMR 30.354.
- (4) How an eligible academic entity indicates it will withdraw from the requirements of 310 CMR 30.354.
  - (a) An eligible academic entity shall notify the Department in writing, using the RCRA Subtitle C Site Identification Form (EPA Form 8700-12), that it is electing to no longer be subject to the requirements of 310 CMR 30.354 for all the laboratories owned by the eligible academic entity under the same EPA Identification Number and that it will comply with the requirements of 310 CMR 30.353, 310 CMR 30.351 and 310 CMR 30.340 for Very Small Quantity Generators, Small Quantity Generators or Large Quantity Generators, as applicable. An eligible academic entity must submit a separate notification (Site Identification Form) to the Department for each EPA Identification Number that it is withdrawing from the requirements of 310 CMR 30.354 and must submit the Site Identification Form to the Department before it begins operating under the requirements for Very Small Quantity Generators, Small Quantity Generators and Large Quantity Generators.
  - (b) When submitting the Site Identification Form, the eligible academic entity shall, at a minimum, fill out the following fields on the form:
    - 1. Reason for Submittal;
    - 2. Site EPA Identification Number;
    - 3. Site Name;
    - 4. Site Location Information
    - 5. Site Land Type;
    - 6. North American Industry Classification System (NAICS) Code(s) for the Site;
    - 7. Site Mailing Address;

- 8. Site Contact Person;
- 9. Operator and Legal Owner of the Site;
- 10. Type of Regulated Waste Activity; and
- 11. Certification.
- (c) An eligible academic entity shall keep a copy of the withdrawal notice on file at the eligible academic entity for three years from the date of the notification.
- (5) Summary of the Requirements of 310 CMR 30.354. An eligible academic entity that chooses to be subject to 310 CMR 30.354 is not required to have interim status or a RCRA Part B permit for the accumulation of unwanted material and hazardous waste in its laboratories, provided the laboratories comply with the provisions of 310 CMR 30.354 and the eligible academic entity has a Laboratory Management Plan (LMP) in accordance with 310 CMR 30.354(14) that describes how the laboratories owned by the eligible academic entity will comply with the requirements of 310 CMR 30.354.
- (6) <u>Labeling and Management Standards for Containers of Unwanted Material in the Laboratory</u>. An eligible academic entity shall manage containers of unwanted material while in the laboratory in accordance with the requirements in 310 CMR 30.354.
  - (a) Labeling. Label unwanted material as follows:
    - 1. The following information shall be affixed or attached to the container:
      - a. The words "unwanted material" or another equally effective term that is to be used consistently by the eligible academic entity and that is identified in Part I of the Laboratory Management Plan; and
      - b. Sufficient information to alert emergency responders to the contents of the container. Examples of information that would be sufficient to alert emergency responders to the contents of the container include, but are not limited to:
        - i. The name of the chemical(s);
        - ii. The type or class of chemical, such as organic solvents or halogenated organic solvents.
      - c. The hazard(s) of the chemical(s);
      - d. The date that the unwanted material first began accumulating in the container;
      - e. Information sufficient to allow a trained professional to properly identify whether an unwanted material is a hazardous waste and to assign the proper hazardous waste code(s), pursuant to 310 CMR 30.302.
    - 2. The following information may be affixed or attached to the container, but must at a minimum be associated with (*i.e.*, the container information must be recorded and accessible using an electronic spreadsheet, a bar code or some other printed inventory of containers.) the container:
      - a. The description of the chemical contents or composition of the unwanted material or, if known, the product of the chemical reaction;
      - b. Whether the unwanted material has been used or is unused; and
      - c. A description of the manner in which the chemical was produced or processed, if applicable.
  - (b) <u>Management of Containers in the Laboratory</u>. An eligible academic entity shall properly manage containers of unwanted material in the laboratory to assure safe storage of the unwanted material, to prevent leaks, spills, emissions to the air, adverse chemical reactions, and dangerous situations that may result in harm to human health or the environment. Proper container management shall include the following:
    - 1. Containers are maintained and kept in good condition, and damaged containers are replaced, over-packed, or repaired;
    - 2. Containers are compatible with their contents to avoid reactions between the contents and the container; and are made of, or lined with, material that is compatible with the unwanted material so that the container's integrity is not impaired; and
    - 3. Containers are kept closed at all times, except:
      - a. When adding, removing or bulking unwanted material;
      - b. A working container may be open until the end of the procedure or work shift, or until it is full, whichever comes first, at which time the working container must either be closed or the contents emptied into a separate container that is then closed; or

- c. When venting of a container is necessary.
  - For the proper operation of laboratory equipment, such as with in-line collection of unwanted materials from high performance liquid chromatographs;
  - ii. To prevent dangerous situations, such as build-up of extreme pressure.
- (7) Training. An eligible academic entity shall provide training to all individuals working in a laboratory at the eligible academic entity, as follows:
  - (a) Training for laboratory workers and students shall be commensurate with their duties so they understand the requirements in 310 CMR 30.354 and can implement them.
  - (b) An eligible academic entity can provide training for laboratory workers and students in a variety of ways including, but not limited to:
    - 1. Instruction by the professor or laboratory manager before or during an experiment;
    - 2. Formal classroom training;
    - 3. Electronic/written training;
    - 4. On-the-job training; or
    - 5. Written or oral exams.
  - An eligible academic entity that is a large quantity generator shall maintain documentation for the durations specified in 310 CMR 30.516(1)(e) demonstrating training for all laboratory workers that is sufficient to determine whether laboratory workers have been trained. Examples of documentation demonstrating training can include, but are not limited to, the following:
    - 1. Sign-in or attendance sheet(s) for training session(s);
    - 2. Syllabus for training session;
    - 3. Certificate of training completion; or4. Test results.
  - (d) A trained professional shall:
    - Accompany the transfer of unwanted material and hazardous waste when the unwanted material and hazardous waste is removed from the laboratory; and
    - 2. Make the hazardous waste determination, pursuant to 310 CMR 30.302, for unwanted material.
- (8) Removing Containers of Unwanted Material from the Laboratory.
  - (a) Removing containers of unwanted material on a regular schedule. An eligible academic entity shall either:
    - 1. Remove all containers of unwanted material from each laboratory on a regular interval, not to exceed six months; or
    - 2. Remove containers of unwanted material from each laboratory within six months of each container's accumulation start date.
  - (b) The eligible academic entity shall specify in Part I of its Laboratory Management Plan whether it will comply with 310 CMR 30.354(8)(a)1. or 310 CMR 30.354(8)(a)2. for the regular removal of unwanted material from its laboratories.
  - (c) The eligible academic entity shall specify in Part II of its Laboratory Management Plan how it will comply with 310 CMR 30.354(8)(a)1. or 310 CMR 30.354(8)(a)2. and develop a schedule for regular removals of unwanted material from its laboratories.
  - (d) Removing containers of unwanted material when volumes are exceeded.
    - 1. If a laboratory accumulates a total volume of unwanted material (including reactive acutely hazardous unwanted material) in excess of 55 gallons before the regularly scheduled removal, the eligible academic entity shall ensure that all containers of unwanted material in the laboratory, (including reactive acutely hazardous unwanted material):
      - a. Are marked on the label that is affixed or attached to the container with the date that 55 gallons is exceeded; and
      - b. Are removed from the laboratory within ten calendar days of the date that 55 gallons was exceeded, or at the next regularly scheduled removal, whichever comes first
    - If a laboratory accumulates more than one quart of reactive acutely hazardous unwanted material before the regularly scheduled removal, then the eligible academic entity shall ensure that all containers of reactive acutely hazardous unwanted material:

- a. Are marked on the label that is affixed or attached to the container with the date that one quart is exceeded; and
- b. Are removed from the laboratory within ten calendar days of the date that one quart was exceeded, or at the next regularly scheduled removal, whichever comes first.
- (9) Where and When to Make the Hazardous Waste Determination and Where to Send Containers of Unwanted Material upon Removal from the Laboratory. Large Quantity Generators, Small Quantity Generators and Very Small Quantity Generators an eligible academic entity shall ensure that a trained professional makes a hazardous waste determination, pursuant to 310 CMR 30.302, for unwanted material in any of the following areas:
  - (a) In the laboratory before the unwanted material is removed from the laboratory, in accordance with 310 CMR 30.354(10);
  - (b) Within four calendar days of arriving at an on-site central accumulation area, in accordance with 310 CMR 30.354(11); and
  - (c) Within four calendar days of arriving at an on-site interim status or licensed treatment, storage or disposal facility, in accordance with CMR 30.354(12).
- (10) <u>Making the Hazardous Waste Determination in the Laboratory before the Unwanted Material Is Removed from the Laboratory</u>. If an eligible academic entity makes the hazardous waste determination, pursuant to 310 CMR 30.302, for unwanted material in the laboratory, it shall comply with the following:
  - (a) A trained professional shall make the hazardous waste determination, pursuant to 310 CMR 30.302, before the unwanted material is removed from the laboratory.
  - (b) If an unwanted material is a hazardous waste, the eligible academic entity shall:
    - 1. Write the words "hazardous waste" on the container label that is affixed or attached to the container, before the hazardous waste may be removed from the laboratory; and
    - 2. Write the appropriate hazardous waste code(s) on the label that is affixed or attached to the container before the hazardous waste is transported off-site.
    - 3. Count the hazardous waste toward the eligible academic entity's generator status, pursuant to 310 CMR 30.351(2)(a) and 310 CMR 30.353(2)(a), in the calendar month that the hazardous waste determination was made.
  - (c) A trained professional shall accompany all hazardous waste that is transferred from the laboratory(ies) to an on-site central accumulation area or on-site interim status or licensed treatment, storage or disposal facility.
  - (d) When hazardous waste is removed from the laboratory: Large Quantity Generators, Small Quantity Generators and Very Small Quantity Generators shall ensure it is taken directly from the laboratory(ies) to an on-site central accumulation area, or on-site interim status or licensed treatment, storage or disposal facility, or transported off-site.
  - (e) An unwanted material that is a hazardous waste is subject to all applicable hazardous waste regulations when it is removed from the laboratory.
- (11) <u>Making the Hazardous Waste Determination at an On-site Central Accumulation Area</u>. If an eligible academic entity makes the hazardous waste determination, pursuant to 310 CMR 30.302, for unwanted material at an on-site central accumulation area, it shall comply with the following:
  - (a) A trained professional shall accompany all unwanted material that is transferred from the laboratory(ies) to an on-site central accumulation area.
  - (b) All unwanted material removed from the laboratory(ies) shall be taken directly from the laboratory(ies) to the on-site central accumulation area.
  - (c) The unwanted material becomes subject to the generator accumulation regulations of 310 CMR 30.340 through 30.343 for large quantity generators, 310 CMR 30.351 for small quantity generators or 310 CMR 30.353 for Very Small Quantity Generators as soon as it arrives in the central accumulation area, except for the "hazardous waste" labeling requirements of 310 CMR 30.682.
  - (d) A trained professional shall determine, pursuant to 310 CMR 30.302, if the unwanted material is a hazardous waste within four calendar days of the unwanted materials' arrival at the on-site central accumulation area.

- (e) If the unwanted material is a hazardous waste, the eligible academic entity shall:
  - 1. Write the words "hazardous waste" on the container label that is affixed or attached to the container, within four calendar days of arriving at the on-site central accumulation area and before the hazardous waste may be removed from the on-site central accumulation area;
  - 2. Write the appropriate hazardous waste code(s) on the container label that is on the label that is affixed or attached to the container before the hazardous waste may be treated or disposed of on-site or transported off-site;
  - 3. Count the hazardous waste toward the eligible academic entity's generator status, pursuant to 310 CMR 30.351(2)(a) and 30.353(2)(a) in the calendar month that the hazardous waste determination was made; and
  - 4. Manage the hazardous waste according to all applicable hazardous waste regulations.
- (12) <u>Making the Hazardous Waste Determination at an On-site Interim Status or Licensed Treatment, Storage or Disposal Facility</u>. If an eligible academic entity makes the hazardous waste determination, pursuant to 310 CMR 30.302, for unwanted material at an on-site interim status or licensed treatment, storage or disposal facility, it shall comply with the following:
  - (a) A trained professional shall accompany all unwanted material that is transferred from the laboratory(ies) to an on-site interim status or licensed treatment, storage or disposal facility.
  - (b) All unwanted material removed from the laboratory(ies) shall be taken directly from the laboratory(ies) to the on-site interim status or licensed treatment, storage or disposal facility.
  - (c) The unwanted material becomes subject to the terms of the eligible academic entity's hazardous waste license or interim status requirements as soon as it arrives in the on-site treatment, storage or disposal facility.
  - (d) A trained professional shall determine, pursuant to 310 CMR 30.302, if the unwanted material is a hazardous waste within four calendar days of the unwanted materials' arrival at an on-site interim status or licensed treatment, storage or disposal facility.
  - (e) If the unwanted material is a hazardous waste, the eligible academic entity shall:
    - 1. Write the words "hazardous waste" on the container label that is affixed or attached to the container within four calendar days of arriving at the on-site interim status or licensed treatment, storage or disposal facility and before the hazardous waste may be removed from the on-site interim status or licensed treatment, storage or disposal facility;
    - 2. Write the appropriate hazardous waste code(s) on the container label that is affixed or attached to the container before the hazardous waste may be treated or disposed on-site or transported off-site;
    - 3. Count the hazardous waste toward the eligible academic entity's generator status, pursuant to  $310\,\text{CMR}$  30.351(2)(a) and  $310\,\text{CMR}$  30.353(2)(a) in the calendar month that the hazardous waste determination was made; and
    - 4. Manage the hazardous waste according to all applicable hazardous waste regulations.

# (13) <u>Laboratory Clean-outs</u>.

- (a) One time per 12-month period for each laboratory, an eligible academic entity may opt to conduct a laboratory clean-out that is subject to all the applicable requirements of 310 CMR 30.354, except that:
  - 1. If the volume of unwanted material in the laboratory exceeds 55 gallons (or one quart of reactive acutely hazardous unwanted material), the eligible academic entity is not required to remove all unwanted materials from the laboratory within ten calendar days of exceeding 55 gallons (or one quart of reactive acutely hazardous unwanted material), as required by 310 CMR 30.354(8). Instead, the eligible academic entity shall remove all unwanted materials from the laboratory within 30 calendar days from the start of the laboratory clean-out; and
  - 2. For the purposes of on-site accumulation, an eligible academic entity is not required to count hazardous waste that is an unused commercial chemical product (listed in 310 CMR 30.133 or 30.136, or exhibiting one or more characteristics in 310 CMR 30.120 through 30.125) generated solely during the laboratory clean-out toward its hazardous waste generator status, pursuant to 310 CMR 30.351(2)(b) and 30.353(2)(b). An unwanted material that is generated prior to the beginning of the laboratory clean-out and is still in the laboratory at the time the laboratory clean-out commences shall be counted toward hazardous waste generator status, pursuant to 310 CMR 30.351(2)(a) and 30.353(2)(a), if it is determined to be hazardous waste; and

- 3. For the purposes of off-site management, an eligible academic entity shall count all its hazardous waste, regardless of whether the hazardous waste was counted toward generator status under 310 CMR 30.354(13)(a)2., and the hazardous waste is subject to all applicable hazardous waste regulations when it is transported off-site; and
- 4. An eligible academic entity shall document the activities of the laboratory clean-out. The documentation shall, at a minimum, identify the laboratory being cleaned out, the date the laboratory clean-out begins and ends, and the volume of hazardous waste generated during the laboratory clean-out. The eligible academic entity must maintain the records for a period of three years from the date the clean-out ends; and
- (b) For all other laboratory clean-outs conducted during the same 12-month period, an eligible academic entity is subject to all the applicable requirements of 310 CMR 30.354 including, but not limited to:
  - 1. The requirement to remove all unwanted materials from the laboratory within ten calendar days of exceeding 55 gallons (or one quart of reactive acutely hazardous unwanted material), as required by 310 CMR 30.354(8); and
  - 2. The requirement to count all hazardous waste, including unused hazardous waste, generated during the laboratory clean-out toward its hazardous waste generator status, pursuant to 310 CMR 30.351(2)(a) and 310 CMR 30.353(2)(a).
- Laboratory Management Plan. An eligible academic entity shall develop and retain a written Laboratory Management Plan, or revise an existing written plan, and make the Laboratory Management Plan available to the Department upon request. The Laboratory Management Plan is a site-specific document that describes how the eligible academic entity will manage unwanted materials in compliance with 310 CMR 30.354. An eligible academic entity may write one Laboratory Management Plan for all the laboratories owned by the eligible academic entity that have opted into 310 CMR 30.354, even if the laboratories are located at sites with different EPA Identification Numbers. The Laboratory Management Plan shall contain two parts with a total of nine elements identified in 310 CMR 30.354(14)(a) and (b). In Part I of its Laboratory Management Plan, an eligible academic entity shall describe its procedures for each of the elements listed in 310 CMR 30.354(14)(a). An eligible academic entity must implement and comply with the specific provisions that it develops to address the elements in Part I of the Laboratory Management Plan. In Part II of its Laboratory Management Plan, an eligible academic entity must describe its best management practices for each of the elements listed in paragraph 310 CMR 30.354(14)(b). The specific actions taken by an eligible academic entity to implement each element in Part II of its Laboratory Management Plan may vary from the procedures described in the eligible academic entity's Laboratory Management Plan, without constituting a violation of 310 CMR 30.354. An eligible academic entity may include additional elements and best management practices in Part II of its Laboratory Management Plan, if it chooses.
  - (a) The eligible academic entity shall implement and comply with the specific provisions of Part I of its Laboratory Management Plan. In Part I of its Laboratory Management Plan, an eligible academic entity shall:
    - 1. Describe procedures for container labeling in accordance with 310 CMR 30.354(6)(a) by:
      - a. Identifying whether the eligible academic entity will use the term "unwanted material" on the containers in the laboratory. If not, identify an equally effective term that will be used in *lieu* of "unwanted material" and consistently by the eligible academic entity. The equally effective term, if used, shall have the same meaning and is subject to the same requirements as "unwanted material"; and
      - b. Identifying the manner in which information that is associated with the container will be imparted.
    - 2. Identify whether the eligible academic entity will comply with 310 CMR 30.354(8)(a)1. or 310 CMR 30.354(8)(a)2. for regularly scheduled removals of unwanted material from the laboratory.
  - (b) In Part II of its Laboratory Management Plan, an eligible academic entity must:
    - 1. Describe its intended best practices for container labeling and management (*see* the required standards at 310 CMR 30.354(6)).
    - 2. Describe its intended best practices for providing training for laboratory workers and students commensurate with their duties (*see* the required standards at 310 CMR 30.354(7)(a) and (b)).

- 3. Describe its intended best practices for providing training to ensure safe on-site transfers of unwanted material and hazardous waste by trained professionals (see the required standards at 310 CMR 30.354(7)(d)).
- 4. Describe its intended best practices for removing unwanted material from the laboratory, including:
  - a. For regularly scheduled removals, develop a regular schedule for identifying and removing unwanted materials from its laboratories (*see* the required standards at 310 CMR 30.354(8)(a)1. and 310 CMR 30.354(8)(a)2.).
  - b. For removals when maximum volumes are exceeded:
    - i. Describe its intended best practices for removing unwanted materials from the laboratory within ten calendar days when unwanted materials have exceeded their maximum volumes (*see* the required standards at 310 CMR 30.354(8)(d)).
    - ii. Describe its intended best practices for communicating with environmental health and safety personnel that unwanted materials have exceeded their maximum volumes.
- 5. Describe its intended best practices for making hazardous waste determinations, including specifying the duties of the individuals involved in the process (*see* the required standards at 310 CMR 30.302 and 310 CMR 30.354(9) through (12)).
- 6. Describe its intended best practices for laboratory clean-outs, if the eligible academic entity plans to use the incentives for laboratory clean-outs provided in 310 CMR 30.354(13), including:
  - a. Procedures for conducting laboratory clean-outs (*see* the required standards at 310 CMR 30.354(13)(a)1. through 3.); and
  - b. Procedures for documenting laboratory clean-outs (*see* the required standards at 310 CMR 30.354(13)(a)4.).
- 7. Describe its intended best practices for emergency prevention, including:
  - a. Procedures for emergency prevention, notification, and response, appropriate to the hazards in the laboratory;
  - b. A list of chemicals that the eligible academic entity has, or is likely to have, that become more dangerous when they exceed their expiration date and/or as they degrade;
  - c. Procedures to safely dispose of chemicals that become more dangerous when they exceed their expiration date and/or as they degrade; and
  - d. Procedures for the timely characterization of unknown chemicals.
- (c) An eligible academic entity shall make its Laboratory Management Plan available to laboratory workers, students, or any others at the eligible academic entity who request it.
- (d) An eligible academic entity shall review and revise its Laboratory Management Plan, as needed.
- (15) <u>Unwanted Material That Is Not Hazardous Waste</u>. If an unwanted material does not meet the definition of hazardous waste in 310 CMR 30.010, it is no longer subject to 310 CMR 30.000, but shall be managed in compliance with any other applicable laws and regulations.
- (16) <u>Non-laboratory Hazardous Waste Generated at an Eligible Academic Entity</u>. An eligible academic entity that generates hazardous waste outside of a laboratory is not eligible to manage that hazardous waste under 310 CMR 30.354; and remains subject to:
  - (a) the generator requirements of 310 CMR 30.302 and 310 CMR 30.340(6) for large quantity generators, 310 CMR 30.351(5) for small quantity generators and 310 CMR 30.353(6)(i) for Very Small Quantity Generators (if the hazardous waste is managed in a satellite accumulation area); and
  - (b) all other applicable generator requirements of 310 CMR 30.300, with respect to that hazardous waste.
- (17) Eligible academic entities that choose not to comply with 310 CMR 30.354 with respect to their laboratories are subject to the full requirements of 310 CMR 30.000, as applicable.

## 30.361: International Shipments

(1) Any person who exports hazardous waste to a destination outside of the United States shall: (a) Comply with the requirements of 40 CFR 262, Subpart E, which are hereby incorporated by reference subject to the following additions, modifications and exceptions: All references to federal hazardous waste regulations are replaced with the corresponding state code analog as shown in Table 30.361:

#### Table 30.361

Federal Citation	State Analog
[40 CFR] Part 263	310 CMR 30.400
40 CFR 262.58	N/A
40 CFR 260.10	310 CMR 30.010
40 CFR Part 261, Subparts C & D	310 CMR 30.100
[40 CFR] 260.2	310 CMR 3.00
40 CFR 262.20 – 262.23, or 40 CFR	
Part 262, Subpart B	310 CMR 30.310
40 CFR 264.72(a)	310 CMR 30.533(1)
40 CFR 262.20(d)	310 CMR 311(5)
40 CFR 263.20(g)(4)	310 CMR 30.405(8)(d)
40 CFR 262.42	310 CMR 30.333
40 CFR 262.41	310 CMR 30.332

- (2) When importing hazardous waste from a foreign country into Massachusetts, the generator shall comply with the federally enforceable import requirements of 40 CFR 262, Subpart F, which are hereby incorporated by reference subject to the following additions, modifications and exceptions:
  - (a) 40 CFR 262.60(a) is hereby modified by substituting the reference to "the requirements of this part" with "310 CMR 30.300"; and
  - (b) 40 CFR 262.60(b) is hereby modified by substituting the reference to "262.20(a)" with "310 CMR 30.311 through 30.314".

# 30.390: Special Provisions for Accumulation of Household Hazardous Waste and/or Hazardous Waste Generated by Very Small Quantity Generators

310 CMR 30.390 through 30.399, cited collectively as 310 CMR 30.390, set forth standards and requirements to be met by sponsors that wish to accept for accumulation household hazardous waste and/or hazardous waste generated by Very Small Quantity Generators.

## 30.391: Definitions

As used in 310 CMR 30.390, the following terms shall have the following meanings:

<u>Center</u> means a permanent site established or maintained by a sponsor at which a sponsor offers to accept household hazardous waste and/or hazardous waste generated by Very Small Quantity Generators.

<u>Event</u> means an event at which a sponsor offers to accept household hazardous waste and/or hazardous waste generated by Very Small Quantity Generators for a period not to exceed 48 hours. Hazardous waste may be accumulated for the duration of the event, and for a period not to exceed 24 hours after the closing of the event for the purposes of classifying, consolidating and packing collected hazardous waste in preparation for shipment.

<u>Public Entity</u> means the Commonwealth of Massachusetts or any authority, district, municipality or political subdivision of the Commonwealth of Massachusetts.

<u>Sponsor</u> is a person that is responsible for ensuring that an event or center is and remains in compliance with 310 CMR 30.000, and that notifies the Department of an event or applies for Department approval for a center.

30.391: continued

<u>Surplus Paint</u> means leftover paint products or leftover paint related materials which may include, but not be limited to, latex-based paints, oil-based paints, stains, lacquers, varnishes, and spent or leftover turpentine, thinners and mineral spirits.

# 30.392: Events for the Accumulation of Household Hazardous Waste and/or Hazardous Waste Generated by Very Small Quantity Generators

- (1) <u>Applicability and Compliance</u>. A sponsor may conduct an event provided that the event is in compliance with the requirements set forth in 310 CMR 30.392.
- (2) <u>Duration of an Event</u>. The event's duration shall not exceed 48 hours. Hazardous waste may be accumulated for the duration of the event, and for a period not to exceed 24 hours after the closing of the event for the purposes of classifying, consolidating and packing collected hazardous waste in preparation for shipment.
- (3) <u>Site Requirements</u>. The site of the event shall meet all the following requirements:
  - (a) The site shall have a work area that is:
    - 1. located at least 50' from all containers and tanks containing ignitable materials not accepted at the event;
    - 2. sufficiently impervious to leaks and spills so that any spilled material can be readily collected and removed; and
    - 3. ventilated to ensure the adequate control of hazardous vapors, if the work area is indoors.
  - (b) The site shall have sufficient space available to allow for:
    - 1. the accumulation and packaging of hazardous waste;
    - 2. the entrance and egress of persons bringing hazardous waste to the event and of persons working for the event; and
    - 3. the entrance and preparation requirements of emergency response vehicles.
  - (c) At all times while the event is in progress, and until all hazardous wastes accepted at the event have been removed from the site of the event, the following requirements shall apply:
    - 1. Access to the event shall be restricted to those persons participating in the event.
    - 2. All drains at the site of the event shall be covered or otherwise protected from releases and threats of release of hazardous waste;
    - 3. Smoking shall be prohibited at the site of the event and "No Smoking" signs shall be posted at the site at locations where such signs shall be easily readable;
    - 4. Signs that clearly indicate the intended flow of traffic at the site shall be prominently posted at the site of the event;
    - 5. Emergency, cleanup and protective equipment, including, but not limited to, a respirator, first aid kit, eyewash fluid, broom, dustpan, shovel, and absorbent, and the emergency response plan required pursuant to 310 CMR 30.392(5) shall be located at the site in a place readily accessible in an emergency; and
    - 6. All areas where hazardous wastes are accumulated shall be operated with appropriate security measures at all times as described in 310 CMR 30.341(3);
  - (d) The use of an underground tank for the accumulation of any hazardous waste accepted at the event is prohibited.
- (4) <u>Use of Licensed Transporter</u>. The sponsor shall retain the services of a transporter licensed by the Department for the transport of the hazardous waste(s) accepted at the event.
- (5) <u>Emergency Response Plan</u>. The sponsor shall adopt and, if necessary, implement an emergency response plan which shall include at least the following:
  - (a) the arrangements specified in 310 CMR 30.351(9)(j) and (k);
  - (b) a map of the layout of the site which shall be distributed at least two business days before commencement of the event to the transporter retained for the event pursuant to 310 CMR 30.392(4) and to the organizations referred to in 310 CMR 30.351(9)(j);
  - (c) provisions for the entrance and exit of emergency vehicles at all times during the event, and for halting and/or redirecting traffic and for clearing the site in an emergency;
  - (d) provisions for cleanup and protective equipment required pursuant to 310 CMR 30.392(3)(c)5.;
  - (e) provisions for traffic control at the site of the event;
  - (f) provisions for compliance with 310 CMR 30.351(9)(c)2. and 310 CMR 30.351(9)(i).

# (6) Event Operational Requirements.

(a) Except as otherwise provided in 310 CMR 30.392(6)(b), the sponsor or his designee shall:

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- 1. comply with the requirements set forth in 310 CMR 30.061, 30.301 through 30.305, 30.310 through 30.314, 30.320 through 30.324, 30.331, 30.333, 30.334. 30.353(9), 30.360, 30.683 and 30.684;
- 2. notify in writing the appropriate DEP regional office of the date and location of the event at least one month in advance of the event, and for events with a sponsor that is a private entity, also notify the Board of Health and the Fire Department of the municipality in which the event is to take place;
- 3. refuse to accept any waste if there is reason to believe that the hazardous waste is not household hazardous waste or hazardous waste generated by a Very Small Quantity Generator, or waste that is unidentifiable, explosive or reactive, cannot be lawfully disposed of, or is specified as unacceptable in the contract between the sponsor and the transporter;
- 4. be available at all times during the event to respond to an emergency;
- 5. be familiar with the layout of the site and all emergency response plans; and
- 6. verify that the transporter has completed the packaging and labeling of the accumulated hazardous waste prior to the departure of the transporter from the site.
- (b) For events where the sponsor is a public entity (*i.e.*, a municipality), the sponsor shall retain the services of a hazardous waste transporter licensed by the Department who shall:
  - 1. comply with 310 CMR 30.392(6)(a)(1), and (3) through (5);
  - 2. provide a trained field chemist who shall remain at the site of the event for the duration of the event;
  - 3. properly, lawfully, and promptly handle and remove the hazardous waste accepted at the event;
  - 4. provide the sponsor with information on the total quantities of each type of hazardous waste manifested, and a summary of the ultimate waste disposal method or facility used for each type of hazardous waste collected;
- (c) For the purpose of complying with 310 CMR 30.310 through 30.314, and the manifest requirements cited in 310 CMR 30.392(6)(a):
  - 1. if the sponsor is a public entity, the transporter shall sign the manifest as the generator of the hazardous waste accepted at the event;
  - 2. if the sponsor is a private entity, either the sponsor or the transporter shall sign the manifest as the generator of the hazardous waste accepted at the event.
- (7) <u>Determining Hazardous Waste Status for Generators that are Sponsors</u>. A generator of hazardous waste who is also a sponsor of an event is not required to count hazardous waste received during those collection activities toward its hazardous waste generator status, provided the collected hazardous waste is managed independently (*i.e.*, packaged, accumulated, stored and disposed separately) from the generator's own hazardous waste. However, if the generator chooses to combine its own hazardous waste with hazardous waste collected at the event(s), then the hazardous waste collected at the event(s) shall be counted toward the generator's status.
- (8) For events that accept any of the wastes listed at 310 CMR 30.143(2), sponsors may manage such wastes as universal wastes under 310 CMR 30.1000 or as household hazardous wastes under 310 CMR 30.390. If wastes are managed as universal wastes, the accumulation limits of 310 CMR 30.392(2) will continue to apply in *lieu* of the time limits of 310 CMR 30.1000.

# 30.393: Centers for the Accumulation of Hazardous Waste Generated by Households and/or Very Small Quantity Generators

- (1) <u>Applicability and Compliance</u>. A sponsor may establish or maintain a center provided that the center is in compliance with the requirements set forth in 310 CMR 30.393, as specified below. All centers shall be subject to 310 CMR 30.393(1) through 30.393(4). A center that accepts waste oil shall also be subject to 310 CMR 30.393(5).
- (2) <u>Application for Department Approval</u>. Any sponsor who wishes to establish or operate a center shall, before establishing or operating the center, apply for and obtain the Department's approval.

## 30.393: continued

The approval of applications for centers that accept only waste oil and/or surplus paint, submitted pursuant to 310 CMR 30.393(3), shall be deemed granted as a "presumptive approval" unless, within 21 days of the Department's receipt of an application, the Department notifies the applicant of a deficiency or denies the application in writing. If deemed granted, the applicant may act in good faith on this approval even though the applicant does not have a written statement by the Department to that effect. For centers that accept hazardous wastes other than waste oil and surplus paint, the applicant shall apply for and receive written approval from the Department. The sponsor shall sign all applications for the Department's approval to establish or maintain a center in compliance with the requirements of 310 CMR 30.009 and 310 CMR 30.807(1). The Department may give an approval pursuant to 310 CMR 30.393 and allow that approval to remain in effect only to the extent the Department is persuaded that such action would not lead to a significant potential hazard to public health, safety, or welfare, or to the environment, or be in noncompliance with 310 CMR 30.393. In addition to any requirements set forth in 310 CMR 30.393, the Department may impose any other conditions in its approval to ensure that the activity in question does not constitute a significant potential hazard to public health, safety, or welfare or the environment.

- (3) Application Procedure for Centers. Any sponsor who wishes to establish or maintain a center shall apply for the Department's approval of that activity using a form prescribed by the Department. Application forms required by the Department may vary, depending on the nature of the hazardous waste proposed to be collected. The application shall specify all additional persons retained by the sponsor to operate or maintain the center. A copy of each application shall be submitted to the Board of Health and the Fire Department of the municipality in which the proposed center is to be located.
- (4) <u>Management Standards for Centers</u>. A sponsor or his designee shall comply with the following:
  - (a) 310 CMR 30.001 through 30.199;
  - (b) 310 CMR 30.310 through 30.331, 30.333 through 30.334, 310 CMR 30.341(3) through
  - (5), 30.342(1)(e) and 30.343(1)(d)2;
  - (c) 310 CMR 30.351(8)(a), (b)(1) through (4) and 30.351(9) through (11);
  - (d) 310 CMR 30.360;
  - (e) 310 CMR 30.560(1) through (3) and 310 CMR 30.689;
  - (f) The site requirements set forth in 310 CMR 30.392(3), except for 310 CMR 30.392(3)(c)1.;
  - (g) A center may accumulate hazardous waste for up to 180 days without having to obtain a license from the Department for such accumulation provided the requirements of 310 CMR 30.393(4) are complied with; the 180-day accumulation period does not begin until the amount accumulated at any one time equals 100 hundred or more kilograms of non-acutely hazardous waste, or any amount of acutely hazardous waste; a center that intends to or does accumulate hazardous waste for more than 180 days is an operator of a storage facility and shall comply with the requirements in 310 CMR 30.500 through 30.900 applicable to the storage of hazardous waste;
  - (h) Signs shall be clearly and prominently displayed describing the kinds of hazardous waste accepted at the center;
  - (i) An attendant, trained in sorting procedures for determination of hazard, classification for reuse and recycling and potential health and safety issues related to handling hazardous waste, shall be present at all times while the center is open to accept hazardous waste.
  - (j) A center that receives hazardous waste generated by Very Small Quantity Generators shall be subject to 310 CMR 30.353(9) and all other regulations applicable to persons who receive hazardous waste generated by Very Small Quantity Generators;
  - (k) All centers shall report to the Department by January 15<sup>th</sup> each year on the previous year's activity. The report shall be submitted on a form prescribed by the Department, and shall describe the quantities and types of hazardous waste and other materials collected during the previous calendar year;
  - (l) The sponsor shall retain the services of a transporter licensed by the Department for the transport of the types of hazardous waste accepted at the center;

#### 30.393: continued

- (m) A generator of hazardous waste who is also a center is not required to count hazardous waste received during those collection activities toward its hazardous waste generator status, provided that collected hazardous waste is managed independently (*i.e.*, packaged, accumulated, stored and disposed separately) from the generator's own hazardous waste. However, if the generator chooses to combine its own hazardous waste with hazardous waste collected at the center, then the hazardous waste collected at the center shall be counted toward the generator's status;
- (n) The center shall refuse to accept any waste if there is reason to believe that the waste is not household hazardous waste or hazardous waste generated by a Very Small Quantity Generator, or waste that is unidentifiable, explosive or reactive, cannot be lawfully disposed of, or is specified as unacceptable in the contract between the sponsor and the transporter; and
- (o) A center that accepts waste oil shall accumulate and manage such waste oil in compliance with the requirements in 310 CMR 30.253.
- (5) <u>Standards for Waste Oil Recycled in Used Oil Fuel Fired Space Heaters Located in Centers</u>. In addition to the management standards specified in 310 CMR 30.393(4), a center where waste oil is burned for energy recovery shall comply with the following:
  - (a) the space heater shall be operated in accordance with 310 CMR 30.222, as applicable;
  - (b) each batch of waste oil shall be tested using appropriate analytical methods contained in EPA's Test Methods for Evaluating Solid Waste, SW-846, (e.g. the field screening method 9077) to determine whether the waste oil contains 1,000 or more ppm of total halogens; in cases where the total halogen concentration exceeds 1,000 ppm, the waste oil is presumed to be adulterated with halogenated hazardous waste, and therefore must be managed as a hazardous waste unless proved otherwise pursuant to 310 CMR 30.393(6)(c);
  - (c) in cases where the concentration of total halogens is greater than 1,000 ppm, the sponsor may use the rebuttable presumption provision cited at 310 CMR 30.215(1)(b) to document that the waste oil does not contain halogenated constituents listed in 310 CMR 30.160 in significant concentration, and therefore can be managed as a used oil fuel;
  - (d) If the site of the waste oil collection center and the site of the waste oil fired space heater is different, the sponsor of the waste oil collection center shall be allowed to transport such waste oil to a used oil fired space heater operated by the same sponsor provided that such transport is done in compliance with 310 CMR 30.353(7)(c),(f),(g),(i) and (l).
- (6) For centers that accept any of the wastes listed at 310 CMR 30.143(2), sponsors may manage such wastes as universal wastes under 310 CMR 30.1000 or as household hazardous wastes under 310 CMR 30.390. If these wastes are managed as universal wastes, a separate area shall be provided and marked as a universal waste accumulation area.

# 30.394: Management Standards for the Collection and Transport of Hazardous Waste to and from Events and/or Centers

For the purposes of 310 CMR 30.390 only:

- (1) A licensed transporter participating in an activity authorized pursuant to 310 CMR 30.390, may collect hazardous waste from individual events for the purpose of delivering such waste to a center, may consolidate such waste at centers, and may use a shipping paper in *lieu* of a manifest for transportation of such waste between individual events or between an event and a center; but only if the following conditions are complied with:
  - (a) containers of hazardous waste shall be closed in compliance with 310 CMR 30.685(1), and labelled in compliance with 310 CMR 30.682;
  - (b) partially full containers collected from an event may be unloaded from a vehicle at a center, and consolidation of wastes from such partially full containers may occur only at a center:
  - (c) for full containers, a manifest that identifies the transporter as the generator must be initiated by the transporter upon collection at an event or center; for partially full containers a shipping paper may be used by the transporter to document shipment between any two events or between an event and a center;
  - (d) the transporter must complete collection of hazardous waste from events, for delivery to a center, within 48 hours of collection from the first event; and

## 30.394: continued

- (e) the transporter must comply with 310 CMR 30.408 with regard to all hazardous waste collected and transported on a manifest.
- (2) Any person may collect and transport household hazardous waste from households to an event, center or hazardous waste facility without the use of a vehicle licensed by the Department and without the use of a manifest or shipping paper provided that:
  - (a) the driver is sufficiently trained in the procedures and practices described in 310 CMR 30.409(1)(c), (d), (e) and 310 CMR 30.415(4) for the safe management of hazardous waste;
  - (b) the household hazardous waste is transported in compliance with 310 CMR 30.353(7)(c);
  - (c) each waste shall be shipped in an appropriate container that prevents spilling and/or mixing with incompatible wastes, and the container shall otherwise be in good condition for handling and transportation; and
  - (d) the total amount of hazardous waste transported at any one time does not exceed 200 kilograms.

## 30.400: REQUIREMENTS FOR TRANSPORTERS OF HAZARDOUS WASTE

## 30.401: Purpose and Applicability

- (1) 310 CMR 30.401 through 30.499, cited collectively as 310 CMR 30.400, prescribe requirements which apply to all persons transporting hazardous waste within or through the Commonwealth, unless specifically exempted in 310 CMR 30.000.
- (2) A transporter of hazardous waste shall also comply with the requirements of 310 CMR 30.300 if that transporter:
  - (a) Transports hazardous waste into Massachusetts from outside the United States; or
  - (b) Mixes hazardous waste of different DOT shipping descriptions by placing them into a single container.
- (3) 310 CMR 30.400 does not apply to the following:
  - (a) Transport of hazardous waste by generators within the site where it is generated;
  - (b) Transport of hazardous waste within the site of a facility licensed at that time by the Department for the treatment, storage, or disposal of hazardous waste if such transport was done by the owner or operator of the facility;
  - (c) Transport of hazardous waste within a site at which such use is licensed at that time by the Department if such transport was done by the person so licensed;
  - (d) Any air or rail transporter subject to regulation by the U.S. Department of Transportation, except that 310 CMR 30.401 and the requirements of 310 CMR 30.405, 30.406, 30.413, and 30.415 do apply to such transporters;
  - (e) Any bulk shipment water transporter who is subject to regulation by the U.S. Coast Guard, except that 310 CMR 30.401 and the requirements of 310 CMR 30.405, 30.406, 30.413, and 30.415 do apply to such transporters.
- (4) Any transporter of hazardous waste who has current and proper ICC approval as a common carrier or contract carrier shall not be required to obtain a license to transport hazardous waste through Massachusetts if:
  - (a) That transporter neither accepts hazardous waste from any location in Massachusetts nor delivers hazardous waste to any location in Massachusetts; and
  - (b) That transporter only passes through Massachusetts from a State of generation to another State for treatment, storage, use, or disposal of hazardous waste.
- (5) Transporters described in 310 CMR 30.401(4) shall comply with all applicable requirements of Federal regulations, of regulations of States in which they pick up or deliver hazardous waste, and of 310 CMR 30.401, 30.408 and 30.413 while they are in Massachusetts, and need not comply with any other requirement of 310 CMR 30.400.

## 30.401: continued

- (6) 310 CMR 30.401(2) and (7), 30.402(1), 30.404, 30.405, 30.406, 30.408, 30.412 and 30.413 shall apply, and all other provisions of 310 CMR 30.400 shall not apply, to:
  - (a) explosives which are disposed of, or whose disposal is supervised, by U.S. Army Explosive Ordinance Disposal Personnel; and
  - (b) Explosives regulated by the Department of Public Safety pursuant to M.G.L. c. 148, § 9 and regulations codified at 527 CMR 13.00 *et seq*.
- (7) Transporters of regulated recyclable materials shall transport such materials in compliance with 310 CMR 30.200 or all applicable provisions of 310 CMR 30.000 other than 310 CMR 30.200.

## 30.402: Requirements for Transporting Hazardous Waste

No person, unless exempted by 310 CMR 30.401, shall transport hazardous waste without obtaining and maintaining in effect:

- (1) An EPA identification number from the Department, pursuant to 310 CMR 30.060 through 30.064;
- (2) A valid license from the Department to transport hazardous waste;
- (3) A vehicle identification device for each vehicle used by the licensee to transport hazardous waste; and
- (4) A written certification by the Massachusetts Department of Telecommunications and Energy that the person is in compliance with M.G.L. c. 159B.
- (5) A written certification of hazardous waste transporter training in accordance with 310 CMR 30.409(2).

## 30.403: Accepting Shipment of Hazardous Waste

A transporter may accept hazardous waste only from the following:

- (1) A generator who has an EPA identification number or a valid Massachusetts identification number.
- (2) Another transporter who at that time has a valid license from the Department;
- (3) A bulk shipment water transporter; or
- (4) A rail transporter.

## 30.404: Delivery of Shipment of Hazardous Waste

- (1) A transporter shall deliver the entire quantity of hazardous waste, which that transporter has accepted from a generator or from another transporter to either:
  - (a) the designated facility listed on the manifest; or
  - (b) the alternate designated facility, if the hazardous waste cannot be delivered to the designated facility due to an emergency; or
  - (c) the next transporter designated on the manifest, if any.
- (2)(a) If the hazardous waste cannot be delivered in compliance with 310 CMR 30.404(1) and 310 CMR 30.305, because of an emergency condition, then the transporter must contact the generator for further instructions and shall revise the manifest according to the generator's instructions before resuming transport of the hazardous waste.
  - (b) If no instructions are received from the generator, the transporter shall return all the hazardous waste to the generator.

#### 30.404: continued

- (3) If hazardous waste is rejected by the designated facility while the transporter is on the facility's premises, then the transporter shall obtain the following:
  - (a) For a partial load rejection or for regulated quantities of container residues, a copy of the original manifest that includes the facility's date and signature, and the Manifest Tracking Number of the new manifest that will accompany the shipment, and a description of the partial rejection or container residue in the discrepancy block of the original manifest. The transporter must retain a copy of this manifest in accordance with 310 CMR 30.331(1), and give the remaining copies of the original manifest to the rejecting designated facility. If the transporter is forwarding the rejected part of the shipment or a regulated container residue to an alternate facility or returning it to the generator, the transporter must obtain a new manifest to accompany the shipment, and the new manifest shall include all of the information required in 310 CMR 30.533(5)(a) through (f).
  - (b) For a full load rejection that will be taken back by the transporter, a copy of the original manifest that includes the rejecting facility's signature and date attesting to the rejection, the description of the rejection in the discrepancy block of the manifest, and the name, address, phone number, and Identification Number for the alternate facility or generator to whom the shipment must be delivered. The transporter shall retain a copy of the manifest in accordance with 310 CMR 30.331(1), and give a copy of the manifest containing this information to the rejecting designated facility. If the original manifest is not used, then the transporter shall obtain a new manifest for the shipment and comply with 310 CMR 30.533(5)(a) through (f).

# 30.405: Manifest Requirements

- (1) A transporter shall not accept hazardous waste from a generator or from another transporter unless the hazardous waste is accompanied by a manifest which is signed by the generator and, if applicable, signed by the other transporter in accordance with the requirements of 310 CMR 30.405(2).
- (2) Before accepting or transporting hazardous waste, the transporter shall sign and date the manifest, thereby acknowledging acceptance of the hazardous waste from the generator or other transporter. The first transporter shall return the necessary number of signed copies to the generator before leaving the site of the generator.
- (3) A hazardous waste transporter shall not accept any hazardous waste from a generator or from another transporter if:
  - (a) the hazardous waste is not as described on the manifest, or
  - (b) if the waste is not in containers that are packaged, labelled, and marked in compliance with 310 CMR 30.320 through 30.323.
- (4) The transporter shall ensure that the manifest accompanies the hazardous waste at all times.
- (5) A transporter who delivers a hazardous waste to another transporter or to the designated facility shall:
  - (a) Obtain the date of delivery and the handwritten signature of that transporter or of the owner or operator of the facility designated on the manifest;
  - (b) Retain one copy of the manifest for three years; and
  - (c) Give the remaining copies of the manifest to the accepting transporter or designated facility.
- (6) The requirements of 310 CMR 30.405(4), (5), and (8) do not apply to the transport of hazardous waste in bulk by water if:
  - (a) The hazardous waste is delivered in bulk by water to the designated facility; and
  - (b) A shipping paper containing all the information required on the manifest, excluding only the EPA identification numbers, generator certification and signatures, accompanies the hazardous waste; and
  - (c) The person delivering the hazardous waste to the initial bulk shipment water transporter obtains the date of delivery and signature of that water transporter on the manifest and forwards the manifest to the designated facility or subsequent transporter other than a bulk shipment water transporter; and
  - (d) The delivering transporter obtains the date of delivery and handwritten signature of the owner or operator of the designated facility on either the manifest or the shipping paper; and

## 30.405: continued

- (e) A copy of the shipping paper or manifest is retained by each bulk shipment water transporter.
- (7) For shipments involving rail transportation, the requirements of 310 CMR 30.405(4), (5), and (8) do not apply and the following requirements do apply:
  - (a) When accepting hazardous waste from a non-rail transporter, the initial rail transporter shall:
    - 1. Sign and date the manifest acknowledging acceptance of the hazardous waste;
    - 2. Return a signed copy of the manifest to the non-rail transporter;
    - 3. Forward at least three copies of the manifest to either: the next non-rail transporter, if any; or the designated facility, if the shipment is delivered to that facility by rail; or the last rail transporter designated to handle the waste in the United States; and
    - 4. Retain one copy of the manifest and rail shipping paper in compliance with 310 CMR 30.406.
  - (b) Rail transporters shall ensure that a shipping paper containing all the information required on the manifest, excluding only the EPA identification numbers, generator certification, and signatures, accompanies the hazardous waste at all times. Intermediate rail transporters are not required to sign either the manifest or shipping paper.
  - (c) When delivering hazardous waste to the designated facility, a rail transporter shall:
    - 1. Obtain the date of delivery and handwritten signature of the owner or operator of the designated facility on either the manifest or the shipping paper if the manifest has not been received by the facility; and
    - 2. Retain a copy of the manifest or signed shipping paper in compliance with 310 CMR 30.406.
  - (d) When delivering hazardous waste to a non-rail transporter, a rail transporter shall:
    - 1. Obtain the date of delivery and the handwritten signature of the non-rail transporter on the manifest; and
    - 2. Retain a copy of the manifest in compliance with 310 CMR 30.406.
  - (e) Before accepting hazardous waste from a rail transporter, a non-rail transporter shall sign and date the manifest and provide a copy to the rail transporter.
- (8) Transporters who transport hazardous waste out of the United States shall:
  - (a) Sign and date the manifest in the international shipment block to indicate the date that the shipment left the United States and retain one copy in compliance with 310 CMR 30.406;
  - (b) Return to the generator a copy of the manifest with the handwritten signature of the owner or operator of the facility or transporter to whom the shipment was delivered;
  - (c) Give a copy of the manifest to a U.S. Customs official at the point of departure from the United States; and
  - (d) In the case of exports other than those subject to subpart H of 40 CFR part 262, a transporter shall not accept such waste from a primary exporter or other person if he knows the shipment does not conform to the EPA Acknowledgment of Consent; and unless, in addition to a manifest signed by the generator as provided in this section, the transporter shall also be provided with an EPA Acknowledgment of Consent which, except for shipments by rail, is attached to the manifest (or shipping paper for exports by water (bulk shipment)). For exports of hazardous waste subject to the requirements of subpart H of 40 CFR Part 262, a transporter shall not accept hazardous waste without a tracking document that includes all information required by 40 CFR 262.84.
- (9) Transporters who own and operate their own vehicles to transport waste to their own recycling facility and deliver the recycled material back to the generator who generated it shall use the manifest described in 310 CMR 30.312 and shall comply with the requirements of 310 CMR 30.314, 30.405(1) through (4), and 30.406(1).

## 30.406: Record Keeping

(1) A transporter of hazardous waste shall keep a copy of the manifest signed by the generator, by that transporter, and by the next designated transporter or the owner or operator of the designated facility, for a period of three years from the date the hazardous waste was accepted by the initial transporter.

#### 30.406: continued

- (2) For shipments delivered to the designated facility by water in bulk shipment, each bulk shipment water transporter shall keep a copy of the shipping paper containing all the information required for a period of three years from the date the hazardous waste was accepted by the initial transporter.
- (3) For shipments of hazardous waste by rail within the United States:
  - (a) The initial rail transporter shall keep a copy of the manifest and shipping paper containing all the information required for a period of three years from the date the hazardous waste was accepted by the initial transporter; and
  - (b) The final rail transporter shall keep a copy of the manifest, or the shipping paper in *lieu* of the manifest, for a period of three years from the date the hazardous waste was accepted by the initial transporter.
- (4) The periods prescribed in 310 CMR 30.406 for keeping records shall be extended automatically for the duration of any unresolved enforcement action regarding the activity in question, or as ordered by the Department.

## 30.407: Reporting

- (1) All transporters licensed by the Department pursuant to 310 CMR 30.000 shall submit monthly operating reports to the Department no later than the last day of the following month. Such reports shall be on a machine readable file in a format prescribed by the Department and shall include, but not be limited to, for each shipment of hazardous waste, the following information:
  - (a) Generator EPA identification number, name, generator city, generator state, generator zip code, and site address:
  - (b) Manifest tracking number;
  - (c) Transporter(s) EPA identification number, transporter(s) state identification number;
  - (d) Designated facility EPA identification number;
  - (e) Number of containers, type of containers, total quantity, units, waste number, and handling code, for each waste stream;
  - (f) Generator certification date, Transporter(s) signature date, continuing transporter(s) signature date(s) as applicable, and designated facility signature date.
  - (g) Special handling instructions; and
  - (h) Discrepancy indication.
- (2) Wastes in transit at the end of the reporting period shall be reported in the monthly report for the month in which they were collected by the reporting transporter.
- (3) If hazardous waste is transported by a transporter licensed at that time by the Department from a generator to a facility which is licensed at that time by the Department and which is on the site where that hazardous waste was generated, and if that transporter, generator, and facility owner or operator are the same person, that hazardous waste need not be included in the monthly reports of that transporter.
- (4) Transporters who handle no hazardous wastes in a particular month shall submit a monthly report stating that fact to the Department no later than the last day of the following month.

## 30.408: Hazardous Wastes in Transit

- (1) A hazardous waste transporter shall expeditiously transport all shipments of hazardous waste directly from the generator to the facility designated on the manifest, except that the provisions of 310 CMR 30.408(2) shall apply if:
  - (a) there is a delay in the acceptance of the hazardous waste by the designated facility; or
  - (b) there are weather delays or vehicle breakdowns; or
  - (c) the driver is ill or "out of hours" pursuant to 49 CFR 395.3; or
  - (d) the shipment originated from a prescheduled sequence of combined less-than-truckload pickups from individual generators; or
  - (e) the hazardous wastes being shipped originated from water-contaminated tanks; or

## 30.408: continued

- (f) the hazardous waste was generated pursuant to an emergency response pursuant to M.G.L. c. 21E.
- (2) In the event of the occurrence of one or more of the conditions listed in 310 CMR 30.408(1)(a) through (f), the shipment of hazardous waste shall be held by the transporter in the transporter's vehicle in the original container(s) or tank(s) either in a licensed hazardous waste facility or in a transportation-related area. The hazardous waste may be held without being subject to the storage requirements of 310 CMR 30.000, for a period of up to five days, not including weekends or state holidays, provided that the containers are in compliance with the requirements set forth in 310 CMR 30.321 through 30.324. While hazardous waste is being held, the transporter's vehicle shall remain operational at all times so that the vehicle, (including any trailer) can be immediately moved. Parking of the vehicle shall be in compliance with 49 CFR § 397.7.
- (3) A transporter who intends to or does hold a shipment of hazardous waste at any location for a period longer than 48 hours shall immediately notify the local fire chief.
- (4) Notwithstanding the provisions of 310 CMR 30.408(2), a transporter may hold hazardous waste at or near a school or in a residentially zoned area if work is being conducted at such location or for the purpose of an emergency response pursuant to M.G.L. c. 21E.
- (5) The transporter shall not unload any hazardous waste from the vehicle between the site of generation and the facility designated on the manifest except in the following circumstances:
  - (a) a vehicle breakdown requires the transfer of the hazardous waste to another authorized vehicle for the purpose of continuing transportation; or
  - (b) hazardous waste is unloaded from the vehicle and is transferred directly to another authorized vehicle at a facility which has a condition in its license that allows such transfers for the particular wastes being transported.

# 30.409: Instruction and Training

- (1) All hazardous waste handlers and their employees who may handle hazardous waste or accompany vehicle drivers during handling or transportation of hazardous waste, shall successfully complete a program of instruction that teaches how to perform transportation duties in a way that ensures the transporter's compliance with all DOT requirements at 49 CFR Part 172, Subpart H and Part 177. Such program shall include, but not be limited to, the following:
  - (a) Basic knowledge of DOT's labelling, packaging, placarding and shipping requirements as set forth at 49 CFR Parts 171 through 180, and all other applicable DOT regulations.
  - (b) Training in safe vehicle operations as required by 49 CFR Section 177.800 including, but not limited to, pre-trip safety inspections, use of vehicle controls and equipment, and loading and unloading of materials.
  - (c) Handling of hazardous wastes in a safe manner, and measures to protect drivers and employees from the hazards associated with the wastes.
  - (d) Emergency handling procedures in the event of a discharge of hazardous waste during transportation, including containment of hazardous waste to minimize harm to the public health, safety, welfare or the environment in compliance with 49 CFR Section 177.854 and 310 CMR 30.413.
  - (e) Emergency Response information required by 49 CFR Section 172.602.
  - (f) Evidence of written or oral testing that the instruction program has been effectively completed as required by 49 CFR Section 172.702(d).
- (2) All hazardous waste handlers and their employees who may handle hazardous waste or accompany vehicle drivers during handling or transportation of hazardous waste shall create and retain a record of current training in accordance with the DOT requirements at 49 CFR Part 172, Subpart H. The record shall include:
  - (a) The hazardous waste employee's name;
  - (b) The most recent training completion date of the hazardous waste employee's training;
  - (c) A description, copy, or the location of the training materials used to meet the requirements of 310 CMR 30.409(1);

## 30.409: continued

- (d) The name and address of the person providing the training; and
- (e) A certification that the hazardous waste employee has been trained and tested as required by 49 CFR Part 172, Subpart H and 49 CFR Section 177.800.
- (3) All hazardous waste handlers and their employees who may handle hazardous waste or accompany vehicle drivers during handling or transportation of hazardous waste shall furnish a certification to the Department at the time of license application and renewal which shall state that the applicant is subject to the DOT hazardous materials training requirements, and is currently trained and tested.
- (4) The Department may independently verify successful completion of the instruction program required above by questioning drivers, trainees, employees, or utilizing other appropriate methods.

# 30.410: Liability Insurance Requirements

- (1) All hazardous waste transporters licensed by the Department shall carry liability insurance for sudden and accidental occurrences, exclusive of legal defense costs, for claims arising out of bodily injury and property damage from the hazardous waste transport operations of the transporter in the minimum amount of one million dollars per incident, provided, however, the Department may require a greater amount if it deems it necessary to protect public health, safety, or welfare or the environment, or to ensure compliance with M.G.L. c. 21C, or 310 CMR 30.000. Such insurance policy shall carry an approved DOT endorsement (Form MCS 90-DOT) covering liability for accidents, including environmental restoration, bodily injury, and property damage, as those terms are defined in said endorsement, or shall carry a comparable endorsement approved by the Department.
- (2) The insurance coverage obtained by the transporter to fulfill the requirements of 310 CMR 30.410 shall include the provision that the insurer notify the Department at least 30 days before cancellation of the insurance for any reason or for reduction of limits below the minimum required by the transporter's license.
- (3) The licensee shall submit at the time of license application a certificate from an insurance company licensed to do business in the Commonwealth certifying that the policy of liability is in force in the required amount covering the licensee's hazardous waste transportation activities. The certificate shall provide for bodily injury and property damage protection including the required endorsement for environmental restoration.
- (4) The insurance policy shall be maintained in full force at all times during the term of the license.

# 30.411: Bonding Requirements

- (1) As used in 310 CMR 30.411, the term "bond" means:
  - (a) a surety bond or performance bond; or
  - (b) a collateral indemnity agreement in a certain sum payable to the Department in cash or in negotiable bonds of the United States of America, the Commonwealth of Massachusetts or any city, town, or body politic of the Commonwealth; or
  - (c) An irrevocable letter of credit of any bank organized or authorized to transact business in the Commonwealth or in the United States of America;
  - (d) Any other collateral deemed satisfactory to the Department, provided that all such collateral shall be deposited in an escrow account in a bank authorized to transact business in the Commonwealth, or may be held by the Department, and shall in all cases be in favor of the Department.
- (2) No new or revised license to transport hazardous wastes shall be issued by the Department until the applicant for such license has filed a bond payable to the Department on a form provided by the Department, and such bond has been approved by the Department.

## 30.411: continued

- (3) The amount of the bond shall be \$10,000 at a minimum and be in an amount sufficient to assure that the licensee shall faithfully perform all of the requirements of M.G.L. c. 21C and 310 CMR 30.000, the terms and conditions of the license and any Department order issued to the licensee.
- (4) Liability under the bond may be terminated by a surety or bank by giving 90 days written notice thereof, by registered or certified mail, to the Department and to the licensee. One year and 90 days from the date of receipt of the notice by both the Department and the licensee, as shown by the later return receipt, the surety or bank shall be discharged from all liability occurring after the expiration of 90 days from the date of receipt of the notice by both the Department and the licensee, as shown by the later return receipt, except that liability shall automatically be extended while administrative and judicial proceedings are pending involving or alleging a violation of M.G.L. c. 21C, 310 CMR 30.000, the terms and conditions of the license, or a Department order to the licensee. After the surety or bank gives such notice, and before the surety or bank's discharge from liability takes effect, or within another period set by order of the Department, the licensee shall provide evidence of replacement bond coverage; otherwise, the licensee shall be deemed to be without bond coverage in violation of 310 CMR 30.411.
- (5) The Department may require additional bond amounts at any time if the licensee changes the kind of wastes transported, or the way it transports them, or the Department determines such additional bond amounts are necessary to protect public health, safety, or welfare, or the environment or to ensure compliance with M.G.L. c. 21C, the terms and conditions of the license, or any Department order.
- (6) Collateral bonds, *i.e.* bonds described in 310 CMR 30.411(1), shall be subject to the following conditions:
  - (a) The Department may obtain possession of and keep in custody all collateral deposited by the licensee, other than funds deposited in escrow with a bank, until authorized by the Department for release;
  - (b) The Department shall value collateral at its current market value;
  - (c) Collateral shall be in the name of the licensee, not in the name of third parties, and shall be pledged and assigned to the Department free and clear of claims.
- (7) Letters of credit shall be subject to the following additional conditions:
  - (a) The institution issuing a letter of credit shall be an entity which has the authority to issue letters of credit and whose letter of credit operations are regulated and examined by the Massachusetts Commissioner of Banking, or the institution shall be a national bank.
  - (b) They shall be irrevocable. The Department may accept a term of at least three years if:

    1. The letter of credit is automatically renewable for additional terms unless the bank gives at least 90 days prior written notice to the Department of its intent to terminate the letter of credit at the end of the current term; and
    - 2. The Department has the right to draw upon the letter of credit before the end of its term and convert it into a cash collateral bond if the licensee fails to replace such letter of credit with other collateral acceptable to the Department within 30 days of the bank's notice to terminate the letter of credit.
  - (c) They shall be payable to the Department in part or in full upon demand of the Department in the case of a forfeiture or the failure of the licensee to replace the letter of credit.
  - (d) The Department shall not accept letters of credit from a bank for a licensee in excess of 10% of the bank's capital surplus account as shown on a balance sheet certified by a Certified Public Accountant.
  - (e) All letters of credit shall be subject to the Uniform Customs and Practice for Documentary Credits, International Chamber of Commerce Publication No. 290, including amendments and successor publications.
  - (f) Letters of credit shall provide that the bank shall give prompt notice to the licensee and the Department of a notice received or action filed alleging the insolvency or bankruptcy of the bank, or alleging any violations of regulatory requirements which could result in suspension or revocation of the bank's charter or license to do business.

## 30.411: continued

- (g) Upon the incapacity of a bank by reason of bankruptcy, insolvency, or suspension or revocation of its charter or license, the licensee shall be deemed to be without bond coverage in violation of 310 CMR 30.411. The licensee shall provide evidence of replacement bond coverage within 30 days of receipt of the notice described in 310 CMR 30.411(7)(f), or within another period set by order of the Department.
- (8) The Department may declare forfeit all or any amount of the bond if the Department finds that the licensee has violated any of the requirements of M.G.L. c. 21C, 310 CMR 30.000, or conditions of the license or a Department order issued to the licensee, and if the Department also finds that the licensee has failed to promptly remedy such a violation.

## 30.413: Discharges of Hazardous Wastes in Transit

- (1) A transporter shall take appropriate immediate action to protect public health, safety and welfare and the environment and shall notify the Department, local authorities, including police and fire departments, and the generator, in the event of a discharge of hazardous waste in transit.
- (2) An air, rail, highway, or bulk shipment water transporter who has discharged hazardous waste shall:
  - (a) In all cases, notify the Department; and
  - (b) Report in writing, as required by 49 CFR 171.15, to the National Response Center (800-424-8802 or 202-426-2675); and
  - (c) Give notice, if required by 49 CFR 171.16, to the Information Systems Manager, PHH-63, Pipeline and Hazardous Materials Safety Administration, Department of Transportation, Washington, D.C. 20590-0001. This report may alternatively be submitted electronically to the Information Systems Manager, DHM-63, Research and Special Programs Administration, Department of Transportation, Washington, D.C. 20590-0001 at <a href="http://hazmat.dot.gov">http://hazmat.dot.gov</a>.
- (3) A bulk shipment water transporter who has discharged hazardous waste shall give notice to the Department in all cases and shall give the same notice as required by 33 CFR 153.203 for oil and hazardous substances.
- (4) A transporter shall clean up or cause to be cleaned up any hazardous waste discharge that occurs during transportation or take such action as may be required or approved by the Department and by Federal officials, so that the hazardous waste discharge no longer presents a hazard to public health, safety, or welfare or the environment.

## 30.414: Vehicle Identification Device

(1) <u>General Provisions</u>. No transporter shall transport hazardous waste in any motor vehicle in the Commonwealth unless the Department has issued a Vehicle Identification Device (VID) to that transporter for that vehicle. Said VID issued by the Department shall have an expiration date for the current calendar year. The VID is only effective for one calendar year regardless of when issued. Said VID shall accompany each shipment of hazardous waste in the vehicle. Any VID shall be returned to the Department upon demand.

# (2) Annual Vehicle Identification Device (VID).

- (a) A transporter shall apply annually for a VID for each vehicle to be used to transport hazardous waste, by submitting a completed Department approved application form. Such application shall have attached four quarterly Massachusetts Hazardous Waste Transporter Fee Reports (as required by 801 CMR 4.00) for hazardous waste transported during the 12 months ending the March 31<sup>st</sup> prior to the application, and shall convert total annual volume or weight to pounds using the following conversion factors: one gallon equals ten pounds, one ton equals 2000 pounds, one metric ton equals 2204.6 pounds, one liter equals 2.643 pounds, one cubic yard equals 2000 pounds, one cubic meter equals 2515.9 pounds, one kilogram equals 2.205 pounds.
- (b) The transporter must receive a hazardous waste license prior to receiving any VIDs.

## 30.414: continued

- (c) An application for VID(s) may be filed any business day of the year; however, an application for the following calendar year's VID shall be received between October 1<sup>st</sup> and November 30<sup>th</sup> or as otherwise directed by the Department.
- (d) After issuance of VID(s) for use during a calendar year, additional or replacement VID(s) for the same calendar year may be requested without an additional application fee.

## 30.415: Emergency Procedures Guide

All persons who transport hazardous waste in the Commonwealth shall prepare, and follow when necessary, an Emergency Procedures guide, hereafter in 310 CMR 30.415 called the Guide. The Guide shall outline emergency procedures to be followed in the event of a discharge of hazardous waste during transport, including, at a minimum: how and to whom notification of such a discharge shall be given; how the discharge shall be initially contained; and how required equipment shall be used. No transporter shall transport hazardous waste in the Commonwealth without being in possession of the following, all of which shall accompany the driver at all times during transport and shall include, at a minimum, the following:

- (1) The Guide prepared by the transporter.
- (2) Telephone numbers of:
  - (a) The generator whose waste is being transported.
  - (b) The Department and those required by 310 CMR 30.413(2).
  - (c) The Emergency Response contact person(s) required by 49 CFR 172.604.
- (3) A copy of the most recent edition of the Emergency Response Guidebook for Hazardous Materials published by DOT.
- (4) All of the following equipment in good operating condition:
  - (a) an effective means of communication (e.g. two-way radio or mobile or cellular telephone).
  - (b) a fully equipped first-aid kit which contains provisions for eye wash.
  - (c) a flashlight.
  - (d) personnel protective equipment appropriate for the types of materials being transported (e.g. respirator, gloves, boots, protective suit).
  - (e) spill containment equipment appropriate for the types of materials being transported (e.g. shovel, plastic sheets, absorbent, pail, overpack drum).

# 30.416: Vehicle Markings

That portion of a vehicle (either tractor, trailer, or both) which is used for the transport of hazardous waste and for which the Department has issued a vehicle identification device pursuant to 310 CMR 30.402(3), shall bear the following markings:

- (1) prominent markings that appear on at least two sides of the vehicle and that identify the name of the hazardous waste transport licensee in letters all of which are not less than two inches high and all of which are in a color that contrasts with the background; and
- (2) all other markings, including placards, required by any Federal or State statute or regulation.

# 30.500: MANAGEMENT STANDARDS FOR ALL HAZARDOUS WASTE FACILITIES

## 30.501: Applicability

- (1) Except as specifically provided elsewhere in 310 CMR 30.000, 310 CMR 30.501 through 30.599, cited collectively as 310 CMR 30.500, apply to owners and operators of:
  - (a) All facilities which use, store, treat, or dispose of hazardous waste;
  - (b) All facilities which are described in 310 CMR 30.341(8);
  - (c) All facilities which recycle regulated recyclable material, or which store regulated recyclable material prior to its being recycled, unless the regulated recyclable material is stored and recycled in compliance with 310 CMR 30.200.

#### 30.501: continued

- (d) All facilities which treat or store hazardous waste before it is loaded onto an ocean vessel for incineration or disposal at sea.
- (2) The requirements of 310 CMR 30.500 do not apply to:
  - (a) The accumulation of hazardous waste by a generator at the site of generation for less than 90 days, provided that the requirements of 310 CMR 30.340 through 30.343 are met.
  - (b) A treatment process, method, or technique which is an integral part of the manufacturing process as defined in 310 CMR 30.010.
  - (c) Accumulation by a small quantity generator in compliance with 310 CMR 30.351, or by a very small quantity generator in compliance with 310 CMR 30.353, or by a generator who is in compliance with 310 CMR 30.222(4).
  - (d) Municipal or industrial waste water treatment facilities permitted pursuant to M.G.L. c. 21, § 43, as defined in 310 CMR 30.010. Hazardous waste activities at such facilities are regulated pursuant to 314 CMR 8.00: Supplemental Requirements for Hazardous Waste Management Facilities.
  - (e) Universal waste handlers, and universal waste transporters handling the wastes listed at 310 CMR 30.143(2) in compliance with 310 CMR 30.1000.
  - (f) The accumulation of a laboratory waste by a University participating in the Laboratory XL project at the site of generation for less than 120 days, provided that the requirements of 310 CMR 30.340 and 30.355 are met.
  - (g) The accumulation of a laboratory waste by a University participating in the Laboratory XL project at the site of generation for less than 210 days, provided that the requirements of 310 CMR 30.351 and 30.355 are met.
  - (h) elementary neutralization of corrosive hazardous waste at the site of generation in an elementary neutralization unit provided that the generator is in compliance with 310 CMR 30.1103.
- (3) (a) Except as provided in 310 CMR 30.500, 30.305(5) and 30.801, the requirements of 310 CMR 30.060 through 30.999 do not apply to facilities for the storage, treatment, or disposal of hazardous wastes containing PCBs in concentrations equal to or greater than 50 parts per million, provided that such facilities shall meet all of the following requirements:
  - 1. They comply with all the applicable standards set forth in 40 CFR Part 761, as in effect July 1, 2002, for the storage, treatment, or disposal, as the case may be, of PCBs.
  - 2. In the case of PCB incinerators or PCB waste landfills, they have been formally approved pursuant to 40 CFR Part 761, and such approval is in effect at the time.
  - 3. If such facilities burn or incinerate PCBs, they do so in compliance with 310 CMR 7.00: *Air Pollution Control*.
  - 4. They are not located within an Area of Critical Environmental Concern (ACEC) as designated by the Secretary of the Executive Office of Energy and Environmental Affairs or, if the facility is located outside but adjacent to or in close proximity to an ACEC, such location is protective of the outstanding resources of the ACEC as identified in the Secretary's designation. 310 CMR 30.501(3)(a)4. shall not apply to an existing facility that is otherwise in compliance with 310 CMR 30.000.
  - (b) Any facility which is subject to 310 CMR 30.501(3) and which the Department determines is not in compliance with 310 CMR 30.501(3)(a)1. or 3. shall be deemed in violation of M.G.L. c. 21C and 310 CMR 30.000 regardless of whether or not that facility is in compliance with 310 CMR 30.501(3)(a)2., regardless of that facility's compliance status with respect to 40 CFR Part 761.
  - (c) The owner or operator of a facility for the storage of PCBs pursuant to 40 CFR 761.65 shall notify the Department in compliance with the requirements, set forth in 310 CMR 30.060 through 30.064.

## 30.502: Submission and Amendment of Plans

- (1) The following plans shall be submitted in writing to the Department with the hazardous waste license application, and shall be acted on by the Department, in accordance with the requirements and procedures set forth in 310 CMR 30.800:
  - (a) The general waste analysis plan required by 310 CMR 30.513.
  - (b) The security plan required by 310 CMR 30.514.
  - (c) The inspection plan required by 310 CMR 30.515.
  - (d) The personnel training plan required by 310 CMR 30.516.
  - (e) The contingency plan and emergency procedures required by 310 CMR 30.520 through 30.523.
  - (f) The closure plan required by 310 CMR 30.583.
  - (g) The post-closure plan required by 310 CMR 30.593, if applicable.

#### 30.502: continued

- (2) Plans and all amendments to plans shall be prepared by persons knowledgeable in the field in question, provided that the provisions of M.G.L. c. 112 shall be complied with. All plans shall be subject to review and approval by the Department. The Department may establish additional and specific conditions for each facility on a case-by-case basis as the Department may deem necessary to protect public health, safety, and welfare and the environment. All plans and amendments to plans shall, upon a demonstration by the applicant to the Department and a determination by the Department that the plans meet the requirements set forth in 310 CMR 30.500, be made conditions of the license issued by the Department and shall be complied with by the owner or operator.
- (3) In meeting the provisions set forth in 310 CMR 30.500, the plans shall reflect the nature of the proposed activities, special conditions of the facility or the proposed facility and its location, and any special circumstances associated with the operation, facility, and location.
- (4) The owner or operator shall submit to the Department for the Department's approval an amendment to the plans listed in 310 CMR 30.502(1) whenever they may be affected by:
  - (a) changes in operating plans or facility design; or
  - (b) any other event that occurs during the active life or post-closure care period of the facility.
- (5) The owner or operator shall furnish to the Department on request, including, but not limited to, request by mail, a copy of each plan.
- (6) The owner or operator shall keep copies of plans as follows:
  - (a) An up-to-date copy of each plan, except the closure and post-closure plans, shall be kept at the facility at all times during the active life of the facility, during closure, and at all other times when the facility is subject to 310 CMR 30.000, except during the post-closure care period. While a site is being inspected by an officer, employee, or representative of the Department, an up-to-date copy of each such plan shall be provided, on request, to any officer, employee, or representative of the Department.
  - (b) Except as otherwise required in 310 CMR 30.502(6)(b), the owner or operator shall keep an up-to-date copy of the closure plan either at the facility or at some other place readily accessible to the owner or operator and to key staff individuals at all times when the facility is subject to 310 CMR 30.000, except during the post-closure care period. An up-to-date copy of the closure plan shall be kept at the facility at all times between the time notification of closure is first given and the time closure is certified in writing by the Department as being complete. During this period, while a site is being inspected by an officer, employee, or representative of the Department, an up-to-date copy of the closure plan shall be provided, on request, to any officer, employee, or representative of the Department.
  - (c) Except as otherwise required in 310 CMR 30.502(6)(c), the owner or operator shall keep an up-to-date copy of the post-closure plan either at the facility or at some other place readily accessible to the owner or operator and to key staff individuals at all times when the facility is subject to 310 CMR 30.000. After the time closure is certified by the Department as being complete, and throughout the post-closure care period, an up-to-date copy of the post-closure plan shall be kept by the person or office specified pursuant to 310 CMR 30.593(1)(c).

# 30.510: General Management Standards for all Facilities

# 30.511: Identification Number

Every facility owner or operator, in compliance with the requirements of 310 CMR 30.060 through 30.064, shall apply to the Department for an EPA identification number if one has not already been obtained.

## 30.512: Required Notices

- (1) The owner or operator of a facility that has arranged to receive hazardous waste, other than State-only hazardous waste, from a source outside the United States should be aware of the need to notify the Regional Administrator of EPA in writing at least four weeks in advance of the date the hazardous waste is expected to arrive at the facility pursuant to 40 CFR 264.12. The owner or operator of a facility that has arranged to receive State-only hazardous waste from a source outside the United States shall notify the Department in writing at least four weeks in advance of the date the hazardous waste is expected to arrive at the facility. Advance notice of subsequent shipments of the same type of waste from the same source is not required.
- (2) The owner or operator of a facility that receives hazardous waste from an off-site source shall inform the generator in writing prior to the first shipment that he has the appropriate license and will accept the waste the generator is shipping. The owner or operator shall keep a copy of this written notice as part of the operating record of the facility. The owner or operator shall also inform the generator, in writing, within seven days of receiving notice from the Department of any change in the facility's license status that affects the facility's authority to accept the generator's waste.

## 30.513: General Waste Analysis

## (1) Waste Analysis Requirements.

- (a) An owner or operator shall, before treating, storing, using, or disposing of any hazardous waste, obtain a detailed chemical and physical analysis of a representative sample of the waste. At a minimum this analysis shall contain all the information which needs to be known to treat, store, use, or dispose of the waste in compliance with the requirements of 310 CMR 30.500, 30.750, and with the conditions of the facility's license in effect at that time pursuant to 310 CMR 30.800.
- (b) Provided the facility complies with the minimum frequencies specified within its Waste Analysis Plan for testing its waste, contaminated soils, treatment residues, and extracts from treatment residues as established pursuant to 310 CMR 30.513(2), the analysis may include data developed by the generator pursuant to 310 CMR 30.302 and existing published or documented data on the hazardous waste or on hazardous wastes generated from processes similar to those which generate that waste.
- (c) The analysis shall be repeated as often as necessary to ensure that it is accurate and up-to-date. At a minimum, the analysis shall be repeated when the owner or operator is notified, or has reason to believe, that the process or operation generating the hazardous waste has changed; and, for facilities which receive shipments from off-site sources, when the results of the inspection required by 310 CMR 30.513(1)(d) indicate that the hazardous waste received at the facility is not as described on the accompanying manifest or shipping paper.
- (d) The owner or operator shall inspect and, if necessary, analyze each hazardous waste shipment received at the facility to determine whether it is as described on the accompanying manifest or shipping paper.

## (2) Content of Plan.

- (a) The owner or operator shall prepare a waste analysis plan which shall describe the procedures which shall be carried out to comply with 310 CMR 30.513(1)(a). At a minimum, the waste analysis plan shall specify:
  - 1. The parameters for which each hazardous waste shall be analyzed and the rationale for the selection of these parameters, *i.e.* how analysis for those parameters will provide sufficient information on the waste's properties to comply with 310 CMR 30.513(1)(a).
  - 2. The test methods which shall be used to test for these parameters.
  - 3. The sampling methods which shall be used to obtain a representative sample of the waste to be analyzed.
  - 4. The frequency with which the initial analysis of the waste shall be reviewed or repeated to ensure that the analysis is accurate and up-to-date.
  - 5. Where applicable, the methods which shall be used to meet the additional waste analysis requirements for specific waste management methods as specified in 310 CMR 30.560, 30.629, 30.750, and 310 CMR 7.08(4).
  - 6. Where applicable, the following procedures and schedule for sampling surface impoundments that are exempted from the land disposal restrictions pursuant to 310 CMR 30.750:

#### 30.513: continued

- a. the sampling of impoundment contents; and
- b. the analysis of test data; and
- c. the annual removal of residues which are not delisted pursuant to 310 CMR 30.142 or which exhibit a characteristic of a hazardous waste, and either do not meet the applicable treatment standard(s) of 40 CFR Part 268, Subpart D as incorporated by reference at 310 CMR 30.750 with modifications, or, if there are no applicable treatment standards, are otherwise prohibited from land disposal.
- (b) For facilities which receive shipments from off-site sources, the waste analysis plan shall also specify the procedures which shall be used to inspect and, if necessary, analyze each shipment of hazardous waste received at the facility to ensure that it is as described on the accompanying manifest or shipping paper. At a minimum, the plan shall describe:
  - 1. The procedures which shall be used to determine the content of each shipment of waste managed at the facility;
  - 2. The sampling method which shall be used to obtain a representative sample of the waste to be identified, if the identification method includes sampling; and
  - 3. Any waste analysis to be supplied by the generator.

## 30.514: Security

- (1) <u>Security Standards</u>. The owner or operator shall prevent the unknowing entry of persons, reduce as much as possible the possibility for the unauthorized entry of persons, and prevent the entry of livestock onto the active portion of the facility, unless the Department determines that:
  - (a) Physical contact with the waste, structures, or equipment within the active portion of the facility will not injure or endanger the health of unknowing or unauthorized persons and will not injure livestock which might enter the active portion of a facility; and
  - (b) Disturbance of the waste or equipment by the unknowing or unauthorized entry of persons or livestock onto the active portion of a facility will not result in any non-compliance with the requirements of 310 CMR 30.500.

## (2) Security Plan and Security Measures.

- (a) The owner or operator shall prepare a security plan which shall describe the procedures to be carried out to comply with 310 CMR 30.514(1).
- (b) Unless the owner or operator of the facility demonstrates, and the Department determines, that, in accordance with 310 CMR 30.514(1), the security measures specified below are not required, a facility shall have:
  - 1. A sign with the legend, "Danger Unauthorized Personnel Keep Out", posted at each entrance to all active portions of the facility, and at other locations, in sufficient numbers to be seen from any approach to all active portions. Each sign shall be legible from a distance of at least 25 feet. Existing signs with a legend other than "Danger Unauthorized Personnel Keep Out" may be used if the legend on the sign indicates that only authorized personnel are allowed to enter the active portion, and that entry onto the active portion can be dangerous; and either
  - 2. A 24-hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel) which continuously monitors and controls entry onto the active portion of the facility; or
  - 3. A barrier at least eight feet in height (such as a fence in good repair) completely surrounding the active portion of the facility; and a means to control entry, at all times, through the gates or other entrances to the active portion of the facility (*e.g.*, an attendant, television monitors, locked entrance, or controlled roadway access to the facility). The requirements of the preceding sentence are satisfied if the facility or plant within which the active portion is located itself has a surveillance system, or a barrier and a means to control entry, which complies with the requirements of 310 CMR 30.514.

## 30.515: General Inspection

## (1) Inspection Requirements.

(a) The owner or operator shall inspect the facility for malfunctions and deterioration of equipment or structures, operator error, and discharges, which may be causing or may lead to the release of hazardous waste constituents to the environment. The owner or operator shall conduct these inspections often enough to identify problems in time to correct them before they harm public health, safety, or welfare or the environment.

#### 30.515: continued

- (b) To ensure that they do not lead to a threat to public health, safety, or welfare, or to the environment, the owner or operator shall remedy all malfunctions, deteriorations, operator errors, and discharges which any inspection reveals. When a hazard is imminent or has already occurred, the owner or operator shall immediately notify the Department and shall immediately take remedial action.
- (c) The owner or operator shall record every inspection in an inspection log or summary. The owner or operator shall keep the records of each inspection for at least three years from the date of inspection or until final closure of the facility, whichever period is longer. At a minimum, these records shall include the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions.

## (2) Inspection Plan.

- (a) The owner or operator shall prepare a written inspection plan which shall describe the procedures which shall be carried out to comply with 310 CMR 30.515(1). Said plan shall include, at a minimum, a written schedule for inspecting monitoring equipment, safety devices, and operating and structural equipment (such as dikes and sump pumps) that are important in preventing, detecting, or responding to threats to the public health, safety, or welfare or to the environment.
- (b) The schedule shall identify the types of problems which shall be looked for during the inspection (e.g., inoperative sump pump, leaking fitting, eroding dike, etc.).
- (c) The frequency of inspection may vary for the items on the schedule. However, the frequency of inspection shall be based on the rate of possible deterioration of the equipment and the probability of a threat to public health, safety, or welfare or to the environment if the deterioration, malfunction, operator error, or discharge goes undetected between inspections. Areas subject to spills, such as loading and unloading areas, shall be inspected daily when in use. At a minimum, inspections for interim status facilities shall be in compliance with the requirements set forth or referred to in 310 CMR 7.08(4), and 30.099(6)(e) through (k), 30.099(6)(n) through (q) and 30.099(6)(u), as applicable. Inspections for facilities subject to 310 CMR 30.800 shall, at a minimum, be in compliance with 310 CMR 7.08(4), 30.606(3), 30.614, 30.624, 30.644, 30.655, 30.686, 30.692(5) and 30.696.

## 30.516: Personnel Training

## (1) Training Program.

- (a) Facility personnel assigned to the management of hazardous waste shall successfully complete a program of instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with 310 CMR 30.000 and the conditions of the facility's license. This program shall be directed by a person trained in hazardous waste management procedures and shall include instruction which teaches facility personnel hazardous waste management procedures, including contingency plan implementation, relevant to the position in which they are employed.
- (b) Personnel new to a facility shall not work in unsupervised positions until they have successfully completed the training requirements of 310 CMR 30.516(1)(a).
- (c) Facility personnel shall successfully complete the program required by 310 CMR 30.516(1)(a) within six months of their employment or their being assigned to a position new to them at the facility.
- (d) Facility personnel shall take part in an annual review of the initial training required by 310 CMR 30.516(1)(a).
- (e) Training records on current personnel shall be kept until closure of the facility. Training records of former personnel shall be kept for at least three years from the date such personnel last worked at the facility.

## (2) Contents of Training Plan.

- (a) The owner or operator shall prepare a written personnel training plan designed to ensure compliance with 310 CMR 30.516(1). To ensure that facility personnel are able to respond effectively to emergencies, the training plan, at a minimum, shall specify how personnel will be familiarized with the properties and hazardous nature of the hazardous waste at the facility and with emergency procedures, emergency equipment, emergency systems, and personnel safety equipment, including where applicable:
  - 1. Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment;

#### 30.516: continued

- 2. Use of automatic waste feed cutoff systems;
- 3. Communications or alarm systems;
- 4. Response to fire or explosions;
- 5. Response to potential ground water or surface water contamination incidents; and
- 6. Shutdown of operations; and
- (b) Included with the personnel training plan shall be the following documents and records:
  - 1. The job title for each position at the facility related to hazardous waste management;
  - 2. A written job description for each position listed pursuant to 310 CMR 30.516(2)(b)1. This description may be consistent in its degree of specificity with descriptions for other similar positions in the same company locations or bargaining unit, but shall include the requisite skill, education, or other qualifications, and duties, of employees assigned to each such position.
  - 3. A written description of the type and amount of both introductory and continuing training that will be given to each individual filling a position listed pursuant to 310 CMR 30.516(2)(b)1.
  - 4. Records that document that the training or job experience required pursuant to 310 CMR 30.516 has been given to, and satisfactorily completed by, facility personnel.

# 30.520: Contingency Plan, Emergency Procedures, Preparedness, and Prevention

310 CMR 30.521 through 30.524, cited collectively as 310 30.520, prescribe requirements which apply to owners and operators of all facilities to which the requirements of 310 CMR 30.500 apply.

# 30.521: Purpose, Content, and Implementation of Contingency Plan

- (1) Each owner or operator shall have a contingency plan for each facility. The contingency plan shall be designed to prevent and to minimize hazards to public health, safety, or welfare or the environment from fires, explosions, spills or any other unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, surface water, or ground water.
- (2) The provisions of the contingency plan shall be carried out immediately whenever there is a potential for, or there actually is, a fire, explosion, or other release of hazardous waste or waste constituents which could threaten public health, safety, or welfare, or the environment.
- (3) The contingency plan shall contain a clear outline of the lines of communication among facility personnel and shall describe the actions facility personnel shall take to comply with 310 CMR 30.521(1) and (2), and the equipment to be used and the actions to be taken to comply with 310 CMR 30.524(6), in response to potential or actual fires, explosions, or any other unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, surface water or ground water.
- (4) If the owner or operator has already prepared a Spill Prevention, Control, and Countermeasures (SPCC) Plan in compliance with 40 CFR Part 112 or Part 151, or some other emergency or contingency plan, the owner or operator need only add to that plan whatever is necessary to comply with 310 CMR 30.521.
- (5) The owner or operator shall make every reasonable attempt to make the following arrangements, as appropriate for the type of hazardous waste handled at the facility and the potential need for the services of the organizations referred to below, and the contingency plan shall describe all of the said arrangements:
  - (a) Arrangements to familiarize police departments, fire departments, local boards of health and emergency response teams with the layout of the facility, properties of hazardous waste handled at the facility, hazards associated with such wastes, places where facility personnel would normally be working, entrances to and roads inside the facility, and possible evacuation routes.

#### 30.521: continued

- (b) If more than one police department and/or fire department might respond to an emergency, agreements designating the specific police department and/or specific fire department which shall have primary emergency authority, and agreements with any other police department(s) and/or fire department(s) to provide support to whoever has primary emergency authority;
- (c) Agreements with State emergency response teams, emergency response contractors, local boards of health, and equipment suppliers.
- (d) Arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries or illnesses which could result from fires, explosions, or other releases at the facility.
- (6) If any organization referred to in 310 CMR 30.521(5) refuses to enter into an arrangement listed therein, the owner or operator shall document the refusal in the facility's operating record and contingency plan and shall promptly so inform the Department.
- (7) Each facility shall at all times have an emergency coordinator either on the facility premises, or, to the extent the facility's operations make this option appropriate, on call and available to respond to an emergency by reaching the facility within one hour. The emergency coordinator shall have the responsibility for coordinating all emergency response measures. This emergency coordinator shall be thoroughly familiar with all aspects of the facility's contingency plan, all operations and activities at the facility, the location and characteristics of waste handled, the location of all records within the facility, and the facility layout. The coordinator shall have access to all parts of the facility. In addition, this individual shall have the authority to spend or use whatever is necessary to carry out the contingency plan.
- (8) The contingency plan shall list the names, addresses, and the office and home telephone numbers of all individuals qualified to act as emergency coordinator, and this list shall be kept up-to-date. If more than one individual is listed, one shall be named as primary emergency coordinator and others shall be listed in the order in which they will assume responsibility as alternates. For new facilities, this information shall be initially supplied to the Department at the time of license application. All facilities shall promptly notify the Department and the organizations listed in 310 CMR 30.521(5)(a) of any change in this information.
- (9) The contingency plan shall include a list of all emergency equipment, including emergency medical equipment, to be kept and maintained at the facility. This list shall be kept up-to-date. In addition, the plan shall include the location and a physical description of each item on the list, and a brief outline of its capabilities.
- (10) The plan shall include a description of procedures, structures, or equipment used at the facility to:
  - (a) Prevent uncontrolled reaction of incompatible wastes; for example, procedures to avoid fires, explosions, or toxic gases;
  - (b) Prevent hazards in unloading operations; for example, ramps, special fork lifts, emergency containment equipment;
  - (c) Prevent run-off from hazardous waste handling areas to other areas of the facility or environment;
  - (d) Prevent flooding;
  - (e) Mitigate effects of equipment failure or power outages;
  - (f) Prevent hazards to public health, safety, or welfare or the environment from fires, explosions, spills, or any other unplanned or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, surface water, or ground water; and
  - (g) Prevent undue exposure of personnel to hazardous waste (e.g., protective clothing).
- (11) The plan shall include an evacuation plan for facility personnel if there is a possibility that evacuation could be necessary. This plan shall describe signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes in case the primary routes were to be blocked by potential or actual releases of hazardous waste or fires.

### 30.522: Copies of Contingency Plan

A copy of the contingency plan and all revisions to the plan shall be submitted to local police departments, local fire departments, hospitals, local boards of health, the chief executive officer of the community, state and local emergency response teams that may be called upon to provide emergency services, and the Department.

## 30.523: Amendment of Contingency Plan

The contingency plan shall be reviewed, and immediately amended, if necessary, whenever:

- (1) The facility license is revised;
- (2) The plan fails in an emergency;
- (3) The list of emergency coordinators changes;
- (4) The list of emergency equipment changes;
- (5) There is any change in the operation or maintenance of the facility; or
- (6) There occurs any other circumstance which indicates the need for a change in the contingency plan.

# 30.524: Standards for Emergency Prevention and Response

- (1) <u>Design and Operation of Facility</u>. Facilities shall be designed, constructed, maintained, and operated to prevent and to minimize the possibility of any threat to public health, safety, or welfare, or the environment from a fire, explosion, or any other unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, surface water, or ground water.
- (2) <u>Required Equipment</u>. All facilities shall be equipped with at least the following, unless the Department determines in writing that none of the hazards posed by waste handled at the facility could require a particular kind of equipment specified below:
  - (a) An internal communications or alarm system capable of providing immediate emergency instruction, by voice or signal, to facility personnel;
  - (b) A device, immediately available at all areas of operations, such as a telephone or a hand-held two-way radio, call box, or other instrument capable of summoning emergency assistance from, and which is acceptable to, local police departments, fire departments, or Federal, State or local emergency response teams;
  - (c) A portable fire extinguisher; fire control equipment, including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals; spill control equipment; and decontamination equipment; and
  - (d) Water at adequate volume and pressure to supply water hose streams or foam producing equipment, or automatic sprinklers or water spray systems.
  - (e) Clear markings identifying all exits so that everyone in the facility during an emergency can quickly find their way out of the facility during the emergency.
  - (f) An up-to-date written list containing the following information, a copy of which list shall be prominently posted near the telephones at the site of accumulation.
    - 1. The name(s) and telephone number(s) of the emergency coordinator(s).
    - 2. The location(s) of the fire extinguisher(s) and spill control material(s), and, if present, the fire alarms.
    - 3. The telephone number of the fire department, or, if there is a direct alarm system, instructions on how to activate it, or both.
    - 4. Evacuation routes, where applicable.
- (3) <u>Testing and Maintenance of Equipment</u>. All facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment shall be tested and maintained as necessary to ensure its proper operation in time of emergency.

#### 30.524: continued

# (4) Access to Communications or an Alarm System.

- (a) Whenever hazardous waste is being poured, mixed, spread, or otherwise handled, the owner or operator shall ensure that all personnel involved in the operation always have immediate access to an internal alarm or emergency communications device, either directly or through visual or voice contact with another employee, unless the Department has determined that such a device is not required pursuant to 310 CMR 30.524(2).
- (b) If, at any time, only one employee is on the premises while the facility is operating, the owner or operator shall ensure that the employee always has immediate access to a device prescribed in 310 CMR 30.524(2)(b), unless the Department has determined that such a device is not required pursuant to 310 CMR 30.524(2).
- (5) <u>Required Aisle Space</u>. The owner or operator shall maintain sufficient aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless the Department determines in writing that aisle space is not needed for any of these purposes.

# (6) Emergency Procedures.

- (a) Whenever there is an imminent or actual emergency, the emergency coordinator at the facility or then on call, if having an emergency coordinator on call is authorized by the Department pursuant to 310 CMR 30.521(7) and 30.800, shall immediately:
  - 1. Activate internal facility alarms or communication systems, where applicable, to notify all facility personnel,
  - 2. Notify the Department, and
  - 3. Notify other appropriate State or local agencies with designated response roles if their help is needed.
- (b) Whenever there is a fire, explosion, or other release, the emergency coordinator shall:
  - 1. Immediately identify the character, exact source, amount, and extent of all released materials, and concurrently,
  - 2. Assess possible hazards to public health, safety, or welfare, or the environment that may result from the fire, explosion, or other release. This assessment shall consider both direct and indirect effects of the fire, explosion, or other release, *e.g.* the effects of any hazardous surface water run-off from water or chemical agents used to control fire or heat-induced explosions.
- (c) If the emergency coordinator determines that the facility has had a fire, explosion, or other release which could threaten public health, safety, or welfare of the environment, the emergency coordinator shall:
  - 1. Immediately notify appropriate officials as identified in the facility contingency plan if the emergency coordinator's assessment indicates that evacuation of local areas may be advisable. The coordinator shall be available to help appropriate officials decide whether local areas should be evacuated; and
  - 2. Immediately notify the Department and either the government official identified in the facility's contingency plan as the on-scene coordinator for that geographical area (in the applicable regional contingency plan pursuant to 40 CFR Part 1510), or the National Response Center using its 24-hour toll free telephone number 800-424-8802. The report shall include the name and telephone number of the individual reporting; the name and address of the facility; the time and type of incident (*e.g.*, release, fire); the name(s) and quantity of material(s) involved, to the extent known; the extent of injuries, if any; and the possible hazards to public health, safety, or welfare, or the environment outside the facility.
- (d) During an emergency, the emergency coordinator shall take all reasonable measures necessary to ensure that fires, explosions, runoff, and other releases do not occur, recur, or spread off the site or to other hazardous waste at the facility. These measures shall include, where applicable, stopping processes and operations, collecting and containing released waste, and removing or isolating containers.
- (e) If the facility stops operations in response to a potential or actual fire, explosion, or other release
  - 1. The emergency coordinator shall monitor for leaks, pressure buildup, gas generation, and ruptures in valves, pipes, or other equipment, wherever this is appropriate.

#### 30.524: continued

- 2. The emergency coordinator shall, immediately after an emergency, provide for the treatment, storage, or disposal of recovered waste, contaminated soil or surface water, or any other material that results from a fire, explosion, or other release at the facility. Unless the owner or operator can demonstrate pursuant to 310 CMR 30.100 that the recovered material is not hazardous waste, the owner or operator also becomes a generator of hazardous waste and shall manage it in compliance with all applicable requirements of 310 CMR 30.000.
- 3. The emergency coordinator shall ensure that, in the affected area(s) of the facility: a. no waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and
  - b. all emergency equipment and systems listed in the contingency plan are cleaned, recharged, reactivated, and fit for their intended use before facility operations are resumed.
- 4. Operations shall not be resumed at the facility until the owner or operator notifies the Department and appropriate local authorities that the facility is in compliance with 310 CMR 30.524(6)(e)3. and the Department determines in writing that there is no longer a threat to public health, safety, or welfare, or the environment.
- (f) The owner or operator shall note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within seven days after the incident, the owner or operator shall submit a written report of the incident to the Department. The report shall include:
  - 1. The name, address, and telephone number of the owner or operator;
  - 2. The name, address, and telephone number of the facility;
  - 3. The date, time, and type of incident (e.g., fire, explosion);
  - 4. The name and quantity of material(s) involved;
  - 5. The extent of injuries, if any;
  - 6. An assessment of actual or potential hazards to public health, safety, welfare, or the environment, when this is applicable;
  - 7. The estimated quantity and the disposition of recovered material that resulted from the incident;
  - 8. All differences between the emergency response activities actually taken and those prescribed in the contingency plan and the reasons for each such difference; and
  - 9. Proposed measures to prevent similar incidents in the future.

## 30.530: Manifest System

#### 30.531: Applicability

310 CMR 30.532 through 30.535 apply to owners and operators of facilities that receive any hazardous waste from any offsite source, except hazardous waste to which 310 CMR 30.536 applies. 310 CMR 30.536 shall apply to hazardous waste that is collected from a small quantity generator or very small quantity generator by a recycling facility, transported by that recycling facility in vehicles it owns or operates to that recycling facility, recycled at that facility, and then transported by that recycling facility in vehicles it owns or operates to a small quantity generator or very small quantity generator.

# 30.532: Use of the Manifest System

- (1) Upon receipt by a facility of hazardous waste, the owner or operator or his agent shall:
  - (a) Comply with the requirements of 310 CMR 30.313 through 30.315, as applicable;
  - (b) Sign and date each copy of the manifest to certify that the hazardous waste described by the manifest was received, except as noted in a manifest discrepancy, or if the waste was rejected;
  - (c) Note on the manifest or in attached documentation any significant discrepancies in the shipment as described in 310 CMR 30.533. The owner or operator of a facility does not need to perform a detailed waste analysis before signing the manifest and giving the transporter his copy; however, 310 CMR 30.533(2) requires the reporting of any unreconciled discrepancy discovered during later analysis.

#### 30.532: continued

- (d) Immediately give the transporter at least one copy of the signed manifest;
- (e) Within 30 days after the delivery, send a copy of the manifest to the generator;
- (f) Within 30 days after the delivery, send a copy of the manifest to the Department and, if required, to the State of origin of the shipment, if not Massachusetts;
- (g) Retain at the facility a copy of each manifest for at least three years from the date of receipt of the hazardous waste at the facility; and
- (h) Determine whether the destination state for a shipment regulates any additional wastes (beyond those regulated Federally) as hazardous wastes under its state hazardous waste program. Facilities shall also determine whether the destination state or generator state requires the facility to submit any copies of the manifest to these states.
- (2) Upon receipt of an unmanifested shipment of hazardous waste, a facility owner or operator shall comply with 310 CMR 30.534.
- (3) If a facility receives, from a rail or bulk shipment water transporter, hazardous waste which is accompanied by a manifest or a shipping paper containing all the information required on the manifest, excluding only the EPA identification numbers, generator's certification, and signatures, the owner or operator, or his agent, shall:
  - (a) Sign and date each copy of the manifest, or shipping paper if the manifest has not been received, to certify that the hazardous waste described by the manifest or shipping paper has been received.
  - (b) Note any significant discrepancies, as described in 310 CMR 30.533(1), in the manifest, or shipping paper if the manifest has not been received, on each copy of the manifest or shipping paper;
  - (c) Immediately give the rail or bulk shipment water transporter at least one copy of the manifest, or shipping paper if the manifest has not been received;
  - (d) Within 30 days after receipt of the hazardous waste, send a copy of the signed and dated manifest to the generator. If the manifest has not been received within 30 days after receipt of the hazardous waste, the owner or operator, or his agent, shall send a copy of the shipping paper, signed and dated, to the generator;
  - (e) Within 30 days after the receipt of the hazardous waste, send a copy of the manifest, or shipping paper if the manifest has not been received, to the Department and to the State of origin of the shipment, if not Massachusetts; and
  - (f) Retain at the facility a copy of the manifest, and the shipping paper if signed in lieu of the manifest at the time of delivery, for at least three years from the date of the receipt of the hazardous waste by the facility.
- (4) Whenever a facility initiates a shipment of hazardous waste or generates hazardous waste, the owner or operator of that facility shall comply with the requirements of 310 CMR 30.300 with respect to that hazardous waste.
- (5) If a facility receives hazardous waste imported from a foreign source, the receiving facility shall mail a copy of the manifest to the following address within 30 days of delivery: International Compliance Assurance Division, OFA/OECA (2254A), U.S. Environmental Protection Agency, Ariel Rios Building, 1200 Pennsylvania Avenue, NW., Washington, DC 20460.

# 30.533: Manifest Discrepancies

- (1) Manifest discrepancies are:
  - (a) Significant differences, as defined at 310 CMR 30.533(2), between the quantity or type of hazardous waste designated on the manifest or shipping paper, and the quantity and type of hazardous waste a facility actually receives;
  - (b) Rejected wastes, which may be a full or partial shipment of hazardous waste that the TSDF cannot accept; or

#### 30.533: continued

- (c) Container residues, which are residues that exceed the quantity limits for "empty" containers set forth in 310 CMR 30.106(2).
- (2) Significant differences in quantity are: For bulk waste, variations greater than 10% in weight; for batch waste, any variation in piece count, such as a discrepancy of one drum in a truckload. Significant differences in type are obvious differences, which can be discovered by inspection or waste analysis, such as waste solvent substituted for waste acid.
- (3) Upon discovering a significant difference in quantity or type, the owner or operator must attempt to reconcile the discrepancy with the waste generator or transporter (e.g., with telephone conversations). If the discrepancy is not resolved within 15 days after receiving the waste, the owner or operator shall immediately submit to the Department a letter describing the discrepancy and attempts to reconcile it, and a copy of the manifest or shipping paper at issue.
- (4) (a) Upon rejecting waste or identifying a container residue that exceeds the quantity limits for "empty" containers set forth in 310 CMR 30.106(2), the facility shall consult with the generator prior to forwarding the waste to another facility that can manage the waste. If it is impossible to locate an alternative facility that can receive the waste, the facility may return the rejected waste or residue to the generator, which shall sign the manifest for the returned shipment in compliance with 310 CMR 30.340(9)(a) or (b). The facility shall send the waste to the alternative facility or to the generator within 60 days of the rejection or the container residue identification.
  - (b) While the facility is making arrangements for forwarding rejected wastes or residues to another facility under 310 CMR 30.533(4), it shall ensure that either the delivering transporter retains custody of the waste while present at the facility, or the facility must provide for secure, temporary custody of the waste, pending delivery of the waste to the first transporter designated on the manifest prepared under 310 CMR 30.533(5) and (6).
- (5) Except as provided in 310 CMR 30.533(5)(g), for full or partial load rejections and residues that are to be sent off-site to an alternate facility, the facility shall prepare a new manifest in accordance with 310 CMR 30.311(1) and the following instructions:
  - (a) Write the generator's U.S. EPA ID number in Item 1 of the new manifest. Write the generator's name and mailing address in Item 5 of the new manifest. If the mailing address is different from the generator's site address, then write the generator's site address in the designated space in Item 5.
  - (b) Write the name of the alternate designated facility and the facility's U.S. EPA ID number in the designated facility block (Item 8) of the new manifest.
  - (c) Copy the manifest tracking number found in Item 4 of the old manifest to the Special Handling and Additional Information Block of the new manifest, and indicate that the shipment is a residue or rejected waste from the previous shipment.
  - (d) Copy the manifest tracking number found in Item 4 of the new manifest to the manifest reference number line in the Discrepancy Block of the old manifest (Item 18a) of 310 CMR 30.000.
  - (e) Write the DOT description for the rejected load or the residue in Item 9 (U.S. DOT Description) of the new manifest and write the container types, quantity, and volume(s) of waste.
  - (f) Sign the Generator's/Offeror's Certification to certify, as the offeror of the shipment, that the waste has been properly packaged, marked and labeled and is in proper condition for transportation.
  - (g) For full load rejections that are made while the transporter remains present at the facility, the facility may forward the rejected shipment to the alternate facility by completing Item 18b of the original manifest and supplying the information on the next destination facility in the Alternate Facility space. The facility shall retain a copy of this manifest for its records, and then give the remaining copies of the manifest to the transporter to accompany the shipment. If the original manifest is not used, then the facility shall use a new manifest and comply with 310 CMR 30.533(5)(a) through (f).

#### 30.533: continued

- (6) Except as provided at 310 CMR 30.533(6)(g), for rejected wastes and residues that are to be sent back to the generator, the facility shall prepare a new manifest in accordance with 310 CMR 30.311(1) of this chapter and the following instructions:
  - (a) Write the facility's U.S. EPA ID number in Item 1 of the new manifest. Write the generator's name and mailing address in Item 5 of the new manifest. If the mailing address is different from the generator's site address, then write the generator's site address in the designated space for Item 5.
  - (b) Write the name of the initial generator and the generator's U.S. EPA ID number in the designated facility block (Item 8) of the new manifest.
  - (c) Copy the manifest tracking number found in Item 4 of the old manifest to the Special Handling and Additional Information Block of the new manifest, and indicate that the shipment is a residue or rejected waste from the previous shipment.
  - (d) Copy the manifest tracking number found in Item 4 of the new manifest to the manifest reference number line in the Discrepancy Block of the old manifest (Item 18a).
  - (e) Write the DOT description for the rejected load or the residue in Item 9 (U.S. DOT Description) of the new manifest and write the container types, quantity, and volume(s) of waste.
  - (f) Sign the Generator's/Offeror's Certification to certify, as offeror of the shipment, that the waste has been properly packaged, marked and labeled and is in proper condition for transportation,
  - (g) For full load rejections that are made while the transporter remains at the facility, the facility shall return the shipment to the generator with the original manifest by completing Item 18b of the manifest and supplying the generator's information in the Alternate Facility space. The facility shall retain a copy for its records and then give the remaining copies of the manifest to the transporter to accompany the shipment. If the original manifest is not used, then the facility shall use a new manifest and comply with CMR 30.533(6)(a) through (f).
- (7) If a facility rejects a waste or identifies a container residue that exceeds the quantity limits for "empty" containers set forth in 310 CMR 30.106(2) after it has signed, dated, and returned a copy of the manifest to the delivering transporter or to the generator, the facility shall amend its copy of the manifest to indicate the rejected wastes or residues in the discrepancy space of the amended manifest. The facility shall also copy the manifest tracking number from Item 4 of the new manifest to the discrepancy space of the amended manifest, and shall re-sign and date the manifest to certify to the information as amended. The facility shall retain the amended manifest for at least three years from the date of amendment, and shall, within 30 days, send a copy of the amended manifest to the Department, transporter and generator that received copies prior to their being amended.

# 30.534: Unmanifested Waste Report

If an unmanifested waste shipment arrives at a facility, the owner or operator shall notify the Department immediately upon the arrival of the shipment.

- (1) If the facility does not accept the shipment, the owner or operator shall instruct the transporter to take no action until that transporter receives specific instructions from the Department.
- (2) If the facility accepts the shipment, the owner or operator shall submit an unmanifested waste report to the Department within 15 days of receipt by the facility of the unmanifested hazardous waste shipment. The report shall be on a form prescribed by the Department and shall include the following information:
  - (a) The EPA identification number, name, and address of the facility;
  - (b) The date the facility received the waste;
  - (c) The EPA identification number, name, and address of the generator and the transporter, if available;
  - (d) A description and the quantity of each unmanifested hazardous waste the facility received:
  - (e) The method of treatment, storage, use or disposal for each unmanifested hazardous waste;

#### 30.534: continued

- (f) A brief explanation, if known to the facility, of why the waste was unmanifested; and
- (g) The certification required by 310 CMR 30.009, signed by the owner or operator of the facility or his agent.
- (3) Except as provided in 310 CMR 30.535, the provisions of 310 CMR 30.534 shall not apply to hazardous waste generated and transported by a Very Small Quantity Generator in compliance with 310 CMR 30.353(1) through (11).

# 30.535: Waste Generated and Delivered by Very Small Quantity Generators

If a facility receives hazardous waste generated and transported by a very small quantity generator in compliance with 310 CMR 30.353(1) through (11), the owner or operator shall comply with all requirements applicable to him set forth or referred to in 310 CMR 30.353(1) through (11) and need not comply with 310 CMR 30.532 and 30.534 with respect to that hazardous waste. If the hazardous waste is handled pursuant to 310 CMR 30.353(12), the owner or operator of the facility shall comply with 310 CMR 30.532 and 30.534.

# 30.536: Manifest Requirements for Waste Recycled Pursuant to a Contractual Agreement

Upon receipt by a recycling facility of hazardous waste subject to 310 CMR 30.536, as set forth in 310 CMR 30.531, the owner or operator or his agent shall:

- (a) Comply with the requirements of 310 CMR 30.315, as applicable;
- (b) Sign and date each copy of the manifest to certify that the hazardous waste described by the manifest has been received; and
- (c) Retain at the facility a copy of each manifest for at least three years from the date of receipt of the hazardous waste at the facility; and
- (d) Retain a copy of each manifest in compliance with requirements set forth in 310 CMR 30.543(2) and (3).

### 30.540: Record Keeping and Reporting

## 30.541: Applicability

310 CMR 30.540 through 30.544 apply to facilities which treat, store, use or dispose of hazardous waste at the site of generation of that waste and to facilities which receive for treatment, storage, use or disposal hazardous wastes from off-site sources.

# 30.542: Operating Record

- (1) The owner or operator shall keep a written operating record at the premises of the facility, and it shall be readily accessible to personnel of the Department and the EPA.
- (2) The following information shall be recorded, as it becomes available, and maintained in the operating record until closure of the facility, or for at least three years after the information is recorded in the operating record of the facility, whichever period is longer:
  - (a) A description and the quantity of each hazardous waste received, and the method(s) and date(s) of its treatment, storage, use or disposal at the facility.
  - (b) The location of each hazardous waste type within the facility and the quantity at each location. For land disposal facilities, the location, quantity and EPA or Massachusetts hazardous waste number of each hazardous waste shall be recorded on a map or diagram of each cell or disposal area. For all facilities, this information shall include cross-references to specific manifest document numbers.
  - (c) Records and results of waste analyses required by 310 CMR 7.08(4), 30.513, 30.560 or 30.629, and 40 CFR 268.4(a) and 268.7 as incorporated by reference at 310 CMR 30.750 with modifications.
  - (d) Summary reports and details of all incidents that require implementing the contingency plan.
  - (e) Records and results of inspections as required by 310 CMR 30.515.
  - (f) For facilities which receive shipments of hazardous waste from off-site sources, notices to generators as required by 310 CMR 30.512.

#### 30.542: continued

- (g) Records, results of inspections, and monitoring, testing, or analytical data required for interim status facilities by 310 CMR 30.099(6)(f) through (j) and, for facilities subject to 310 CMR 30.800, by 310 CMR 30.606(3), 30.610, 30.620, 30.640, 30.650, 30.680, 30.690, and 30.750, as well as by the conditions of the facility's license in effect at that time.
- (h) A certification by the owner or operator no less often than once every 12 months that the facility has a program in place to reduce the volume and toxicity of hazardous waste that it generates to the degree determined by the owner or operator to be economically practicable; and the proposed method of treatment, storage or disposal is that practicable method currently available to the owner or operator which minimizes the present and future threat to public health, safety and welfare, and the environment.
- (i) Records of the quantities and date of placement for each shipment of hazardous waste placed in land disposal units pursuant to:
  - 1. an extension of the effective date of any land disposal restriction granted by EPA pursuant to 40 CFR 268.5; or
  - 2. the approval of a petition granted by EPA pursuant to 40 CFR 268.6; and
  - 3. the applicable notice and certification required by a generator pursuant to 40 CFR 268.7(a) as incorporated by reference at 310 CMR 30.750 with modifications.
- (j) For a facility that treats hazardous waste generated off the site of the facility, a copy of each certification and demonstration, if applicable, required of the generator or owner or operator pursuant to 40 CFR 268.7 as incorporated by reference at 310 CMR 30.750 with modifications.
- (k) For a facility that treats hazardous waste generated only at the site of the facility, the information, except the manifest number, contained in the notice, and the certification and demonstration, if applicable, required of the generator or the owner or operator pursuant to 40 CFR 268.7 as incorporated by reference at 310 CMR 30.750 with modifications.
- (l) For a land disposal facility that disposes of hazardous waste generated off the site of the facility, a copy of the notice, and the certification and demonstration if applicable, required of the generator or the owner or operator of a treatment facility pursuant to 40 CFR 268.7 as incorporated by reference at 310 CMR 30.750 with modifications.
- (m) For a land disposal facility that disposes of hazardous waste generated only at the site of the facility, the information, except for the manifest number, contained in the notice, and the certification and demonstration, if applicable, required of the generator or owner or operator of the treatment facility pursuant to 40 CFR 268.7 as incorporated by reference at 310 CMR 30.750 with modifications.

(PAGES 1091 THROUGH 1118 ARE <u>RESERVED</u> FOR FUTURE USE.)

#### 30.542: continued

- (n) For a facility that stores hazardous waste generated off the site of the facility, a copy of the notice, and the certification and demonstration if applicable, required of the generator or the owner or operator pursuant to 40 CFR 268.7 as incorporated by reference at 310 CMR 30.750 with modifications.
- (o) For a facility that stores hazardous waste generated only at the site of the facility, the information, except the manifest number, contained in the notice, and the certification and demonstration, if applicable, required of the generator or the owner or operator pursuant to 40 CFR 268.7 as incorporated by reference at 310 CMR 30.750 with modifications.

# 30.543: Availability, Retention, and Disposition of Records

- (1) All plans required by 310 CMR 30.513 through 30.523, 30.583, and 30.593 and all approved revisions thereof shall be kept at the facility until completion of the certification of closure in compliance with 310 CMR 30.586.
- (2) All records, including plans required pursuant to 310 CMR 30.000, shall be furnished upon request of, and made available at all reasonable times for inspection by, any duly designated officer, employee, or representative of the Department or of the EPA.
- (3) The retention period for all records required pursuant to 310 CMR 30.500 shall be extended automatically during the course of any unresolved enforcement action regarding the facility, or as requested or ordered by the Department.
- (4) A copy of records of waste disposal locations and quantities shall be submitted to the Department upon closure of the facility.

### 30.544: Biennial Report

The owner or operator of any facility subject to licensing pursuant to 310 CMR 30.801 shall prepare and submit a copy of a Biennial Report to the Commissioner by March 1<sup>st</sup> of each even numbered year. The Biennial Report shall be submitted on EPA Form 8700-13A. The report shall cover facility activities during the previous calendar year and shall include, at a minimum, the following information:

- (1) The EPA identification number, name, and address of the facility, and the name and telephone number of the principal contact at the facility.
- (2) The calendar year covered by the report.
- (3) For facilities that receive any hazardous waste from any off-site source, the EPA identification number of each hazardous waste generator from which the facility received a hazardous waste during the year; for imported shipments, the report shall include the name and address of the foreign generator.
- (4) A description of and the quantity of each hazardous waste the facility treated, stored or disposed of during the year; for facilities that receive any hazardous waste from any off-site source, this information must be listed by the EPA identification number of each generator.
- (5) The method of treatment, storage, or disposal for each hazardous waste.
- (6) The most recent closure cost estimate made pursuant to 310 CMR 30.580 through 30.586 and, if applicable, the most recent post-closure cost estimate made pursuant to 310 CMR 30.590 through 30.595.
- (7) For generators who treat, store, or dispose of hazardous waste on-site, a description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated.
- (8) For generators who treat, store, or dispose of hazardous waste on-site, a description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years to the extent such information is available for the years prior to 1984.

#### 30.544: continued

- (9) A summary of every incident that required implementing the contingency plan.
- (10) The certification signed by the owner or operator of the facility or his authorized representative pursuant to 310 CMR 30.009.

### 30.560: General Requirements for Ignitable, Reactive, or Incompatible Wastes

- (1) The owner or operator shall take precautions to prevent accidental ignition or reaction of ignitable or reactive hazardous waste at the facility. Such waste shall be separated and protected from sources of ignition or reaction which include, but are not limited to:
  - (a) Open flames;
  - (b) Smoking;
  - (c) Cutting and welding;
  - (d) Hot surfaces;
  - (e) Frictional heat;
  - (f) Static, electrical, or mechanical sparks;
  - (g) Spontaneous ignition, e.g. from heat producing chemical reactions; and
  - (h) Radiant heat.
- (2) While ignitable or reactive waste is being handled, the owner or operator shall confine smoking and open flames to specially designated locations. "No Smoking" signs shall be conspicuously placed wherever there is a potential or actual hazard from ignitable or reactive waste.
- (3) The treatment, storage, disposal, or use of ignitable or reactive waste, and the mixture or commingling of incompatible wastes, or incompatible wastes and materials, shall be conducted so that such treatment, storage, use or disposal does not, and does not threaten to:
  - (a) Generate extreme heat or pressure, fire or explosion, or violent reaction;
  - (b) Produce uncontrolled toxic mists, fumes, dusts, or gases which may threaten public health, safety, or welfare or the environment;
  - (c) Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of explosion;
  - (d) Damage the structural integrity of the device or facility containing the waste; or
  - (e) Through other means threaten public health, safety, or welfare, or the environment.
- (4) When conditions exist which require the owner or operator to comply with 310 CMR 30.560(1), (2), and (3), the owner or operator shall document that compliance. The plans specified in 310 CMR 30.513, 30.514, 30.515, 30.516, and 30.520 through 30.523 shall indicate how the requirements of 310 CMR 30.560 shall be met. This documentation may be based on:
  - (a) References to published scientific or engineering literature;
  - (b) Data from trial tests, e.g. bench scale or pilot scale tests;
  - (c) Waste analyses as specified in 310 CMR 30.513; or
  - (d) The results of the treatment of similar wastes by similar treatment processes and under similar operating conditions.

# 30.561: Examples of Potentially Incompatible Wastes

Many hazardous wastes, when mixed with other waste or material, can produce effects which are harmful to human health and the environment, such as (1) heat or pressure, (2) fire or explosion, (3) violent reaction, (4) toxic dusts; mists, fumes, or gases, or (5) flammable fumes or gases.

Below are examples of potentially incompatible wastes, waste components, and materials, along with the harmful consequences which might result from mixing material in one group with material in another group. The list is intended only as a guide to indicate the need for special precautions when managing these potentially incompatible waste materials or components.

#### 30.561: continued

This list is not intended to be exhaustive. An owner or operator shall, as regulations require, adequately analyze his wastes so that he can prevent creating uncontrolled substances or reactions of the type listed below, whether they are listed below or not.

In the lists below, the mixing of a Group A material with a Group B material might have the potential consequences as noted.

# Group 1-A Group 1-B

Acetylene sludge
Alkaline caustic liquids
Alkaline cleaner
Alkaline corrosive liquids
Alkaline corrosive battery fluid

Caustic wastewater Etching acid liquid or solvent Lime sludge and other corrosive Pickling liquor and other

alkalies corrosive acids
Lime wastewater Spent acid
Lime and water Spent mixed acid
Spent caustic Spent sulfuric acid

Potential consequences: Heat generation; violent reaction.

## Group 2-A Group 2-B

Aluminum Any waste in Group 1-A or 1-B

Beryllium
Calcium
Lithium
Magnesium
Potassium
Sodium
Zinc powder
Other reactive metals and metal

hydrides

Group 3-A

Potential consequences: Fire or explosion; generation of flammable hydrogen gas.

Alcohols Any concentrated waste Water in Groups 1-A or 1-B

Calcium
Lithium
Metal hydrides
Potassium

SO<sub>2</sub>Cl<sub>2</sub>, SOCl<sub>2</sub>, PCl<sub>3</sub>, CH<sub>3</sub>SiCl<sub>3</sub> Other water-reactive waste

Group 3-B

Potential consequences: Fire, explosion, or heat generation; generation of flammable or toxic gases.

30.561: continued

Group 4-A Group 4-B

Alcohols Concentrated Group 1-A Aldehydes or 1-B wastes

Halogenated hydrocarbons Group 2-A wastes
Nitrated hydrocarbons
Unsaturated hydrocarbons

Other reactive organic compounds

and solvents

Potential consequences: Fire, explosion, or violent reaction.

Group 5-A Group 5-B

Spent cyanide and sulfide Group 1-B wastes

solutions

Potential consequences: Generation of toxic hydrogen cyanide or hydrogen sulfide gas.

Group 6-A Group 6-B

Chlorates Acetic acid and other Chlorine organic acids

Chlorites Concentrated mineral acids

Chromic acid Group 2-A wastes
Hypochlorites Group 4-A wastes
Nitrates Other flammable and

Nitric acid, fuming combustible wastes
Perchlorates
Permanganates

Other strong oxidizers

Potential consequences: Fire, explosion, or violent reaction.

30.580: CLOSURE

30.581: Applicability

The closure requirements in 310 CMR 30.580 through 30.587, cited collectively as 310 CMR 30.580, apply to all hazardous waste facilities.

## 30.582: Closure Performance Standard

Peroxides

The owner or operator shall close the facility in a manner that minimizes the need for further maintenance and complies with the closure requirements established within 310 CMR 30.600 that are specific to the type of facility being closed. Post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated runoff, or hazardous waste decomposition products to the ground water, surface water, soil, or the atmosphere shall be eliminated or minimized to the extent necessary to assure compliance with the previous sentence and to prevent any threat to public health, safety, or welfare, or the environment.

# 30.583: Contents and Approval of Closure Plan; Notification of Closure

- (1) The owner or operator of a facility shall have a written closure plan that complies with the requirements of 310 CMR 30.580. The owner or operator of a facility at which there is a surface impoundment described in 310 CMR 30.617(5) or a waste pile described in 310 CMR 30.649(3) from which the owner or operator intends to remove all hazardous waste at closure shall have a contingent closure plan that complies with the requirements of 310 CMR 30.590 and, as applicable, in 310 CMR 30.617(5) and 30.649(3). Each closure plan shall identify the activities that shall, and each contingent closure plan shall identify the activities that might, be necessary to close the hazardous waste management unit or facility at any point during its intended operating life or at the end of its intended operating life. The closure plan shall include at least:
  - (a) A description of how and when each hazardous waste management unit at the facility will be closed during the facility's intended operating life, and the facility as a whole will be closed at the end of its intended operating life. The plan shall identify how the requirements of 310 CMR 30.580 shall be complied with.
  - (b) A description that shall identify the capacity and extent of the facility's operation that is planned to be active at the time that the capacity and extent of the facility's operation will be at maximum.
  - (c) An estimate of the maximum inventory of hazardous wastes ever on the site of the facility over the active life of the facility.
  - (d) A detailed description of the methods to be used during closure(s), including, but not limited to, methods for removing, transporting, treating, storing, or disposing of all hazardous wastes, and identification of the type(s) of the off-site hazardous waste management units to be used, if applicable.
  - (e) A detailed description of the steps needed to remove hazardous waste residues from, or decontaminate, all contaminated containment system components, and all facility equipment, structures, and soils during closure(s). This description shall include, but not be limited to, procedures for cleaning equipment and removing contaminated soils, methods for sampling and testing surrounding soils, and criteria for determining the extent of decontamination required to comply with the closure performance standard, 310 CMR 30.582.
  - (f) A detailed description of other activities necessary during the period of each closure to ensure that all closures comply with the closure performance standard, 310 CMR 30.582. This description shall include, but not be limited to, ground water monitoring, leachate collection, and run-on and run-off control.
  - (g) A schedule for closure of each hazardous waste management unit and for final closure of the facility. The schedule shall include, at a minimum, the total time required to close each hazardous waste management unit, and the time required for intervening closure activities which will allow tracking of the progress of closure. For example, in the case of a landfill unit, the plan shall include estimates of the time required to treat or dispose of all hazardous waste inventory and of the time required to place a final cover. In addition, facilities that use trust funds to demonstrate financial assurance for closure pursuant to 310 CMR 30.904 shall include an estimate of the expected year of closure. Facilities not using trust funds are not required to estimate the expected year of closure, provided that the closure fund mechanism is funded appropriately and updated annually.
  - (h) A description of how the requirements of 310 CMR 30.580, and the applicable closure requirements of 310 CMR 30.606(1) through (3), 30.617, 30.633, 30.649, 30.659, 30.689, and 30.699 will be complied with.
- (2) Amendments of closure plans shall be subject to the following provisions:
  - (a) All applications to the Department for approval to amend a facility's closure plan shall include a copy of the proposed amended closure plan. The owner or operator shall submit a written notification of or request for a license modification to authorize a change in the approved closure plan in compliance with 310 CMR 30.802 through 30.807. The Department shall classify the proposed amendment in accordance with 310 CMR 30.852. The Department shall act in accordance with the requirements and procedures set forth in 310 CMR 30.852.

#### 30.583: continued

- (b) The owner or operator may apply to the Department for approval to amend the closure plan for the facility as a whole, or for a particular hazardous waste management unit or units, at any time prior to giving notification of closure of the facility as a whole, or the hazardous waste management unit(s) in question, as the case may be. Except as provided in 310 CMR 30.852 and 30.890, denial of an application to amend a closure plan shall not be subject to public notice, public comment, or public hearings.
- (c) The owner or operator shall apply to the Department for approval to amend the facility's closure plan whenever
  - 1. changes in operating plans or facility design affect the closure plan, or
  - 2. there is a change in the expected year of closure, if applicable, or
  - 3. in conducting closure activities, unexpected events (including, but not limited to, a change in applicable regulations when published in the *Massachusetts Register*) require a modification of the approved closure plan, or
  - 4. the Department requests or orders an amendment of the facility's closure plan.
- (d) The deadline for the owner or operator to file required applications to the Department for approval to amend the facility's closure plan shall be as follows:
  - 1. At least 60 days prior to a proposed change in facility design or operation.
  - 2. Not more than 60 days after an unexpected event has occurred (including, but not limited to, a change in applicable regulations when published in the Massachusetts Register) that affects the closure plan, if the unexpected event does not occur during a closure period.
  - 3. Not more than 30 days after an unexpected event has occurred (including, but not limited to, a change in applicable regulations when published in the Massachusetts Register) that affects the closure plan, if the unexpected event occurs during a closure period.
  - 4. Not more than 60 days after the Department requests or orders an amendment of the facility's closure plan if the event(s) cited by the Department for issuing the request or order do(es) not occur during a closure period.
  - 5. Not more than 30 days after the Department requests or orders an amendment of the facility's closure plan if any event(s) cited by the Department for issuing the request or order occur(s) during a closure period.
- (e) If the Department determines that a surface impoundment or waste pile shall be closed as a landfill in accordance with requirements set forth in 310 CMR 30.620, the owner or operator of the surface impoundment or waste pile shall submit an amended closure plan to the Department. The deadline for submittal shall be:
  - 1. Not more than 60 days after the date of the Department's determination if the Department does not make the determination during a closure period.
  - 2. Not more than 30 days after the date of the Department's determination if the Department makes the determination during a closure period.
- (3) The owner or operator shall notify the Department of each expected closure subject to the following provisions.
  - (a) The owner or operator shall notify the Department in writing at least 60 days prior to the date on which he expects to begin closure of a surface impoundment, waste pile, land treatment unit, or landfill unit, or closure of a facility with any such unit.
  - (b) The owner or operator shall notify the Department in writing at least 45 days prior to the date on which he expects to begin
    - 1. closure of a unit consisting of one or more treatment or storage tanks, a container storage unit, or an incinerator unit, or
    - 2. closure of a facility with only units described in 310 CMR 30.583(3)(b)1., or
    - 3. closure of any other unit or facility not subject to 310 CMR 30.583(3)(a).
  - (c) The date on which the owner or operator "expects to begin . . . closure" shall be
    - 1. no later than 30 days after the date on which any hazardous waste management unit receives the known final volume of hazardous waste, or
    - 2. if there is a reasonable possibility that the hazardous waste management unit will receive additional hazardous wastes, no later than one year after the date on which the unit received the most recent volume of hazardous waste.

#### 30.583: continued

- (d) The Department may approve an extension of the one-year limit set forth in 310 CMR 30.583(3)(c)2. Such an extension shall be in writing, shall be subject to the requirements and procedures set forth in 310 CMR 30.800, and, in addition, may be granted, and may be allowed to remain in effect, only if the owner or operator has persuaded the Department that
  - 1. the hazardous waste management unit or facility has the capacity to receive additional hazardous waste, and
  - 2. he has taken, and will continue to take, all steps to prevent threats to public health, safety, and welfare, and the environment, including compliance with all applicable license requirements.
- (e) If the facility's hazardous waste license is suspended or revoked, or if the facility is otherwise ordered by the Department, by a court of competent jurisdiction, or by any other government agency or body politic to cease receiving hazardous waste or to close, then the requirements set forth in 310 CMR 30.583(3)(a) through (d) do not apply. However, the owner or operator shall close the facility in accordance with the deadlines set forth in 310 CMR 30.584, and in compliance with all applicable provisions of 310 CMR 30.000. In addition, the owner or operator shall promptly notify the Department whenever the facility is ordered by a court of competent jurisdiction, or by any government agency or body politic other than the Department, to cease receiving hazardous waste or to close.
- (f) Except as provided in 310 CMR 30.583(2)(c)4 and 30.583(2)(e), nothing in 310 CMR 30.583 shall preclude an owner or operator from removing hazardous wastes and decontaminating or dismantling equipment in accordance with the approved closure plan at any time before or after notification of closure.

# 30.584: Time Allowed for Closure

- (1) Within 90 days after receiving the final volume of hazardous wastes at a hazardous waste management unit or facility, the owner or operator shall have treated all hazardous wastes in storage or in treatment, or have removed them from the unit or facility, or disposed of them on-site, in compliance with the approved closure plan. The Department may approve a longer period, but (1) only if the owner or operator applies for such approval at least 30 days prior to the expiration of the 90-day period described in the preceding sentence, and (2) only if the owner or operator applies for such approval in compliance with 310 CMR 30.802 through 30.807, and (3) only after the Department complies with the requirements and procedures set forth in 310 CMR 30.851 and 30.852, and, if applicable, 310 CMR 30.833, 30.835, 30.836, 30.837, and 30.839, and (4) such approval shall be subject to all other applicable provisions of 310 CMR 30.800, and (5) in addition, such approval may be granted, and may be allowed to remain in effect, only if the owner or operator has persuaded the Department that:
  - (a) He has taken and will continue to take all steps to prevent threats to public health, safety, or welfare, or the environment, including compliance with all applicable license requirements, and
  - (b) Either:
    - 1. The activities required to comply with 310 CMR 30.584(1) will, of necessity, take longer than 90 days to complete, or
    - a. The hazardous waste management unit or facility has the capacity to receive additional hazardous wastes, and
      - b. There is a reasonable likelihood that he or another person will recommence operation of the hazardous waste management unit or facility within one year, and c. closure of the hazardous waste management unit or facility would be incompatible with continued operation of the site.

#### 30.584: continued

- (2) The owner or operator shall complete closure activities in accordance with the approved closure plan and within 180 days after receiving the final volume of hazardous wastes at the hazardous waste management unit or facility. The Department may require and specify a shorter closure period if the Department determines that such action is necessary to protect public health, safety, or welfare, or the environment. The Department may approve an extension to the closure period, but (1) only if the owner or operator applies for such approval at least 30 days prior to the expiration of the 180-day period described in the preceding sentence, and (2) only if the owner or operator applies for such approval in compliance with 310 CMR 30.802 through 30.807, and (3) only after the Department complies with the requirements and procedures set forth in 310 CMR 30.851 and 30.852, and, if applicable, 310 CMR 30.833, 30.835, 30.836, 30.837, and 30.839, and (4) such approval shall be subject to all other applicable provisions of 310 CMR 30.800, and (5) in addition, such approval may be granted, and may be allowed to remain in effect, only if the owner or operator has persuaded the Department that:
  - (a) He has taken and will continue to take all steps to prevent threats to public health, safety, or welfare, or the environment from the unclosed but not operating hazardous waste management unit or facility, including compliance with all applicable license requirements, and
  - (b) Either:
    - 1. The activities required to comply with 310 CMR 30.584(1) will, of necessity, take longer than 180 days to complete, or
    - 2. a. The hazardous waste management unit or facility has the capacity to receive additional hazardous wastes, and
      - b. There is a reasonable likelihood that he or another person will recommence operation of the hazardous waste management unit or facility within one year, and
      - c. Closure of the hazardous waste management unit or facility would be incompatible with continued operation of the site.

# 30.585: Disposal or Decontamination of Equipment

Closure shall not be considered complete until all facility equipment, structures, and soil have been properly disposed of or decontaminated by removal of all hazardous wastes and residues. During each closure period, all contaminated equipment, structure, and soils shall be properly disposed of or decontaminated unless otherwise specifically specified in 310 CMR 30.000. In addition, during the closure period of a hazardous waste incinerator, the owner or operator shall remove from the incinerator site all hazardous waste and hazardous waste residues, including, but not limited to, ash, scrubber waters, and scrubber sludges. By removing any hazardous wastes or hazardous constituents during closure, the owner or operator might become a generator of hazardous waste and, if he does, he shall handle that waste in compliance with all applicable provisions of 310 CMR 30.000.

### 30.586: Recording Survey Plat

No later than the submission of the certification of closure, in compliance with 310 CMR 30.587(1), of each land disposal unit or facility, the owner or operator of the land disposal unit or facility shall record in the appropriate Registry of Deeds or, if the land in question is registered land, in the registry section of the land court for the district wherein the land lies, and shall submit to the Department and to the Board of Health of the city or town wherein the land lies, a survey plat indicating the location and dimensions of landfill cells and other disposal units with respect to permanently surveyed benchmarks. This plat shall be prepared and certified by a professional land surveyor and shall be in a form acceptable to the Registry of Deeds. The plat shall contain a note prominently displayed which states the obligation to restrict disturbance of the site of the land disposal unit or facility in accordance with 310 CMR 30.590. In addition, the plat shall be accompanied by a record of the type, location, and quantity of hazardous wastes in the land disposal unit or facility. For wastes placed in the land disposal unit or facility before the effective date of 310 CMR 30.000, the owner or operator shall identify the type, location, and quantity of the wastes to the best of his knowledge and in accordance with any records kept by him or his predecessors. After the survey plat and record of wastes has been recorded, any changes that occur in the type, location, or quantity of hazardous wastes within each land disposal unit or area of the facility, or in what the owner or operator knows or learns about the type, location, or quantity of hazardous wastes within each land disposal unit or area of the facility, shall be noted on a revised plat which shall be promptly recorded in the appropriate Registry of Deeds or Land Court and promptly reported to the Department.

# 30.587: Completion and Certification of Closure

- (1) Within 60 days of completion of closure of each hazardous waste surface impoundment, waste pile, land treatment unit, and landfill unit, within 60 days of completion of closure of any other hazardous waste management unit, and within 60 days of completion of final closure of the facility, the owner or operator shall submit to the Department, either by hand-delivery or by certified mail, a certification signed by both the owner or operator and by an independent Massachusetts registered professional engineer that:
  - (a) the hazardous waste management unit or facility, as applicable, has been closed in compliance with the requirements of 310 CMR 30.000 and of the approved closure plan, and (b) the survey plat required by 310 CMR 30.586 has been recorded in the appropriate Registry of Deeds or, if the land in question is registered land, in the registry section of the land court for the district wherein the land lies, and copies of the plat have been submitted to the Department and to the Board of Health of the city or town wherein the land lies, in compliance with 310 CMR 30.586.
- (2) Until the Department, pursuant to 310 CMR 30.904(8), notifies the owner or operator in writing that he is no longer required to maintain financial assurance for closure of the facility, the owner or owner and the independent Massachusetts registered professional engineer who signed the certification required pursuant to 310 CMR 30.587(1) shall each promptly submit to the Department on request any documentation supporting said certification.
- (3) Closure shall not be considered complete until the Department has notified the owner or operator in writing that he is no longer required to maintain financial assurance for the closure of the facility pursuant to 310 CMR 30.587(2).

# 30.590: Post-closure

### 30.591: Applicability

The requirements in 310 CMR 30.590 through 30.596, cited collectively as 310 CMR 30.590, apply to the owners and operators of all hazardous waste management units and facilities at which hazardous waste and/or hazardous waste residues will remain after closure.

### 30.592: Post-closure Care and Use of Property

- (1) Post-closure care for each hazardous waste management unit subject to the requirements of 310 CMR 30.590 shall begin after completion of closure of the unit, shall continue for 30 years after that date, and shall consist of at least the following:
  - (a) Monitoring and reporting in accordance with the requirements set forth in 310 CMR 30.606 through 30.675; and
  - (b) Maintenance and monitoring of waste containment systems in accordance with the requirements set forth in 310 CMR 30.606 through 30.675.
- (2) At any time preceding completion of closure of a particular hazardous waste management unit subject to the requirements of 310 CMR 30.590, or at any time during the post-closure period of that hazardous waste management unit or facility, the Department may shorten the post-closure period applicable to that hazardous waste management unit or facility
  - (a) if all hazardous waste management units or facilities have been closed, and
  - (b) if the Department determines that such action is sufficient to protect public health, safety, or welfare, or the environment (e.g., leachate or ground water monitoring results, characteristics of the hazardous wastes, application of advanced technology, or alternative disposal, treatment, or re-use techniques indicate that the hazardous waste management unit or facility is and would continue to be secure), and
  - (c) if the owner or operator requests the Department to take such action by filing an application that complies with the requirements in 310 CMR 30.802 through 30.807, and
  - (d) only after the Department complies with the requirements and procedures set forth in 310 CMR 30.851 and 30.852, and, if applicable, 310 CMR 30.833, 30.835 through 30.837, and 30.839, and
  - (e) if such action is accordance with all other applicable provisions of 310 CMR 30.800.
- (3) At any time preceding completion of closure of a particular hazardous waste management unit or facility subject to the requirements of 310 CMR 30.590, or at any time during the post-closure period of that hazardous waste management unit or facility, the Department may extend the post-closure period applicable to that hazardous waste management unit or facility
  - (a) if the Department determines that such action is necessary to protect public health, safety, or welfare, or the environment (e.g., leachate or ground water monitoring results indicate a potential for migration of hazardous wastes at levels which might be harmful to public health, safety, or welfare, or the environment), and
  - (b) after the Department complies with the requirements and procedures set forth in 310 CMR 30.851 and 30.852, and, if applicable, 310 CMR 30.833, 30.835 through 30.837, and 30.839, except as provided in 310 CMR 30.020 and 30.030, and
  - (c) if such action is accordance with all other applicable provisions of 310 CMR 30.800.
- (4) The Department may require continuation, after closure, of any of the security requirements of 310 CMR 30.514 during part or all of the post-closure period if:
  - (a) Hazardous wastes might remain exposed after completion of closure, or
  - (b) Access by the public or domestic livestock might pose a hazard to public health, safety, or welfare, or the environment.
- (5) Post-closure use of property on or in which hazardous wastes remain after closure shall never be allowed to disturb the integrity of the final cover, liner(s), or any other components of any containment system, or the function of the facility's monitoring systems, unless the Department determines in writing that the disturbance:
  - (a) Is necessary to the proposed use of the property and will not increase the potential hazard to public health, safety, or welfare or the environment; or
  - (b) Is necessary to reduce a threat to public health, safety or welfare or the environment.
- (6) All post-closure care activities shall be in compliance with the provisions of the approved post-closure plan as specified in 310 CMR 30.593.

#### 30.593: Post-closure Plan

- (1) The owner or operator of a hazardous waste management unit or facility subject to the requirements of 310 CMR 30.590 shall have a written post-closure plan that complies with the requirements in 310 CMR 30.590. The owner or operator of a facility at which there is a surface impoundment described in 310 CMR 30.617(5) or a waste pile described in 310 CMR 30.649(3) from which the owner or operator intends to remove all hazardous waste at closure shall have a contingent post-closure plan that complies with the requirements of 310 CMR 30.590 and, as applicable, in 310 CMR 30.617(5) and 30.649(3). Owners or operators of surface impoundments or waste piles not otherwise required to have contingent post-closure plans shall submit a post-closure plan to the Department within 90 days after the owner or operator or the Department determines that the surface impoundment or waste pile shall be closed as a landfill. Each post-closure plan shall identify the activities that shall, and each contingent post-closure plan shall identify the activities that might, be carried on after closure and the frequency of these activities, and shall include at least:
  - (a) A description of the planned monitoring activities and frequencies at which they will be performed to comply with the requirements set forth in 310 CMR 30.606 through 30.675, and
  - (b) A description of the planned maintenance activities, and frequencies at which they will be performed, to ensure:
    - 1. The integrity of the cap and final cover or other containment systems in accordance with the requirements set forth in 310 CMR 30.606 through 30.659, and
    - 2. The function of the monitoring equipment in accordance with the requirements set forth in 310 CMR 30.606 through 30.675, and
  - (c) The name, address, and telephone number of the person or office to contact about the hazardous waste management unit or facility during the post-closure care period. This individual or office shall keep at all times during the post-closure period an updated copy of the approved post-closure plan.
- (2) Amendments of post-closure plans shall be subject to the following provisions.
  - (a) All applications to the Department for approval to amend a facility's post-closure plan shall include a copy of the proposed amended post-closure plan. The owner or operator shall submit a written notification of or request for a license modification to authorize a change in the approved post-closure plan in compliance with 310 CMR 30.802 through 30.807. The Department shall classify the proposed amendment in accordance with 310 CMR 30.852. The Department shall act in accordance with the requirements and procedures set forth in 310 CMR 30.852.
  - (b) The owner or operator may apply to the Department for approval to amend the facility's post-closure plan at any time during the active life of the facility or during the post-closure care period. Except as provided in 310 CMR 30.852 and 30.890, denial of an application to amend a post-closure plan shall not be subject to public notice, public comment, or public hearings.
  - (c) The owner or operator shall apply to the Department for approval to amend the facility's post-closure plan whenever
    - 1. changes in operating plans or facility design affect the post-closure plan, or
    - 2. there is a change in the expected year of final closure, if applicable, or
    - 3. events which occur during the active life of the facility, including but not limited to closures (and changes in applicable regulations when published in the *Massachusetts Register*), require a modification of the approved post-closure plan, or
    - 4. the Department requests or orders an amendment of the facility's post-closure plan.
  - (d) The deadline for the owner or operator to file required applications to the Department for approval to amend the facility's post-closure plan shall be as follows:
    - 1. At least 60 days prior to a proposed change in facility design or operation.
    - 2. Not more than 60 days after an unexpected event has occurred (including, but not limited to, a change in applicable regulations when published in the *Massachusetts Register* that affects the post-closure plan.
    - 3. Not more than 60 days after the Department requests or orders an amendment of the facility's closure plan, or 90 days if the hazardous waste management unit is a surface impoundment or waste pile not previously required to prepare a contingent post-closure plan.

(PAGES 1131 AND 1132 ARE RESERVED FOR FUTURE USE.)

### 30.594: Recording Notice of License and of Past Disposal

- (1) Within 60 days of certification of closure of the first hazardous waste management unit subject to the requirements of 310 CMR 30.590, and within 60 days of certification of closure of the last hazardous waste management unit subject to the requirements of 310 CMR 30.590, the owner or operator shall record in the appropriate Registry of Deeds or, if the land in question is registered land, in the registry section of the land court for the district wherein the land lies, a notice that:
  - (a) the land has been used to manage hazardous wastes, and
  - (b) the land's use is restricted pursuant to 310 CMR 30.592(5), and
  - (c) the survey plat and record required by 310 CMR 30.586 have been recorded in the Registry of Deeds and copies thereof have been submitted to the Department and to the Board of Health of the city or town wherein the land lies.
- (2) The landowner shall submit to the Department a certified copy of each notice described in 30.594(1), including the date and book and page numbers of recording of such notice, within 30 days after the landowner receives the recorded notice from the registry.

# 30.595: Subsequent Removal of Hazardous Waste and Hazardous Waste Containment Systems

- (1) If the owner or operator or any subsequent owner or operator of the land upon which is located a hazardous waste management unit or facility subject to the requirements of 310 CMR 30.590 wishes to remove hazardous wastes, hazardous waste residues, the liner if any, or contaminated soils, he shall apply to the Department for approval to do so. The Department may grant such approval but
  - (a) only if the owner or operator applies for such approval in compliance with the requirements and procedures set forth in 310 CMR 30.802 through 30.807, and
  - (b) only after the Department complies with the requirements and procedures set forth in 310 CMR 30.851 and 30.852, and, if applicable, 310 CMR 30.833, 30.835, 30.836, 30.837, and 30.839, and
  - (c) such approval shall be subject to all other applicable provisions of 310 CMR 30.800, and
  - (d) in addition, such approval may be granted, and may be allowed to remain in effect, only if the owner or operator has persuaded the Department that the removal of the material in question will be in compliance with the requirements set forth in 310 CMR 30.592(5).
- (2) If the Department grants the approval described in 310 CMR 30.595(1), the person granted such approval may request that the Department give written verification of such removal. If the Department verifies in writing that the material in question has been removed in compliance with such approval, the person requesting the verification may record that verification in the appropriate Registry of Deeds or, if the land in question is registered land, in the registry section of the land court for the district wherein the land lies.

# 30.596: Completion and Certification of Post-closure Care

- (1) No later than 60 days after completion of the established post-closure care period for each hazardous waste management unit or facility subject to the requirements of 310 CMR 30.590, the owner or operator shall submit to the Department, either by hand-delivery or by certified mail, a certification signed by both the owner or operator and by an independent Massachusetts registered professional engineer that
  - (a) post-closure care was performed for the hazardous waste management unit or facility, as applicable, for the required period in compliance with the requirements of 310 CMR 30.000 and of the approved post-closure plan, and
  - (b) the survey plat required by 310 CMR 30.586 has been recorded in the appropriate Registry of Deeds or, if the land in question is registered land, in the registry section of the land court for the district wherein the land lies, and copies of the plat have been submitted to the Department and to the Board of Health of the city or town wherein the land lies, in compliance with 310 CMR 30.586.

30.596: continued

- (c) the notices required by 310 CMR 30.040 and 30.594 have been recorded in the appropriate Registry of Deeds or, if the land in question is registered land, in the registry section of the land court for the district wherein the land lies, and copies of the notices have been submitted to the Department in compliance with 310 CMR 30.040 and 30.594.
- (2) Until the Department, pursuant to 310 CMR 30.906(8), notifies the owner or operator in writing that he is no longer required to maintain financial assurance for post-closure care of the facility, the owner or owner and the independent Massachusetts registered professional engineer who signed the certification required pursuant to 310 CMR 30.596(1) shall each promptly submit to the Department on request any documentation supporting said certification.
- (3) Post-closure care shall not be considered complete until so certified in writing by the Department.

# 30.600: TECHNICAL STANDARDS FOR ALL HAZARDOUS WASTE FACILITIES

# 30.601: Applicability

- (1) 310 CMR 30.601 through 30.699, cited collectively as 310 CMR 30.600, set standards for the design, performance, operation, maintenance, and monitoring of facilities subject to 310 CMR 30.000. Different provisions of 310 CMR 30.600 apply to different classes and categories of facilities. 310 CMR 30.600 applies to owners and operators of:
  - (a) All facilities which use, store, treat or dispose of hazardous waste;
  - (b) All facilities which are described in 310 CMR 30.341(8);
  - (c) All facilities which recycle regulated recyclable material, or which store regulated recyclable material prior to its being recycled, unless the regulated recyclable material is stored and recycled in compliance with 310 CMR 30.200.
  - (d) All facilities which treat or store hazardous waste before it is loaded onto a vessel for incineration or disposal at sea.
- (2) The requirements of 310 CMR 30.600 do not apply to:
  - (a) The accumulation of hazardous waste by a generator at the site of generation for less than 90 days, provided that the requirements of 310 CMR 30.340 through 30.343 are met;
  - (b) A treatment process, method or technique which is an integral part of the manufacturing process, as defined in 310 CMR 30.010, provided that an owner or operator conducting treatment which is an integral part of the manufacturing process shall conduct inspections, maintenance or other activities to ensure that the treatment operation does not result in spills, leaks, or emissions into the environment;
  - (c) Accumulation by a small quantity generator in compliance with 310 CMR 30.351(5); and
  - (d) Municipal or industrial waste water treatment facilities permitted pursuant to M.G.L. c. 21, § 43. Such facilities shall be subject to 314 CMR 8.00.
  - (e) Universal waste handlers and universal waste transporters handling the wastes listed at 310 CMR 30.143(2) in compliance with 310 CMR 30.1000.
  - (f) The accumulation of a laboratory waste by a University participating in the Laboratory XL project at the site of generation for less than 120 days, provided that the requirements of 310 CMR 30.340 and 30.355 are met.
  - (g) The accumulation of a laboratory waste by a University participating in the Laboratory XL project at the site of generation for less than 210 days, provided that the requirements of 310 CMR 30.351 and 30.355 are met.
  - (h) Elementary neutralization of corrosive hazardous waste at the site of generation in an elementary neutralization unit provided that the generator is in compliance with 310 CMR 30.1103.

# 30.602: General Requirements for All Facilities

(1) Hazardous waste storage operations shall be conducted in such a manner that all hazardous wastes are contained throughout the life of the storage operation.

#### 30.602: continued

- (2) Notwithstanding any provision of 310 CMR 30.660, the Department may require the owner or operator of any facility which uses, stores, or treats hazardous waste to comply with, and such owner or operator shall comply with, all or part of 310 CMR 30.660: *Groundwater Protection* if the Department determines that such action is appropriate to protect public health, safety or welfare or the environment.
- (3) The Department may require any facility which uses, stores, treats or disposes of hazardous waste to implement, and such owner or operator shall implement, emission monitoring and/or ambient air quality monitoring programs if the Department determines that such action is appropriate to protect public health, safety, or welfare or the environment.
- (4) Each unit in which hazardous waste is used, stored, treated or disposed of shall have such process controls and emission controls as the Department may require to protect public health, safety, and welfare and the environment from toxic or otherwise harmful fumes, mists, dusts or gases. The Department may prohibit the use, storage, treatment or disposal of certain hazardous wastes in impoundments, piles, landfills or other units if the Department determines that use, storage, treatment or disposal of such waste might result in the production of hazardous emissions in concentrations in excess of air quality standards or in quantities sufficient to present a potential hazard to public health, safety, or welfare or the environment.
- (5) Pursuant to 310 CMR 7.02(5) and 30.000, the Department may require the owner or operator of an existing facility (as defined in 310 CMR 30.010) to submit to the Department plans and specifications for reconstruction, alteration or repair of the facility and/or proposed standard operating procedures for the facility whenever the Department determines that the facility is in need of reconstruction, alteration or repair and/or that new or revised standard operating procedures are necessary to prevent the facility from causing or contributing to a condition of air pollution.
- (6) Each owner or operator shall take all appropriate measures to minimize odors originating from each facility for the use, treatment, storage or disposal of hazardous waste. No operation at a facility which uses, stores, treats or disposes of hazardous waste shall result in the creation of a noisome or unwholesome odor (as defined in 310 CMR 30.010).
- (7) Each owner or operator shall pave or line each truck dock or similar area where hazardous waste is loaded or unloaded with a material which is sufficiently impervious to spills or leaks of hazardous waste that such waste shall be prevented from coming in contact with soil or groundwater.
- (8) Each owner or operator shall operate each facility so that, at the site of the facility, traffic patterns and volume are controlled and access roads are surfaced so that traffic, including emergency vehicles, has safe and expeditious access to the facility.
- (9) For all facility owners and operators who are required to seek a new permit/license or a renewal permit/license (including a post-closure permit/license) for the treatment, storage, or disposal of hazardous waste pursuant to 310 CMR 30.099 or 40 CFR 270.1(c), the corrective action provisions of 40 CFR 264.101 are hereby incorporated by reference, and will be applied at the time of permit/license issuance, subject to the following additions, modifications, and exceptions:
  - (a) In 40 CFR 264.101(b), delete "Subpart S of this part" and substitute "310 CMR 40.0000."
  - (b) In 40 CFR 264.101(c), delete "Regional Administrator" and substitute "Department."
  - (c) At the end of 40 CFR 264.101(d), add, "The management of remediation waste is subject to the requirements of 310 CMR 40.0030."

Notwithstanding the foregoing, the requirements of 310 CMR 30.602(9) shall not apply to the owner and/or operator of an Interim Status Disposal Facility that is conducting corrective action pursuant to the terms of a federal RCRA Corrective Action permit issued by EPA under the authority of 40 CFR 264.101, and in effect as of the date that EPA authorizes Massachusetts to implement the HSWA Corrective Action Rule pursuant to RCRA § 3006 and 40 CFR Part 271, Subpart A, for so long as the EPA permit continues in effect and for so long as any requirements established by the EPA permit continue in effect pursuant to a federal count order, unless otherwise agreed to by the parties and ordered by a court of competent jurisdiction.

#### 30.602: continued

- (10) Any post closure permit/license that is issued will address all applicable 310 CMR 30.000 groundwater monitoring, unsaturated zone monitoring, corrective action, and post-closure care requirements at 310 CMR 30.000. The Department may issue a post closure order under M.G.L. c. 21C, or M.G.L. c. 21E, or both, in lieu of a post closure permit/license. Any such order that is issued will address all applicable 310 CMR 30.000 groundwater monitoring, unsaturated zone monitoring, corrective action, and post-closure care requirements at 310 CMR 30.000. The Department will assure a meaningful opportunity for public involvement regarding any such post closure order:
  - (a) At the time when the post closure order is being issued;
  - (b) At the time when the post closure remedy is being selected, and
  - (c) At the time when the remedy has been completed, by providing a public notice reflecting the Department's tentative determination. Any such notice shall:
    - 1. Be published, at the Department's expense, in a newspaper having a substantial circulation in the affected area;
    - 2. Be provided to the owner or operator of the facility and to all persons on the facility mailing list maintained pursuant to 310 CMR 30.833(4); and
    - 3. Indicate the basis for the Department's tentative determination and that the Department will accept public comments on the tentative determination for at least 30 days from the date of publication. Notice of the Department's final determination shall be provided to the owner or operator of the facility and to all persons who commented on the Department's tentative determination. The Department may combine the public comment periods regarding issuance of an order and remedy selection, if the Department has tentatively selected a remedy at the time when it is proposing to issue an order. The Department may modify the public comment procedures set forth above to the extent provided by 40 CFR 265.121(b)(2) and (3) as incorporated by reference.
- (11) Facilities subject to 310 CMR 30.602(9) or (10) must also comply with the provisions of 310 CMR 40.0113 in order to be considered to be Adequately Regulated pursuant to M.G.L. c. 21E.
- (12) The Corrective Action Management Unit (CAMU) provisions of 40 CFR Part 264, Subpart S, § 264.552 which are hereby incorporated by reference.
- (13) Temporary Unit (TU) provisions of 40 CFR Part 264, Subpart S, § 264.553 which are hereby incorporated by reference.
- (14) Staging pile provisions of 40 CFR Part 264, Subpart S, § 264.554 which are hereby incorporated by reference.
- (15) References to the EPA Regional Administrator in 40 CFR 264.550 through 264.555 shall mean the Department, except that the references to Regional Administrator in 40 CFR 264.555(e) regarding oversight of an out-of-state landfill shall mean the State Director or EPA Regional Administrator who has responsibility under 40 CFR 264.555(d) for permitting the landfill.
- (16) An owner or operator of a hazardous waste management facility shall comply with the applicable land disposal restrictions of 310 CMR 30.750.

# 30.603: Preparation of Hazardous Waste for Disposal

- (1) The following processes shall not be deemed "treatment" of hazardous waste and shall not be subject to 310 CMR 30.500 through 30.999 if such processes are done at the site of generation of the waste and are done solely for the purpose of making the waste more amenable to disposal in a hazardous waste facility, provided that the accumulation, collection, transport, storage, treatment and disposal of such hazardous waste before and after such processes are done shall be subject to 310 CMR 30.000:
  - (a) The addition of an absorbent (e.g., sawdust) in which a chemical reaction does not occur; and
  - (b) The use of a gelation process or similar technique in which a chemical reaction does not occur.

30.603: continued

(2) 310 CMR 30.603(1) shall not apply to, and all applicable requirements of 310 CMR 30.000 shall apply to, solidification techniques which employ cement-based processes, pozzolanic processes, thermoplastic techniques, organic polymer processes, surface encapsulating techniques, glassification processes, or similar processes. (Note: For a description of the above-listed processes see *Guide to the Disposal of Chemically Stabilized and Solidified Waste*, U.S. Environmental Protection Agency, SW-872, September 1982.)

## 30.604: Injection Wells, Leaching Fields, Seepage Pits

- (1) No person shall inject hazardous waste into or through any well.
- (2) No person shall dispose of hazardous waste into:
  - (a) any septic tank, leaching field or leaching pit; or
  - (b) any pit, pond or lagoon that does not meet the requirements set forth in 310 CMR 30.610 for surface impoundments or the requirements set forth in 310 CMR 30.650 for land treatment units.

# 30.605: Special Requirements for Wastewater Treatment Units

### (1) Applicability.

- (a) The requirements of 310 CMR 30.605 shall apply, and the other requirements of 310 CMR 30.500 through 30.900 shall not apply, to the following wastewater treatment units, as that term is defined in 310 CMR 30.010, provided that such units meet all of the requirements set forth in 310 CMR 30.605:
  - 1. wastewater treatment units for the treatment of hazardous waste at the site of generation of the waste; and
  - 2. wastewater treatment units for the accumulation or storage, at the site of generation, of wastewater treatment sludge which is hazardous waste, prior to reintroduction of such sludge back into the wastewater treatment process.
- (b) The requirements of 310 CMR 30.605 shall not apply to a wastewater treatment unit which treats hazardous waste by a treatment process, method, or technique which is an integral part of the manufacturing process, as that term is defined in 310 CMR 30.010.
- (c) The requirements of 310 CMR 30.500 through 30.900 shall not apply to a wastewater treatment unit, as that term is defined in 310 CMR 30.010, which is permitted pursuant to 314 CMR 3.00. Hazardous waste activities at such wastewater treatment units are regulated pursuant to 314 CMR 8.05.
- (d) 310 CMR 30.605(2) through (6) shall not apply, and all applicable requirements of 310 CMR 30.000 shall apply, to each wastewater treatment unit in which the owner or operator intends to or does treat any hazardous waste generated off the site where the wastewater treatment unit is located.
- (2) <u>Management Standards</u>. The owner or operator of each wastewater treatment unit shall comply with the requirements set forth in the following regulations:
  - (a) 310 CMR 30.511: Identification Number;
  - (b) 310 CMR 30.513: General Waste Analysis;
  - (c) 310 CMR 30.514(1): *Security Standards*;
  - (d) 310 CMR 30.515: General Inspection;
  - (e) 310 CMR 30.516: Personnel Training;
  - (f) 310 CMR 30.520 through 30.524: Contingency Plan, Emergency Procedures, Preparedness and Prevention;
  - (g) 310 CMR 30.542: Operating Record;
  - (h) 310 CMR 30.543: Availability, Retention and Disposition of Records; and
  - (i) 310 CMR 30.560: General Requirements for Ignitable, Reactive, or Incompatible Wastes.

### 30.605: continued

# (3) Operation and Maintenance.

- (a) The owner or operator of each wastewater treatment unit shall ensure that the accumulation, storage, or treatment done in each unit does not:
  - 1. Generate fire, explosion, violent reaction, or excessive heat or pressure;
  - 2. Produce uncontrolled toxic mists, fumes or gases in quantities which might threaten public health, safety or welfare or the environment;
  - 3. Produce uncontrolled flammable fumes or gases in quantities which might pose a risk of fire or explosion;
  - 4. Damage the structural integrity of the tank or equipment containing the waste; or
  - 5. Threaten public health, safety or welfare or the environment by any other means.
- (b) No person shall place hazardous waste or any other material into a wastewater treatment unit if such action might result in the unit, or any of its equipment, rupturing, leaking, abnormally corroding, or failing before the end of its intended life.

#### 30.605: continued

(c) Each wastewater treatment unit shall be designed, constructed, operated and maintained so as to prevent hazardous waste from spilling or leaking into or on any land or water.

# (4) Additional Waste Analysis Requirements.

- (a) By not later than April 16, 1984, the owner or operator of each wastewater treatment unit in existence on October 15, 1983, shall submit a copy of the waste analysis plan prepared in compliance with 310 CMR 30.513 and 30.605(2)(b) to the Department and to the local sewer use authority with jurisdiction over the publicly owned treatment works, hereinafter in 310 CMR 30.605 called the POTW, into which the effluent from the wastewater treatment unit discharges.
- (b) In addition to complying with the waste analysis requirements of 310 CMR 30.513 and 30.605(2)(b), the owner or operator shall ensure that the waste analysis plan:
  - 1. Provides for determining the average and maximum effluent flow in gallons per day of the treated waste to be discharged to the POTW.
  - 2. Provides for identifying the waste(s) and the EPA or Massachusetts hazardous waste number(s) of the waste(s) being treated; and
  - 3. Describes the treatment process used.
- (5) <u>Location Standards</u>. No person shall construct, maintain or operate a wastewater treatment unit at a site at which hazardous waste is first generated on or after October 15, 1983, unless the following requirements are complied with:
  - (a) If such unit is to be located on land subject to flooding from the statistical 100-year frequency storm, as determined pursuant to 310 CMR 30.701(1)(a) and (b), it shall be floodproofed in compliance with 310 CMR 30.701(2).
  - (b) If such unit is also an underground tank pursuant to 310 CMR 30.693(1), it shall not be located:
    - 1. within the watershed of a class A or class SA segment of a surface water body, as that term is defined pursuant to 310 CMR 30.010, unless the owner or operator applies to the Department for approval to construct, operate and maintain such a unit at such a location, and the Department has given such approval in writing; the Department may give such approval only if the Department is persuaded that there is no feasible alternative to treating, storing or accumulating the wastewater in an underground unit (e.g., another permitting authority requires that the waste be accumulated, stored or treated underground); or
    - 2. over an actual, planned, or potential public underground drinking water source, as that term is defined in 310 CMR 30.010, unless the owner or operator has applied to the Department for approval to construct, operate and maintain such a unit at such a location, and the Department has given such approval in writing. The Department may give such approval only if the Department is persuaded that there is no feasible alternative to treating, storing, or accumulating the wastewater in an underground unit (e.g., another permitting authority requires that the waste be accumulated, stored, or treated underground).
- (6) <u>Closure Requirements</u>. At closure of the unit, the owner or operator of a wastewater treatment unit shall remove all hazardous waste and hazardous waste residues from the unit. Such waste and residues shall be managed in compliance with 310 CMR 30.000.

# 30.606: Special Requirements for Miscellaneous Units

(1) <u>Applicability</u>. 310 CMR 30.606(1) through (4), prescribe requirements which apply to owners and operators of facilities that treat, store, or dispose of hazardous wastes in miscellaneous units.

30.606: continued

- (2) Environmental Performance Standards. A miscellaneous unit shall be located, designed, constructed, operated, maintained, and closed in a manner that shall ensure protection of public health, safety and welfare and the environment. Licenses for miscellaneous units shall contain such terms and provisions as appropriate to comply with applicable provisions of 310 CMR 30.500 through 30.900 as well as to protect public health, safety and welfare and the environment, including, but not limited to, design and operating requirements, detection and monitoring requirements, and requirements for responses to releases of hazardous waste or hazardous constituents from the unit. Protection of public health, safety and welfare and the environment shall include but is not limited to:
  - (a) Prevention of any releases that may have adverse effects on public health, safety, welfare, or the environment due to migration of waste constituents in the ground water or subsurface environment, considering
    - 1. The volume and physical and chemical characteristics of the waste in the unit, including its potential for migration through soil, liners, or other containing structures;
    - 2. The hydrologic and geologic characteristics of the unit and the surrounding area;
    - 3. The existing quality of groundwater, including other sources of contamination and their cumulative impact on the groundwater;
    - 4. The quantity and direction of groundwater flow;
    - 5. The proximity to and withdrawal rates of current and potential groundwater users;
    - 6. The patterns of land use in the region;
    - 7. The potential for deposition or migration of waste constituents into subsurface physical structures, and into the root zone of food-chain crops and other vegetation;
    - 8. The potential for health risks caused by human exposure to waste constituents; and
    - 9. The potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents.
  - (b) Prevention of any releases that may have adverse effects on public health, safety and welfare, or the environment due to migration of waste constituents in surface water, or in or on any water or land described in 310 CMR 10.02(1), or on the soil surface, considering
    - 1. The volume and physical and chemical characteristics of the waste in the unit;
    - 2. The effectiveness and reliability of containing, confining, and collecting systems and structures in preventing migration;
    - 3. The hydrologic characteristics of the unit and the surrounding area, including the topography of the land around the unit;
    - 4. The patterns of precipitation in the region;
    - 5. The quantity, quality, and direction of groundwater flow;
    - 6. The proximity of the unit to surface waters and to water or land described in 310 CMR 10.02(1);
    - 7. The current and potential uses of nearby surface waters and any water quality standards established for those surface waters;
    - 8. The existing quality of surface waters and surface soils, including other sources of contamination and their cumulative impact on surface waters and surface soils;
    - 9. The patterns of land use in the region;
    - 10. The potential for health risks caused by human exposure to waste constituents; and
    - 11. The potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents.
  - (c) Prevention of any release that may have adverse effects on public health, safety or welfare or the environment due to migration of waste constituents in the air, considering
    - 1. The volume and physical and chemical characteristics of the waste in the unit, including its potential for the emission and dispersal of gases, aerosols and particulates;
    - 2. The effectiveness and reliability of systems and structures to reduce or prevent emissions of hazardous constituents to the air;
    - 3. The operating characteristics of the unit;
    - 4. The atmospheric, meterologic, and topgraphic characteristics of the units and the surrounding area;

30.606: continued

- 5. The existing quality of the air, including other sources of contamination and their cumulative impact on the air;
- 6. The potential for health risks caused by human exposure to waste constituents; and
- 7. The potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents.
- (3) Monitoring, Analysis, Inspection, Response, Reporting and Corrective Action. The owner or operator of each miscellaneous unit shall comply with the requirements of 310 CMR 30.515: General Inspection, 30.524(3): Testing and Maintenance of Equipment, 30.534: Unmanifested Waste Report, 30.544: Biennial Report, 30.602(9): Corrective Action, and 30.606(2): Environmental Performance Standards, and all additional requirements as specified in the license.
- (4) <u>Post-closure Care</u>. The owner or operator of a miscellaneous unit which is a disposal unit shall maintain the miscellaneous unit during the post-closure care period in a manner that complies with 310 CMR 30.590, 30.606(2), and 30.652. In addition, the owner or operator of a treatment or storage unit which has contaminated soils or groundwater that cannot be completely removed or decontaminated during closure shall maintain the miscellaneous unit in a manner that complies with 310 CMR 30.590 and 30.606(2) during the post-closure care period. The post-closure plan required pursuant to 310 CMR 30.590 shall specify activities that shall or might be carried out to comply with these requirements.

# 30.610: SURFACE IMPOUNDMENTS

# 30.611: Applicability

- (1) 310 CMR 30.611 through 30.618, cited collectively as 310 CMR 30.610, prescribe requirements which apply to owners and operators of facilities that use surface impoundments to treat, store, or dispose of hazardous waste.
- (2) The containment of hazardous waste in a surface impoundment at the site of generation for any period of time is "storage" and not "accumulation" of hazardous waste and shall be subject to all the requirements of 310 CMR 30.610.
- (3) All of the provisions of 310 CMR 30.610, except 30.613 and 30.617(2), (3) and (5), apply to each new surface impoundment and each new portion of each existing surface impoundment.
- (4) All of the provisions of 310 CMR 30.610, except 30.612(2), and 30.617(1), apply to each existing portion of each existing surface impoundment.

# 30.612: Design and Operating Requirements

(1) Except as provided in 310 CMR 30.613(4), each surface impoundment shall be underlain by two liners which are designed and constructed in a manner that prevents the migration of liquids into or out of the space between the liners. The liners shall be designed, constructed, and installed to prevent any migration of wastes out of the impoundment to the adjacent groundwater, surface water, or subsurface soil at any time during the active life and during the closure period of the impoundment. The liners may be constructed of materials (*e.g.*, clays and admixes) that allow waste to migrate into the liners themselves, but not into the space between the liners or into the adjacent groundwater, surface water, or subsurface soil during the active life of the facility provided that the impoundment is closed in compliance with 310 CMR 30.617(1). Each liner shall be:

#### 30.612: continued

- (a) of a hydraulic conductivity not to exceed  $1 \times 10^{-7}$  cm/sec;
- (b) constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients, including static head and external hydrogeologic forces, physical contact with the waste or leachate to which they are exposed, climatic conditions, exposure to ultraviolet light, ozone, microbes, the stress of installation, and the stress of daily operation, including the use of machinery and equipment upon the liner after installation;
- (c) placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner due to settlement, compression or uplift; rocks, boulders, irregularities with sharp edges, and all material that may damage the liner shall be removed from the subgrade prior to installation of the liner; and
- (d) installed to cover all surrounding earth likely to be in contact with the waste or leachate.
- (2) The bottom liner shall be at least four feet above the probable high groundwater level as determined pursuant to 310 CMR 30.675. This shall not prohibit the owner or operator from carrying out design and operating procedures which artificially lower the groundwater table throughout the operating life of the facility, provided that the facility's license specifically authorizes this.
- (3) A leak detection, collection, and removal system shall be designed, constructed, maintained and operated between the liners to detect, collect, and remove any discharge of liquid into the space between the liners. The detection, collection and removal system shall be designed, constructed, operated and maintained so that leakage flows freely from the collection system and is removed either as it accumulates or with sufficient frequency to prevent backwater within the collection system. If liquid leaks into the leak detection, collection, and removal system, the owner or operator shall:
  - (a) Notify the Department of the leak immediately by the quickest available means and also notify the Department in writing within seven days; and
  - (b) Within a period of time which shall be specified by the Department, remove accumulated liquid, repair or replace the liner which is leaking to prevent the migration of liquids through the liner, and obtain a certification from an independent Massachusetts registered professional engineer that, to the best of his knowledge and opinion, the leak has been stopped. If the leakage which is collected is identified as hazardous waste pursuant to 310 CMR 30.100, it shall be managed as hazardous waste in compliance with 310 CMR 30.000.
- (4) The direct discharge onto a liner of hazardous waste or other material shall not be allowed to occur without adequate provision having been made for energy dissipation.
- (5) Each surface impoundment shall be designed, constructed, maintained and operated to prevent overtopping resulting from normal or abnormal operation, overfilling, wind and wave action, precipitation, run-on, malfunction of level controllers, alarms or other equipment, or human error.
- (6) Each surface impoundment shall be designed, constructed, operated and maintained to provide at least 60 centimeters (two feet) of freeboard. The design shall reflect a consideration of the difference between the precipitation and evaporation anticipated for the area.
- (7) Each surface impoundment shall be designed, constructed and maintained so that any flow of waste into the impoundment can be immediately shut off in the event of overtopping or liner failure.
- (8) Run-on shall be diverted away from a surface impoundment. Diversion systems shall have the capacity to handle the run-on during peak discharge from 24-hour, 100-year storm.

#### 30.612: continued

- (9) Each surface impoundment shall have dikes that are designed, located, constructed and maintained with sufficient structural integrity to prevent failure of the dikes. In ensuring structural integrity, the owner or operator shall not presume that the liner system will function without leakage during the active life of the impoundment. Each earthen dike shall be kept free of perennial woody plants with root systems which could displace the earthen material upon which the structural integrity of the dike is dependent and free of burrowing animals which could remove earthen material upon which the structural integrity of the dike is dependent. Each earthen dike shall have a protective cover, such as grass, shale or rock, to minimize wind or water erosion and to preserve the structural integrity of the dike.
- (10) Completely surrounding each impoundment shall be a barrier (*e.g.*, a fence in good repair) designed to prevent accidental contact between persons at the facility site and hazardous waste in the surface impoundment. This barrier shall be in addition to the barrier required by 310 CMR 30.514(2)(b)3. Posted on or near such barrier shall be at least one sign, the lettering of which shall be legible from a distance of at least 25 feet. The sign shall:
  - (a) Identify the contents of the surface impoundment as "Hazardous Waste";
  - (b) Identify, in words, the contents of the surface impoundment; and
  - (c) Identify, in words, the hazard(s) associated with the hazardous waste.

# 30.613: Special Provisions for Existing Portions of Existing Surface Impoundments

- (1) Except as provided in 310 CMR 30.613(2) or (4), the owner or operator of each existing surface impoundment, each replacement of an existing surface impoundment, and each lateral expansion of an existing surface impoundment, shall comply with the requirements for liners and leak detection, collection and removal systems specified in 310 CMR 30.612(1) and 30.612(3) within a period of time which shall be specified by the Department in the license. This period of time shall not exceed four years from the date of license issuance pursuant to 310 CMR 30.838.
- (2) Instead of meeting the requirements of 310 CMR 30.613(1), the owner or operator may either:
  - (a) Complete closure of the impoundment in compliance with 310 CMR 30.617(2) within a period not to exceed four years from the date of license issuance pursuant to 310 CMR 30.838; or
  - (b) Close the impoundment in compliance with 310 CMR 30.617(2)(a) and design, construct and operate a pretreatment system for hazardous waste such that the treated waste is no longer hazardous pursuant to 310 CMR 30.141. Such treated waste shall be discharged into the impoundment only in compliance with a groundwater discharge permit issued pursuant to 314 CMR 5.00. The impoundment shall be closed in compliance with 310 CMR 30.617(2)(a) within a period of time not to exceed four years from the date of license issuance pursuant to 310 CMR 30.838.
- (3) The Department shall include in the license a schedule which shall ensure that the facility is brought into compliance with 310 CMR 30.613(1) or 30.613(2) as soon as possible. In setting the compliance schedule, the Department shall consider the following factors:
  - (a) The facility's location with respect to high-quality aquifers, surface water, wells, and other water supplies;
  - (b) The hydrogeology of the site;
  - (c) The results of groundwater monitoring conducted at the site;
  - (d) The availability of alternatives and the time required to implement such alternatives;
  - (e) The extent to which the facility is in compliance with all applicable Federal, State and local laws and regulations; and
  - (f) Whether or not the impoundment already has a single liner.

#### 30.613: continued

- (4) In a license issued pursuant to 310 CMR 30.800, the Department may waive all or part of the design or operating practices specified in 310 CMR 30.612(1) and (3) for a surface impoundment containing hazardous waste which only exhibits the characteristic of corrosivity if the owner or operator demonstrates to the Department that such design and operating practices will prevent the migration of any hazardous constituent into the ground water or surface water at least as effectively as the liners and leachate collection and removal system specified in 310 CMR 30.612 and allow detection of leaks of hazardous constituents through the top liner at least as effectively. In determining whether to waive any or all of the design or operating practices of 310 CMR 30.612(1) and (3), the Department shall consider the factors listed in 310 CMR 30.613(3) as well as the following factors:
  - (a) The rate at which corrosive waste is neutralized in the impoundment;
  - (b) The potential for waste in the impoundment to leach hazardous constituents which may be present in the soil; and
  - (c) The presence of material other than hazardous waste in the impoundment (e.g., flyash) which may contain hazardous constituents capable of migrating from the impoundment as a result of the introduction of corrosive hazardous waste into the impoundment.

Nothing in 310 CMR 30.613(4) shall relieve the owner or operator of an unlined impoundment from the responsibility of obtaining a groundwater discharge permit pursuant to 314 CMR 5.00.

(5) An owner or operator using an impoundment that has not received a waiver pursuant to 310 CMR 30.613(4) shall be subject to the requirements of 310 CMR 30.613(1) and (2).

# 30.614: Testing, Monitoring and Inspection

- (1) During construction and installation, each liner and cover system (*e.g.*, membranes, sheets and coatings) shall be inspected for uniformity, damage, and imperfections (*e.g.*, holes, cracks, thin spots, or foreign materials). Immediately after construction or installation:
  - (a) Each synthetic liner and cover shall be inspected, using methods acceptable to the Department, to ensure tight seams and joints and the absence of tears, punctures, or blisters; and
  - (b) Each soil-based and each admixed liner and cover shall be inspected for imperfections, including lenses, cracks, channels, root holes, or other structural defects, that may cause an increase in the permeability of the liner or cover.
- (2) After a liner has been installed and prior to introducing hazardous waste into the impoundment, the owner or operator shall obtain from an independent Massachusetts registered professional engineer a certification which states that:
  - (a) The liner has been inspected in accordance with 310 CMR 30.614(1); and
  - (b) Each defect found has been properly repaired.
- (3) While a surface impoundment is in operation, it shall be inspected weekly and also immediately after storms to detect evidence of any of the following:
  - (a) a deterioration, malfunction, or improper operation of freeboard control systems;
  - (b) A decrease in the level of the impoundment's contents;
  - (c) The presence of liquids in leak detection, collection and removal systems installed to comply with 310 CMR 30.612(3); and
  - (d) Erosion or other signs of deterioration in dikes or other containment devices.
- (4) The owner or operator shall obtain a certification from an independent Massachusetts registered professional engineer that the impoundment's dike, including that portion of the dike which provides freeboard, has structural integrity. This certification shall be obtained:
  - (a) For each existing surface impoundment, prior to the issuance of a license;
  - (b) For each new surface impoundment, prior to being placed in service and after construction; and
  - (c) For any impoundment, prior to being returned to service if the dike has been repaired or after any period of time during which the impoundment was not in service for six months or longer.

### 30.614: continued

- (5) The certification required by 310 CMR 30.614(4) shall be that the dike:
  - (a) Will withstand the stress of the pressure exerted by the type(s) and amount of waste to be placed in the impoundment; and
  - (b) Will not fail due to scouring or piping, and to prevent such failure, there is no dependence on any liner system included in the surface impoundment construction.
- (6) 310 CMR 30.614(6) applies to each liner installed after October 15, 1983. Submitted with the license application shall be a demonstration that the waste(s) and leachate that may be in contact with the liners are compatible with the liner materials to be used. The license applicant shall persuade the Department that the wastes will not cause any detrimental effect (*e.g.*, cause cracks, swelling, decrease in mechanical strength, change in chemical properties or increase in permeability) on the liner materials used to prevent leakage into or out of the space between the liners. This demonstration shall be made by field tests or laboratory tests which are acceptable to the Department. All such testing shall be fully documented and submitted with the license application.
- (7) The Department may specify that, prior to or during installation of a liner, the physical characteristics (*e.g.*, tensile strength, puncture resistance) of a sample from the liner(s) be tested to ensure that the quality of the material being installed meets manufacturer's specifications and any design specifications included in the facility license.
- (8) The Department may specify in the facility license that liner samples be periodically tested to assess the performance or condition of the liner.

Note: For information on liner testing methods, see *Lining of Waste Impoundments and Disposal Facilities*, U.S. E.P.A. Office of Solid Waste and Emergency Response, SW-870, March 1983.

# 30.615: Emergency Repairs; Contingency Plans

- (1) A surface impoundment shall be removed from service in accordance with 310 CMR 30.615(2) when:
  - (a) The level of liquids in the impoundment drops and the drop is not known to be caused by change of the flow into or out of the impoundment; or
  - (b) The dike leaks.
- (2) When a surface impoundment must be removed from service pursuant to 310 CMR 30.615(1), the owner or operator shall:
  - (a) Immediately shut off the flow or stop the addition of wastes into the impoundment; if the impoundment is at the site of generation of the waste and if adequate alternate storage is unavailable, the owner or operator shall discontinue every process which is generating the waste;
  - (b) Immediately contain all surface leakage which has occurred or is occurring;
  - (c) Immediately stop the leak;
  - (d) Take all other necessary steps to stop or prevent catastrophic failure;
  - (e) If a leak cannot be stopped by any other means, empty the impoundment and manage such hazardous waste in compliance with 310 CMR 30.000; and
  - (f) Notify the Department immediately by the quickest available means, followed by a written notification within seven days.
- (3) As part of the contingency plan required by 310 CMR 30.520 through 30.524, the owner or operator shall specify a procedure for complying with the requirements of 310 CMR 30.615(2). The contingency plan shall also include a description of the repair techniques to be used in the event of leakage due to containment system failure or deterioration which does not require the impoundment to be removed from service.

#### 30.615: continued

- (4) No surface impoundment that has been removed from service pursuant to 310 CMR 30.615 shall be restored to service until the portion of the impoundment which was failing is repaired and the following steps are taken:
  - (a) If the impoundment was removed from service as a result of actual or imminent dike failure, the dike's structural integrity is recertified in accordance with 310 CMR 30.614(4).
  - (b) If the impoundment was removed from service as a result of a drop in the liquid level, then:
    - 1. For any existing portion of the impoundment, as a minimum, a single liner is installed in compliance with the requirements of 310 CMR 30.612(1);
    - 2. A newly installed or repaired liner system is certified by an independent Massachusetts registered professional engineer as meeting the design specifications approved in the license or otherwise approved by the Department.
  - (c) The Department is notified when the impoundment will be restored to service.
- (5) A surface impoundment that has been removed from service pursuant to 310 CMR 30.615 and that is not being repaired shall be closed in compliance with 310 CMR 30.617.

# 30.616: Special Requirements for Ignitable, Reactive, Incompatible, and Acutely Hazardous Wastes, and Hazardous Wastes that are Polyhalogenated Aromatic Hydrocarbons

- (1) Ignitable or reactive waste shall not be placed in a surface impoundment unless the waste and impoundment satisfy all applicable requirements of 310 CMR 30.750 and:
  - (a) The waste is treated before or immediately after placement in the impoundment so that:
    - 1. The resulting material is no longer ignitable or reactive hazardous waste pursuant to 310 CMR 30.122 or 30.124; and
    - 2. 310 CMR 30.560(3) is complied with; or
  - (b) The surface impoundment is used solely for emergencies.
- (2) Ignitable or reactive hazardous wastes which are incidental to the storage or treatment of non-ignitable or non-reactive hazardous wastes in the impoundment shall be concentrated, collected, and removed from the impoundment. Where such ignitable or reactive hazardous wastes are present in the impoundment, such wastes shall be managed so that they are protected from any material or condition which may cause them to ignite or react.
- (3) Incompatible hazardous wastes, or materials incompatible with hazardous wastes (*see* 310 CMR 30.561 for examples) shall not be placed in the same surface impoundment unless 310 CMR 30.560(3) is complied with.
- (4) Acutely hazardous waste identified in 310 CMR 30.136 shall not be placed in a surface impoundment.
- (5) Polyhalogenated aromatic hydrocarbons shall not be placed in a surface impoundment except in accordance with all other applicable provisions of 310 CMR 30.610 and in accordance with the terms and conditions of a management plan, approved by the Department, for such placement. Compliance with such a plan, when approved, shall be a condition of a license issued pursuant to 310 CMR 30.000. The Department may approve a management plan for the placement of polyhalogenated aromatic hydrocarbons in a surface impoundment only if, after considering at least the following criteria, the Department determines that such approval is in accordance with provisions set forth in 310 CMR 30.810 through 30.814.
  - (a) The volume and physical and chemical characteristics of the polyhalogenated aromatic hydrocarbons, including their potential to migrate through the soil or to volatilize or escape into the atmosphere.
  - (b) The volume and physical and chemical characteristics of the other materials placed into the surface impoundment, including their potential to migrate through the soil or to volatilize or escape into the atmosphere.

#### 30.616: continued

- (c) The attenuative properties of the soil and other materials surrounding or underlying the surface impoundment.
- (d) The effectiveness of additional treatment, design, or monitoring techniques used by the owner or operator of the surface impoundment. The Department may require the use of additional or different treatment, design, or monitoring techniques to reduce the possibility of migration or emission of these materials into ground water, surface water, soil, or air.

## 30.617: Closure and Post-Closure Care

- (1) At closure of a new surface impoundment, the owner or operator shall remove or decontaminate all waste residues, contaminated containment system components (*e.g.*, liners), contaminated subsoils, and structures and equipment contaminated with waste or leachate, and manage them as hazardous waste unless 310 CMR 30.141 applies.
- (2) At closure of an existing surface impoundment, either:
  - (a) The owner or operator shall remove or decontaminate all waste residues, contaminated containment system components (*e.g.*, liners), contaminated subsoils, and structures and equipment contaminated with waste or leachate, and manage them as hazardous waste unless 310 CMR 30.141 applies; or
  - (b) If the Department determines that it will be impracticable for the owner or operator to comply with 310 CMR 30.617(2)(a), the Department may approve an alternate closure plan which requires the owner or operator to do the following at closure:
    - 1. Remove wastes, waste residues, contaminated equipment and soils to the extent practicable;
    - 2. Eliminate free liquids by either removing liquid wastes or solidifying the remaining wastes and waste residues;
    - 3. Stabilize remaining wastes to a bearing capacity sufficient to support final cover; and
    - 4. Cover the surface impoundment with a final cover designed and constructed to:
      - a. Provide long-term minimization of the migration of liquid through the closed impoundment;
      - b. Function with minimum maintenance;
      - c. Promote drainage and minimize erosion or abrasion of the final cover;
      - d. Accommodate settling and subsidence so that the cover's integrity is maintained; and
      - e. Have a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present.
- (3) In determining whether or not it is impractical to remove all wastes from an existing impoundment, the Department shall consider the following:
  - (a) The types and volumes of waste in the impoundment;
  - (b) Safety hazards involved in removing hazardous waste from the impoundment; and
  - (c) The extent to which surrounding soil and groundwater have been contaminated.
- (4) (Effective on and after July 1, 1988) If some waste residues or contaminated materials are left in place at final closure, the owner or operator shall comply with all post-closure requirements set forth in 310 CMR 30.590, including maintenance and monitoring throughout the post-closure period as specified in the license. The owner or operator shall:
  - (a) Maintain the integrity and effectiveness of the final cover, including repairing the cap as necessary to correct the effects of settling, subsidence, erosion, or other events;
  - (b) Maintain and monitor the groundwater monitoring system and comply with all other applicable requirements of 310 CMR 30.660;
  - (c) Prevent run-on or run-off from eroding or otherwise damaging the final cover; and
  - (d) Maintain and monitor the leak detection system in accordance with 310 CMR 30.612(3), and comply with all other requirements set forth in 310 CMR 30.612(3).

#### 30.617: continued

- (5) If an owner or operator of an existing surface impoundment plans to close the impoundment in accordance with 310 CMR 30.617(2)(a), and the impoundment did not meet the double-liner requirements of 310 CMR 30.612(1) at the time the Part A permit application was submitted to the EPA in accordance with 40 CFR Part 270, as in effect July 1, 1983 then:
  - (a) The closure plan for the impoundment pursuant to 310 CMR 30.583 shall include both an expected plan for complying with 310 CMR 30.617(2)(a) and a contingent plan for complying with 310 CMR 30.617(2)(b) in the event that not all contaminated subsoil can be practicably removed at closure; and
  - (b) The owner or operator shall prepare a contingent post-closure plan pursuant to 310 CMR 30.593 for complying with 310 CMR 30.617(4) in case not all contaminated subsoil can be practicably removed at closure.
  - (c) The cost estimates calculated pursuant to 310 CMR 30.903 and 30.905 for closure and post-closure care of an impoundment subject to 310 CMR 30.617(5) shall include the cost of complying with the expected closure plan, the contingent closure plan, and the contingent post-closure plan. Where the costs of the expected closure plan and the contingent closure plan overlap (*i.e.*, the same items are factored into the cost estimate), the costs need not be counted twice.

## 30.618: Stand-by Surface Impoundments - Waiver From Groundwater Monitoring Requirements

- (1) On a case-by-case basis, the Department may waive all or part of 310 CMR 30.660: *Groundwater Protection* for surface impoundments that are designed and operated solely for the containment of hazardous waste in the event of an emergency at the facility (*e.g.*, equipment failure or overflows). If such a waiver is granted, the owner or operator shall:
  - (a) Immediately notify the Department by the quickest available means following an emergency which requires that the impoundment be utilized, and follows this up with a written notification within seven days; and
  - (b) Remove all waste from the impoundment as expeditiously as practicable and in a manner and time period approved by the Department.
- (2) If the owner or operator fails to comply with 310 CMR 30.618(1)(a) or (b), the Department may require that the owner or operator comply with 310 CMR 30.660: *Groundwater Protection*.
- (3) Nothing in 310 CMR 30.618 relieves the owner or operator from the responsibility to comply with any other provision of 310 CMR 30.610.

#### 30.620: Landfills

## 30.621: Applicability

310 CMR 30.621 through 30.633, cited collectively as 310 CMR 30.620, prescribe requirements which apply to owners and operators of facilities that dispose of hazardous waste in landfills.

#### 30.622: Design and Operating Requirements

- (1) Each landfill shall be underlain by two liners which are designed and constructed in a manner that prevents the migration of liquids into or out of the space between the liners. The liners shall be designed, constructed and installed to prevent any migration of wastes out of the landfill to the adjacent groundwater, surface water or subsurface soil at any time during the active life and during the closure period of the landfill. The upper liner shall be constructed of materials that prevent waste from passing into the liner during the active life of the facility. Clay liners and admixes shall not be acceptable. The bottom liner may be constructed of materials that allow waste to migrate into the liner itself but not into the groundwater, surface water or adjacent subsurface soil during the active life of the facility. The bottom liner shall have a hydraulic conductivity not to exceed  $1 \times 10^{-7}$  cm/sec. Each liner shall be:
  - (a) Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to:
    - 1. pressure gradients including static head and external hydrogeologic forces;
    - 2. physical contact with and the chemical properties of the waste or leachate to which it is exposed;
    - 3. climatic conditions;
    - 4. exposure to ozone, ultraviolet light or microbes; and
    - 5. the stress of installation and the stress of daily operation, including the use of machinery and equipment upon the liner after installation.
  - (b) Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression or uplift; rocks, boulders, irregularities with sharp edges, and all material that may damage the liner shall be removed from the subgrade prior to installation of the liner; and
  - (c) Installed to cover all surrounding earth likely to be in contact with the waste or leachate.
- (2) The bottom liner shall be at least four feet above the probable high groundwater level as determined pursuant to 310 CMR 30.675. This shall not prohibit the owner or operator from installing passive systems designed to artificially lower the groundwater table throughout the operating life of the facility and beyond, provided that the facility's license specifically authorizes this.
- (3) A leak detection, collection and removal system shall be designed, constructed, maintained and operated between the liners to detect, collect and remove all discharge of liquid into the space between the liners. The detection, collection and removal system shall be designed, constructed, operated and maintained so that leakage flows freely from the collection system and is removed either as it accumulates or with sufficient frequency to prevent backwater within the collection system. If liquid leaks into the leak detection, collection and removal system, the owner or operator shall:
  - (a) Notify the Department of the leak immediately by the quickest available means and also notify the Department in writing within seven days; and
  - (b) Either:
    - 1. Within the period of time which shall be specified by the Department:
      - a. Remove accumulated liquid;
      - b. To prevent the migration of liquids through the liner, repair or replace the liner which is leaking; and
      - c. Obtain a certification from an independent Massachusetts registered professional engineer that, to the best of his knowledge and opinion, the leak has been stopped; or
    - 2. Ask the Department to determine that it is impractical to repair or replace the liner that is leaking, in which case the Department may authorize the owner or operator to continue operating the landfill but only if leakage is continually removed by the leakage detection, collection and removal system and 310 CMR 30.660: *Groundwater Protection* is complied with. In making such a determination, the Department may consider the following:

#### 30.622: continued

- a. The type(s) and volume(s) of waste(s) in the landfill;
- b. The ease with which the cause of the leak can be determined;
- c. Safety hazards involved in removing hazardous waste from the landfill;
- d. Availability of temporary storage areas for waste removed from the landfill; and
- e. The types and concentrations of hazardous constituents appearing in the liquid which is leaking from the liner.
- (4) The landfill shall have, immediately above the upper liner, a leachate collection and removal system that is designed, constructed, maintained, and operated to collect and remove leachate from the landfill. The leachate depth over the liner at any point over the base of the landfill shall not exceed 30 cm. (one foot). If the collected leachate is hazardous waste pursuant to 310 CMR 30.100, it shall be managed as hazardous waste in compliance with 310 CMR 30.000. If the collected leachate is discharged to surface water or groundwater, such discharge is subject to M.G.L. c. 21, § 43. The leachate collection and removal system shall be:
  - (a) Constructed of materials that are:
    - 1. Chemically resistant to the waste managed in the landfill and to the leachate expected to be generated; and
    - 2. Of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying waste, waste cover material, and by any equipment used at the landfill; and
  - (b) Designed and operated to function without clogging through the active life and the closure and post-closure period of the landfill.
- (5) The owner or operator shall design, construct, operate and maintain a run-on control system capable of preventing flow onto the active portion of the landfill during peak discharge from at least a 100-year storm.
- (6) The owner or operator shall design, construct, operate and maintain a run-off management system to collect and control at least the water volume resulting from a 24-hour, 100-year storm. If the collected run-off is hazardous waste pursuant to 310 CMR 30.100, it shall be managed as hazardous waste in compliance with 310 CMR 30.000. If the collected run-off is discharged to surface water or groundwater, such discharge is subject to M.G.L. c. 21, § 43.
- (7) To maintain design capacity of the system, collection and holding facilities (*e.g.*, tanks, basins) associated with run-on and run-off control systems shall be emptied or otherwise managed expeditiously after storms.
- (8) If a landfill contains any particulate matter which may be subject to wind dispersal, the owner or operator shall cover or otherwise manage the landfill to control wind dispersal.
- (9) The owner or operator shall design and operate the facility so that, where necessary to protect public health, safety and welfare and the environment, the migration of toxic, ignitable or otherwise harmful emissions from the facility site shall be controlled.
- (10) The owner or operator shall provide, and maintain in good repair, access roads at the landfill site. Such access roads shall be designed, constructed and maintained so that traffic will flow smoothly at all times and will not be interrupted by inclement weather.
- (11) Landfills shall be equipped with suitable channeling devices, such as ditches, berms or settling basins, to prevent run-off originating from the landfill site which could cause interference with natural drainage of adjacent land(s).

#### 30.623: Demonstration of Waste/Liner Compatibility

Submitted with the license application shall be a demonstration that the waste(s) and leachate that may be in contact with the liners are compatible with the liner materials to be used. The license applicant shall persuade the Department that the wastes will not cause any detrimental effect (*e.g.*, cause cracks, swelling, decrease in mechanical strength, change in chemical properties or increase in permeability) on the liner material(s) used to prevent leakage into or out of the space between the liners. This demonstration shall be made by:

- (1) conducting field tests or laboratory tests which are approved by the Department; all such testing shall be fully documented and submitted with the license application; or
- (2) submitting to the Department historical data which documents successful use of the particular liner material to be used with the waste(s) and leachate to which the liner materials will be exposed; or
- (3) submitting to the Department scientific and technical literature which demonstrates that the waste(s) and leachate will not adversely affect the liners.

## 30.624: Monitoring and Inspection

- (1) During construction and installation, liners and cover systems (e.g., membranes, sheets and coatings) shall be inspected for uniformity, damage, and imperfections (e.g., holes, cracks, thin spots, or foreign materials). Immediately after construction and installation, each synthetic liner and cover shall be inspected, using methods acceptable to the Department, to ensure tight seams and joints and the absence of tears, punctures or blisters. Immediately after construction and installation, each soil-based and admixed liner and cover shall be inspected for imperfections, including lenses, cracks, channels, root holes, or other structural defects, that might cause an increase in the permeability of the liner or cover.
- (2) After a liner has been installed and prior to introducing hazardous waste into the landfill, the owner or operator shall obtain from an independent Massachusetts registered professional engineer a certification which states that:
  - (a) The liner has been inspected in accordance with 310 CMR 30.624(1); and
  - (b) Each defect found has been properly repaired.
- (3) While a landfill is in operation, it shall be inspected weekly and also immediately after storms to detect evidence of any of the following:
  - (a) Deterioration, malfunction, or improper operation of run-on and run-off control systems;
  - (b) The presence of liquids in leak detection, collection and removal systems installed to comply with 310 CMR 30.622(3);
  - (c) Proper functioning of wind dispersal control systems, where present;
  - (d) The presence of leachate in leachate collection and removal systems; and
  - (e) Proper functioning of leachate collection and removal systems.
- (4) All inspections done pursuant to 310 CMR 30.624(3) shall be recorded in the log required pursuant to 310 CMR 30.515(1).

## 30.625: Supervision of Operation

- (1) During the period beginning with commencement of construction of each hazardous waste landfill and ending two years thereafter, there shall be in effect at all times a contract properly executed by the owner or operator and by an independent Massachusetts registered professional engineer knowledgeable in matters of hazardous waste disposal. The owner or operator shall submit a copy of said contract to the Department with the license application. The contract shall provide for the following minimum requirements:
  - (a) During site preparation, the engineer shall provide sufficient supervision, assistance and inspection to enable him to certify that preparation of the site has been done in accordance with the plans which were approved by the Department.

#### 30.625: continued

- (b) During the operation of the landfill,
  - 1. The engineer shall provide daily supervision, engineering assistance, and plan interpretation during the first week of operation.
  - 2. The engineer shall conduct monthly inspections during the first year of operation to ensure compliance with the approved plans.
  - 3. Thereafter, the engineer shall conduct inspections of the landfill operation at least once every two months.
- (c) The engineer shall comply with 310 CMR 30.625(3) and (4).
- (2) After expiration of the period specified in 310 CMR 30.625(1), there shall be in effect at all times a contract properly executed by the owner or operator and by an independent Massachusetts registered professional engineer knowledgeable in matters of hazardous waste disposal. The owner or operator shall submit to the Department a copy of each such contract. Each such contract shall provide for the following minimum requirements:
  - (a) The engineer shall conduct inspections at least once every two months; and
  - (b) The engineer shall comply with 310 CMR 30.625(3) and (4).
- (3) After each site inspection, the engineer shall prepare a written report for the owner or operator. This report shall be part of the facility's operating record and shall be kept in compliance with 310 CMR 30.541 through 30.543. The engineer shall also submit a copy of this report to the Department within 15 days of the inspection.
- (4) The engineer shall promptly notify the Department of any and all deviations from the approved plans and operating procedure.

# 30.626: Surveying and Record Keeping

The owner or operator of a hazardous waste landfill shall maintain the following items in the operating record required pursuant to 310 CMR 30.542:

- (1) On a map, the exact location and dimensions, including depth, of each cell with respect to permanently surveyed benchmarks; and
- (2) The contents of each cell and the approximate location of each waste type within each cell.

# 30.627: Equipment

- (1) The owner or operator shall provide equipment in adequate numbers and of appropriate type and size for the proper operation of the landfill in accordance with good engineering practice and in compliance with 310 CMR 30.000.
- (2) The owner or operator shall make provisions for the routine maintenance of equipment and to assure satisfactory performance capability for the various operations necessary for excavation, compaction, transportation, covering and other aspects of a landfill, and for the prompt repair or replacement of said equipment.
- (3) The owner or operator shall provide at the site suitable shelter or protection for all equipment and service supplies used in connection with landfill operation.
- (4) The owner or operator shall make arrangements for providing standby equipment in the event of breakdown of regular equipment. Such standby equipment shall be available for use and shall be provided within 24 hours of such breakdown; otherwise the landfill area shall be closed for receipt of waste until equipment becomes available.

# 30.628: Special Requirements for Ignitable, Reactive, and Incompatible Hazardous Wastes, and Hazardous Wastes that are Polyhalogenated Aromatic Hydrocarbons

(1) Ignitable or reactive hazardous waste shall not be disposed of in a landfill.

#### 30.628: continued

- (2) Incompatible hazardous wastes, or materials incompatible with hazardous wastes (*see* 310 CMR 30.561 for examples) shall not be placed in the same landfill cell unless 310 CMR 30.560(3) is complied with.
- (3) Polyhalogenated aromatic hydrocarbons shall not be placed in a landfill except in accordance with all other applicable provisions of 310 CMR 30.620 and in accordance with the terms and conditions of a management plan, approved by the Department, for such placement. Compliance with such a plan, when approved, shall be a condition of a license issued pursuant to 310 CMR 30.000. The Department may approve a management plan for the placement of polyhalogenated aromatic hydrocarbons in a landfill only if, after considering at least the following criteria, the Department determines that such approval is in accordance with provisions set forth in 310 CMR 30.810 through 30.814.
  - (a) The volume and physical and chemical characteristics of the polyhalogenated aromatic hydrocarbons, including their potential to migrate through the soil or to volatilize or escape into the atmosphere.
  - (b) The volume and physical and chemical characteristics of the other materials placed into the landfill, including their potential to migrate through the soil or to volatilize or escape into the atmosphere.
  - (c) The attenuative properties of the soil and other materials surrounding or underlying the landfill.
  - (d) The effectiveness of additional treatment, design, or monitoring techniques used by the owner or operator of the landfill. The Department may require the use of additional or different treatment, design, or monitoring techniques to reduce the possibility of migration or emission of these materials into ground water, surface water, soil, or air.

## 30.629: Special Requirements for Liquid Waste

- (1) Non-containerized liquid waste or waste containing free liquids, in each case as determined in accordance with 310 CMR 30.156, shall not be placed in a landfill whether or not sorbents have been added.
- (2) A container holding liquid waste or waste containing free liquids, in each case as determined in accordance with 310 CMR 30.156, shall not be placed in a landfill whether or not sorbents have been added.

# 30.630: Special Requirements for Containers

- (1) An empty container shall be crushed flat, shredded, or similarly reduced in volume to the maximum practical extent or filled with solids before it is buried beneath the surface of a landfill.
- (2) A partially empty container, before it is buried beneath the surface of a landfill, shall be:
  - (a) Filled with solids compatible with the wastes already in the container; or
  - (b) Crushed to the maximum practical extent to eliminate void spaces; or
  - (c) Emptied and the empty container crushed flat, shredded, or similarly reduced in volume.

#### 30.630: continued

- (3) To be considered "filled with solids" in compliance with 310 CMR 30.630(1) or (2)(a), a container shall be filled in compliance with 310 CMR 30.630(3)(a) or (b), whichever results in less void space.
  - (a) The container shall be filled to within 7.6 centimeters (three inches) of the top of the container, or
  - (b) The contents of the container shall occupy 90% or more of the volume of the container.
- (4) For the purposes of 310 CMR 30.630, the term "partially empty container" shall mean a container that is neither an empty container (*see* 310 CMR 30.010) or a container that is "filled with solids" (*see* 310 CMR 30.630(3)).
- (5) Landfill disposal of small containers of hazardous waste in overpacked drums (e.g., lab packs) is prohibited.

# 30.631: Wastes Unacceptable for Landfilling

- (1) Except as provided in 310 CMR 30.631(3), (4) or (5), the following wastes shall not be disposed of in a landfill:
  - (a) Any sludge or solid containing halogenated organic compounds in a concentration greater than 100 mg/kg;
  - (b) Any waste containing cyanide;
  - (c) Any waste which is acutely hazardous waste pursuant to 310 CMR 30.136.
- (2) The Department may prohibit the disposal of any hazardous waste in a landfill if it determines that landfilling of such waste may present a hazard to public health, safety or welfare or the environment (*e.g.*, volatile organics).
- (3) On a case-by-case basis, the Department may waive any provision of 310 CMR 30.631(1) if the Department determines that:
  - (a) The waste cannot be recycled, treated or disposed of by some other means in compliance with 310 CMR 30.000; and
  - (b) The type and volume of waste to be disposed of will not present any significant risk to public health, safety or welfare or the environment.
- (4) On a case-by-case basis, the Department may waive any provision of 310 CMR 30.631(1) if the waste is a contaminated soil and the Department determines that the requirements set forth in 310 CMR 30.631(3)(a) and (b) are met.
- (5) On a case-by-case basis, the Department may waive any provision of 310 CMR 30.631(1) if the waste has been absorbed by spill clean-up material and the Department determines that the requirements set forth in 310 CMR 30.631(3)(a) and (b) are met.
- (6) The Department shall review the feasibility of available hazardous waste management alternatives for all hazardous wastes which the owner or operator proposes to dispose of at the landfill, as stated in the license application pursuant to 310 CMR 30.804(19)(a). The Department shall approve for landfill disposal only those hazardous wastes which cannot be reused, recycled, treated or disposed of by some other means in compliance with 310 CMR 30.000, or which the Department determines cannot be eliminated.

## 30.632: Stabilization/Solidification Plan

- (1) The owner or operator shall prepare a stabilization/solidification plan designed to ensure that all wastes disposed of in the landfill have been treated to the maximum extent practicable to minimize the potential for wastes migrating from the landfill site. At a minimum, the stabilization/solidification plan shall specify:
  - (a) The wastes which will be stabilized and/or solidified at the landfill site prior to disposal;
  - (b) The techniques which will be used to limit the solubility and potential for migration of the waste by:

#### 30.632: continued

- 1. The addition of materials that ensure that hazardous constituents are maintained in their least soluble form;
- 2. The production of monolithic blocks of treated waste with high structural integrity; and/or
- 3. The placing of a jacket or membrane of material of low permeability and low chemical reactivity between the waste and the landfill;
- (c) The means that will be used to ensure that wastes which will not be stabilized or solidified at the landfill site will, to the maximum extent practicable, be stabilized or solidified at the site of generation of the waste, or at another facility where such stabilization or solidification can be lawfully done, if the landfill is not at the site of generation of the waste;
- (d) A description of the physical and chemical properties of the stabilized/solidified waste (e.g., compressive strength, leachability); and
- (e) A quality assurance program designed to ensure that the stabilized/solidified waste meets the specifications which are outlined in the stabilization/solidification plan.
- (2) The stabilization/solidification plan shall be submitted to the Department with the license application and upon approval by the Department shall become a condition of the license.

## 30.633: Closure and Post-Closure Care

- (1) At final closure of the landfill or upon closure of any cell, the owner or operator shall cover the landfill or cell with a final cover designed and constructed to:
  - (a) Provide long-term minimization of migration of liquids through the closed landfill;
  - (b) Function with minimum maintenance;
  - (c) Promote drainage and minimize erosion or abrasion of the cover;
  - (d) Accommodate settling and subsidence so that the cover's integrity is maintained; and
  - (e) Have a permeability less than or equal to the permeability of the bottom liner system.
- (2) (Effective on and after July 1, 1988) After final closure of the landfill or upon closure of any cell, the owner or operator shall comply with all post-closure requirements set forth in 310 CMR 30.590, including, without limitation, maintenance and monitoring throughout the post-closure care period as specified pursuant to 310 CMR 30.592. The owner or operator shall:
  - (a) Maintain the integrity and effectiveness of the final cover, including making repairs to the cap to correct the effects of settling, subsidence, erosion or other events;
  - (b) Maintain and monitor the leak detection, collection and removal system in compliance with 310 CMR 30.622(3);
  - (c) Continue to operate the leachate collection and removal system;

#### 30.633: continued

- (d) Maintain and monitor the groundwater monitoring system and comply with all other applicable requirements of 310 CMR 30.660;
- (e) Prevent run-off and run-on from eroding or otherwise damaging the final cover;
- (f) Maintain access roads in compliance with 310 CMR 30.622(10);
- (g) Maintain gas collection and control systems, where present; and
- (h) Protect and maintain surveyed benchmarks used in complying with 310 CMR 30.626.
- (3) During the post-closure period, if liquid leaks into the leak detection, collection and removal system, the owner or operator shall comply with the provisions of 310 CMR 30.622(3).

## 30.640: Waste Piles

- (1) 310 CMR 30.640 through 30.649 prescribe requirements which apply to owners and operators of facilities that use waste piles to store or treat hazardous waste.
- (2) The containment of hazardous waste in a pile at the site of generation for any period of time is "storage" and not "accumulation" of hazardous waste and shall be subject to all the requirements of 310 CMR 30.640 through 30.649.
- (3) 310 CMR 30.640 through 30.649 do not apply to owners or operators using waste piles that are closed with hazardous wastes left in place. Such waste piles are subject to regulation as landfills pursuant to 310 CMR 30.620.
- (4) 310 CMR 30.641 and 30.660: *Groundwater Protection* do not apply to a waste pile that is inside or under a structure that provides protection from precipitation so that neither run-off nor leachate is generated, provided that:
  - (a) Neither liquids nor materials containing free liquids are placed in the pile;
  - (b) The pile is protected from surface water run-on by the structure or in some other manner acceptable to the Department;
  - (c) Where necessary, the pile is designed and operated to control dispersal of the waste by wind by means other than wetting; and
  - (d) The pile will not generate leachate through decomposition or any other reaction.

## 30.641: Design and Operating Requirements

- (1) A waste pile shall have:
  - (a) A liner that is designed, constructed and installed to prevent all migration of waste out of the pile into the adjacent groundwater, surface water, or subsurface soil at all times during the active life and during the closure period of the waste pile. The liner may be constructed of materials that may allow waste to migrate into the liner itself, but not the adjacent subsurface soil, groundwater or surface water, during the active life of the pile. The liner shall be:
    - 1. A minimum of four feet above the probable high groundwater level as determined pursuant to 310 CMR 30.675;
    - 2. Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients including static head and external hydrogeologic forces, physical contact with the waste or leachate to which it is exposed, climatic conditions, and the stress of installation. The liner shall also be of sufficient strength and thickness to prevent failure due to puncture, cracking, tearing or other physical damage from equipment used to place waste in or on the pile or to clean and expose the liner surface for inspection.
    - 3. Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression or uplift; rocks, boulders, irregularities with sharp edges, and all material that may damage the liner shall be removed from the subgrade prior to installation of the liner; and
    - 4. Installed to cover all surrounding earth likely to be in contact with the waste or leachate.

#### 30.641: continued

- (b) A leachate collection and removal system immediately above the liner that is designed, constructed, maintained and operated to collect and remove leachate from the pile. The leachate depth over the liner shall not exceed 30 cm (one foot) at any point. If the collected leachate is hazardous waste pursuant to 310 CMR 30.100, it shall be managed as hazardous waste in compliance with 310 CMR 30.000. If the collected leachate is discharged to surface water or groundwater, it is subject to regulation pursuant to M.G.L. c. 21, § 43. The leachate collection and removal system shall be:
  - 1. Constructed of materials that are chemically resistant to the waste managed in the pile and the leachate expected to be generated, and that are of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying waste, waste cover material, and by any equipment used at the pile; and
  - 2. Designed and operated to function without clogging during the life of the pile and throughout the closure period of the pile.
- (2) The owner or operator shall design, construct, operate and maintain a run-on control system capable of preventing flow onto the active portion of the pile during peak discharge from at least a 100-year storm.
- (3) The owner or operator shall design, construct, operate and maintain a run-off management system to collect and control at least the water volume resulting from a 24-hour, 100-year storm. If the collected run-off is hazardous waste pursuant to 310 CMR 30.100, it shall be managed as a hazardous waste in compliance with 310 CMR 30.000. If the collected run-off is discharged to surface water or groundwater, it is subject to regulation pursuant to M.G.L. c. 21, § 43.
- (4) To maintain design capacity of the system, collection and holding facilities (*e.g.*, tanks, basins) associated with run-on and run-off control systems shall be emptied or otherwise managed expeditiously after storms.
- (5) If the pile contains any particulate matter which may be subject to wind dispersal, the owner or operator shall cover or otherwise manage the pile to control wind dispersal.
- (6) Except as provided in 310 CMR 30.640(4), each owner or operator using a single-lined waste pile shall comply with 310 CMR 30.660: *Groundwater Protection*.

## 30.643: Inspection of Liners

The owner or operator shall comply with the following:

- (1) The waste in a pile shall be removed periodically, and the liner shall be inspected for deterioration, cracks, and other conditions that might result in leaks. The frequency of inspection shall be specified in the inspection plan required by 310 CMR 30.515 and shall be based on the potential for the liner to crack or otherwise deteriorate under the conditions of operation (*e.g.*, waste type, rainfall, loading rates and subsurface stability).
- (2) If deterioration, a crack, or other condition is identified that is causing or could cause a leak, the owner or operator shall:
  - (a) Notify the Department of the condition immediately by the quickest available means and also notify the Department in writing within seven days; and
  - (b) Repair or replace the liner and obtain a certification from an independent Massachusetts registered professional engineer that, to the best of his knowledge and opinion, the liner has been repaired and leakage will not occur.

#### 30.644: Monitoring and Inspection

- (1) During construction or installation, liners and cover systems (*e.g.*, membranes, sheets or coatings) shall be inspected for uniformity, damage and imperfections (*e.g.*, holes, cracks, thin spots and foreign materials). Immediately after construction or installation:
  - (a) Each synthetic liner and cover shall be inspected, using methods acceptable to the Department, to ensure tight seams and joints and the absence of tears, punctures and blisters; and
  - (b) Each soil-based and admixed liner and cover shall be inspected for imperfections, including lenses, cracks, channels, root holes or other structural defects that may cause an increase in the permeability of the liner or cover.
- (2) While a waste pile is in operation, it shall be inspected weekly and also immediately after storms to detect evidence of any of the following:
  - (a) Deterioration, malfunction, or improper operation of run-on and run-off control systems;
  - (b) Proper functioning of wind-dispersal-control systems, where present;
  - (c) The presence of leachate in leachate collection and removal systems; and
  - (d) Proper functioning of leachate collection and removal systems.

## 30.645: Demonstration of Waste/Liner Compatibility

The provisions of 310 CMR 30.645 apply only to liners installed after October 15, 1983. Submitted with the license application shall be a demonstration that the waste(s) and leachate that may be in contact with the liners will be compatible with the liner materials to be used. The license applicant shall persuade the Department that the wastes will not have any detrimental effect (e.g., cause cracks, swelling, decrease in mechanical strength, change in chemical properties or increase in permeability) on the liner materials used to prevent leakage into or out of the space between the liners. This demonstration shall be made by conducting field tests or laboratory tests which shall be acceptable to the Department. All such testing shall be fully documented and submitted with the license application.

# 30.646: Special Requirements for Ignitable, Reactive, and Acutely Hazardous Wastes, Hazardous Wastes that are Polyhalogenated Aromatic Hydrocarbons, and Powders, Dusts, or Friable Materials

- (1) Ignitable or reactive hazardous waste shall not be placed in a waste pile unless the waste and the waste pile satisfy all applicable requirements of 310 CMR 30.750 and the waste is treated before or immediately after placement in the pile so that:
  - (a) The resulting material is no longer ignitable or reactive hazardous waste pursuant to 310 CMR 30.122 and 30.124; and
  - (b) 310 CMR 30.560(3) is complied with.
- (2) Acutely hazardous waste identified in 310 CMR 30.136 shall not be stored or treated in a waste pile.
- (3) Hazardous waste in the form of powder, dust or friable material shall not be stored or treated in a waste pile.
- (4) Polyhalogenated aromatic hydrocarbons shall not be placed in a waste pile except in accordance with all other applicable provisions of 310 CMR 30.640 and in accordance with the terms and conditions of a management plan, approved by the Department, for such placement. Compliance with such a plan, when approved, shall be a condition of a license issued pursuant to 310 CMR 30.000. The Department may approve a management plan for the placement of polyhalogenated aromatic hydrocarbons in a waste pile only if, after considering at least the following criteria, the Department determines that such approval is in accordance with provisions set forth in 310 CMR 30.810 through 30.814.
  - (a) The volume and physical and chemical characteristics of the polyhalogenated aromatic hydrocarbons, including their potential to migrate through the soil or to volatilize or escape into the atmosphere.

#### 30.646: continued

- (b) The volume and physical and chemical characteristics of the other materials placed into the waste pile, including their potential to migrate through the soil or to volatilize or escape into the atmosphere.
- (c) The attenuative properties of the soil and other materials surrounding or underlying the waste pile.
- (d) The effectiveness of additional treatment, design, or monitoring techniques used by the owner or operator of the waste pile. The Department may require the use of additional or different treatment, design, or monitoring techniques to reduce the possibility of migration or emission of these materials into ground water, surface water, soil, or air.

## 30.647: Special Requirements for Incompatible Wastes

- (1) Incompatible hazardous wastes, or materials incompatible with hazardous wastes (*see* 310 CMR 30.561 for examples) shall not be placed in the same pile unless 310 CMR 30.560(3) is complied with.
- (2) A pile which contains hazardous waste that is incompatible with any waste or other material stored nearby in one or more containers, other piles, open tanks or surface impoundments shall be separated from the other materials or protected from them by means of a dike, berm, wall or other device.
- (3) Hazardous waste shall not be piled on the same base where incompatible wastes or other materials were previously piled, unless the base has been decontaminated sufficiently to ensure compliance with 310 CMR 30.560(3).

#### 30.648: Limited Storage Duration

The Department may place a limit on the period of time that a waste pile may remain on the facility site whenever the Department determines that such action is necessary or appropriate to protect public health, safety or welfare or the environment.

## 30.649: Closure and Post-Closure Care

- (1) At closure of the pile, the owner or operator shall remove or decontaminate all waste residues, contaminated containment system components (*e.g.*, liners), contaminated subsoils, and structures and equipment contaminated with waste or leachate, and manage them as hazardous waste unless 310 CMR 30.141 applies.
- (2) If, after removing or decontaminating all residues and making all reasonable efforts to effect removal or decontamination of contaminated components, subsoils, structures and equipment as required by 310 CMR 30.649(1), the owner or operator finds that not all contaminated subsoils can be practicably removed or decontaminated, he shall close the facility and perform post-closure care in compliance with the closure and post-closure care requirements that apply to landfills, 310 CMR 30.633.
- (3) If an owner or operator of an existing waste pile which does not meet the requirements of 310 CMR 30.640(4) plans to close the pile in accordance with 310 CMR 30.649(1), and the pile was not lined in accordance with 310 CMR 30.641(1) at the time the original Part A permit application was submitted to the EPA in accordance with 40 CFR Part 270, as in effect July 1, 1983, then:
  - (a) The closure plan for the pile pursuant to 310 CMR 30.583 shall include both an expected plan for complying with 310 CMR 30.649(1) and a contingent plan for complying with 310 CMR 30.649(2) in the event that not all contaminated subsoil can be practicably removed at closure; and
  - (b) The owner or operator shall prepare a contingent post-closure plan pursuant to 310 CMR 30.593 for complying with 310 CMR 30.649(2) in case not all contaminated subsoils can be practicably removed at closure.

#### 30.649: continued

(4) The cost estimates calculated pursuant to 310 CMR 30.903 and 30.905 for closure and post-closure care of a pile subject to 310 CMR 30.649(3) shall include the cost of complying with the contingent closure plan and the contingent post-closure plan, as well as the cost of expected closure pursuant to 310 CMR 30.649(1). Where the costs of the expected closure plan and the contingent closure plan overlap (*i.e.*, the same items are factored into the cost estimate), the costs need not be counted twice.

## 30.650: Land Treatment Units

## 30.651: Applicability

310 CMR 30.651 through 30.659, cited collectively as 310 CMR 30.650, prescribe requirements which apply to owners and operators of facilities that use land treatment units to treat and dispose of hazardous waste.

## 30.652: Treatment Program

- (1) An owner or operator subject to 310 CMR 30.650 shall establish a land treatment program that is designed to ensure that hazardous constituents placed in or on the treatment zone are degraded, transformed, or immobilized within the treatment zone. The licensee shall persuade the Department that:
  - (a) The wastes are capable of being treated at the land treatment unit based on a demonstration pursuant to 310 CMR 30.653;
  - (b) Design measures and operating practices will be implemented to maximize the success of degradation, transformation, and immobilization processes in the treatment zone in accordance with 310 CMR 30.654;
  - (c) Unsaturated zone monitoring provisions will meet the requirements of 310 CMR 30.655;
  - (d) All wastes which are to be treated at the facility are comprised primarily of constituents that are degradable or transformable in a soil media, and the primary mechanisms of land treatment at the unit are not immobilization or volatilization of wastes;
  - (e) The land treatment of hazardous waste will not present a significant risk to public health, safety or welfare or the environment.
- (2) The Department shall specify in the facility license the hazardous constituents that shall be degraded, transformed or immobilized pursuant to 310 CMR 30.650. Such hazardous constituents shall be constituents identified in 310 CMR 30.160 that are reasonably expected to be in, or derived from, waste placed in the treatment zone.
- (3) The Department shall specify in the facility license the vertical and horizontal dimensions of the treatment zone. The treatment zone shall consist of soils which meet the criteria for the following United States Department of Agriculture soil texture classes: sandy loam, fine sandy loam, loam, very fine silt, silt loam, clay loam, silty clay loam, sandy clay and silty clay. The maximum depth of the treatment zone shall be:
  - (a) No more than 1.5 meters from the initial soil surface; and
  - (b) At least four feet above the probable high groundwater level as determined pursuant to 310 CMR 30.675.

# 30.653: Treatment Demonstration

(1) For each waste that the owner or operator intends to apply to the treatment zone, the owner or operator shall demonstrate, prior to application of the waste to the treatment zone, that hazardous constituents in the waste can be completely degraded, transformed, or immobilized in the treatment zone.

#### 30.653: continued

- (2) In making the demonstration required by 310 CMR 30.653(1), the owner or operator shall use field tests. Laboratory analyses and analysis of other available data may be used only as a supplement to field testing and may not be used in lieu of field testing. Before making the demonstration required by 310 CMR 30.653(1), the owner or operator shall obtain a treatment and disposal license pursuant to 310 CMR 30.800. The Department shall specify in the license the testing, analytical, design and operating requirements (including, but not limited to, the duration of the tests and analyses, and in the case of field tests, the horizontal and vertical dimensions of the treatment zone, monitoring procedures, closure and cleanup activities) necessary to meet the requirements of 310 CMR 30.653(3).
- (3) Each field test and laboratory analysis conducted in order to make a demonstration pursuant to 310 CMR 30.653(1) shall:
  - (a) Accurately simulate the characteristics and operating conditions for the proposed land treatment unit including:
    - 1. The properties of the waste including, but not limited to, the presence of constituents identified in 310 CMR 30.160;
    - 2. The climate in the area;
    - 3. The topography of the surrounding area;
    - 4. The characteristics of the soil in the treatment zone (including but not limited to soil depth and texture, and cation exchange capacity); and
    - 5. The operating practices to be used at the unit;
  - (b) Show that hazardous constituents in the waste to be tested will be completely degraded, transformed or immobilized in the treatment zone of the proposed land treatment unit; and
  - (c) Be conducted in a manner that protects public health, safety, and welfare and the environment, considering;
    - 1. The properties of the hazardous waste to be tested;
    - 2. The operating and monitoring measures to be taken during the course of the test;
    - 3. The duration of the test;
    - 4. The volume of hazardous waste used in the test; and
    - 5. In the case of field tests, the potential for migration of hazardous constituents to groundwater or surface water.
- (4) When the owner or operator has completed the treatment demonstration, he shall submit to the Department a certification, signed by a person authorized to sign a license application or report pursuant to 310 CMR 30.807, that the field tests and laboratory tests have been carried out in accordance with the conditions specified in the land treatment demonstration license for conducting such tests or analyses. The owner or operator shall also submit all data collected during the field tests and laboratory analyses within 90 days of completion of those tests and analyses unless the Department approves a later date.

## 30.654: Design and Operating Requirements

- (1) Each applicant for a license for land treatment shall persuade the Department that the land treatment unit will be designed, constructed, operated and maintained in compliance with 310 CMR 30.654.
- (2) The owner or operator shall design, construct, operate, and maintain the land treatment unit to maximize the degradation, transformation, and immobilization of the hazardous constituents in the treatment zone. The owner or operator shall design, construct, operate and maintain the unit in accordance with all design and operating conditions that were used in the treatment demonstration pursuant to 310 CMR 30.653. At a minimum, the Department shall specify the following in each license for a land treatment unit:
  - (a) The rate and method of waste application to the treatment zone;
  - (b) Measures to control soil pH;
  - (c) Measures to enhance microbial or chemical reaction (e.g., fertilization, tilling);
  - (d) Measures to control the moisture content of the treatment zone; and
  - (e) The maximum quantity of waste that can be applied to the treatment zone over the operating life of the facility.

#### 30.654: continued

- (3) Hazardous waste shall not be applied to soil which is frozen, covered by ice or snow, and/or saturated with water. Hazardous waste shall not be applied to soil during any period of rainfall.
- (4) Hazardous waste shall not be applied to land with a slope of greater than 4%.
- (5) The owner or operator shall design, construct, operate and maintain the treatment zone to minimize run-off of hazardous constituents during the active life of the land treatment unit.
- (6) The owner or operator shall design, construct, operate and maintain a run-off management system to collect and control at least the water volume resulting from a 24 hour, 100-year storm. If the collected run-off is hazardous waste pursuant to 310 CMR 30.100, it shall be managed as hazardous waste in compliance with 310 CMR 30.000. If the collected run-off is discharged to surface water or groundwater, it is subject to regulation pursuant to M.G.L. c. 21 § 43.
- (7) The owner or operator shall design, construct, operate, and maintain a run-on control system capable of preventing flow onto the treatment zone during peak discharge from at least a 100-year storm.
- (8) To maintain the design capacity of the system, collection and holding facilities (e.g., tanks or basins) associated with run-on and run-off control systems shall be emptied or otherwise managed expeditiously after storms.
- (9) If the treatment zone contains particulate matter which may be subject to wind dispersal, the owner or operator shall manage the unit to control wind dispersal.
- (10) The owner or operator shall inspect the unit weekly and after storms to detect evidence of:
  - (a) Deterioration, malfunctions, or improper operation of run-on and run-off control systems; and
  - (b) Improper functioning of wind-dispersal control measures.
- (11) The growing of any food chain crop on the active portion or the closed portion of a land treatment facility is prohibited.

## 30.655: Unsaturated Zone Monitoring

An owner or operator subject to 310 CMR 30.650 shall establish an unsaturated zone monitoring program which shall include the following:

- (1) The owner or operator shall monitor the soil and soil-pore liquid to determine whether hazardous constituents migrate out of the treatment zone.
  - (a) In the land treatment license, the Department shall specify the hazardous constituents to be monitored. Except as provided in 310 CMR 30.655(1)(b), the owner or operator shall monitor for all the hazardous constituents identified pursuant to 310 CMR 30.652(2).
  - (b) The Department may require monitoring for principal hazardous constituents (PHCs) in lieu of the constituents specified pursuant to 310 CMR 30.652(2). PHCs are hazardous constituents contained in the wastes to be land applied at the unit that are the most difficult to treat, considering the combined effects of degradation, transformation, and immobilization. The Department may establish PHCs if the Department determines, based on waste analyses, treatment demonstrations, or other data, that effective degradation, transformation, or immobilization of the PHCs will assure at least equivalent levels of treatment for the other hazardous constituents in the waste.

## 30.655: continued

- (2) The owner or operator shall install an unsaturated zone monitoring system that shall include both soil monitoring using soil cores and also soil-pore liquid monitoring using devices such as lysimeters. The unsaturated zone monitoring system shall consist of a sufficient number of sampling points at appropriate locations and depths to yield samples that:
  - (a) Represent the quality of background soil-pore liquid quality and the chemical make-up of soil that has not been affected by leakage from the treatment zone; and
  - (b) Indicate the quality of soil-pore liquid and the chemical make-up of the soil below the treatment zone.
- (3) The owner or operator shall establish a background value for each hazardous constituent to be monitored pursuant to 310 CMR 30.655(1). The license shall specify the background value for each hazardous constituent or specify the procedures to be used to calculate the background values.
  - (a) Background soil values may be based on a one-time sampling at a background plot that is on the site of the facility and that has characteristics similar to those of the treatment zone. The Department shall specify in the land treatment license the number of samples to be taken. In no case shall less than three samples be taken.
  - (b) Background soil-pore liquid values shall be based on at least quarterly sampling for one year at a background plot having characteristics similar to those of the treatment zone.
  - (c) The owner or operator shall express all background values in a form suitable for the determination of statistically significant increases to be determined pursuant to 310 CMR 30.655(6).
  - (d) In taking samples used in the determination of all background values, the owner or operator shall use an unsaturated zone monitoring system that is in compliance with 310 CMR 30.655(2).
- (4) The owner or operator shall conduct soil monitoring and soil-pore liquid monitoring immediately below the treatment zone. The Department shall specify the frequency and timing of soil and soil-pore liquid monitoring in the facility license after considering the frequency, timing, and rate of waste application, and the soil permeability. The owner or operator shall express the results of soil and soil-pore liquid monitoring in a form suitable for the determination of statistically significant increases to be determined pursuant to 310 CMR 30.655(6).
- (5) The owner or operator shall use consistent sampling and analysis procedures that are designed to ensure sampling results that provide a reliable indication of soil-pore liquid quality and the chemical makeup of the soil below the treatment zone. At a minimum, the owner or operator shall implement and document procedures and techniques for:
  - (a) Sample collection;
  - (b) Sample preservation and shipment;
  - (c) Analytical procedures; and
  - (d) Chain-of-custody control.
- (6) Using a statistical procedure specified in the land treatment license, the owner or operator shall determine whether there is a statistically significant increase over background values for any hazardous constituent to be monitored, pursuant to 310 CMR 30.655(1), below the treatment zone each time he conducts soil monitoring and soil-pore liquid monitoring pursuant to 310 CMR 30.655(4). In the land treatment license, the Department shall specify a statistical procedure which shall provide reasonable confidence that migration from the treatment zone will be identified, shall be appropriate for the distribution of the data used to establish background values, and shall provide a reasonable balance between the probability of falsely identifying migration from the treatment zone and the probability of failing to identify real migration from the treatment zone.
  - (a) In determining whether a statistically significant increase has occurred, the owner or operator shall compare the value of each constituent, as determined pursuant to 310 CMR 30.655(4), to the background value for that constituent, using the statistical procedure specified in the land treatment license.

#### 30.655: continued

- (b) Within a reasonable time period after completion of sampling, the owner or operator shall determine whether there has been a statistically significant increase below the treatment zone. The Department shall specify that time period in the land treatment license after considering the complexity of the statistical test and the availability of laboratory facilities to perform the analysis of soil and soil-pore liquid samples.
- (7) If the owner or operator determines, pursuant to 310 CMR 30.655(6), that there is a statistically significant increase of hazardous constituents below the treatment zone, he shall:
  - (a) Notify the Department immediately by the quickest available means and also notify the Department in writing within seven days; the notification shall indicate what constituents have shown statistically significant increases; and
  - (b) Within 90 days of determining that there is such a statistically significant increase, submit to the Department an application for a land treatment license modification to modify the operating practices at the facility in order to maximize the success of degradation, transformation, or immobilization processes in the treatment zone.
- (8) If the owner or operator determines, pursuant to 310 CMR 30.655(6), that there is a statistically significant increase of hazardous constituents below the treatment zone, he may demonstrate to the Department that a source other than licensed land treatment units caused the increase or that the increase resulted from an error in sampling, analysis, or evaluation. Such a demonstration shall be in addition to, and not in lieu of, submitting a land-treatment license modification pursuant to 310 CMR 30.655(7)(b). If such a demonstration is made to the satisfaction of the Department, and the Department so determines in writing before the expiration of the 90 day period specified in 310 CMR 30.655(7)(b), the owner or operator need not submit a land treatment license modification application. If such an application is submitted, it may be withdrawn upon a written determination by the Department that the owner or operator has made this demonstration to the satisfaction of the Department. In making such a demonstration, the owner or operator shall:
  - (a) Within seven days of determining a statistically significant increase below the treatment zone, notify the Department in writing that he intends to make a determination pursuant to 310 CMR 30.655(8); and
  - (b) Within 90 days of such a determination, submit a report to the Department demonstrating that a source other than the regulated unit(s) caused the increase or that the increase resulted from error in sampling, analysis, or evaluation; and
  - (c) Within 90 days of such a determination, submit to the Department an application for a license modification to make any appropriate changes to the unsaturated zone monitoring program at the facility, unless the Department has determined in writing that such an application need not be submitted; and
  - (d) Continue to monitor in compliance with the unsaturated zone monitoring program established pursuant to 310 CMR 30.655.

# 30.656: Record Keeping

The owner or operator of a land treatment facility shall include the following in the operating record required by 310 CMR 30.542:

- (1) the application dates, application rates, total quantities, and location of each hazardous waste treated at the facility; and
- (2) A record of all vegetation grown at the site and of the dates, quantities and destination of all vegetation and soil removed from the site; and
- (3) The results of all monitoring done to comply with 310 CMR 30.650, and a record of everything else done to comply with 310 CMR 30.650.

# 30.657: Special Requirements for Ignitable, Reactive, Incompatible, and Acutely Hazardous Wastes, and Hazardous Wastes that are Polyhalogenated Aromatic Hydrocarbons

(1) The owner or operator shall not apply ignitable or reactive waste to the treatment zone unless the waste and the treatment zone meet all applicable requirements of 310 CMR 30.750 and the waste is immediately incorporated into the soil so that:

#### 30.657: continued

- (a) The resulting material is no longer ignitable or reactive hazardous waste pursuant to 310 CMR 30.122 or 30.124; and
- (b) 310 CMR 30.560(3) is complied with.
- (2) Incompatible hazardous wastes, or materials incompatible with hazardous wastes (*see* 310 CMR 30.561 for examples) shall not be placed in or on the same treatment zone unless 310 CMR 30.560(3) is complied with.
- (3) Acutely hazardous waste identified in 310 CMR 30.136 shall not be treated or disposed of at a land treatment facility.
- (4) Polyhalogenated aromatic hydrocarbons shall not be placed in a land treatment facility except in accordance with all other applicable provisions of 310 CMR 30.650 and in accordance with the terms and conditions of a management plan, approved by the Department, for such placement. Compliance with such a plan, when approved, shall be a condition of a license issued pursuant to 310 CMR 30.000. The Department may approve a management plan for the placement of polyhalogenated aromatic hydrocarbons in a land treatment facility only if, after considering at least the following criteria, the Department determines that such approval is in accordance with provisions set forth in 310 CMR 30.810 through 30.814.
  - (a) The volume and physical and chemical characteristics of the polyhalogenated aromatic hydrocarbons, including their potential to migrate through the soil or to volatilize or escape into the atmosphere.
  - (b) The volume and physical and chemical characteristics of the other materials placed into the land treatment facility, including their potential to migrate through the soil or to volatilize or escape into the atmosphere.
  - (c) The attenuative properties of the soil and other materials surrounding or underlying the land treatment facility.
  - (d) The effectiveness of additional treatment, design, or monitoring techniques used by the owner or operator of the land treatment facility. The Department may require the use of additional or different treatment, design, or monitoring techniques to reduce the possibility of migration or emission of these materials into ground water, surface water, soil, or air.

## 30.658: Application Rates and Capacity

- (1) With the land treatment license application, the owner or operator shall submit information identifying the annual rate limiting constituent, the single application limiting constituent, and the soil capacity limiting constituent of the wastes to be treated at the facility (*see* 310 CMR 30.010).
- (2) The annual application rate of hazardous waste shall not be greater than the maximum rate established by the annual rate limiting constituent for that waste.
- (3) The amount of each hazardous waste applied at any one time shall not exceed that established by the single application limiting constituent identified for that waste.
- (4) The total amount of each hazardous waste applied to the land over the operating life of the facility shall not exceed that established by the soil capacity limiting constituent for that waste.
- (5) The application rates and capacities shall be determined taking into consideration:
  - (a) The potential for volatilization of hazardous constituents from the applied waste;
  - (b) The need to prevent migration of hazardous constituents from the treatment zone;
  - (c) The ability of the treatment zone to degrade, transform or immobilize hazardous constituents;
  - (d) The soil characteristics, including the anticipated pH of the soil following the post-closure care period of the facility;

#### 30.658: continued

- (e) The potential for run-off;
- (f) Climatic conditions;
- (g) The toxic effects of the waste to decomposer organisms;
- (h) The toxic effects of the waste on the vegetative cover;
- (i) The potential for odor problems at the site; and
- (j) The potential for long-term anoxic conditions in the soil.
- (6) In the waste analysis plan required pursuant to 310 CMR 30.513, the owner or operator shall include provisions for determining the concentrations of the annual rate limiting constituent, the single application limiting constituent, the soil capacity limiting constituent, and those constituents which are within 25% of the concentration level which would make them limiting constituents.

# 30.659: Closure and Post-Closure Care

- (1) During the closure period of the land treatment facility, the owner or operator shall:
  - (a) Continue all operations (*e.g.*, pH control) necessary to maximize degradation, transformation, and immobilization of hazardous constituents within the treatment zone as required by 310 CMR 30.654(2), except to the extent such measures are inconsistent with 310 CMR 30.659(1)(h);
  - (b) Continue all operations in the treatment zone to minimize runoff of hazardous constituents, as required by 310 CMR 30.654(5);
  - (c) Maintain the run-off management system required by 310 CMR 30.654(6).
  - (d) Maintain the run-on control system required by 310 CMR 30.654(7);
  - (e) Control wind dispersal of hazardous waste if required by 310 CMR 30.654(9);
  - (f) Continue to comply with the prohibition on growing food chain crops as set forth in 310 CMR 30.654(11);
  - (g) Continue unsaturated zone monitoring in compliance with 310 CMR 30.655 except that soil-pore liquid monitoring may be terminated 90 days or more after the last application of waste to the treatment zone; and
  - (h) Establish a vegetative cover on the portion of the land treatment unit being closed at such time that the cover will not substantially impede degradation, transformation or immobilization of hazardous constituents in the treatment zone. The vegetative cover shall be capable of maintaining growth without extensive maintenance.
- (2) For the purpose of complying with 310 CMR 30.587, when closure of the land treatment facility is completed, the owner or operator may submit to the Department certification by an independent qualified soil scientist, in lieu of an independent Massachusetts registered professional engineer, that the land treatment facility has been closed in compliance with the specifications in the approved closure plan.
- (3) During the post-closure care period the owner or operator shall:
  - (a) Continue all operations (e.g., pH control) necessary to maximize degradation and transformation and sustain immobilization of hazardous constituents in the treatment zone to the extent that such measures are consistent with other post-closure activities;
  - (b) Maintain a vegetative cover over closed portions of the land treatment unit;
  - (c) Maintain the run-on control system required by 310 CMR 30.654(7);
  - (d) Maintain the run-off management system required by 310 CMR 30.654(6);
  - (e) Control wind dispersal of hazardous waste if required by 310 CMR 30.654(9);
  - (f) Continue to comply with the prohibition concerning growth of food-chain crops as set forth in 310 CMR 30.654(11); and
  - (g) Continue unsaturated zone monitoring in compliance with 310 CMR 30.655, except that soil-pore liquid monitoring may be terminated 90 days or more after the last application of waste to the treatment zone.

#### 30.659: continued

- (4) An owner or operator need not comply with 310 CMR 30.659(1)(h) and (3) if the Department determines that the level of hazardous constituents in the treatment zone soil does not exceed the background value of those constituents by an amount that is statistically significant when using the test specified pursuant to 310 CMR 30.659(4)(c). The owner or operator may submit such a demonstration to the Department at any time during the closure or post-closure care periods. For this purpose:
  - (a) The owner or operator shall establish background soil values and determine whether there is a statistically significant increase over those values for all hazardous constituents specified in the land treatment license pursuant to 310 CMR 30.652(2).
    - 1. Background soil values may be based on a one-time sampling of a background plot that is on the site and that has characteristics similar to those of the treatment zone. The Department shall specify the number of samples to be taken, which number shall be no less than three.
    - 2. The owner or operator shall express background values and values for hazardous constituents in the treatment zone in a form suitable for the determination of statistically significant increases pursuant to 310 CMR 30.659(4)(c).
  - (b) In taking samples used in the determination of background soil values and treatment zone values, the owner or operator shall take samples at a sufficient number of sampling points and at appropriate locations and depths to yield samples that represent the chemical makeup of:
    - 1. soil that has not been affected by leakage from the treatment zone; and
    - 2. soil within the treatment zone.
  - (c) In determining whether a statistically significant increase has occurred, the owner or operator shall compare the value of each constituent in the treatment zone to the background value for that constituent using a statistical procedure that:
    - 1. Provides reasonable confidence that constituent presence in the treatment zone will be identified.
    - 2. Is appropriate for the distribution of the data used to establish background values;
    - 3. Provides a reasonable balance between the probability of falsely identifying the presence of hazardous constituents in the treatment zone and the probability of failing to identify real presence of hazardous constituents in the treatment zone; and
    - 4. Is approved, in writing, by the Department.
- (5) The owner or operator need not comply with 310 CMR 30.660: *Groundwater Protection* if the Department finds that the owner or operator meets the requirements of 310 CMR 30.659(4) and if unsaturated zone monitoring required by 310 CMR 30.655 indicates that hazardous constituents have not migrated beyond the treatment zone during the active life of the land treatment unit.

# 30.660: Groundwater Protection

## 30.661: Applicability

- (1) Except as provided in 310 CMR 30.661(2) and (3), 30.661 through 30.673, cited collectively as 310 CMR 30.660, prescribe requirements which apply to owners and operators of regulated units that receive hazardous waste after July 26, 1982. As used in 310 CMR 30.660, the term "regulated unit" shall mean a surface impoundment, waste pile, miscellaneous units, land treatment unit or landfill which treats, stores or disposes of hazardous waste. Any hazardous waste or hazardous waste constituent found beyond a waste management area described in 310 CMR 30.669(2) shall be presumed to originate from a regulated unit unless the Department determines that such waste or waste constituent originated from another source.
- (2) 310 CMR 30.660 shall not apply to a waste pile that is designed and operated in compliance with 310 CMR 30.640(4).

#### 30.661: continued

- (3) The requirements in 310 CMR 30.660 apply during the active life of each regulated unit and during the closure period for each regulated unit. After closure of each regulated unit, 310 CMR 30.660 shall:
  - (a) Apply during the post-closure period pursuant to 310 CMR 30.590 through 30.595 if the owner or operator is conducting a detection monitoring program pursuant to 310 CMR 30.664;
  - (b) Apply during the compliance period specified in 310 CMR 30.670 if the owner or operator is conducting a compliance monitoring program pursuant to 310 CMR 30.671 or a corrective action program pursuant to 310 CMR 30.672.
  - (c) Not apply if all hazardous waste, hazardous waste residues, contaminated containment system components, and contaminated subsoils are removed or decontaminated during closure, unless 310 CMR 30.661(3)(b) applies;
  - (d) Not apply if the Department determines, pursuant to 310 CMR 30.659(4), that:
    - 1. The treatment zone of a land treatment unit does not contain levels of hazardous constituents that, by amounts that are statistically significant, are above background levels of those constituents; and
    - 2. The unsaturated zone monitoring program done in compliance with 310 CMR 30.655 has not shown a statistically significant increase in hazardous constituents below the treatment zone during the operating life of the land treatment unit.
- (4) The Department may waive any requirement of 310 CMR 30.660 otherwise applicable to a miscellaneous unit if the Department is persuaded that, as applied to that miscellaneous unit, the requirement is unnecessary to protect public health, safety or welfare or the environment.

## 30.662: Required Programs

- (1) Each owner and operator subject to 310 CMR 30.660 shall conduct a monitoring and response program as follows:
  - (a) Whenever those hazardous constituents specified pursuant to 310 CMR 30.666 are detected at a compliance point described in 310 CMR 30.669, the owner or operator shall institute a compliance monitoring program pursuant to 310 CMR 30.671 unless the Department determines that such constituents originated from another source. Detected is defined as statistically significant evidence of increased contamination as described in 310 CMR 30.664(6).
  - (b) Whenever a requirement of 310 CMR 30.665: *Groundwater Protection Standard* is not complied with, the owner or operator shall institute a corrective action program pursuant to 310 CMR 30.672.
  - (c) Whenever those hazardous constituents specified pursuant to 310 CMR 30.666 exceed concentration limits specified pursuant to 310 CMR 30.667 in groundwater between a compliance point specified pursuant to 310 CMR 30.669 and the downgradient facility property boundary, the owner or operator shall institute a corrective action program pursuant to 310 CMR 30.672, unless the Department determines that such constituents originated from another source. Exceeded is defined as statistically significant evidence of increased contamination as described in 310 CMR 30.671(4).
  - (d) In all other cases, the owner or operator shall institute a detection monitoring program pursuant to 310 CMR 30.664.
- (2) In the facility license, the Department shall specify the specific elements of the monitoring and response program. The Department may include one or more of the programs identified in 310 CMR 30.662(1) in the facility license and shall specify the circumstances under which each such program shall be required.

# 30.663: General Groundwater Monitoring Requirements

The owner or operator shall comply with the following requirements for any groundwater monitoring program developed to comply with the requirements of 310 CMR 30.664, 30.671, or 30.672:

#### 30.663: continued

- (1) The groundwater monitoring system shall consist of a sufficient number of wells, installed at appropriate locations and depths, to yield from the uppermost aquifer groundwater samples that:
  - (a) Represent the quality of background groundwater that has not been affected by leakage from a regulated unit.

A determination of background quality may include sampling of wells that are not hydraulically upgradient of the waste management area where:

- 1. Hydrogeologic conditions do not allow the owner or operator to determine what wells are hydraulically upgradient; and
- 2. Sampling at other wells will provide an indication of background ground-water quality that is representative or more representative than that provided by upgradient wells; and
- (b) Represent the quality of groundwater passing a point of compliance; and
- (c) Allow for the detection of contamination when hazardous waste or hazardous constituents have migrated from the waste management area to the uppermost aquifer.
- (2) If a facility contains more than one regulated unit, separate groundwater monitoring systems shall not be required for each regulated unit if sampling of groundwater in the uppermost aquifer at a compliance point will enable detection and measurement of hazardous constituents from the regulated units.
- (3) All monitoring wells shall be cased in a manner that maintains the integrity of the monitoring well bore hole. To enable collection of groundwater samples, this casing shall be screened or perforated and, where necessary, packed with gravel or sand. The annular space (*i.e.*, the space between the bore hole and well casing) above and below the sampling depth shall be sealed to prevent contamination of samples and of the groundwater.
  - (a) The inside diameter shall be sized to facilitate the collection of samples.
  - (b) The casing shall be constructed of a material which will not be reactive with or corroded by any leachate from any regulated unit.
  - (c) PVC casing shall be joined in a manner which does not contribute organics to water samples.
  - (d) The casing shall be screened or perforated in a manner that allows water to enter the well freely at low velocity, prevents sand from entering the well, and serves as the structural retainer to support loose formation material.
  - (e) All monitoring wells shall be protected by a length of protective casing which is larger in diameter than the monitoring well casing and which extends below the land surface.
    - 1. The protective casing shall be grouted and placed with a protective collar to hold it firmly in position.
    - 2. The protective casing shall be identified by a highly visible color.
    - 3. The protective casing shall be higher above grade than the inner well casing.
    - 4. The protective casing shall have a vented cap that will allow the well to be secured against acts of vandalism.
  - (f) All borings for monitoring wells shall be done by a technique that enables the well driller to obtain representative soil samples at five-foot intervals.
    - 1. The soil samples shall be placed in covered glass jars and labelled so that a stratigraphic log can be prepared.
    - 2. Sample jars containing soil samples shall be placed in the custody of the facility owner or operator after examination by an engineer or geologist, and shall be available for inspection by the Department.
    - 3. When well clusters are used, soil sampling is only necessary at the deepest boring and at other borings at the screened depth.
  - (g) As technology changes in the field of groundwater monitoring, the Department may approve, in writing, different but equivalent or better methods for obtaining the information required to prepare a stratigraphic log, take water level measurements, or obtain representative groundwater samples.

## 30.663: continued

- (4) The groundwater monitoring program shall include consistent sampling and analysis procedures that are designed to ensure monitoring results that provide a reliable indication of groundwater quality below the waste management area, as described in 310 CMR 30.669(2). At a minimum, the program shall include procedures and techniques for:
  - (a) Sample collection;
  - (b) Sample preservation, storage and shipment;
  - (c) Analytical procedures, including quality control and assurance techniques; and
  - (d) Chain-of-custody control.
- (5) The groundwater monitoring program shall include sampling and analytical methods that are appropriate for groundwater sampling and that accurately measure hazardous constituents in groundwater samples.
- (6) The groundwater monitoring program shall include a determination of the groundwater surface elevation each time groundwater is sampled. These data shall be plotted to make a map showing water table contours and presumed flow directions. Care shall be taken in preparing this map to consider the portions of the aquifer screened by each of the wells. All measurements shall be referenced to sea level, based on USGS or USC&GS data. By April 30th of each year, the owner or operator shall evaluate the data on groundwater elevations obtained in compliance with 310 CMR 30.663(6) to determine whether the requirements set forth in 310 CMR 30.663(1) for well locations continue to be met. If any such requirement is not met, the owner or operator shall:
  - (a) Within ten days, notify the Department of this fact, and request, in writing, a license modification; and
  - (b) Within a period of time specified by the Department, locate and install new wells to meet the requirements of 310 CMR 30.663(1).
- (7) In detection monitoring or where appropriate in compliance monitoring, data on each hazardous constituent specified in the license shall be collected from background wells and wells at compliance point(s). The number and kinds of samples collected to establish background shall be appropriate for the form of statistical test employed, following generally accepted statistical principles. The sample size shall be as large as necessary to ensure with reasonable confidence that a contaminant release to ground water from a facility will be detected. The owner or operator shall determine an appropriate sampling procedure and interval for each hazardous constituent listed in the facility license which shall be specified in the unit license upon approval by the Department. This sampling procedure shall be:
  - (a) A sequence of at least four samples, taken at an interval that assures, to the greatest extent technically feasible, that an independent sample is obtained, by reference to the uppermost aquifer's effective porosity, hydraulic conductivity, and hydraulic gradient, and the fate and transport characteristics of the potential contaminants, or
  - (b) An alternate sampling procedure proposed by the owner or operator and approved by the Department.
- (8) The owner or operator shall specify one of the following statistical methods to be used in evaluating ground-water monitoring data for each hazardous waste constituent which, upon approval by the Department, shall be specified in the unit license. The statistical test chosen shall be conducted separately for each hazardous constituent in each well. Where practical quantification limits (pql's) are used in any of the following statistical procedures to comply with 310 CMR 30.663(10)(e), the pql shall be proposed by the owner or operator and approved by the Department. Use of any of the following statistical methods shall be protective of public health, safety and welfare and the environment and shall comply with the performance standards outlined in 310 CMR 30.663(10).
  - (a) A parametric analysis of variance (ANOVA) followed by multiple comparisons procedures to identify statistically significant evidence of contamination. The method shall include estimation and testing of the contrasts between each compliance well's mean and the background mean levels for each constituent.

30.663: continued

- (b) An analysis of variance (ANOVA) based on ranks followed by multiple comparison procedures to identify statistically significant evidence of contamination. The method shall include estimation and testing of the contrasts between each compliance well's median and the background median levels for each constituent.
- (c) A tolerance or prediction interval procedure in which an interval for each constituent is established from the distribution of the background data, and the level of each constituent in each compliance well is compared to the upper tolerance or prediction limit.
- (d) A control chart approach that gives control limits for each constituent.
- (e) Another statistical test method submitted by the owner or operator and approved by the Department.
- (9) In addition to using a statistical test to determine whether background values or concentration limits have been exceeded, each owner or operator conducting a groundwater monitoring program shall compile the information for each water quality parameter at each sampling point in the form of a table covering the current year and on a graph showing the historical trend. This information shall be submitted to the Department annually by March 1 of each year.
- (10) Any statistical method chosen pursuant to 310 CMR 30.663(8) for specification in the unit license shall comply with the following performance standards, as appropriate:
  - (a) The statistical method used to evaluate ground-water monitoring data shall be appropriate for the distribution of chemical parameters or hazardous constituents. If the distribution of the chemical parameters or hazardous constituents is shown by the owner or operator to be inappropriate for a normal theory test, then the data shall be transformed or a distribution-free theory test shall be used. If the distributions for the constituents differ more than one statistical method may be needed.
  - (b) If an individual well comparison procedure is used to compare an individual compliance well constituent concentration with background constituent concentrations or a ground-water protection standard, the test shall be done at a Type I error level no less than 0.01 for each testing period. If a multiple comparison procedure is used, the Type I experimentwise error rate for each testing period shall be no less than 0.05; however, the Type I error of no less than 0.01 for individual well comparisons shall be maintained. This performance standard does not apply to tolerance intervals, prediction intervals or control charts.
  - (c) If a control chart approach is used to evaluate ground-water monitoring data, the specific type of control chart and its associated parameter values shall be proposed by the owner or operator and approved by the Department if the Department finds it to be protective of public health, safety and welfare and the environment.
  - (d) If a tolerance interval or a prediction interval is used to evaluate groundwater monitoring data, the levels of confidence and, for tolerance intervals, the percentage of the population that the interval shall contain, shall be proposed by the owner or operator and approved by the Department if the Department finds these parameters to be protective of public health, safety and welfare and the environment. These parameters will be determined after considering the number of samples in the background data base, the data distribution, and the range of the concentration values for each constituent of concern.
  - (e) The statistical method shall account for data below the limit of detection with one or more statistical procedures that are protective of public health, safety and welfare and the environment. Any practical quantification limit (pql) approved by the Department pursuant to 310 CMR 30.663(8) that is used in the statistical method shall be the lowest concentration level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions that are available to the facility.
  - (f) If necessary, the statistical method shall include procedures to control or correct for seasonal and spatial variability as well as temporal correlation in the data.
- (11) Ground-water monitoring data collected in accordance with 310 CMR 30.663(7), including actual levels of constituents shall be maintained in the facility operating record. The Department will specify in the license when the data shall be submitted for review.

#### 30.664: Detection Monitoring Program

An owner or operator required to establish a detection monitoring program pursuant to 310 CMR 30.661 and 30.662 shall, at a minimum, comply with the following:

- (1) The owner or operator shall monitor for all indicator parameters (e.g., pH, specific conductance, total organic carbon, or total organic halogen), waste constituents, or reaction products that provide a reliable indication of the presence of hazardous constituents in groundwater. In the facility license, the Department shall specify the parameters or constituents to be monitored after considering:
  - (a) The types, quantities, and concentrations of constituents in hazardous wastes managed at the regulated unit;
  - (b) The mobility, stability, and persistence of waste constituents or their reaction products in the unsaturated zone beneath the waste management area, as described in 310 CMR 30.669(2);
  - (c) The detectability of indicator parameters, waste constituents, and reaction products in groundwater; and
  - (d) The concentrations or values, and in all cases the coefficients of variation of proposed monitoring parameters or constituents in the groundwater background.
- (2) The owner or operator shall install a groundwater monitoring system at compliance points as specified pursuant to 310 CMR 30.669. The groundwater monitoring system shall be in compliance with 310 CMR 30.663(1)(b), (2) and (3).
- (3) The owner or operator shall conduct a ground-water monitoring program for each chemical parameter and hazardous constituent specified in the license pursuant to 310 CMR 30.664(1) in accordance with 310 CMR 30.663(7). The owner or operator shall maintain a record of ground-water analytical data as measured and in a form necessary for determination of statistical significance pursuant to 310 CMR 30.663(7).
- (4) The Department will specify the frequencies for collecting samples and conducting statistical tests to determine whether there is statistically significant evidence of contamination for any parameter or hazardous constituent specified in the license pursuant to 310 CMR 30.664(1) in accordance with 310 CMR 30.663(7). A sequence of at least four samples from each well (background and compliance wells) shall be collected at least semiannually during detection monitoring.
- (5) The owner or operator shall determine the groundwater flow rate and direction in the uppermost aquifer at least annually.
- (6) The owner or operator shall determine whether there is statistically significant evidence of contamination for any chemical parameter or hazardous constituent specified in the license pursuant to 310 CMR 30.664(1) at a frequency specified pursuant to 310 CMR 30.664(4).
  - (a) In determining whether statistically significant evidence of contamination exists, the owner or operator shall use the method(s) specified in the license pursuant to 310 CMR 30.663(8). These methods shall compare data collected at the compliance point(s) to the background ground-water quality data.
  - (b) The owner or operator shall determine whether there is statistically significant evidence of contamination at each monitoring well as the compliance point within a reasonable period of time after completion of sampling. The Department will specify in the facility license what period of time is reasonable, after considering complexity of the statistical test and the availability of laboratory facilities to perform the analysis of ground-water samples.
- (7) If the owner or operator determines pursuant to 310 CMR 30.664(6) that there is statistically significant evidence of contamination for chemical parameters or hazardous constituents specified pursuant to 310 CMR 30.664(1) at any monitoring well at the compliance point, the owner or operator shall:

#### 30.664: continued

- (a) Notify the Department of this finding in writing within seven days. The notification shall indicate what chemical parameters or hazardous constituents have shown statistically significant evidence of contamination.
- (b) Immediately sample the ground water in all monitoring wells and determine whether constituents in 310 CMR 30.161 are present and, if so, in what concentration.
- (c) For any 310 CMR 30.161 compounds found in the analysis pursuant to 310 CMR 30.664(7)(b), the owner or operator may resample within one month and repeat the analysis for those compounds detected. If the results of the second analysis confirm the initial results, then these constituents shall form the basis for compliance monitoring. If the owner or operator does not resample for compounds found pursuant to 310 CMR 30.664(7)(b), the hazardous constituents found during the initial analysis for compounds in 310 CMR 30.161 shall form the basis for compliance monitoring.
- (d) Within 90 days, submit to the Department an application for a license modification to establish a compliance monitoring program meeting the requirements of 310 CMR 30.671. The application shall include the following information:
  - 1. An identification of the concentration or any 310 CMR 30.161 constituent detected in the ground water at each monitoring well at the compliance point;
  - 2. Any proposed changes to the ground-water monitoring system at the facility necessary to meet the requirements of 310 CMR 30.671;
  - 3. Any proposed additions or changes to the monitoring frequency, sampling and analysis procedures or methods, or statistical methods used at the facility necessary to meet the requirements of 310 CMR 30.671;
  - 4. For each hazardous constituent detected at the compliance point, a proposed concentration limit pursuant to 310 CMR 30.667(1)(a) or (b), or a notice of intent to seek an alternate concentration limit pursuant to 310 CMR 30.667(2); and
- (e) Within 180 days, submit to the Department:
  - 1. All data necessary to justify an alternate concentration limit sought pursuant to 310 CMR 30.667(2); and
  - 2. An engineering feasibility plan for a corrective action program necessary to meet the requirements of 310 CMR 30.672, unless:
    - a. All hazardous constituents identified pursuant to 310 CMR 30.664(7)(b) are listed in 310 CMR 30.668 and their concentrations do not exceed the respective values given in Table 30.668; or
    - b. The owner or operator has sought an alternate concentration limit pursuant to 310 CMR 30.667(2) for every hazardous constituent identified pursuant to 310 CMR 30.664(7)(b).
- (f) If the owner or operator determines, pursuant to 310 CMR 30.664(6), that there is a statistically significant difference for chemical parameters or hazardous constituents specified pursuant to 310 CMR 30.664(1) at any monitoring well at the compliance point, the owner or operator may demonstrate that a source other than a regulated unit has caused the contamination or that the detection is an artifact caused by error in sampling, analysis, or statistical evaluation or natural variation in ground water. The owner or operator may make a demonstration pursuant to 310 CMR 30.664(7)(f) in addition to, or in *lieu* of, submitting a license modification application pursuant to 310 CMR 30.664(7)(d); however, the owner or operator is not relieved of the requirement to submit a license modification application within the time specified in 310 CMR 30.664(7)(d) unless the demonstration made pursuant to 310 CMR 30.664(7)(f) successfully shows that a source other than a regulated unit caused the increase, or that the increase resulted from error in sampling, analysis or evaluation. In making a demonstration pursuant to 310 CMR 30.664(7)(f), the owner or operator shall:
  - 1. Notify the Department in writing within seven days of determining statistically significant evidence of contamination at the compliance point that the owner or operator intends to make a demonstration pursuant to 310 CMR 30.664(7)(f);
  - 2. Within 90 days, submit a report to the Department which demonstrates that a source other than a regulated unit caused the contamination or that the contamination resulted from an error in sampling, analysis, or evaluation;

#### 30.664: continued

- 3. Within 90 days, submit to the Department an application for a license modification to make any appropriate changes to the detection monitoring program; and
- 4. Continue to monitor in accordance with the detection monitoring program established pursuant to 310 CMR 30.664.
- (8) If the owner or operator determines that the detection monitoring program no longer satisfies the requirements of 310 CMR 30.664, the owner or operator shall, within 90 days, submit an application for license modification to make any appropriate changes to the program.

# 30.665: Groundwater Protection Standard

The Department shall impose, and the owner or operator shall comply with, conditions in the facility's license that are designed to ensure that hazardous constituents which are identified pursuant to 310 CMR 30.666 and which are detected in the groundwater from a regulated unit do not exceed the concentration limits specified pursuant to 310 CMR 30.667. Such concentration limits shall not be exceeded in the uppermost aquifer underlying the waste management area at or beyond a point of compliance identified pursuant to 310 CMR 30.669 during the compliance period specified pursuant to 310 CMR 30.670. When hazardous constituents have been detected the groundwater from a regulated unit, the Department shall, in the facility's license, impose conditions which meet the requirements of 310 CMR 30.665. The Department may impose such conditions in the facility's license before hazardous constituents have been detected in the groundwater from a regulated unit.

#### 30.666: Hazardous Constituents

The Department shall specify, in the facility's license, those specific hazardous constituents identified in 310 CMR 30.161 to which the requirements of 310 CMR 30.665: *Groundwater Protection Standard* shall apply. The Department shall identify such hazardous constituents upon establishing a compliance monitoring or corrective action program in the facility's license. Hazardous constituents which shall be specified in the license shall be constituents identified in 310 CMR 30.160 that the Department reasonably expects to be in or derived from waste contained in a regulated unit. The Department may exclude such a constituent from the list of hazardous constituents in the facility's license if the constituent is unstable in water and has not been detected in the groundwater.

# 30.667: Concentration Limits

- (1) If the Department specifies in a facility's license a compliance monitoring program or a corrective action program, the Department shall also specify in the facility's license concentration limits, established pursuant to 310 CMR 30.666, for hazardous constituents in the groundwater. The concentration of a hazardous constituent:
  - (a) Shall not, at the time that such limit is specified in the license, exceed the background level of that constituent in the groundwater; or
  - (b) For any of the constituents listed in 310 CMR 30.000: *Table* 30.668, shall not exceed the respective maximum concentration set forth in 310 CMR 30.000: *Table* 30.668 if the background level of the constituent is below the value set forth in 310 CMR 30.000: *Table* 30.668; or
  - (c) Shall not exceed an alternate limit established by the Department pursuant to 310 CMR 30.667(2).
- (2) The Department may establish an alternate concentration limit for a hazardous constituent if the Department determines that the constituent will not pose a substantial present or potential hazard to public health or safety or the environment as long as the alternate concentration limit is not exceeded. In establishing each alternate concentration limit, the Department shall consider the following factors:

#### 30.667: continued

- (a) Potential adverse effects on groundwater quality, considering:
  - 1. The physical and chemical properties of the waste in the regulated unit, including its potential for migration;
  - 2. The hydrogeologic characteristics of the facility and surrounding land;
  - 3. The quantity of groundwater and the direction of groundwater flow;
  - 4. The proximity and withdrawal rates of groundwater users;
  - 5. The current and potential uses of groundwater in the area;
  - 6. The existing quality of groundwater, including other sources of contamination and their cumulative impact on the groundwater quality;
  - 7. The potential for health or safety risks caused by human exposure to waste constituents;
  - 8. The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents;
  - 9. The persistence and permanence of the potential adverse effects; and
- (b) Potential adverse effects on hydraulically-connected surface water quality, considering:
  - 1. The volume and physical and chemical properties of the waste in the regulated unit;
  - 2. The hydrogeologic characteristics of the facility and surrounding land;
  - 3. The quantity and quality of groundwater, and the direction of groundwater flow;
  - 4. The patterns of rainfall in the region;
  - 5. The proximity of the regulated unit to surface water(s);
  - 6. The current and potential uses of surface water(s) in the sources of contamination and the cumulative impact on surface water quality;
  - 7. The existing quality of surface water, including other sources of contamination and the cumulative impact on surface water quality;
  - 8. The potential for health or safety risks caused by human exposure to waste constituents;
  - 9. The potential damage to wildlife, crops, vegetation, and physical structure caused by exposure to waste constituents; and
  - 10. The persistence and permanence of the potential adverse effects.
- (3) In making any determination, pursuant to 310 CMR 30.667(2), about the use of groundwater in the area around the facility, the Department shall consider any identification, made pursuant to 310 CMR 27.00: *Underground Water Source Protection*, of underground sources of drinking water and exempted aquifers.

# 30.668: Maximum Concentration of Constituents for Groundwater Protection

Except as provided in 310 CMR 30.667, the concentration in groundwater of each constituent listed in Table 30.668 shall not exceed the maximum concentration specified in 310 CMR 30.000: *Table* 30.688 for that constituent.

30.668: continued

Table 30.668

Constituent	Maximum Concentration (Milligrams per liter)
	——————————————————————————————————————
Arsenic	0.05
Barium	1.0
Cadmium	0.01
Chromium	0.05
Lead	0.05
Mercury	0.002
Selenium	0.01
Silver	0.05
Endrin (1,2,3,4,10,10-hexachloro-1,7-	0.0002
epoxy-1,4,4a,5,6,7,8,9a-octahydro-1,	
4-endo, endo-5,8-dimethano naphthalene)	
Lindane (1,2,3,4,5,6-hexachlorocyclohexane, gamma isomer)	0.004
Methoxychlor (1,1,1-Trichloro-2,2-bis (p-methoxyphenylethane)	0.1
Toxaphene (C <sub>10</sub> H <sub>10</sub> C1 <sub>6</sub> , Technical chlorinated camphene, 67-69% chlorine)	0.005
2,4-D (2,4-Dichlorophenoxyacetic acid)	0.1
2,4,5-TP Silvex (2,4,5-Trichlorophenoxypropionic acid)	0.01

## 30.669: Point of Compliance

- (1) In the facility's license, the Department shall specify points of compliance at which the requirements of 310 CMR 30.665: *Groundwater Protection Standard* shall apply and at which monitoring shall be conducted. A point of compliance is a vertical surface which is located at the hydraulically downgradient limit of the waste management area and which extends down into the uppermost aquifer underlying the regulated unit(s).
- (2) The waste management area is the limit projected in the horizontal plane of the area on which hazardous waste will be placed during the active life of the regulated unit(s).
  - (a) The waste management area includes, without limitation, horizontal space taken up by any liner, dike, or other barrier designed to contain waste in a regulated unit.
  - (b) If the facility contains more than one regulated unit, the waste management area is described by the boundary circumscribing all the regulated units.
- (3) Monitoring wells installed at points of compliance shall be designed and operated in a manner that will provide an early warning system to alert the owner or operator of the migration of hazardous constituents from a regulated unit to the groundwater in the uppermost aquifer. In the license, the Department may require additional downgradient monitoring wells beyond those points of compliance specified pursuant to 310 CMR 30.669(1). The re- quirements of 310 CMR 30.665 (Groundwater Protection Standard) shall apply to such additional wells.

## 30.670: Compliance Period

In the facility's license, the Department shall specify the compliance period during which the requirements of 310 CMR 30.665: *Groundwater Protection Standard* shall apply. In no event shall the duration of the compliance period be less than the duration of the active life of the waste management area, including, without limitation, the period prior to licensing, and the closure period. The compliance period shall begin when the owner or operator initiates a compliance monitoring program meeting the requirements of 310 CMR 30.671. If the owner or operator is engaged in a corrective action program, the compliance period shall not end until the owner or operator has persuaded the Department, and the Department has determined in writing, that the requirements of 310 CMR 30.665 have been complied with for a period of at least three consecutive years.

## 30.671: Compliance Monitoring Program

Each owner or operator required to establish a compliance monitoring program pursuant to 310 CMR 30.661 and 30.662 shall, at a minimum, comply with the following:

- (1) The owner or operator shall monitor the groundwater to determine whether each regulated unit is in compliance with the requirements of 310 CMR 30.665: *Groundwater Protection Standard*. The Department shall specify what the facility shall do to comply with 310 CMR 30.665, including specifying:
  - (a) A list of the hazardous constituents identified pursuant to 310 CMR 30.666;
  - (b) Concentration limits specified pursuant to 310 CMR 30.667 for each of those hazardous constituents:
  - (c) The compliance points specified pursuant to 310 CMR 30.669; and
  - (d) The compliance period specified pursuant to 310 CMR 30.670.
- (2) The owner or operator shall install a groundwater monitoring system at the compliance points as specified pursuant to 310 CMR 30.669. The groundwater monitoring system shall comply with 310 CMR 30.663(1)(b), (2), and (3).
- (3) The Department will specify the sampling procedures and statistical methods appropriate for the constituents and the facility, consistent with 310 CMR 30.664(7) and (8).
  - (a) The owner or operator shall conduct a sampling program for each chemical parameter or hazardous constituent in accordance with 310 CMR 30.664(7).
  - (b) The owner or operator shall record ground-water analytical data as measured and in a form necessary for the determination of statistical significance pursuant to 310 CMR 30.664(8) for the compliance period of the facility.
- (4) The owner or operator shall determine whether there is statistically significant evidence of increased contamination for any chemical parameter or hazardous constituent specified in the license, pursuant to 310 CMR 30.671(1), at a frequency specified pursuant to 310 CMR 30.671(6).
  - (a) In determining whether statistically significant evidence of increased contamination exists, the owner or operator shall use the method(s) specified in the license pursuant to 310 CMR 30.663(8). The method(s) shall compare data collected at the compliance point(s) to a concentration limit developed in accordance with 310 CMR 30.667.
  - (b) The owner or operator shall determine whether there is statistically significant evidence of increased contamination at each monitoring well at the compliance point within a reasonable time period after completion of sampling. The Department will specify that time period in the facility license, after considering the complexity of the statistical test and the availability of laboratory facilities to perform the analysis of ground-water samples.
- (5) The owner or operator shall determine the groundwater flow rate and direction in the uppermost aquifer at least annually.

#### 30.671: continued

- (6) The Department will specify the frequencies for collecting samples and conducting statistical tests to determine statistically significant evidence of increased contamination in accordance with 310 CMR 30.663(7). A sequence of at least four samples from each well (background and compliance wells) shall be collected at least semi-annually during the compliance period of the facility.
- (7) The owner or operator shall analyze samples from all monitoring wells at the compliance point for all constituents contained in 310 CMR 30.161 at least annually to determine whether additional hazardous constituents are present in the uppermost aquifer and, if so, at what concentration, pursuant to procedures in 310 CMR 30.664(6). If the owner or operator finds constituents in 310 CMR 30.161 in the ground water that are already identified in the license as monitoring constituents, the owner or operator may resample within one month and repeat the 310 CMR 30.161 analysis. If the second analysis confirms the presence of new constituents, the owner or operator shall report the concentration of these additional constituents to the Department within seven days after the completion of the second analysis and add them to the monitoring list. If the owner or operator chooses not to resample, then the owner or operator shall report the concentrations of these additional constituents to the Department within seven days after completion of the initial analysis and add them to the monitoring list.
- (8) If the owner or operator determines pursuant to 310 CMR 30.671(4) that any concentration limits pursuant to 310 CMR 30.667 are being exceeded at any monitoring well at the point of compliance the owner or operator shall:
  - (a) Immediately notify the Department by the quickest available means and also notify the Department in writing within seven days. The notification shall indicate each concentration limit that has been exceeded and by how much.
  - (b) Within 180 days, submit to the Department an application for a license modification to establish a corrective action program meeting the requirements of 310 CMR 30.672, or within 90 days if an engineering feasibility study has been previously submitted to the Department pursuant to 310 CMR 30.664(8)(e). The application shall at a minimum include the following information:
    - 1. A detailed description of corrective actions that will achieve compliance with the requirements specified in the license pursuant to 310 CMR 30.671(1); and
    - 2. A plan for a groundwater monitoring program that will demonstrate the effectiveness of the corrective action. Such a groundwater monitoring program may be based on a compliance monitoring program developed to meet the requirements of 310 CMR 30.671.
- (9) If the owner or operator determines pursuant to 310 CMR 30.671(4) that the ground-water concentration limits pursuant to 310 CMR 30.671 are being exceeded at any monitoring well at the point of compliance, the owner or operator shall demonstrate a source other than a regulated unit caused the contamination or that the detection is an artifact caused by an error in sampling, analysis, or statistical evaluation or natural variation in the ground water. In making a demonstration pursuant to 310 CMR 30.671(9), the owner or operator shall:
  - (a) Within seven days of determining that a requirement of 310 CMR 30.665 is not being met, notify the Department in writing that he intends to make such a demonstration;
  - (b) Within 90 days of determining that a requirement of 310 CMR 30.665 is not being met, submit a report to the Department which demonstrates that a source other than a regulated unit caused the requirement not to be met or that the apparent noncompliance with the standards resulted from error in sampling, analysis, or evaluation; and
  - (c) Within 90 days of determining that a requirement of 310 CMR 30.665 is not being met, submit to the Department a completed application for a license modification to make all appropriate changes to the compliance monitoring program at the facility, unless the Department has determined in writing that such an application need not be submitted; and (d) Continue to monitor in accordance with the compliance monitoring program established pursuant to 310 CMR 30.671.

#### 30.671: continued

(10) If either the owner or operator or the Department determines that the compliance monitoring program no longer satisfies the requirements of 310 CMR 30.671, the owner or operator shall, within 90 days, submit an application for a license modification to make all appropriate changes to the program.

## 30.672: Corrective Action Program

An owner or operator required to establish a corrective action program pursuant to 310 CMR 30.661 and 30.662 shall, at a minimum, comply with the following:

- (1) The owner or operator shall take corrective action to ensure that each regulated unit is in compliance with the requirements of 310 CMR 30.665: *Groundwater Protection Standard* which shall be specified by the Department in the facility's license. These requirements shall include, at a minimum:
  - (a) A list of the hazardous constituents specified pursuant to 310 CMR 30.666;
  - (b) Concentration limits, specified pursuant to 310 CMR 30.667, for each of those hazardous constituents;
  - (c) The compliance points specified pursuant to 310 CMR 30.669; and
  - (d) The compliance period specified pursuant to 310 CMR 30.670.
- (2) The owner or operator shall implement a corrective action program that prevents hazardous constituents from exceeding their respective concentration limits at compliance points by removing the hazardous waste constituents or treating them in place.
- (3) The owner or operator shall begin corrective action within a reasonable time period after a requirement of 310 CMR 30.665: *Groundwater Protection Standard* has not been complied with. The Department shall specify that time period in the facility's license. If a facility's license includes a corrective action program in addition to a compliance monitoring program, the license shall specify when the corrective action will begin and such a requirement will operate in lieu of the requirement of 310 CMR 30.671(9)(b).
- (4) In conjunction with a corrective action program, the owner or operator shall establish and implement a groundwater monitoring program to demonstrate the effectiveness of the corrective action program. Such a monitoring program may be based on the requirements for a compliance monitoring program pursuant to 310 CMR 30.671 and shall be as effective as that program in determining compliance with the requirements of 310 CMR 30.665: *Groundwater Protection Standard*, and in determining the success of a corrective action program pursuant to 310 CMR 30.672(5), where appropriate.
- (5) In addition to the other requirements of 310 CMR 30.672, the owner or operator shall conduct a corrective action program to remove or treat in place all hazardous constituents that are specified pursuant to 310 CMR 30.666 and that exceed concentration limits, specified pursuant to 310 CMR 30.667, in groundwater between the compliance point, specified pursuant to 310 CMR 30.668, and the downgradient facility property boundary. The license shall specify the measures to be taken.
  - (a) Corrective action measures shall be:
    - 1. Initiated within 60 days of detection of noncompliance with a requirement of 310 CMR 30.665; and
    - 2. Completed within a reasonable period of time, considering the extent of contamination.
  - (b) Corrective action measures may be terminated once the concentration of hazardous constituents specified pursuant to 310 CMR 30.666 is reduced, for three consecutive years, to a level below the respective concentration limits specified pursuant to 310 CMR 30.667.
- (6) In addition to the other requirements of 310 CMR 30.672, if so required by the Department, the owner or operator shall conduct a corrective action program to remove or treat in place all hazardous constituents which are specified pursuant to 310 CMR 30.666, and which exceed concentration limits, specified pursuant to 310 CMR 30.667, in groundwater beyond the downgradient property boundary.

#### 30.672: continued

- (a) Corrective action measures shall be initiated within 60 days of a determination by the Department that such measures are necessary, and shall be completed within a reasonable period of time considering the extent of contamination. Corrective action measures may be terminated once the concentration of hazardous constituents specified pursuant to 310 CMR 30.666 is reduced, for three consecutive years, to levels below their respective concentration limits specified pursuant to 310 CMR 30.667.
- (b) The owner or operator shall, by certified mail, immediately notify the owners of abutting property which may be affected by such contamination. The owner or operator shall take immediate steps to acquire permission from such property owner(s) to initiate groundwater monitoring, and, if necessary, corrective action on such abutting property.
- (7) The owner or operator shall continue corrective action measures during the compliance period to the extent necessary to ensure that the requirements of 310 CMR 30.665 are complied with. If the owner or operator is conducting corrective action at the end of the compliance period, he shall continue that corrective action for as long as necessary to achieve compliance with the requirements of 310 CMR 30.665. The owner or operator may terminate corrective action measures when he has persuaded the Department that, based on data from the groundwater monitoring program implemented pursuant to 310 CMR 30.672(4), the requirements of 310 CMR 30.665 have been met for a period of three consecutive years.
- (8) The owner or operator shall submit to the Department semi-annual reports on the effectiveness of the corrective action program.
- (9) If the owner or operator or the Department determines that the corrective action program no longer satisfies the requirements of 310 CMR 30.672, the owner or operator shall, within 90 days, submit an application for a license modification to make all appropriate changes to the program.

## 30.673: Cochran's Approximation to the Behrens-Fisher Students' t-Test

- (1) Using all the available background data ( $n_b$  readings), calculate the background mean ( $X_B$ ) and background variance ( $s_b$ <sup>2</sup>). For the single monitoring well under investigation ( $n_m$  reading), calculate the monitoring mean ( $X_m$ ) and monitoring variance ( $s_m$ <sup>2</sup>).
- (2) For any set of data  $(X_1, X_2 \dots X_n)$  the mean is calculated by:

$$X = \frac{X_1 + X_2 \dots + X_n}{n}$$

and the variance is calculated by:

$$s^2 = \frac{(X_1 - X)^2 + (X_2 - X)^2 \dots + (X_n - X)^2}{n-1}$$

where "n" denotes the number of observations in the set of data.

(3) The t-test uses these data summary measures to calculate a t-statistic ( $t^*$ ) and a comparison t-statistic ( $t_c$ ). The  $t^*$  value is compared to the  $t_c$  value and a conclusion reached as to whether there has been a statistically significant change in any indicator parameter.

## 30.673: continued

(4) The t-statistic for all parameters except pH and similar monitoring parameters is:

$$t^* = \frac{\overline{X_m} - \overline{X_B}}{\sqrt{\frac{S_m^2}{n_m} + \frac{S_m^2}{n_B}}}$$

If the value of this t-statistic is negative, there is no significant difference between the monitoring data and background data. It should be noted that significantly small negative values may be indicative of a failure of the assumption made for test validity, or errors have been made in collecting the background data.

(5) The t-statistic ( $t_c$ ), against which t\* will be compared, necessitates finding  $t_B$  and  $t_m$  from standard (one-tailed) tables where,

 $t_B$  = t-tables with ( $n_B$  - 1) degrees of freedom, at the 0.05 level of significance.  $t_m$  = t-tables with ( $n_m$  - 1) degrees of freedom, at the 0.05 level of significance.

Finally, the special weightings  $W_{\scriptscriptstyle B}$  and  $W_{\scriptscriptstyle m}$  are defined as:

and so the comparison t-statistic is:

$$t_{c} = rac{W_{B}t_{B}}{W_{B}} + rac{W_{m}t_{m}}{W_{m}}$$

- (6) The t-statistic ( $t^*$ ) is now compared with the comparison t-statistic ( $t_c$ ) using the following decision-rule:
  - If  $\underline{t^*}$  is equal to or larger than  $t_c$ , then conclude that there most likely has been a significant change in this specific parameter.
  - If  $\underline{t^*}$  is less than  $t_c$ , then conclude that, most likely, there has not been a change in this specific parameter.
- (7) The t-statistic for testing pH and similar monitoring parameters is constructed in the same manner as previously described except the negative sign (if any) is discarded and the caveat concerning the negative value is ignored. The standard (two-tailed) tables are used in the construction t<sub>c</sub> for pH and similar monitoring parameters.
- (8) If  $t^*$  is equal to or larger than  $t_c$ , then conclude that there most likely has been a significant increase (if the initial  $t^*$  had been negative, this would imply a significant decrease). If  $t^*$  is less than  $t_c$ , then conclude that there most likely has been no change.
- (9) A further discussion of the test may be found in *Statistical Methods* (6th Edition, Section 4.14) by G.W. Snedecor and W.G. Cochran, or *Principles and Procedures of Statistics* (1st Edition, Section 5.8) by R.G.D. Steel and J.H. Torrie.

#### 30.673: continued

# (10) Standard T-Tables 0.05 Level Of Significance.

Degrees of Freedom	t-values (one-tail)	t-values (two-tail)	
1	6.314	12.706	
2	2.920	4.303	
3	2.353	3.182	
4	2.132	2.776	
5	2.015	2.571	
6	1.943	2.447	
7	1.895	2.365	
8	1.860	2.306	
9	1.833	2.262	
10	1.812	2.228	
11	1.796	2.201	
12	1.782	2.179	
13	1.771	2.160	
14	1.761	2.145	
15	1.753	2.131	
16	1.746	2.120	
17	1.740	2.110	
18	1.734	2.101	
19	1.729	2.093	
20	1.725	2.086	
21	1.721	2.080	
22	1.717	2.074	
23	1.714	2.069	
24	1.711	2.064	
25	1.708	2.060	
30	1.697	2.042	
40	1.684	2.021	

Adopted from Table III of *Statistical Tables for Biological, Agricultural, and Medical Research* (1947, R.A. Fisher and F. Yates).

# 30.675: Probable High Groundwater Levels

## (1) For areas in Massachusetts other than Cape Cod:

(a) <u>Sand and gravel areas</u>. For estimating the probable high groundwater levels in sand and gravel areas in Massachusetts except Cape Cod, the following formula shall be used wherever practicable. Use of this formula allows for the estimation of the potential groundwater level rise at the facility site by correlation with the potential rise in an off-site observation well if the climatic trends and hydrogeologic conditions at the site and the well are similar. For an in-depth discussion of the derivation of this formula and its use see: *Probable High Groundwater Levels in Massachusetts*, U.S. Geological Survey, Water Resources Investigations, Open-File Report 80-1205 by Michael H. Frimpter.

$$S_{h} = S_{c} - S_{r} \qquad (OW_{c} - OW_{max})$$

$$OW_{r}$$

where:

 $S_h$  = estimated depth to probable high water level at the site;

 $S_c$  = measured depth to water at the site (ground level to water table);

OW<sub>c</sub> = measured depth to water in the observation well which is used to correlate with

the water levels at the site (ground level to water table);

 $OW_{max}$  = depth to recorded maximum water level at the observation well which is used to

correlate with the water levels at the site;

 $S_r$  = range of water level where the site is located; and

OW<sub>r</sub> = recorded maximum value of annual range of water level at the observation well

which is used to correlate with the water levels at the site.

In the above equation, S<sub>c</sub> and OW<sub>c</sub> shall be measured in the same month. The observation well which is chosen to correlate with the water levels at the facility site shall be among those included in the report *Groundwater Levels in Massachusetts*, 1936-74: U.S. Geological Survey Open-File report, Massachusetts Hydrologic-Data Report 17 by Anthony Maevsky. The observation well shall be located in the same type of climate and hydrogeologic environment as the facility site.

Values of  $OW_{max}$  and  $OW_{r}$  shall be obtained from the chosen observation-well record.  $OW_{max}$  shall be found by reviewing the historical record of measurements and finding the depth from ground level to water table level that corresponds to the maximum water level ever recorded at the observation well site.  $OW_{r}$  shall be determined by finding the maximum water level fluctuation that ever occurred during one year of recordings at the observation well (*i.e.*, the "range" or the maximum difference in water table levels ever recorded during a one year period).

The value of  $S_r$  shall be as follows:

Sand and gravel deposits on terraces and hillsides

10 feet
Sand and gravel deposits in valleys

4 feet

These values represent a range of water level at the site that is unlikely to be exceeded.

(b) <u>Areas of till</u>. For estimating the probable high groundwater level in areas of till, a series of measurements shall be taken to determine the high groundwater level for a particular year, and the following method shall be used, wherever practicable.

To estimate the maximum water level, a proportion is used. That proportion is: The potential water-level rise at the site is to the maximum annual water-level range at the site as the potential water-level rise at an observation well is to the maximum annual water-level range at the observation well, where the potential rise is the difference between the highest and current water levels. For the use of the formula below, a value of five feet was chosen to represent the maximum annual water-level range at the site. Analysis of records of over 5000 water level measurements in 15 wells in till between 1936 and 1982 show that the mean range of maximum annual water levels is about five feet. For an illustration of the variables which are used in the formula, *see* Figure 30.675(1)(b).

Difference between current and maximum levels at site Range of maximum annual level at site

$$S_c - S_m$$
 $S_m = S_c - 5 x$ 

Difference between current and maximum levels at observation well Range of maximum annual level at observation well

 $S_c - S_m$ 
 $OW_c - OW_m$ 
 $OW_c - OW_m$ 

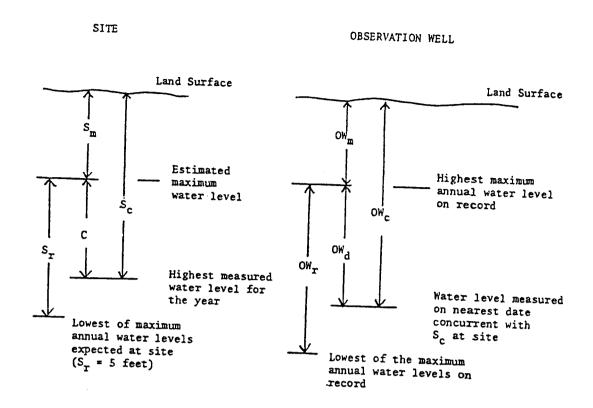
Steps in the method are as follows: Measure and record the water level on a weekly basis from March 15 to May 15. From the observation well location map select the most representative observation well on a basis of geographic proximity. From reports of the U.S. Geological Survey determine the water level  $(OW_c)$  in that observation well for the concurrent date, the date closest to the date at which the highest water level was measured at the site. Determine from Table 30.675(1)(b), provided here, the maximum recorded water level  $(OW_m)$  and the range of annual maximum water level  $(OW_r)$  for the same observation well. Substitute these values of  $OW_c$ ,  $OW_m$  and  $OW_r$ , and the current maximum annual water level measured at the site  $(S_c)$  in the formula and solve for the estimated maximum water level at the site  $(S_m)$ .

Based on the small available sample of 10 representative observation wells in till there is a 10% chance that the maximum annual range at a site would exceed the estimate by about one foot. See the range of  $OW_r$  in Table 30.675(1)(b).

TABLE 30.675(1)(b)

Maximum Water Levels and Maimum Annual Water-Level Ranges for Observation Wells in Till				
LOCATION	NUMBER	$\mathrm{OW}_{\mathrm{m}}$	$OW_r$	
Andover	AJW-26	3.47	5.48	
Cheshire	CJW-2	0.14	4.00	
East Bridgewater	EBW-30	2.40	5.78	
Great Barrington	GMW-2	5.09	5.65	
Lowell	L2W-14	7.79	6.11	
Middleborough	MTW-82	1.57	4.68	
Northborough	NUW-38	0.96	3.58	
Topsfield	TQW-1	5.64	4.49	
Weymouth	XGW-2	5.25	4.44	
Winchester	XOW-14	4.03	4.69	

Most, but not all, facility sites will be located in one of the hydrogeologic settings discussed above. As an example, a surface impoundment might be located on a terrace composed largely of silt. In such a case, the formula is not valid. The estimation of the probable high groundwater levels shall be based upon measurements of the water level at the facility site in the months of March, April and May and a best possible prediction of the highest water table levels that can reasonably be expected throughout the facility's operating life (and beyond if a land disposal facility). Soil mottling may help to verify this prediction. In rare instances, long term historical data (15 years or more) of water levels may actually be available at the facility site. In these cases, the probable high groundwater levels can be determined directly from this data.



(2) <u>Probable High Groundwater Levels For Cape Cod</u>. For estimating the probable high water level in sand and gravel areas of Cape Cod, the following method shall be used wherever practicable. It cannot be applied in areas where low permeability layers of silt, clay or till are present. Some parts of Cape Cod show no pattern for annual water level range. In these locations, soil conditions are unsuitable for water level estimation. In cases where the following procedure is not applicable, tests for water levels shall be conducted at the site during March, April and May and a best possible judgment made of the probable high groundwater levels considering hydro-geologic and climatic trends.

Probable high groundwater levels at a site in Cape Cod shall be made by correlation of a single water-level measurement from a facility test site with water level records from one of nine index wells which have been established by the U.S. Geological Survey. For the rationale behind the establishment of the estimating procedure, and for an in-depth discussion of its use, see: *Probable High Groundwater Levels on Cape Cod, Massachusetts*, U.S. Geological Survey, Water-Resources Investigations, Open-File Report 80-1008 by Michael H. Frimpter. Also, in order to estimate the probable high groundwater levels, Plate 1 and Plate 2 from that report will need to be utilized. These plates subdivide Cape Cod into nine areas in which water level fluctuations in each area are best represented by a particular index well.

The formula which is used to estimate the depth to the probable high water level at the site is similar to the formula that is used for finding probable high water levels for areas in Massachusetts other than Cape Cod:

$$S_{h} = S_{c} - S_{r} \quad (OW_{c} - OW_{max})$$

$$\overline{OW_{r}}$$

or

Estimated depth to probable = measured depth to - water level high water table water at the site adjustment

where 
$$S_r(OW_c - OW_{max})$$
 = the water level adjustment  $OW_c$ 

#### 30.675: continued

However, in this case  $S_r$ , the maximum value of the annual range of water level at the facility site, will be one of five values (2, 3, 4, 5 or 6 feet), depending upon the particular geographical zone in which the facility is situated. In areas of perched groundwater tables, a value  $S_r = 10$  may be used, but only with written approval of the Department.

In order to simplify the use of this formula, a series of nine tables has been developed. These tables appear in the Report cited in 310 CMR 30.675(2). One table has been prepared for each of the nine index observation wells. The water level adjustment value shall be found from these tables once the geographic zone of the facility site is known and the water levels in the index well and at a specific site have been measured.

#### **Procedure**

- 1. Measure, to the nearest 1/10th of a foot, the depth to the water table below land surface at the facility site.
- 2. Find the location on Plate 1 or Plate 2 of the facility test site. From this Plate determine the geographical zone in which the facility site exists (Zone A, B, C, D or E). Also determine the index well which shall be used.
- 3. Determine the depth to water in the appropriate index well for the month in which the depth to water was measured at the facility site (or previous month if current data are not yet available; see the NOTE below). (The U.S. Geological survey reports the index-well measurements monthly to the Regional Environmental Engineers of the Department and to the Cape Cod Planning and Economic Development Commission.)
- 4. Use the appropriate table (*See* Sample Table 30.675(2)) and find the depth to water level adjustment value from the Table based upon the geographical zone where the site is located and the reported depth to water in the index well. (Refer to the U.S.G.S. report for the complete set of tables).
- 5. Subtract the water-level adjustment value from the measured depth to water at the facility site to obtain the estimate of depth to the probable high water level.

NOTE:

Because the locations of the boundaries between the areas represented by the index wells are somewhat inexact, the above-cited report suggests that, when the site being evaluated is within 1,000 feet of such a boundary, estimates should be calculated from both index wells. The higher of the two groundwater levels calculated would be less likely to be exceeded.

The water level for the month in which the site testing was done should be used in Procedure 3. However, the water level reported for the index well for the month previous to the month in which the site was tested may be used, provided that 0.25 feet is subtracted from the depth to the water level for each week or fraction thereof between the date of the site test and the end of the previous month. For example, if an estimate for a site test made on the 8th of August (8/7 = 1.14) should be adjusted by subtracting 0.3 feet from the reported July water level for the index well. This adjustment need only be applied when the test site is measured in the months of May, June, July, August, September, or October. The adjustment is based on the recorded maximum water level decline of 0.99 feet over a one month period in all nine index wells and the observation that groundwater levels on Cape Cod generally decline from May through October.

# SAMPLE TABLE 30.675(2)

# Water-level Adjustments, in Feet, for Use with Index Well Barnstable A1W-230 (Located in Zone C)

Measured water level (OW <sub>c</sub> in feet below land	Zone A	Zone B	Zone C	Zone D	Zone E
surface)	$(2/4)^1$	$(3/4)^1$	$(4/4)^1$	$(5/4)^1$	$(6/4)^1$
$21.1^{2}$	0.0	0.0	0.0	0.0	0.0
21.2	.0	.1	.1	.1	.1
21.3	.1	.1	.2	.2	.3
21.4	.1	.2	.3	.4	.4
21.5	.2	.3	.4	.5	.6
21.6	.2	.4	.5	.6	.7
21.7	.3	.4	.6	.7	.9
21.8	.3	.5	.7	.9	1.0
21.9	.4	.6	.8	1.0	1.2
22.0	.4	.7	.9	1.1	1.3
22.1	.5	.7	1.0	1.2	1.5
22.2	.5	.8	1.1	1.4	1.6
22.3	.6	.9	1.2	1.5	1.8
22.4	.6	1.0	1.3	1.6	1.9
22.5	.7	1.0	1.4	1.7	2.1
22.6	.7	1.1	1.5	1.9	2.2
22.7	.8	1.2	1.6	2.0	2.4
22.8	.8	1.3	1.7	2.1	2.5
22.9	.9	1.3	1.8	2.2	2.7
23.0	.9	1.4	1.9	2.4	2.8
23.1	1.0	1.5	2.0	2.5	3.0
23.2	1.0	1.6	2.1	2.6	3.1
23.3	1.1	1.6	2.2	2.7	3.3
23.4	1.1	1.7	2.3	2.9	3.4
23.5	1.2	1.8	2.4	3.0	3.6
23.6	1.2	1.9	2.5	3.1	3.7
23.7	1.3	1.9	2.6	3.2	3.9
23.8	1.3	2.0	2.7	3.4	4.0
23.9 24.0	1.4 1.4	2.1 2.2	2.8 2.9	3.5 3.6	4.2 4.3
24.0	1.4	2.2	3.0	3.7	4.5 4.5
24.1	1.5	2.2	3.0	3.7	4.5
24.2	1.6	2.3	3.2	4.0	4.8
24.4	1.6	2.5	3.3	4.1	4.9
24.5	1.7	2.5	3.4	4.2	5.1
24.6	1.7	2.6	3.5	4.4	5.2
24.7	1.8	2.7	3.6	4.5	5.4
24.8	1.8	2.8	3.7	4.6	5.5
24.9	1.9	2.8	3.8	4.7	5.7
25.0	1.9	2.9	3.9	4.9	5.8
25.1	2.0	3.0	4.0	5.0	6.0
25.2	2.0	3.1	4.1	5.1	6.1
25.3	2.1	3.1	4.2	5.2	6.3
25.4	2.1	3.2	4.3	5.4	6.4
25.5	2.2	3.3	4.4	5.5	6.6
25.6	2.2	3.4	4.5	5.6	6.7

30.675: continued

# SAMPLE TABLE 30.675(2) (continued) Water-level Adjustments, in Feet, for Use with Index Well Barnstable A1W-230 (Located in Zone C)

Measured water level (OW° in feet below land surface)	Zone A	Zone B (3/4) <sup>1</sup>	Zone C (4/4) <sup>1</sup>	Zone D (5/4) <sup>1</sup>	Zone E
	$(2/4)^1$				$(6/4)^1$
25.7	2.3	3.4	4.6	5.7	6.9
25.8	2.3	3.5	4.7	5.9	7.0
25.9	2.4	3.6	4.8	6.0	7.2
26.0	2.4	3.7	4.9	6.1	7.3
26.1	2.5	3.7	5.0	6.2	7.5
26.2	2.5	3.8	5.1	6.4	7.6
26.3	2.6	3.9	5.2	6.5	7.8
26.4	2.6	4.0	5.3	6.6	7.9
26.5	2.7	4.0	5.4	6.7	8.1
26.6	2.7	4.1	5.5	6.9	8.2
26.7	2.8	4.2	5.6	7.0	8.4

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(3) <u>Alternative Methods</u>. The Department may accept alternative methods for determining probable high groundwater levels if such methods are demonstrated to give equally reliable results. For the purposes of 310 CMR 30.000, alternative methods may be used only following written approval by the Department.

### 30.680: Use and Management of Containers

# 30.681: Applicability

310 CMR 30.681 through 30.689, cited collectively as 310 CMR 30.680, prescribe requirements which apply to owners and operators of all facilities that use containers to store hazardous waste.

# 30.682: Labelling and Marking

Throughout the period of storage, the side of each container of hazardous waste shall be clearly labeled and marked in a manner which identifies, in words, the hazardous waste(s) being stored in the container (*e.g.*, acetone, toluene) and the hazard(s) associated with the waste (*e.g.*, ignitable, toxic, dangerous when wet). Each container shall also be marked with the words "Hazardous Waste".

# 30.683: Condition of Containers

If a container holding hazardous waste is not in good condition (*e.g.*, severe rusting, apparent structural defects) or if it begins to leak, the owner or operator shall transfer the hazardous waste from this container to a container that is in good condition, or manage the hazardous waste in some other way that complies with the requirements of 310 CMR 30.000.

## 30.684: Compatibility of Waste with Containers

The owner or operator shall store hazardous waste in a container made of or lined with materials which will not react with, and are otherwise compatible with, the hazardous waste to be stored in the container.

 $S_r/OW_r =$ 

<sup>&</sup>lt;sup>2</sup> Recorded highest water level (OW<sub>max</sub>).

#### 30.685: Management of Containers

- (1) A container holding hazardous waste shall always be closed during storage, except when waste is being added or removed. In the event that Federal, State or local law or regulation requires a container to be vented, the container shall be vented only through devices such as pressure relief valves that satisfy ASTM or fire prevention standards (as opposed to open venting) and only in a manner that does not present a threat to public health, safety, or welfare or the environment.
- (2) A container holding hazardous waste shall not be opened, handled or stored in a manner which may rupture the container or cause it to leak. If containers are stacked, they shall be stacked in a manner that allows the containers to be easily and safely inspected, and pallets shall be used to separate the containers.
- (3) Aisle spacing for container storage of ignitable or reactive hazardous waste shall meet the guidelines set forth in the National Fire Protection Association's Flammable and Combustible Liquids Code (NFPA-30, Chapter 4) 2003 Edition.
- (4) Aisle spacing for container storage of hazardous waste shall be such that the owner or operator or the Department can inspect each row of containers to ensure compliance with 310 CMR 30.680.

# 30.686: Inspections

At least weekly, the owner or operator shall inspect areas where containers are stored, looking for leaking and for deterioration, caused by corrosion or other factors, of containers and the containment system.

#### 30.687: Containment

- (1) Each container storage area shall have a containment system that is designed and operated in compliance with 310 CMR 30.687(2), except as otherwise provided by 310 CMR 30.687(3).
- (2) Each containment system shall be designed, constructed, operated and maintained as follows:
  - (a) Underlying the containers shall be a base which is free of cracks and gaps and is sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed;
  - (b) Unless the containers are elevated or are otherwise protected from contact with accumulated liquids, the base shall be sloped or the containment system shall be otherwise designed, constructed, operated and maintained to drain and remove liquids resulting from leaks, spills, or precipitation.
  - (c) For containers which are stored indoors or under a roof, the containment system shall have the capacity to contain either 10% of the total possible contained volume of the containers or 100% of the volume of the largest container, whichever is greater. For containers which are stored outdoors, the containment system shall have the capacity to contain either 10% of the total possible contained volume of the containers or 110% of the volume of the largest container, whichever is greater. Containers that do not contain free liquids need not be considered in determining the containment system's required capacity.
  - (d) The owner or operator shall prevent run-on into the containment system, unless the collection system has sufficient excess capacity, in addition to that required by 310 CMR 30.687(2)(c), to contain the run-on which would enter the system from a 24-hour, 25-year storm.
  - (e) To prevent overflow of the collection system, the owner or operator shall remove spilled or leaked waste and accumulated precipitation from the sump or collection area in as timely a manner as possible. If the collected material is hazardous waste pursuant to 310 CMR 30.100, it shall be managed as hazardous waste in compliance with 310 CMR 30.000.

#### 30.687: continued

- (3) Storage areas that store containers holding only hazardous wastes that do not contain free liquids and that do not contain any polyhalogenated aromatic hydrocarbons, need not have a containment system required by 310 CMR 30.687(2), if:
  - (a) The storage area is sloped or is otherwise designed and operated to drain and remove liquid resulting from precipitation; or
  - (b) The containers are elevated or are otherwise protected from contact with accumulated liquid.

# 30.688: Special Requirements for Ignitable, Reactive, and Incompatible Hazardous Wastes, and Hazardous Wastes that are Polyhalogenated Aromatic Hydrocarbons

- (1) Containers holding ignitable or reactive hazardous waste shall be located at least 15 meters from the facility's property line.
- (2) Incompatible hazardous wastes or materials incompatible with hazardous wastes (*see* 310 CMR 30.561 for examples) shall not be placed in the same container unless 310 CMR 30.560(3) is complied with.
- (3) Hazardous waste shall not be placed in an unwashed container that previously held waste or material incompatible with such hazardous waste.
- (4) A container holding a hazardous waste that is incompatible with any waste or other material stored nearby in other containers or in piles, open tanks or surface impoundments shall be separated from the other waste or other material or protected from it by means of a dike, berm, wall, or other device.
- (5) If containers holding polyhalogenated aromatic hydrocarbons are to be located or used at the facility, the facility's contingency plan shall include the following:
  - (a) Procedures for responding to spills or leaks of polyhalogenated aromatic hydrocarbons into the containment system.
  - (b) Procedures for removing polyhalogenated aromatic hydrocarbons from the containment system.
  - (c) Procedures for repairing or replacing leaking containers.

### 30.689: Closure

- (1) At closure, the owner or operator shall remove all hazardous waste and hazardous waste residues from the containment system and shall decontaminate or remove all remaining containers, liners, bases and soil containing or contaminated with hazardous waste or hazardous waste residues.
- (2) Upon removing hazardous waste from the containment system, the owner or operator shall become a generator of hazardous waste and shall manage it in compliance with all applicable requirements of 310 CMR 30.000.

## 30.690: STORAGE AND TREATMENT IN TANKS

#### 30.691: Applicability

- 310 CMR 30.691 through 30.699, cited collectively as 310 CMR 30.690, prescribe requirements which apply to owners and operators of facilities that use tanks to treat or store hazardous waste, except:
- (1) Tank systems that are used to store or treat hazardous waste which contains no free liquids and are situated inside a building with an impermeable floor are exempted from the requirements in 310 CMR 30.694. To demonstrate the absence or presence of free liquids in the stored/treated waste, EPA method 9095B (Paint Filter Liquids Test) as specified in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, EPA Publication SW-846, as incorporated by reference at 310 CMR 30.012 shall be used.

#### 30.691: continued

(2) Tank systems, including sumps, that serve as part of a secondary containment system to collect or contain releases of hazardous waste are exempted from the requirements of 310 CMR 30.694.

#### 30.692: Assessment of Existing Tank System's Integrity

- (1) For each existing tank system that does not have secondary containment meeting the requirements of 310 CMR 30.694, the owner or operator shall determine that the tank system is not leaking and does not pose a threat of release of hazardous waste to the environment. By no later than June 1, 1989, the owner or operator shall obtain a written assessment that has been reviewed and certified by a Massachusetts registered professional engineer, in accordance with 310 CMR 30.009, and that attests to the system's integrity. Once obtained, this assessment shall be kept on file at the facility until the facility has been closed pursuant to 310 CMR 30.699.
- (2) This assessment shall correctly determine that the tank system is adequately designed and has sufficient structural strength and compatibility with the waste(s) to be stored or treated, to ensure that it will not collapse, rupture, or fail. In addition, the assessment shall correctly demonstrate that a minimum shell thickness has been maintained at all times to ensure sufficient shell strength. At a minimum, this assessment shall consider the following:
  - (a) Design standard(s), if available, according to which the tank and ancillary equipment were constructed;
  - (b) The design of the tank, including, without limitation, the foundation, structural support, seams, and pressure controls;
  - (c) Hazardous characteristics of the waste(s) that have been or are intended to be, handled;
  - (d) Existing corrosion protection measures;
  - (e) Documented age of the tank system, if available (otherwise, an estimate of the age);
  - (f) A soil corrosion survey as described in 310 CMR 30.693(1)(c);
  - (g) The width, height, and materials of construction of the tank, and the specific gravity of the waste that has been, and is intended to be, placed in the tank, in establishing minimum shell thickness; and
  - (h) Results of a leak test, internal inspection, or other tank integrity examination such that 1. For non-enterable underground tanks, the assessment shall include a leak test method that has been approved by the State Fire Marshal and that is capable of taking into account the effects of temperature variations, tank end deflection, vapor pockets, and high water table effects. Such a leak test must have an accuracy equal to or greater than 0.1 gallons per hour for detecting leakage from the tank with a probability of detection of 0.99 and a probability of false positive of 0.01. As the state of the art of the technology for testing underground tanks improves, the Department may specify that a test with an accuracy of better than 0.1 gallons per hour be used; and
    - 2. For other than non-enterable underground tanks and for ancillary equipment, this assessment shall include a leak test in compliance with 310 CMR 30.692(2)(h)1., or other integrity examination, that is certified by a Massachusetts registered professional engineer in accordance with 310 CMR 30.009, that addresses leaks, cracks, corrosion, and erosion. (Note: The practices described in the American Petroleum Institute (API) Publication, Guide for Inspection of Refinery Equipment, Chapter XIII, *Atmospheric and Low-Pressure Storage Tanks*, 4th edition, 1981, may be used, where applicable, as guidelines for conducting other than a leak test.)
- (3) Owners or operators of tank systems in which are stored or treated materials that are classified as hazardous waste, pursuant to amendments to 310 CMR 30.000, that take effect on or after June 1, 1989, shall conduct and complete this assessment within 12 months after the date on which the materials became a hazardous waste.

#### 30.692: continued

- (4) If, as a result of the assessment conducted in accordance with 310 CMR 30.692(2)(h), a tank system is found to be leaking or to pose a threat of release to the environment, the owner or operator must comply with the requirements of 310 CMR 30.697.
- (5) Until such time as secondary containment in compliance with 310 CMR 30.694 is provided, all existing tank systems shall comply with the following:
  - (a) For non-enterable underground tanks, a leak test that meets the requirements of 310 CMR 30.692(2)(h)1. must be conducted at least once every 12 months;
  - (b) For other than non-enterable tanks, an integrity assessment in compliance with 310 CMR 30.692(2)(h)1. or 2. must be conducted at least once every 12 months;
  - (c) For all existing tanks:
    - 1. The owner or operator shall maintain accurate daily inventory records and shall check such records for indication of possible leakage from each tank. Inventory shall be based on the actual daily measurement and recording of tank liquid levels and the daily recording of a material balance for wastes entering and exiting the tank. Measurements shall be taken on all days except days (e.g., Sundays, holidays) when facility business is not transacted. The inventory records shall include a daily computation of gain or loss. All records shall be made part of the operating record of the facility and shall be kept at the facility, readily available to the personnel of the Department for inspection until the facility has been closed pursuant to 310 CMR 30.699.
    - 2. With the license application, the owner or operator shall submit a proposed test for determining whether any gain or loss of material in the tank system shall be considered a statistically significant gain or loss for any one (daily) material balance or series of material balances (*e.g.*, the running balance for a weekly period). Upon approval by the Department, this test for statistical significance shall be made a condition of the license;
    - 3. If the inventory control program required by 310 CMR 30.692(5)(c)1. indicates a statistically significant gain or loss of material as determined in compliance with 310 CMR 30.692(5)(c)2., the owner or operator shall comply with 310 CMR 30.697.
    - 4. If the Department determines in writing that it is infeasible for the owner or operator to comply with the inventory control program specified in 310 CMR 30.692(5)(c), the Department may specify in writing an alternate leak detection program.

### 30.693: Design and Installation of New Tank Systems or Components

- (1) Owners or operators of new tank systems or components shall obtain and submit to the Department, at the time information is submitted to the Department pursuant to 310 CMR 30.099(6) and 310 CMR 30.802, 310 CMR 30.099(7) and (8), or 310 CMR 30.850, a written assessment, reviewed and certified by an independent, qualified, registered professional engineer, in accordance with 310 CMR 30.009, attesting that the tank system has sufficient structural integrity and is acceptable for the storing and treating of hazardous waste. The assessment shall show that the foundation, structural support, seams, connections and pressure controls (if applicable) are adequately designed and that the tank system has sufficient structural strength, compatibility with the waste(s) to be stored or treated, and corrosion protection to ensure that it shall not collapse, rupture, or fail. This assessment be used by the Department, but which the Department will not be limited to considering, to determine the acceptability of the tank system design, must include, at a minimum, the following information:
  - (a) Design standard(s) according to which the tank(s) and/or ancillary equipment are constructed.
  - (b) Hazardous characteristics of the waste(s) to be handled.
  - (c) For new tank systems or components in which the external shell of a metal tank or any external metal component of the tank system will be in contact with the soil or with water, a determination by a corrosion expert of

#### 30.594: Recording Notice of License and of Past Disposal

- (1) Within 60 days of certification of closure of the first hazardous waste management unit subject to the requirements of 310 CMR 30.590, and within 60 days of certification of closure of the last hazardous waste management unit subject to the requirements of 310 CMR 30.590, the owner or operator shall record in the appropriate Registry of Deeds or, if the land in question is registered land, in the registry section of the land court for the district wherein the land lies, a notice that:
  - (a) the land has been used to manage hazardous wastes, and
  - (b) the land's use is restricted pursuant to 310 CMR 30.592(5), and
  - (c) the survey plat and record required by 310 CMR 30.586 have been recorded in the Registry of Deeds and copies thereof have been submitted to the Department and to the Board of Health of the city or town wherein the land lies.
- (2) The landowner shall submit to the Department a certified copy of each notice described in 30.594(1), including the date and book and page numbers of recording of such notice, within 30 days after the landowner receives the recorded notice from the registry.

## 30.595: Subsequent Removal of Hazardous Waste and Hazardous Waste Containment Systems

- (1) If the owner or operator or any subsequent owner or operator of the land upon which is located a hazardous waste management unit or facility subject to the requirements of 310 CMR 30.590 wishes to remove hazardous wastes, hazardous waste residues, the liner if any, or contaminated soils, he shall apply to the Department for approval to do so. The Department may grant such approval but
  - (a) only if the owner or operator applies for such approval in compliance with the requirements and procedures set forth in 310 CMR 30.802 through 30.807, and
  - (b) only after the Department complies with the requirements and procedures set forth in 310 CMR 30.851 and 30.852, and, if applicable, 310 CMR 30.833, 30.835, 30.836, 30.837, and 30.839, and
  - (c) such approval shall be subject to all other applicable provisions of 310 CMR 30.800, and
  - (d) in addition, such approval may be granted, and may be allowed to remain in effect, only if the owner or operator has persuaded the Department that the removal of the material in question will be in compliance with the requirements set forth in 310 CMR 30.592(5).
- (2) If the Department grants the approval described in 310 CMR 30.595(1), the person granted such approval may request that the Department give written verification of such removal. If the Department verifies in writing that the material in question has been removed in compliance with such approval, the person requesting the verification may record that verification in the appropriate Registry of Deeds or, if the land in question is registered land, in the registry section of the land court for the district wherein the land lies.

# 30.596: Completion and Certification of Post-closure Care

- (1) No later than 60 days after completion of the established post-closure care period for each hazardous waste management unit or facility subject to the requirements of 310 CMR 30.590, the owner or operator shall submit to the Department, either by hand-delivery or by certified mail, a certification signed by both the owner or operator and by an independent Massachusetts registered professional engineer that
  - (a) post-closure care was performed for the hazardous waste management unit or facility, as applicable, for the required period in compliance with the requirements of 310 CMR 30.000 and of the approved post-closure plan, and
  - (b) the survey plat required by 310 CMR 30.586 has been recorded in the appropriate Registry of Deeds or, if the land in question is registered land, in the registry section of the land court for the district wherein the land lies, and copies of the plat have been submitted to the Department and to the Board of Health of the city or town wherein the land lies, in compliance with 310 CMR 30.586.

30.596: continued

- (c) the notices required by 310 CMR 30.040 and 30.594 have been recorded in the appropriate Registry of Deeds or, if the land in question is registered land, in the registry section of the land court for the district wherein the land lies, and copies of the notices have been submitted to the Department in compliance with 310 CMR 30.040 and 30.594.
- (2) Until the Department, pursuant to 310 CMR 30.906(8), notifies the owner or operator in writing that he is no longer required to maintain financial assurance for post-closure care of the facility, the owner or owner and the independent Massachusetts registered professional engineer who signed the certification required pursuant to 310 CMR 30.596(1) shall each promptly submit to the Department on request any documentation supporting said certification.
- (3) Post-closure care shall not be considered complete until so certified in writing by the Department.

# 30.600: TECHNICAL STANDARDS FOR ALL HAZARDOUS WASTE FACILITIES

## 30.601: Applicability

- (1) 310 CMR 30.601 through 30.699, cited collectively as 310 CMR 30.600, set standards for the design, performance, operation, maintenance, and monitoring of facilities subject to 310 CMR 30.000. Different provisions of 310 CMR 30.600 apply to different classes and categories of facilities. 310 CMR 30.600 applies to owners and operators of:
  - (a) All facilities which use, store, treat or dispose of hazardous waste;
  - (b) All facilities which are described in 310 CMR 30.341(8);
  - (c) All facilities which recycle regulated recyclable material, or which store regulated recyclable material prior to its being recycled, unless the regulated recyclable material is stored and recycled in compliance with 310 CMR 30.200.
  - (d) All facilities which treat or store hazardous waste before it is loaded onto a vessel for incineration or disposal at sea.
- (2) The requirements of 310 CMR 30.600 do not apply to:
  - (a) The accumulation of hazardous waste by a generator at the site of generation for less than 90 days, provided that the requirements of 310 CMR 30.340 through 30.343 are met;
  - (b) A treatment process, method or technique which is an integral part of the manufacturing process, as defined in 310 CMR 30.010, provided that an owner or operator conducting treatment which is an integral part of the manufacturing process shall conduct inspections, maintenance or other activities to ensure that the treatment operation does not result in spills, leaks, or emissions into the environment;
  - (c) Accumulation by a small quantity generator in compliance with 310 CMR 30.351(5); and
  - (d) Municipal or industrial waste water treatment facilities permitted pursuant to M.G.L. c. 21, § 43. Such facilities shall be subject to 314 CMR 8.00.
  - (e) Universal waste handlers and universal waste transporters handling the wastes listed at 310 CMR 30.143(2) in compliance with 310 CMR 30.1000.
  - (f) The accumulation of a laboratory waste by a University participating in the Laboratory XL project at the site of generation for less than 120 days, provided that the requirements of 310 CMR 30.340 and 30.355 are met.
  - (g) The accumulation of a laboratory waste by a University participating in the Laboratory XL project at the site of generation for less than 210 days, provided that the requirements of 310 CMR 30.351 and 30.355 are met.
  - (h) Elementary neutralization of corrosive hazardous waste at the site of generation in an elementary neutralization unit provided that the generator is in compliance with 310 CMR 30.1103.

# 30.602: General Requirements for All Facilities

(1) Hazardous waste storage operations shall be conducted in such a manner that all hazardous wastes are contained throughout the life of the storage operation.

#### 30.602: continued

- (2) Notwithstanding any provision of 310 CMR 30.660, the Department may require the owner or operator of any facility which uses, stores, or treats hazardous waste to comply with, and such owner or operator shall comply with, all or part of 310 CMR 30.660: *Groundwater Protection* if the Department determines that such action is appropriate to protect public health, safety or welfare or the environment.
- (3) The Department may require any facility which uses, stores, treats or disposes of hazardous waste to implement, and such owner or operator shall implement, emission monitoring and/or ambient air quality monitoring programs if the Department determines that such action is appropriate to protect public health, safety, or welfare or the environment.
- (4) Each unit in which hazardous waste is used, stored, treated or disposed of shall have such process controls and emission controls as the Department may require to protect public health, safety, and welfare and the environment from toxic or otherwise harmful fumes, mists, dusts or gases. The Department may prohibit the use, storage, treatment or disposal of certain hazardous wastes in impoundments, piles, landfills or other units if the Department determines that use, storage, treatment or disposal of such waste might result in the production of hazardous emissions in concentrations in excess of air quality standards or in quantities sufficient to present a potential hazard to public health, safety, or welfare or the environment.
- (5) Pursuant to 310 CMR 7.02(5) and 30.000, the Department may require the owner or operator of an existing facility (as defined in 310 CMR 30.010) to submit to the Department plans and specifications for reconstruction, alteration or repair of the facility and/or proposed standard operating procedures for the facility whenever the Department determines that the facility is in need of reconstruction, alteration or repair and/or that new or revised standard operating procedures are necessary to prevent the facility from causing or contributing to a condition of air pollution.
- (6) Each owner or operator shall take all appropriate measures to minimize odors originating from each facility for the use, treatment, storage or disposal of hazardous waste. No operation at a facility which uses, stores, treats or disposes of hazardous waste shall result in the creation of a noisome or unwholesome odor (as defined in 310 CMR 30.010).
- (7) Each owner or operator shall pave or line each truck dock or similar area where hazardous waste is loaded or unloaded with a material which is sufficiently impervious to spills or leaks of hazardous waste that such waste shall be prevented from coming in contact with soil or groundwater.
- (8) Each owner or operator shall operate each facility so that, at the site of the facility, traffic patterns and volume are controlled and access roads are surfaced so that traffic, including emergency vehicles, has safe and expeditious access to the facility.
- (9) For all facility owners and operators who are required to seek a new permit/license or a renewal permit/license (including a post-closure permit/license) for the treatment, storage, or disposal of hazardous waste pursuant to 310 CMR 30.099 or 40 CFR 270.1(c), the corrective action provisions of 40 CFR 264.101 are hereby incorporated by reference, and will be applied at the time of permit/license issuance, subject to the following additions, modifications, and exceptions:
  - (a) In 40 CFR 264.101(b), delete "Subpart S of this part" and substitute "310 CMR 40.0000."
  - (b) In 40 CFR 264.101(c), delete "Regional Administrator" and substitute "Department."
  - (c) At the end of 40 CFR 264.101(d), add, "The management of remediation waste is subject to the requirements of 310 CMR 40.0030."

Notwithstanding the foregoing, the requirements of 310 CMR 30.602(9) shall not apply to the owner and/or operator of an Interim Status Disposal Facility that is conducting corrective action pursuant to the terms of a federal RCRA Corrective Action permit issued by EPA under the authority of 40 CFR 264.101, and in effect as of the date that EPA authorizes Massachusetts to implement the HSWA Corrective Action Rule pursuant to RCRA § 3006 and 40 CFR Part 271, Subpart A, for so long as the EPA permit continues in effect and for so long as any requirements established by the EPA permit continue in effect pursuant to a federal count order, unless otherwise agreed to by the parties and ordered by a court of competent jurisdiction.

#### 30.602: continued

- (10) Any post closure permit/license that is issued will address all applicable 310 CMR 30.000 groundwater monitoring, unsaturated zone monitoring, corrective action, and post-closure care requirements at 310 CMR 30.000. The Department may issue a post closure order under M.G.L. c. 21C, or M.G.L. c. 21E, or both, in lieu of a post closure permit/license. Any such order that is issued will address all applicable 310 CMR 30.000 groundwater monitoring, unsaturated zone monitoring, corrective action, and post-closure care requirements at 310 CMR 30.000. The Department will assure a meaningful opportunity for public involvement regarding any such post closure order:
  - (a) At the time when the post closure order is being issued;
  - (b) At the time when the post closure remedy is being selected, and
  - (c) At the time when the remedy has been completed, by providing a public notice reflecting the Department's tentative determination. Any such notice shall:
    - 1. Be published, at the Department's expense, in a newspaper having a substantial circulation in the affected area;
    - 2. Be provided to the owner or operator of the facility and to all persons on the facility mailing list maintained pursuant to 310 CMR 30.833(4); and
    - 3. Indicate the basis for the Department's tentative determination and that the Department will accept public comments on the tentative determination for at least 30 days from the date of publication. Notice of the Department's final determination shall be provided to the owner or operator of the facility and to all persons who commented on the Department's tentative determination. The Department may combine the public comment periods regarding issuance of an order and remedy selection, if the Department has tentatively selected a remedy at the time when it is proposing to issue an order. The Department may modify the public comment procedures set forth above to the extent provided by 40 CFR 265.121(b)(2) and (3) as incorporated by reference.
- (11) Facilities subject to 310 CMR 30.602(9) or (10) must also comply with the provisions of 310 CMR 40.0113 in order to be considered to be Adequately Regulated pursuant to M.G.L. c. 21E.
- (12) The Corrective Action Management Unit (CAMU) provisions of 40 CFR Part 264, Subpart S, § 264.552 which are hereby incorporated by reference.
- (13) Temporary Unit (TU) provisions of 40 CFR Part 264, Subpart S, § 264.553 which are hereby incorporated by reference.
- (14) Staging pile provisions of 40 CFR Part 264, Subpart S, § 264.554 which are hereby incorporated by reference.
- (15) References to the EPA Regional Administrator in 40 CFR 264.550 through 264.555 shall mean the Department, except that the references to Regional Administrator in 40 CFR 264.555(e) regarding oversight of an out-of-state landfill shall mean the State Director or EPA Regional Administrator who has responsibility under 40 CFR 264.555(d) for permitting the landfill.
- (16) An owner or operator of a hazardous waste management facility shall comply with the applicable land disposal restrictions of 310 CMR 30.750.

# 30.603: Preparation of Hazardous Waste for Disposal

- (1) The following processes shall not be deemed "treatment" of hazardous waste and shall not be subject to 310 CMR 30.500 through 30.999 if such processes are done at the site of generation of the waste and are done solely for the purpose of making the waste more amenable to disposal in a hazardous waste facility, provided that the accumulation, collection, transport, storage, treatment and disposal of such hazardous waste before and after such processes are done shall be subject to 310 CMR 30.000:
  - (a) The addition of an absorbent (e.g., sawdust) in which a chemical reaction does not occur; and
  - (b) The use of a gelation process or similar technique in which a chemical reaction does not occur.

30.603: continued

(2) 310 CMR 30.603(1) shall not apply to, and all applicable requirements of 310 CMR 30.000 shall apply to, solidification techniques which employ cement-based processes, pozzolanic processes, thermoplastic techniques, organic polymer processes, surface encapsulating techniques, glassification processes, or similar processes. (Note: For a description of the above-listed processes see *Guide to the Disposal of Chemically Stabilized and Solidified Waste*, U.S. Environmental Protection Agency, SW-872, September 1982.)

### 30.604: Injection Wells, Leaching Fields, Seepage Pits

- (1) No person shall inject hazardous waste into or through any well.
- (2) No person shall dispose of hazardous waste into:
  - (a) any septic tank, leaching field or leaching pit; or
  - (b) any pit, pond or lagoon that does not meet the requirements set forth in 310 CMR 30.610 for surface impoundments or the requirements set forth in 310 CMR 30.650 for land treatment units.

# 30.605: Special Requirements for Wastewater Treatment Units

#### (1) Applicability.

- (a) The requirements of 310 CMR 30.605 shall apply, and the other requirements of 310 CMR 30.500 through 30.900 shall not apply, to the following wastewater treatment units, as that term is defined in 310 CMR 30.010, provided that such units meet all of the requirements set forth in 310 CMR 30.605:
  - 1. wastewater treatment units for the treatment of hazardous waste at the site of generation of the waste; and
  - 2. wastewater treatment units for the accumulation or storage, at the site of generation, of wastewater treatment sludge which is hazardous waste, prior to reintroduction of such sludge back into the wastewater treatment process.
- (b) The requirements of 310 CMR 30.605 shall not apply to a wastewater treatment unit which treats hazardous waste by a treatment process, method, or technique which is an integral part of the manufacturing process, as that term is defined in 310 CMR 30.010.
- (c) The requirements of 310 CMR 30.500 through 30.900 shall not apply to a wastewater treatment unit, as that term is defined in 310 CMR 30.010, which is permitted pursuant to 314 CMR 3.00. Hazardous waste activities at such wastewater treatment units are regulated pursuant to 314 CMR 8.05.
- (d) 310 CMR 30.605(2) through (6) shall not apply, and all applicable requirements of 310 CMR 30.000 shall apply, to each wastewater treatment unit in which the owner or operator intends to or does treat any hazardous waste generated off the site where the wastewater treatment unit is located.
- (2) <u>Management Standards</u>. The owner or operator of each wastewater treatment unit shall comply with the requirements set forth in the following regulations:
  - (a) 310 CMR 30.511: Identification Number;
  - (b) 310 CMR 30.513: General Waste Analysis;
  - (c) 310 CMR 30.514(1): *Security Standards*;
  - (d) 310 CMR 30.515: General Inspection;
  - (e) 310 CMR 30.516: Personnel Training;
  - (f) 310 CMR 30.520 through 30.524: Contingency Plan, Emergency Procedures, Preparedness and Prevention;
  - (g) 310 CMR 30.542: Operating Record;
  - (h) 310 CMR 30.543: Availability, Retention and Disposition of Records; and
  - (i) 310 CMR 30.560: General Requirements for Ignitable, Reactive, or Incompatible Wastes.

#### 30.605: continued

# (3) Operation and Maintenance.

- (a) The owner or operator of each wastewater treatment unit shall ensure that the accumulation, storage, or treatment done in each unit does not:
  - 1. Generate fire, explosion, violent reaction, or excessive heat or pressure;
  - 2. Produce uncontrolled toxic mists, fumes or gases in quantities which might threaten public health, safety or welfare or the environment;
  - 3. Produce uncontrolled flammable fumes or gases in quantities which might pose a risk of fire or explosion;
  - 4. Damage the structural integrity of the tank or equipment containing the waste; or
  - 5. Threaten public health, safety or welfare or the environment by any other means.
- (b) No person shall place hazardous waste or any other material into a wastewater treatment unit if such action might result in the unit, or any of its equipment, rupturing, leaking, abnormally corroding, or failing before the end of its intended life.

#### 30.605: continued

(c) Each wastewater treatment unit shall be designed, constructed, operated and maintained so as to prevent hazardous waste from spilling or leaking into or on any land or water.

# (4) Additional Waste Analysis Requirements.

- (a) By not later than April 16, 1984, the owner or operator of each wastewater treatment unit in existence on October 15, 1983, shall submit a copy of the waste analysis plan prepared in compliance with 310 CMR 30.513 and 30.605(2)(b) to the Department and to the local sewer use authority with jurisdiction over the publicly owned treatment works, hereinafter in 310 CMR 30.605 called the POTW, into which the effluent from the wastewater treatment unit discharges.
- (b) In addition to complying with the waste analysis requirements of 310 CMR 30.513 and 30.605(2)(b), the owner or operator shall ensure that the waste analysis plan:
  - 1. Provides for determining the average and maximum effluent flow in gallons per day of the treated waste to be discharged to the POTW.
  - 2. Provides for identifying the waste(s) and the EPA or Massachusetts hazardous waste number(s) of the waste(s) being treated; and
  - 3. Describes the treatment process used.
- (5) <u>Location Standards</u>. No person shall construct, maintain or operate a wastewater treatment unit at a site at which hazardous waste is first generated on or after October 15, 1983, unless the following requirements are complied with:
  - (a) If such unit is to be located on land subject to flooding from the statistical 100-year frequency storm, as determined pursuant to 310 CMR 30.701(1)(a) and (b), it shall be floodproofed in compliance with 310 CMR 30.701(2).
  - (b) If such unit is also an underground tank pursuant to 310 CMR 30.693(1), it shall not be located:
    - 1. within the watershed of a class A or class SA segment of a surface water body, as that term is defined pursuant to 310 CMR 30.010, unless the owner or operator applies to the Department for approval to construct, operate and maintain such a unit at such a location, and the Department has given such approval in writing; the Department may give such approval only if the Department is persuaded that there is no feasible alternative to treating, storing or accumulating the wastewater in an underground unit (e.g., another permitting authority requires that the waste be accumulated, stored or treated underground); or
    - 2. over an actual, planned, or potential public underground drinking water source, as that term is defined in 310 CMR 30.010, unless the owner or operator has applied to the Department for approval to construct, operate and maintain such a unit at such a location, and the Department has given such approval in writing. The Department may give such approval only if the Department is persuaded that there is no feasible alternative to treating, storing, or accumulating the wastewater in an underground unit (e.g., another permitting authority requires that the waste be accumulated, stored, or treated underground).
- (6) <u>Closure Requirements</u>. At closure of the unit, the owner or operator of a wastewater treatment unit shall remove all hazardous waste and hazardous waste residues from the unit. Such waste and residues shall be managed in compliance with 310 CMR 30.000.

## 30.606: Special Requirements for Miscellaneous Units

(1) <u>Applicability</u>. 310 CMR 30.606(1) through (4), prescribe requirements which apply to owners and operators of facilities that treat, store, or dispose of hazardous wastes in miscellaneous units.

30.606: continued

- (2) Environmental Performance Standards. A miscellaneous unit shall be located, designed, constructed, operated, maintained, and closed in a manner that shall ensure protection of public health, safety and welfare and the environment. Licenses for miscellaneous units shall contain such terms and provisions as appropriate to comply with applicable provisions of 310 CMR 30.500 through 30.900 as well as to protect public health, safety and welfare and the environment, including, but not limited to, design and operating requirements, detection and monitoring requirements, and requirements for responses to releases of hazardous waste or hazardous constituents from the unit. Protection of public health, safety and welfare and the environment shall include but is not limited to:
  - (a) Prevention of any releases that may have adverse effects on public health, safety, welfare, or the environment due to migration of waste constituents in the ground water or subsurface environment, considering
    - 1. The volume and physical and chemical characteristics of the waste in the unit, including its potential for migration through soil, liners, or other containing structures;
    - 2. The hydrologic and geologic characteristics of the unit and the surrounding area;
    - 3. The existing quality of groundwater, including other sources of contamination and their cumulative impact on the groundwater;
    - 4. The quantity and direction of groundwater flow;
    - 5. The proximity to and withdrawal rates of current and potential groundwater users;
    - 6. The patterns of land use in the region;
    - 7. The potential for deposition or migration of waste constituents into subsurface physical structures, and into the root zone of food-chain crops and other vegetation;
    - 8. The potential for health risks caused by human exposure to waste constituents; and
    - 9. The potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents.
  - (b) Prevention of any releases that may have adverse effects on public health, safety and welfare, or the environment due to migration of waste constituents in surface water, or in or on any water or land described in 310 CMR 10.02(1), or on the soil surface, considering
    - 1. The volume and physical and chemical characteristics of the waste in the unit;
    - 2. The effectiveness and reliability of containing, confining, and collecting systems and structures in preventing migration;
    - 3. The hydrologic characteristics of the unit and the surrounding area, including the topography of the land around the unit;
    - 4. The patterns of precipitation in the region;
    - 5. The quantity, quality, and direction of groundwater flow;
    - 6. The proximity of the unit to surface waters and to water or land described in 310 CMR 10.02(1);
    - 7. The current and potential uses of nearby surface waters and any water quality standards established for those surface waters;
    - 8. The existing quality of surface waters and surface soils, including other sources of contamination and their cumulative impact on surface waters and surface soils;
    - 9. The patterns of land use in the region;
    - 10. The potential for health risks caused by human exposure to waste constituents; and
    - 11. The potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents.
  - (c) Prevention of any release that may have adverse effects on public health, safety or welfare or the environment due to migration of waste constituents in the air, considering
    - 1. The volume and physical and chemical characteristics of the waste in the unit, including its potential for the emission and dispersal of gases, aerosols and particulates;
    - 2. The effectiveness and reliability of systems and structures to reduce or prevent emissions of hazardous constituents to the air;
    - 3. The operating characteristics of the unit;
    - 4. The atmospheric, meterologic, and topgraphic characteristics of the units and the surrounding area;

30.606: continued

- 5. The existing quality of the air, including other sources of contamination and their cumulative impact on the air;
- 6. The potential for health risks caused by human exposure to waste constituents; and
- 7. The potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents.
- (3) Monitoring, Analysis, Inspection, Response, Reporting and Corrective Action. The owner or operator of each miscellaneous unit shall comply with the requirements of 310 CMR 30.515: General Inspection, 30.524(3): Testing and Maintenance of Equipment, 30.534: Unmanifested Waste Report, 30.544: Biennial Report, 30.602(9): Corrective Action, and 30.606(2): Environmental Performance Standards, and all additional requirements as specified in the license.
- (4) <u>Post-closure Care</u>. The owner or operator of a miscellaneous unit which is a disposal unit shall maintain the miscellaneous unit during the post-closure care period in a manner that complies with 310 CMR 30.590, 30.606(2), and 30.652. In addition, the owner or operator of a treatment or storage unit which has contaminated soils or groundwater that cannot be completely removed or decontaminated during closure shall maintain the miscellaneous unit in a manner that complies with 310 CMR 30.590 and 30.606(2) during the post-closure care period. The post-closure plan required pursuant to 310 CMR 30.590 shall specify activities that shall or might be carried out to comply with these requirements.

# 30.610: SURFACE IMPOUNDMENTS

## 30.611: Applicability

- (1) 310 CMR 30.611 through 30.618, cited collectively as 310 CMR 30.610, prescribe requirements which apply to owners and operators of facilities that use surface impoundments to treat, store, or dispose of hazardous waste.
- (2) The containment of hazardous waste in a surface impoundment at the site of generation for any period of time is "storage" and not "accumulation" of hazardous waste and shall be subject to all the requirements of 310 CMR 30.610.
- (3) All of the provisions of 310 CMR 30.610, except 30.613 and 30.617(2), (3) and (5), apply to each new surface impoundment and each new portion of each existing surface impoundment.
- (4) All of the provisions of 310 CMR 30.610, except 30.612(2), and 30.617(1), apply to each existing portion of each existing surface impoundment.

## 30.612: Design and Operating Requirements

(1) Except as provided in 310 CMR 30.613(4), each surface impoundment shall be underlain by two liners which are designed and constructed in a manner that prevents the migration of liquids into or out of the space between the liners. The liners shall be designed, constructed, and installed to prevent any migration of wastes out of the impoundment to the adjacent groundwater, surface water, or subsurface soil at any time during the active life and during the closure period of the impoundment. The liners may be constructed of materials (*e.g.*, clays and admixes) that allow waste to migrate into the liners themselves, but not into the space between the liners or into the adjacent groundwater, surface water, or subsurface soil during the active life of the facility provided that the impoundment is closed in compliance with 310 CMR 30.617(1). Each liner shall be:

#### 30.612: continued

- (a) of a hydraulic conductivity not to exceed  $1 \times 10^{-7}$  cm/sec;
- (b) constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients, including static head and external hydrogeologic forces, physical contact with the waste or leachate to which they are exposed, climatic conditions, exposure to ultraviolet light, ozone, microbes, the stress of installation, and the stress of daily operation, including the use of machinery and equipment upon the liner after installation;
- (c) placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner due to settlement, compression or uplift; rocks, boulders, irregularities with sharp edges, and all material that may damage the liner shall be removed from the subgrade prior to installation of the liner; and
- (d) installed to cover all surrounding earth likely to be in contact with the waste or leachate.
- (2) The bottom liner shall be at least four feet above the probable high groundwater level as determined pursuant to 310 CMR 30.675. This shall not prohibit the owner or operator from carrying out design and operating procedures which artificially lower the groundwater table throughout the operating life of the facility, provided that the facility's license specifically authorizes this.
- (3) A leak detection, collection, and removal system shall be designed, constructed, maintained and operated between the liners to detect, collect, and remove any discharge of liquid into the space between the liners. The detection, collection and removal system shall be designed, constructed, operated and maintained so that leakage flows freely from the collection system and is removed either as it accumulates or with sufficient frequency to prevent backwater within the collection system. If liquid leaks into the leak detection, collection, and removal system, the owner or operator shall:
  - (a) Notify the Department of the leak immediately by the quickest available means and also notify the Department in writing within seven days; and
  - (b) Within a period of time which shall be specified by the Department, remove accumulated liquid, repair or replace the liner which is leaking to prevent the migration of liquids through the liner, and obtain a certification from an independent Massachusetts registered professional engineer that, to the best of his knowledge and opinion, the leak has been stopped. If the leakage which is collected is identified as hazardous waste pursuant to 310 CMR 30.100, it shall be managed as hazardous waste in compliance with 310 CMR 30.000.
- (4) The direct discharge onto a liner of hazardous waste or other material shall not be allowed to occur without adequate provision having been made for energy dissipation.
- (5) Each surface impoundment shall be designed, constructed, maintained and operated to prevent overtopping resulting from normal or abnormal operation, overfilling, wind and wave action, precipitation, run-on, malfunction of level controllers, alarms or other equipment, or human error.
- (6) Each surface impoundment shall be designed, constructed, operated and maintained to provide at least 60 centimeters (two feet) of freeboard. The design shall reflect a consideration of the difference between the precipitation and evaporation anticipated for the area.
- (7) Each surface impoundment shall be designed, constructed and maintained so that any flow of waste into the impoundment can be immediately shut off in the event of overtopping or liner failure.
- (8) Run-on shall be diverted away from a surface impoundment. Diversion systems shall have the capacity to handle the run-on during peak discharge from 24-hour, 100-year storm.

#### 30.612: continued

- (9) Each surface impoundment shall have dikes that are designed, located, constructed and maintained with sufficient structural integrity to prevent failure of the dikes. In ensuring structural integrity, the owner or operator shall not presume that the liner system will function without leakage during the active life of the impoundment. Each earthen dike shall be kept free of perennial woody plants with root systems which could displace the earthen material upon which the structural integrity of the dike is dependent and free of burrowing animals which could remove earthen material upon which the structural integrity of the dike is dependent. Each earthen dike shall have a protective cover, such as grass, shale or rock, to minimize wind or water erosion and to preserve the structural integrity of the dike.
- (10) Completely surrounding each impoundment shall be a barrier (*e.g.*, a fence in good repair) designed to prevent accidental contact between persons at the facility site and hazardous waste in the surface impoundment. This barrier shall be in addition to the barrier required by 310 CMR 30.514(2)(b)3. Posted on or near such barrier shall be at least one sign, the lettering of which shall be legible from a distance of at least 25 feet. The sign shall:
  - (a) Identify the contents of the surface impoundment as "Hazardous Waste";
  - (b) Identify, in words, the contents of the surface impoundment; and
  - (c) Identify, in words, the hazard(s) associated with the hazardous waste.

## 30.613: Special Provisions for Existing Portions of Existing Surface Impoundments

- (1) Except as provided in 310 CMR 30.613(2) or (4), the owner or operator of each existing surface impoundment, each replacement of an existing surface impoundment, and each lateral expansion of an existing surface impoundment, shall comply with the requirements for liners and leak detection, collection and removal systems specified in 310 CMR 30.612(1) and 30.612(3) within a period of time which shall be specified by the Department in the license. This period of time shall not exceed four years from the date of license issuance pursuant to 310 CMR 30.838.
- (2) Instead of meeting the requirements of 310 CMR 30.613(1), the owner or operator may either:
  - (a) Complete closure of the impoundment in compliance with 310 CMR 30.617(2) within a period not to exceed four years from the date of license issuance pursuant to 310 CMR 30.838; or
  - (b) Close the impoundment in compliance with 310 CMR 30.617(2)(a) and design, construct and operate a pretreatment system for hazardous waste such that the treated waste is no longer hazardous pursuant to 310 CMR 30.141. Such treated waste shall be discharged into the impoundment only in compliance with a groundwater discharge permit issued pursuant to 314 CMR 5.00. The impoundment shall be closed in compliance with 310 CMR 30.617(2)(a) within a period of time not to exceed four years from the date of license issuance pursuant to 310 CMR 30.838.
- (3) The Department shall include in the license a schedule which shall ensure that the facility is brought into compliance with 310 CMR 30.613(1) or 30.613(2) as soon as possible. In setting the compliance schedule, the Department shall consider the following factors:
  - (a) The facility's location with respect to high-quality aquifers, surface water, wells, and other water supplies;
  - (b) The hydrogeology of the site;
  - (c) The results of groundwater monitoring conducted at the site;
  - (d) The availability of alternatives and the time required to implement such alternatives;
  - (e) The extent to which the facility is in compliance with all applicable Federal, State and local laws and regulations; and
  - (f) Whether or not the impoundment already has a single liner.

#### 30.613: continued

- (4) In a license issued pursuant to 310 CMR 30.800, the Department may waive all or part of the design or operating practices specified in 310 CMR 30.612(1) and (3) for a surface impoundment containing hazardous waste which only exhibits the characteristic of corrosivity if the owner or operator demonstrates to the Department that such design and operating practices will prevent the migration of any hazardous constituent into the ground water or surface water at least as effectively as the liners and leachate collection and removal system specified in 310 CMR 30.612 and allow detection of leaks of hazardous constituents through the top liner at least as effectively. In determining whether to waive any or all of the design or operating practices of 310 CMR 30.612(1) and (3), the Department shall consider the factors listed in 310 CMR 30.613(3) as well as the following factors:
  - (a) The rate at which corrosive waste is neutralized in the impoundment;
  - (b) The potential for waste in the impoundment to leach hazardous constituents which may be present in the soil; and
  - (c) The presence of material other than hazardous waste in the impoundment (e.g., flyash) which may contain hazardous constituents capable of migrating from the impoundment as a result of the introduction of corrosive hazardous waste into the impoundment.

Nothing in 310 CMR 30.613(4) shall relieve the owner or operator of an unlined impoundment from the responsibility of obtaining a groundwater discharge permit pursuant to 314 CMR 5.00.

(5) An owner or operator using an impoundment that has not received a waiver pursuant to 310 CMR 30.613(4) shall be subject to the requirements of 310 CMR 30.613(1) and (2).

## 30.614: Testing, Monitoring and Inspection

- (1) During construction and installation, each liner and cover system (*e.g.*, membranes, sheets and coatings) shall be inspected for uniformity, damage, and imperfections (*e.g.*, holes, cracks, thin spots, or foreign materials). Immediately after construction or installation:
  - (a) Each synthetic liner and cover shall be inspected, using methods acceptable to the Department, to ensure tight seams and joints and the absence of tears, punctures, or blisters; and
  - (b) Each soil-based and each admixed liner and cover shall be inspected for imperfections, including lenses, cracks, channels, root holes, or other structural defects, that may cause an increase in the permeability of the liner or cover.
- (2) After a liner has been installed and prior to introducing hazardous waste into the impoundment, the owner or operator shall obtain from an independent Massachusetts registered professional engineer a certification which states that:
  - (a) The liner has been inspected in accordance with 310 CMR 30.614(1); and
  - (b) Each defect found has been properly repaired.
- (3) While a surface impoundment is in operation, it shall be inspected weekly and also immediately after storms to detect evidence of any of the following:
  - (a) a deterioration, malfunction, or improper operation of freeboard control systems;
  - (b) A decrease in the level of the impoundment's contents;
  - (c) The presence of liquids in leak detection, collection and removal systems installed to comply with 310 CMR 30.612(3); and
  - (d) Erosion or other signs of deterioration in dikes or other containment devices.
- (4) The owner or operator shall obtain a certification from an independent Massachusetts registered professional engineer that the impoundment's dike, including that portion of the dike which provides freeboard, has structural integrity. This certification shall be obtained:
  - (a) For each existing surface impoundment, prior to the issuance of a license;
  - (b) For each new surface impoundment, prior to being placed in service and after construction; and
  - (c) For any impoundment, prior to being returned to service if the dike has been repaired or after any period of time during which the impoundment was not in service for six months or longer.

#### 30.614: continued

- (5) The certification required by 310 CMR 30.614(4) shall be that the dike:
  - (a) Will withstand the stress of the pressure exerted by the type(s) and amount of waste to be placed in the impoundment; and
  - (b) Will not fail due to scouring or piping, and to prevent such failure, there is no dependence on any liner system included in the surface impoundment construction.
- (6) 310 CMR 30.614(6) applies to each liner installed after October 15, 1983. Submitted with the license application shall be a demonstration that the waste(s) and leachate that may be in contact with the liners are compatible with the liner materials to be used. The license applicant shall persuade the Department that the wastes will not cause any detrimental effect (e.g., cause cracks, swelling, decrease in mechanical strength, change in chemical properties or increase in permeability) on the liner materials used to prevent leakage into or out of the space between the liners. This demonstration shall be made by field tests or laboratory tests which are acceptable to the Department. All such testing shall be fully documented and submitted with the license application.
- (7) The Department may specify that, prior to or during installation of a liner, the physical characteristics (*e.g.*, tensile strength, puncture resistance) of a sample from the liner(s) be tested to ensure that the quality of the material being installed meets manufacturer's specifications and any design specifications included in the facility license.
- (8) The Department may specify in the facility license that liner samples be periodically tested to assess the performance or condition of the liner.

Note: For information on liner testing methods, see *Lining of Waste Impoundments and Disposal Facilities*, U.S. E.P.A. Office of Solid Waste and Emergency Response, SW-870, March 1983.

# 30.615: Emergency Repairs; Contingency Plans

- (1) A surface impoundment shall be removed from service in accordance with 310 CMR 30.615(2) when:
  - (a) The level of liquids in the impoundment drops and the drop is not known to be caused by change of the flow into or out of the impoundment; or
  - (b) The dike leaks.
- (2) When a surface impoundment must be removed from service pursuant to 310 CMR 30.615(1), the owner or operator shall:
  - (a) Immediately shut off the flow or stop the addition of wastes into the impoundment; if the impoundment is at the site of generation of the waste and if adequate alternate storage is unavailable, the owner or operator shall discontinue every process which is generating the waste;
  - (b) Immediately contain all surface leakage which has occurred or is occurring;
  - (c) Immediately stop the leak;
  - (d) Take all other necessary steps to stop or prevent catastrophic failure;
  - (e) If a leak cannot be stopped by any other means, empty the impoundment and manage such hazardous waste in compliance with 310 CMR 30.000; and
  - (f) Notify the Department immediately by the quickest available means, followed by a written notification within seven days.
- (3) As part of the contingency plan required by 310 CMR 30.520 through 30.524, the owner or operator shall specify a procedure for complying with the requirements of 310 CMR 30.615(2). The contingency plan shall also include a description of the repair techniques to be used in the event of leakage due to containment system failure or deterioration which does not require the impoundment to be removed from service.

#### 30.615: continued

- (4) No surface impoundment that has been removed from service pursuant to 310 CMR 30.615 shall be restored to service until the portion of the impoundment which was failing is repaired and the following steps are taken:
  - (a) If the impoundment was removed from service as a result of actual or imminent dike failure, the dike's structural integrity is recertified in accordance with 310 CMR 30.614(4).
  - (b) If the impoundment was removed from service as a result of a drop in the liquid level, then:
    - 1. For any existing portion of the impoundment, as a minimum, a single liner is installed in compliance with the requirements of 310 CMR 30.612(1);
    - 2. A newly installed or repaired liner system is certified by an independent Massachusetts registered professional engineer as meeting the design specifications approved in the license or otherwise approved by the Department.
  - (c) The Department is notified when the impoundment will be restored to service.
- (5) A surface impoundment that has been removed from service pursuant to 310 CMR 30.615 and that is not being repaired shall be closed in compliance with 310 CMR 30.617.

# 30.616: Special Requirements for Ignitable, Reactive, Incompatible, and Acutely Hazardous Wastes, and Hazardous Wastes that are Polyhalogenated Aromatic Hydrocarbons

- (1) Ignitable or reactive waste shall not be placed in a surface impoundment unless the waste and impoundment satisfy all applicable requirements of 310 CMR 30.750 and:
  - (a) The waste is treated before or immediately after placement in the impoundment so that:
    - 1. The resulting material is no longer ignitable or reactive hazardous waste pursuant to 310 CMR 30.122 or 30.124; and
    - 2. 310 CMR 30.560(3) is complied with; or
  - (b) The surface impoundment is used solely for emergencies.
- (2) Ignitable or reactive hazardous wastes which are incidental to the storage or treatment of non-ignitable or non-reactive hazardous wastes in the impoundment shall be concentrated, collected, and removed from the impoundment. Where such ignitable or reactive hazardous wastes are present in the impoundment, such wastes shall be managed so that they are protected from any material or condition which may cause them to ignite or react.
- (3) Incompatible hazardous wastes, or materials incompatible with hazardous wastes (*see* 310 CMR 30.561 for examples) shall not be placed in the same surface impoundment unless 310 CMR 30.560(3) is complied with.
- (4) Acutely hazardous waste identified in 310 CMR 30.136 shall not be placed in a surface impoundment.
- (5) Polyhalogenated aromatic hydrocarbons shall not be placed in a surface impoundment except in accordance with all other applicable provisions of 310 CMR 30.610 and in accordance with the terms and conditions of a management plan, approved by the Department, for such placement. Compliance with such a plan, when approved, shall be a condition of a license issued pursuant to 310 CMR 30.000. The Department may approve a management plan for the placement of polyhalogenated aromatic hydrocarbons in a surface impoundment only if, after considering at least the following criteria, the Department determines that such approval is in accordance with provisions set forth in 310 CMR 30.810 through 30.814.
  - (a) The volume and physical and chemical characteristics of the polyhalogenated aromatic hydrocarbons, including their potential to migrate through the soil or to volatilize or escape into the atmosphere.
  - (b) The volume and physical and chemical characteristics of the other materials placed into the surface impoundment, including their potential to migrate through the soil or to volatilize or escape into the atmosphere.

#### 30.616: continued

- (c) The attenuative properties of the soil and other materials surrounding or underlying the surface impoundment.
- (d) The effectiveness of additional treatment, design, or monitoring techniques used by the owner or operator of the surface impoundment. The Department may require the use of additional or different treatment, design, or monitoring techniques to reduce the possibility of migration or emission of these materials into ground water, surface water, soil, or air.

## 30.617: Closure and Post-Closure Care

- (1) At closure of a new surface impoundment, the owner or operator shall remove or decontaminate all waste residues, contaminated containment system components (*e.g.*, liners), contaminated subsoils, and structures and equipment contaminated with waste or leachate, and manage them as hazardous waste unless 310 CMR 30.141 applies.
- (2) At closure of an existing surface impoundment, either:
  - (a) The owner or operator shall remove or decontaminate all waste residues, contaminated containment system components (*e.g.*, liners), contaminated subsoils, and structures and equipment contaminated with waste or leachate, and manage them as hazardous waste unless 310 CMR 30.141 applies; or
  - (b) If the Department determines that it will be impracticable for the owner or operator to comply with 310 CMR 30.617(2)(a), the Department may approve an alternate closure plan which requires the owner or operator to do the following at closure:
    - 1. Remove wastes, waste residues, contaminated equipment and soils to the extent practicable;
    - 2. Eliminate free liquids by either removing liquid wastes or solidifying the remaining wastes and waste residues;
    - 3. Stabilize remaining wastes to a bearing capacity sufficient to support final cover; and
    - 4. Cover the surface impoundment with a final cover designed and constructed to:
      - a. Provide long-term minimization of the migration of liquid through the closed impoundment;
      - b. Function with minimum maintenance;
      - c. Promote drainage and minimize erosion or abrasion of the final cover;
      - d. Accommodate settling and subsidence so that the cover's integrity is maintained; and
      - e. Have a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present.
- (3) In determining whether or not it is impractical to remove all wastes from an existing impoundment, the Department shall consider the following:
  - (a) The types and volumes of waste in the impoundment;
  - (b) Safety hazards involved in removing hazardous waste from the impoundment; and
  - (c) The extent to which surrounding soil and groundwater have been contaminated.
- (4) (Effective on and after July 1, 1988) If some waste residues or contaminated materials are left in place at final closure, the owner or operator shall comply with all post-closure requirements set forth in 310 CMR 30.590, including maintenance and monitoring throughout the post-closure period as specified in the license. The owner or operator shall:
  - (a) Maintain the integrity and effectiveness of the final cover, including repairing the cap as necessary to correct the effects of settling, subsidence, erosion, or other events;
  - (b) Maintain and monitor the groundwater monitoring system and comply with all other applicable requirements of 310 CMR 30.660;
  - (c) Prevent run-on or run-off from eroding or otherwise damaging the final cover; and
  - (d) Maintain and monitor the leak detection system in accordance with 310 CMR 30.612(3), and comply with all other requirements set forth in 310 CMR 30.612(3).

#### 30.617: continued

- (5) If an owner or operator of an existing surface impoundment plans to close the impoundment in accordance with 310 CMR 30.617(2)(a), and the impoundment did not meet the double-liner requirements of 310 CMR 30.612(1) at the time the Part A permit application was submitted to the EPA in accordance with 40 CFR Part 270, as in effect July 1, 1983 then:
  - (a) The closure plan for the impoundment pursuant to 310 CMR 30.583 shall include both an expected plan for complying with 310 CMR 30.617(2)(a) and a contingent plan for complying with 310 CMR 30.617(2)(b) in the event that not all contaminated subsoil can be practicably removed at closure; and
  - (b) The owner or operator shall prepare a contingent post-closure plan pursuant to 310 CMR 30.593 for complying with 310 CMR 30.617(4) in case not all contaminated subsoil can be practicably removed at closure.
  - (c) The cost estimates calculated pursuant to 310 CMR 30.903 and 30.905 for closure and post-closure care of an impoundment subject to 310 CMR 30.617(5) shall include the cost of complying with the expected closure plan, the contingent closure plan, and the contingent post-closure plan. Where the costs of the expected closure plan and the contingent closure plan overlap (*i.e.*, the same items are factored into the cost estimate), the costs need not be counted twice.

## 30.618: Stand-by Surface Impoundments - Waiver From Groundwater Monitoring Requirements

- (1) On a case-by-case basis, the Department may waive all or part of 310 CMR 30.660: *Groundwater Protection* for surface impoundments that are designed and operated solely for the containment of hazardous waste in the event of an emergency at the facility (*e.g.*, equipment failure or overflows). If such a waiver is granted, the owner or operator shall:
  - (a) Immediately notify the Department by the quickest available means following an emergency which requires that the impoundment be utilized, and follows this up with a written notification within seven days; and
  - (b) Remove all waste from the impoundment as expeditiously as practicable and in a manner and time period approved by the Department.
- (2) If the owner or operator fails to comply with 310 CMR 30.618(1)(a) or (b), the Department may require that the owner or operator comply with 310 CMR 30.660: *Groundwater Protection*.
- (3) Nothing in 310 CMR 30.618 relieves the owner or operator from the responsibility to comply with any other provision of 310 CMR 30.610.

#### 30.620: Landfills

## 30.621: Applicability

310 CMR 30.621 through 30.633, cited collectively as 310 CMR 30.620, prescribe requirements which apply to owners and operators of facilities that dispose of hazardous waste in landfills.

#### 30.622: Design and Operating Requirements

- (1) Each landfill shall be underlain by two liners which are designed and constructed in a manner that prevents the migration of liquids into or out of the space between the liners. The liners shall be designed, constructed and installed to prevent any migration of wastes out of the landfill to the adjacent groundwater, surface water or subsurface soil at any time during the active life and during the closure period of the landfill. The upper liner shall be constructed of materials that prevent waste from passing into the liner during the active life of the facility. Clay liners and admixes shall not be acceptable. The bottom liner may be constructed of materials that allow waste to migrate into the liner itself but not into the groundwater, surface water or adjacent subsurface soil during the active life of the facility. The bottom liner shall have a hydraulic conductivity not to exceed  $1 \times 10^{-7}$  cm/sec. Each liner shall be:
  - (a) Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to:
    - 1. pressure gradients including static head and external hydrogeologic forces;
    - 2. physical contact with and the chemical properties of the waste or leachate to which it is exposed;
    - 3. climatic conditions;
    - 4. exposure to ozone, ultraviolet light or microbes; and
    - 5. the stress of installation and the stress of daily operation, including the use of machinery and equipment upon the liner after installation.
  - (b) Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression or uplift; rocks, boulders, irregularities with sharp edges, and all material that may damage the liner shall be removed from the subgrade prior to installation of the liner; and
  - (c) Installed to cover all surrounding earth likely to be in contact with the waste or leachate.
- (2) The bottom liner shall be at least four feet above the probable high groundwater level as determined pursuant to 310 CMR 30.675. This shall not prohibit the owner or operator from installing passive systems designed to artificially lower the groundwater table throughout the operating life of the facility and beyond, provided that the facility's license specifically authorizes this.
- (3) A leak detection, collection and removal system shall be designed, constructed, maintained and operated between the liners to detect, collect and remove all discharge of liquid into the space between the liners. The detection, collection and removal system shall be designed, constructed, operated and maintained so that leakage flows freely from the collection system and is removed either as it accumulates or with sufficient frequency to prevent backwater within the collection system. If liquid leaks into the leak detection, collection and removal system, the owner or operator shall:
  - (a) Notify the Department of the leak immediately by the quickest available means and also notify the Department in writing within seven days; and
  - (b) Either:
    - 1. Within the period of time which shall be specified by the Department:
      - a. Remove accumulated liquid;
      - b. To prevent the migration of liquids through the liner, repair or replace the liner which is leaking; and
      - c. Obtain a certification from an independent Massachusetts registered professional engineer that, to the best of his knowledge and opinion, the leak has been stopped; or
    - 2. Ask the Department to determine that it is impractical to repair or replace the liner that is leaking, in which case the Department may authorize the owner or operator to continue operating the landfill but only if leakage is continually removed by the leakage detection, collection and removal system and 310 CMR 30.660: *Groundwater Protection* is complied with. In making such a determination, the Department may consider the following:

#### 30.622: continued

- a. The type(s) and volume(s) of waste(s) in the landfill;
- b. The ease with which the cause of the leak can be determined;
- c. Safety hazards involved in removing hazardous waste from the landfill;
- d. Availability of temporary storage areas for waste removed from the landfill; and
- e. The types and concentrations of hazardous constituents appearing in the liquid which is leaking from the liner.
- (4) The landfill shall have, immediately above the upper liner, a leachate collection and removal system that is designed, constructed, maintained, and operated to collect and remove leachate from the landfill. The leachate depth over the liner at any point over the base of the landfill shall not exceed 30 cm. (one foot). If the collected leachate is hazardous waste pursuant to 310 CMR 30.100, it shall be managed as hazardous waste in compliance with 310 CMR 30.000. If the collected leachate is discharged to surface water or groundwater, such discharge is subject to M.G.L. c. 21, § 43. The leachate collection and removal system shall be:
  - (a) Constructed of materials that are:
    - 1. Chemically resistant to the waste managed in the landfill and to the leachate expected to be generated; and
    - 2. Of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying waste, waste cover material, and by any equipment used at the landfill; and
  - (b) Designed and operated to function without clogging through the active life and the closure and post-closure period of the landfill.
- (5) The owner or operator shall design, construct, operate and maintain a run-on control system capable of preventing flow onto the active portion of the landfill during peak discharge from at least a 100-year storm.
- (6) The owner or operator shall design, construct, operate and maintain a run-off management system to collect and control at least the water volume resulting from a 24-hour, 100-year storm. If the collected run-off is hazardous waste pursuant to 310 CMR 30.100, it shall be managed as hazardous waste in compliance with 310 CMR 30.000. If the collected run-off is discharged to surface water or groundwater, such discharge is subject to M.G.L. c. 21, § 43.
- (7) To maintain design capacity of the system, collection and holding facilities (*e.g.*, tanks, basins) associated with run-on and run-off control systems shall be emptied or otherwise managed expeditiously after storms.
- (8) If a landfill contains any particulate matter which may be subject to wind dispersal, the owner or operator shall cover or otherwise manage the landfill to control wind dispersal.
- (9) The owner or operator shall design and operate the facility so that, where necessary to protect public health, safety and welfare and the environment, the migration of toxic, ignitable or otherwise harmful emissions from the facility site shall be controlled.
- (10) The owner or operator shall provide, and maintain in good repair, access roads at the landfill site. Such access roads shall be designed, constructed and maintained so that traffic will flow smoothly at all times and will not be interrupted by inclement weather.
- (11) Landfills shall be equipped with suitable channeling devices, such as ditches, berms or settling basins, to prevent run-off originating from the landfill site which could cause interference with natural drainage of adjacent land(s).

#### 30.623: Demonstration of Waste/Liner Compatibility

Submitted with the license application shall be a demonstration that the waste(s) and leachate that may be in contact with the liners are compatible with the liner materials to be used. The license applicant shall persuade the Department that the wastes will not cause any detrimental effect (*e.g.*, cause cracks, swelling, decrease in mechanical strength, change in chemical properties or increase in permeability) on the liner material(s) used to prevent leakage into or out of the space between the liners. This demonstration shall be made by:

- (1) conducting field tests or laboratory tests which are approved by the Department; all such testing shall be fully documented and submitted with the license application; or
- (2) submitting to the Department historical data which documents successful use of the particular liner material to be used with the waste(s) and leachate to which the liner materials will be exposed; or
- (3) submitting to the Department scientific and technical literature which demonstrates that the waste(s) and leachate will not adversely affect the liners.

## 30.624: Monitoring and Inspection

- (1) During construction and installation, liners and cover systems (e.g., membranes, sheets and coatings) shall be inspected for uniformity, damage, and imperfections (e.g., holes, cracks, thin spots, or foreign materials). Immediately after construction and installation, each synthetic liner and cover shall be inspected, using methods acceptable to the Department, to ensure tight seams and joints and the absence of tears, punctures or blisters. Immediately after construction and installation, each soil-based and admixed liner and cover shall be inspected for imperfections, including lenses, cracks, channels, root holes, or other structural defects, that might cause an increase in the permeability of the liner or cover.
- (2) After a liner has been installed and prior to introducing hazardous waste into the landfill, the owner or operator shall obtain from an independent Massachusetts registered professional engineer a certification which states that:
  - (a) The liner has been inspected in accordance with 310 CMR 30.624(1); and
  - (b) Each defect found has been properly repaired.
- (3) While a landfill is in operation, it shall be inspected weekly and also immediately after storms to detect evidence of any of the following:
  - (a) Deterioration, malfunction, or improper operation of run-on and run-off control systems;
  - (b) The presence of liquids in leak detection, collection and removal systems installed to comply with 310 CMR 30.622(3);
  - (c) Proper functioning of wind dispersal control systems, where present;
  - (d) The presence of leachate in leachate collection and removal systems; and
  - (e) Proper functioning of leachate collection and removal systems.
- (4) All inspections done pursuant to 310 CMR 30.624(3) shall be recorded in the log required pursuant to 310 CMR 30.515(1).

## 30.625: Supervision of Operation

- (1) During the period beginning with commencement of construction of each hazardous waste landfill and ending two years thereafter, there shall be in effect at all times a contract properly executed by the owner or operator and by an independent Massachusetts registered professional engineer knowledgeable in matters of hazardous waste disposal. The owner or operator shall submit a copy of said contract to the Department with the license application. The contract shall provide for the following minimum requirements:
  - (a) During site preparation, the engineer shall provide sufficient supervision, assistance and inspection to enable him to certify that preparation of the site has been done in accordance with the plans which were approved by the Department.

#### 30.625: continued

- (b) During the operation of the landfill,
  - 1. The engineer shall provide daily supervision, engineering assistance, and plan interpretation during the first week of operation.
  - 2. The engineer shall conduct monthly inspections during the first year of operation to ensure compliance with the approved plans.
  - 3. Thereafter, the engineer shall conduct inspections of the landfill operation at least once every two months.
- (c) The engineer shall comply with 310 CMR 30.625(3) and (4).
- (2) After expiration of the period specified in 310 CMR 30.625(1), there shall be in effect at all times a contract properly executed by the owner or operator and by an independent Massachusetts registered professional engineer knowledgeable in matters of hazardous waste disposal. The owner or operator shall submit to the Department a copy of each such contract. Each such contract shall provide for the following minimum requirements:
  - (a) The engineer shall conduct inspections at least once every two months; and
  - (b) The engineer shall comply with 310 CMR 30.625(3) and (4).
- (3) After each site inspection, the engineer shall prepare a written report for the owner or operator. This report shall be part of the facility's operating record and shall be kept in compliance with 310 CMR 30.541 through 30.543. The engineer shall also submit a copy of this report to the Department within 15 days of the inspection.
- (4) The engineer shall promptly notify the Department of any and all deviations from the approved plans and operating procedure.

## 30.626: Surveying and Record Keeping

The owner or operator of a hazardous waste landfill shall maintain the following items in the operating record required pursuant to 310 CMR 30.542:

- (1) On a map, the exact location and dimensions, including depth, of each cell with respect to permanently surveyed benchmarks; and
- (2) The contents of each cell and the approximate location of each waste type within each cell.

# 30.627: Equipment

- (1) The owner or operator shall provide equipment in adequate numbers and of appropriate type and size for the proper operation of the landfill in accordance with good engineering practice and in compliance with 310 CMR 30.000.
- (2) The owner or operator shall make provisions for the routine maintenance of equipment and to assure satisfactory performance capability for the various operations necessary for excavation, compaction, transportation, covering and other aspects of a landfill, and for the prompt repair or replacement of said equipment.
- (3) The owner or operator shall provide at the site suitable shelter or protection for all equipment and service supplies used in connection with landfill operation.
- (4) The owner or operator shall make arrangements for providing standby equipment in the event of breakdown of regular equipment. Such standby equipment shall be available for use and shall be provided within 24 hours of such breakdown; otherwise the landfill area shall be closed for receipt of waste until equipment becomes available.

# 30.628: Special Requirements for Ignitable, Reactive, and Incompatible Hazardous Wastes, and Hazardous Wastes that are Polyhalogenated Aromatic Hydrocarbons

(1) Ignitable or reactive hazardous waste shall not be disposed of in a landfill.

#### 30.628: continued

- (2) Incompatible hazardous wastes, or materials incompatible with hazardous wastes (*see* 310 CMR 30.561 for examples) shall not be placed in the same landfill cell unless 310 CMR 30.560(3) is complied with.
- (3) Polyhalogenated aromatic hydrocarbons shall not be placed in a landfill except in accordance with all other applicable provisions of 310 CMR 30.620 and in accordance with the terms and conditions of a management plan, approved by the Department, for such placement. Compliance with such a plan, when approved, shall be a condition of a license issued pursuant to 310 CMR 30.000. The Department may approve a management plan for the placement of polyhalogenated aromatic hydrocarbons in a landfill only if, after considering at least the following criteria, the Department determines that such approval is in accordance with provisions set forth in 310 CMR 30.810 through 30.814.
  - (a) The volume and physical and chemical characteristics of the polyhalogenated aromatic hydrocarbons, including their potential to migrate through the soil or to volatilize or escape into the atmosphere.
  - (b) The volume and physical and chemical characteristics of the other materials placed into the landfill, including their potential to migrate through the soil or to volatilize or escape into the atmosphere.
  - (c) The attenuative properties of the soil and other materials surrounding or underlying the landfill.
  - (d) The effectiveness of additional treatment, design, or monitoring techniques used by the owner or operator of the landfill. The Department may require the use of additional or different treatment, design, or monitoring techniques to reduce the possibility of migration or emission of these materials into ground water, surface water, soil, or air.

## 30.629: Special Requirements for Liquid Waste

- (1) Non-containerized liquid waste or waste containing free liquids, in each case as determined in accordance with 310 CMR 30.156, shall not be placed in a landfill whether or not sorbents have been added.
- (2) A container holding liquid waste or waste containing free liquids, in each case as determined in accordance with 310 CMR 30.156, shall not be placed in a landfill whether or not sorbents have been added.

# 30.630: Special Requirements for Containers

- (1) An empty container shall be crushed flat, shredded, or similarly reduced in volume to the maximum practical extent or filled with solids before it is buried beneath the surface of a landfill.
- (2) A partially empty container, before it is buried beneath the surface of a landfill, shall be:
  - (a) Filled with solids compatible with the wastes already in the container; or
  - (b) Crushed to the maximum practical extent to eliminate void spaces; or
  - (c) Emptied and the empty container crushed flat, shredded, or similarly reduced in volume.

#### 30.630: continued

- (3) To be considered "filled with solids" in compliance with 310 CMR 30.630(1) or (2)(a), a container shall be filled in compliance with 310 CMR 30.630(3)(a) or (b), whichever results in less void space.
  - (a) The container shall be filled to within 7.6 centimeters (three inches) of the top of the container, or
  - (b) The contents of the container shall occupy 90% or more of the volume of the container.
- (4) For the purposes of 310 CMR 30.630, the term "partially empty container" shall mean a container that is neither an empty container (*see* 310 CMR 30.010) or a container that is "filled with solids" (*see* 310 CMR 30.630(3)).
- (5) Landfill disposal of small containers of hazardous waste in overpacked drums (e.g., lab packs) is prohibited.

# 30.631: Wastes Unacceptable for Landfilling

- (1) Except as provided in 310 CMR 30.631(3), (4) or (5), the following wastes shall not be disposed of in a landfill:
  - (a) Any sludge or solid containing halogenated organic compounds in a concentration greater than 100 mg/kg;
  - (b) Any waste containing cyanide;
  - (c) Any waste which is acutely hazardous waste pursuant to 310 CMR 30.136.
- (2) The Department may prohibit the disposal of any hazardous waste in a landfill if it determines that landfilling of such waste may present a hazard to public health, safety or welfare or the environment (*e.g.*, volatile organics).
- (3) On a case-by-case basis, the Department may waive any provision of 310 CMR 30.631(1) if the Department determines that:
  - (a) The waste cannot be recycled, treated or disposed of by some other means in compliance with 310 CMR 30.000; and
  - (b) The type and volume of waste to be disposed of will not present any significant risk to public health, safety or welfare or the environment.
- (4) On a case-by-case basis, the Department may waive any provision of 310 CMR 30.631(1) if the waste is a contaminated soil and the Department determines that the requirements set forth in 310 CMR 30.631(3)(a) and (b) are met.
- (5) On a case-by-case basis, the Department may waive any provision of 310 CMR 30.631(1) if the waste has been absorbed by spill clean-up material and the Department determines that the requirements set forth in 310 CMR 30.631(3)(a) and (b) are met.
- (6) The Department shall review the feasibility of available hazardous waste management alternatives for all hazardous wastes which the owner or operator proposes to dispose of at the landfill, as stated in the license application pursuant to 310 CMR 30.804(19)(a). The Department shall approve for landfill disposal only those hazardous wastes which cannot be reused, recycled, treated or disposed of by some other means in compliance with 310 CMR 30.000, or which the Department determines cannot be eliminated.

## 30.632: Stabilization/Solidification Plan

- (1) The owner or operator shall prepare a stabilization/solidification plan designed to ensure that all wastes disposed of in the landfill have been treated to the maximum extent practicable to minimize the potential for wastes migrating from the landfill site. At a minimum, the stabilization/solidification plan shall specify:
  - (a) The wastes which will be stabilized and/or solidified at the landfill site prior to disposal;
  - (b) The techniques which will be used to limit the solubility and potential for migration of the waste by:

#### 30.632: continued

- 1. The addition of materials that ensure that hazardous constituents are maintained in their least soluble form;
- 2. The production of monolithic blocks of treated waste with high structural integrity; and/or
- 3. The placing of a jacket or membrane of material of low permeability and low chemical reactivity between the waste and the landfill;
- (c) The means that will be used to ensure that wastes which will not be stabilized or solidified at the landfill site will, to the maximum extent practicable, be stabilized or solidified at the site of generation of the waste, or at another facility where such stabilization or solidification can be lawfully done, if the landfill is not at the site of generation of the waste;
- (d) A description of the physical and chemical properties of the stabilized/solidified waste (e.g., compressive strength, leachability); and
- (e) A quality assurance program designed to ensure that the stabilized/solidified waste meets the specifications which are outlined in the stabilization/solidification plan.
- (2) The stabilization/solidification plan shall be submitted to the Department with the license application and upon approval by the Department shall become a condition of the license.

## 30.633: Closure and Post-Closure Care

- (1) At final closure of the landfill or upon closure of any cell, the owner or operator shall cover the landfill or cell with a final cover designed and constructed to:
  - (a) Provide long-term minimization of migration of liquids through the closed landfill;
  - (b) Function with minimum maintenance;
  - (c) Promote drainage and minimize erosion or abrasion of the cover;
  - (d) Accommodate settling and subsidence so that the cover's integrity is maintained; and
  - (e) Have a permeability less than or equal to the permeability of the bottom liner system.
- (2) (Effective on and after July 1, 1988) After final closure of the landfill or upon closure of any cell, the owner or operator shall comply with all post-closure requirements set forth in 310 CMR 30.590, including, without limitation, maintenance and monitoring throughout the post-closure care period as specified pursuant to 310 CMR 30.592. The owner or operator shall:
  - (a) Maintain the integrity and effectiveness of the final cover, including making repairs to the cap to correct the effects of settling, subsidence, erosion or other events;
  - (b) Maintain and monitor the leak detection, collection and removal system in compliance with 310 CMR 30.622(3);
  - (c) Continue to operate the leachate collection and removal system;

#### 30.633: continued

- (d) Maintain and monitor the groundwater monitoring system and comply with all other applicable requirements of 310 CMR 30.660;
- (e) Prevent run-off and run-on from eroding or otherwise damaging the final cover;
- (f) Maintain access roads in compliance with 310 CMR 30.622(10);
- (g) Maintain gas collection and control systems, where present; and
- (h) Protect and maintain surveyed benchmarks used in complying with 310 CMR 30.626.
- (3) During the post-closure period, if liquid leaks into the leak detection, collection and removal system, the owner or operator shall comply with the provisions of 310 CMR 30.622(3).

### 30.640: Waste Piles

- (1) 310 CMR 30.640 through 30.649 prescribe requirements which apply to owners and operators of facilities that use waste piles to store or treat hazardous waste.
- (2) The containment of hazardous waste in a pile at the site of generation for any period of time is "storage" and not "accumulation" of hazardous waste and shall be subject to all the requirements of 310 CMR 30.640 through 30.649.
- (3) 310 CMR 30.640 through 30.649 do not apply to owners or operators using waste piles that are closed with hazardous wastes left in place. Such waste piles are subject to regulation as landfills pursuant to 310 CMR 30.620.
- (4) 310 CMR 30.641 and 30.660: *Groundwater Protection* do not apply to a waste pile that is inside or under a structure that provides protection from precipitation so that neither run-off nor leachate is generated, provided that:
  - (a) Neither liquids nor materials containing free liquids are placed in the pile;
  - (b) The pile is protected from surface water run-on by the structure or in some other manner acceptable to the Department;
  - (c) Where necessary, the pile is designed and operated to control dispersal of the waste by wind by means other than wetting; and
  - (d) The pile will not generate leachate through decomposition or any other reaction.

# 30.641: Design and Operating Requirements

- (1) A waste pile shall have:
  - (a) A liner that is designed, constructed and installed to prevent all migration of waste out of the pile into the adjacent groundwater, surface water, or subsurface soil at all times during the active life and during the closure period of the waste pile. The liner may be constructed of materials that may allow waste to migrate into the liner itself, but not the adjacent subsurface soil, groundwater or surface water, during the active life of the pile. The liner shall be:
    - 1. A minimum of four feet above the probable high groundwater level as determined pursuant to 310 CMR 30.675;
    - 2. Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients including static head and external hydrogeologic forces, physical contact with the waste or leachate to which it is exposed, climatic conditions, and the stress of installation. The liner shall also be of sufficient strength and thickness to prevent failure due to puncture, cracking, tearing or other physical damage from equipment used to place waste in or on the pile or to clean and expose the liner surface for inspection.
    - 3. Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression or uplift; rocks, boulders, irregularities with sharp edges, and all material that may damage the liner shall be removed from the subgrade prior to installation of the liner; and
    - 4. Installed to cover all surrounding earth likely to be in contact with the waste or leachate.

#### 30.641: continued

- (b) A leachate collection and removal system immediately above the liner that is designed, constructed, maintained and operated to collect and remove leachate from the pile. The leachate depth over the liner shall not exceed 30 cm (one foot) at any point. If the collected leachate is hazardous waste pursuant to 310 CMR 30.100, it shall be managed as hazardous waste in compliance with 310 CMR 30.000. If the collected leachate is discharged to surface water or groundwater, it is subject to regulation pursuant to M.G.L. c. 21, § 43. The leachate collection and removal system shall be:
  - 1. Constructed of materials that are chemically resistant to the waste managed in the pile and the leachate expected to be generated, and that are of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying waste, waste cover material, and by any equipment used at the pile; and
  - 2. Designed and operated to function without clogging during the life of the pile and throughout the closure period of the pile.
- (2) The owner or operator shall design, construct, operate and maintain a run-on control system capable of preventing flow onto the active portion of the pile during peak discharge from at least a 100-year storm.
- (3) The owner or operator shall design, construct, operate and maintain a run-off management system to collect and control at least the water volume resulting from a 24-hour, 100-year storm. If the collected run-off is hazardous waste pursuant to 310 CMR 30.100, it shall be managed as a hazardous waste in compliance with 310 CMR 30.000. If the collected run-off is discharged to surface water or groundwater, it is subject to regulation pursuant to M.G.L. c. 21, § 43.
- (4) To maintain design capacity of the system, collection and holding facilities (*e.g.*, tanks, basins) associated with run-on and run-off control systems shall be emptied or otherwise managed expeditiously after storms.
- (5) If the pile contains any particulate matter which may be subject to wind dispersal, the owner or operator shall cover or otherwise manage the pile to control wind dispersal.
- (6) Except as provided in 310 CMR 30.640(4), each owner or operator using a single-lined waste pile shall comply with 310 CMR 30.660: *Groundwater Protection*.

### 30.643: Inspection of Liners

The owner or operator shall comply with the following:

- (1) The waste in a pile shall be removed periodically, and the liner shall be inspected for deterioration, cracks, and other conditions that might result in leaks. The frequency of inspection shall be specified in the inspection plan required by 310 CMR 30.515 and shall be based on the potential for the liner to crack or otherwise deteriorate under the conditions of operation (*e.g.*, waste type, rainfall, loading rates and subsurface stability).
- (2) If deterioration, a crack, or other condition is identified that is causing or could cause a leak, the owner or operator shall:
  - (a) Notify the Department of the condition immediately by the quickest available means and also notify the Department in writing within seven days; and
  - (b) Repair or replace the liner and obtain a certification from an independent Massachusetts registered professional engineer that, to the best of his knowledge and opinion, the liner has been repaired and leakage will not occur.

#### 30.644: Monitoring and Inspection

- (1) During construction or installation, liners and cover systems (*e.g.*, membranes, sheets or coatings) shall be inspected for uniformity, damage and imperfections (*e.g.*, holes, cracks, thin spots and foreign materials). Immediately after construction or installation:
  - (a) Each synthetic liner and cover shall be inspected, using methods acceptable to the Department, to ensure tight seams and joints and the absence of tears, punctures and blisters; and
  - (b) Each soil-based and admixed liner and cover shall be inspected for imperfections, including lenses, cracks, channels, root holes or other structural defects that may cause an increase in the permeability of the liner or cover.
- (2) While a waste pile is in operation, it shall be inspected weekly and also immediately after storms to detect evidence of any of the following:
  - (a) Deterioration, malfunction, or improper operation of run-on and run-off control systems;
  - (b) Proper functioning of wind-dispersal-control systems, where present;
  - (c) The presence of leachate in leachate collection and removal systems; and
  - (d) Proper functioning of leachate collection and removal systems.

## 30.645: Demonstration of Waste/Liner Compatibility

The provisions of 310 CMR 30.645 apply only to liners installed after October 15, 1983. Submitted with the license application shall be a demonstration that the waste(s) and leachate that may be in contact with the liners will be compatible with the liner materials to be used. The license applicant shall persuade the Department that the wastes will not have any detrimental effect (e.g., cause cracks, swelling, decrease in mechanical strength, change in chemical properties or increase in permeability) on the liner materials used to prevent leakage into or out of the space between the liners. This demonstration shall be made by conducting field tests or laboratory tests which shall be acceptable to the Department. All such testing shall be fully documented and submitted with the license application.

# 30.646: Special Requirements for Ignitable, Reactive, and Acutely Hazardous Wastes, Hazardous Wastes that are Polyhalogenated Aromatic Hydrocarbons, and Powders, Dusts, or Friable Materials

- (1) Ignitable or reactive hazardous waste shall not be placed in a waste pile unless the waste and the waste pile satisfy all applicable requirements of 310 CMR 30.750 and the waste is treated before or immediately after placement in the pile so that:
  - (a) The resulting material is no longer ignitable or reactive hazardous waste pursuant to 310 CMR 30.122 and 30.124; and
  - (b) 310 CMR 30.560(3) is complied with.
- (2) Acutely hazardous waste identified in 310 CMR 30.136 shall not be stored or treated in a waste pile.
- (3) Hazardous waste in the form of powder, dust or friable material shall not be stored or treated in a waste pile.
- (4) Polyhalogenated aromatic hydrocarbons shall not be placed in a waste pile except in accordance with all other applicable provisions of 310 CMR 30.640 and in accordance with the terms and conditions of a management plan, approved by the Department, for such placement. Compliance with such a plan, when approved, shall be a condition of a license issued pursuant to 310 CMR 30.000. The Department may approve a management plan for the placement of polyhalogenated aromatic hydrocarbons in a waste pile only if, after considering at least the following criteria, the Department determines that such approval is in accordance with provisions set forth in 310 CMR 30.810 through 30.814.
  - (a) The volume and physical and chemical characteristics of the polyhalogenated aromatic hydrocarbons, including their potential to migrate through the soil or to volatilize or escape into the atmosphere.

#### 30.646: continued

- (b) The volume and physical and chemical characteristics of the other materials placed into the waste pile, including their potential to migrate through the soil or to volatilize or escape into the atmosphere.
- (c) The attenuative properties of the soil and other materials surrounding or underlying the waste pile.
- (d) The effectiveness of additional treatment, design, or monitoring techniques used by the owner or operator of the waste pile. The Department may require the use of additional or different treatment, design, or monitoring techniques to reduce the possibility of migration or emission of these materials into ground water, surface water, soil, or air.

## 30.647: Special Requirements for Incompatible Wastes

- (1) Incompatible hazardous wastes, or materials incompatible with hazardous wastes (*see* 310 CMR 30.561 for examples) shall not be placed in the same pile unless 310 CMR 30.560(3) is complied with.
- (2) A pile which contains hazardous waste that is incompatible with any waste or other material stored nearby in one or more containers, other piles, open tanks or surface impoundments shall be separated from the other materials or protected from them by means of a dike, berm, wall or other device.
- (3) Hazardous waste shall not be piled on the same base where incompatible wastes or other materials were previously piled, unless the base has been decontaminated sufficiently to ensure compliance with 310 CMR 30.560(3).

#### 30.648: Limited Storage Duration

The Department may place a limit on the period of time that a waste pile may remain on the facility site whenever the Department determines that such action is necessary or appropriate to protect public health, safety or welfare or the environment.

## 30.649: Closure and Post-Closure Care

- (1) At closure of the pile, the owner or operator shall remove or decontaminate all waste residues, contaminated containment system components (*e.g.*, liners), contaminated subsoils, and structures and equipment contaminated with waste or leachate, and manage them as hazardous waste unless 310 CMR 30.141 applies.
- (2) If, after removing or decontaminating all residues and making all reasonable efforts to effect removal or decontamination of contaminated components, subsoils, structures and equipment as required by 310 CMR 30.649(1), the owner or operator finds that not all contaminated subsoils can be practicably removed or decontaminated, he shall close the facility and perform post-closure care in compliance with the closure and post-closure care requirements that apply to landfills, 310 CMR 30.633.
- (3) If an owner or operator of an existing waste pile which does not meet the requirements of 310 CMR 30.640(4) plans to close the pile in accordance with 310 CMR 30.649(1), and the pile was not lined in accordance with 310 CMR 30.641(1) at the time the original Part A permit application was submitted to the EPA in accordance with 40 CFR Part 270, as in effect July 1, 1983, then:
  - (a) The closure plan for the pile pursuant to 310 CMR 30.583 shall include both an expected plan for complying with 310 CMR 30.649(1) and a contingent plan for complying with 310 CMR 30.649(2) in the event that not all contaminated subsoil can be practicably removed at closure; and
  - (b) The owner or operator shall prepare a contingent post-closure plan pursuant to 310 CMR 30.593 for complying with 310 CMR 30.649(2) in case not all contaminated subsoils can be practicably removed at closure.

#### 30.649: continued

(4) The cost estimates calculated pursuant to 310 CMR 30.903 and 30.905 for closure and post-closure care of a pile subject to 310 CMR 30.649(3) shall include the cost of complying with the contingent closure plan and the contingent post-closure plan, as well as the cost of expected closure pursuant to 310 CMR 30.649(1). Where the costs of the expected closure plan and the contingent closure plan overlap (*i.e.*, the same items are factored into the cost estimate), the costs need not be counted twice.

## 30.650: Land Treatment Units

## 30.651: Applicability

310 CMR 30.651 through 30.659, cited collectively as 310 CMR 30.650, prescribe requirements which apply to owners and operators of facilities that use land treatment units to treat and dispose of hazardous waste.

## 30.652: Treatment Program

- (1) An owner or operator subject to 310 CMR 30.650 shall establish a land treatment program that is designed to ensure that hazardous constituents placed in or on the treatment zone are degraded, transformed, or immobilized within the treatment zone. The licensee shall persuade the Department that:
  - (a) The wastes are capable of being treated at the land treatment unit based on a demonstration pursuant to 310 CMR 30.653;
  - (b) Design measures and operating practices will be implemented to maximize the success of degradation, transformation, and immobilization processes in the treatment zone in accordance with 310 CMR 30.654;
  - (c) Unsaturated zone monitoring provisions will meet the requirements of 310 CMR 30.655;
  - (d) All wastes which are to be treated at the facility are comprised primarily of constituents that are degradable or transformable in a soil media, and the primary mechanisms of land treatment at the unit are not immobilization or volatilization of wastes;
  - (e) The land treatment of hazardous waste will not present a significant risk to public health, safety or welfare or the environment.
- (2) The Department shall specify in the facility license the hazardous constituents that shall be degraded, transformed or immobilized pursuant to 310 CMR 30.650. Such hazardous constituents shall be constituents identified in 310 CMR 30.160 that are reasonably expected to be in, or derived from, waste placed in the treatment zone.
- (3) The Department shall specify in the facility license the vertical and horizontal dimensions of the treatment zone. The treatment zone shall consist of soils which meet the criteria for the following United States Department of Agriculture soil texture classes: sandy loam, fine sandy loam, loam, very fine silt, silt loam, clay loam, silty clay loam, sandy clay and silty clay. The maximum depth of the treatment zone shall be:
  - (a) No more than 1.5 meters from the initial soil surface; and
  - (b) At least four feet above the probable high groundwater level as determined pursuant to 310 CMR 30.675.

## 30.653: Treatment Demonstration

(1) For each waste that the owner or operator intends to apply to the treatment zone, the owner or operator shall demonstrate, prior to application of the waste to the treatment zone, that hazardous constituents in the waste can be completely degraded, transformed, or immobilized in the treatment zone.

- (2) In making the demonstration required by 310 CMR 30.653(1), the owner or operator shall use field tests. Laboratory analyses and analysis of other available data may be used only as a supplement to field testing and may not be used in lieu of field testing. Before making the demonstration required by 310 CMR 30.653(1), the owner or operator shall obtain a treatment and disposal license pursuant to 310 CMR 30.800. The Department shall specify in the license the testing, analytical, design and operating requirements (including, but not limited to, the duration of the tests and analyses, and in the case of field tests, the horizontal and vertical dimensions of the treatment zone, monitoring procedures, closure and cleanup activities) necessary to meet the requirements of 310 CMR 30.653(3).
- (3) Each field test and laboratory analysis conducted in order to make a demonstration pursuant to 310 CMR 30.653(1) shall:
  - (a) Accurately simulate the characteristics and operating conditions for the proposed land treatment unit including:
    - 1. The properties of the waste including, but not limited to, the presence of constituents identified in 310 CMR 30.160;
    - 2. The climate in the area;
    - 3. The topography of the surrounding area;
    - 4. The characteristics of the soil in the treatment zone (including but not limited to soil depth and texture, and cation exchange capacity); and
    - 5. The operating practices to be used at the unit;
  - (b) Show that hazardous constituents in the waste to be tested will be completely degraded, transformed or immobilized in the treatment zone of the proposed land treatment unit; and
  - (c) Be conducted in a manner that protects public health, safety, and welfare and the environment, considering;
    - 1. The properties of the hazardous waste to be tested;
    - 2. The operating and monitoring measures to be taken during the course of the test;
    - 3. The duration of the test;
    - 4. The volume of hazardous waste used in the test; and
    - 5. In the case of field tests, the potential for migration of hazardous constituents to groundwater or surface water.
- (4) When the owner or operator has completed the treatment demonstration, he shall submit to the Department a certification, signed by a person authorized to sign a license application or report pursuant to 310 CMR 30.807, that the field tests and laboratory tests have been carried out in accordance with the conditions specified in the land treatment demonstration license for conducting such tests or analyses. The owner or operator shall also submit all data collected during the field tests and laboratory analyses within 90 days of completion of those tests and analyses unless the Department approves a later date.

## 30.654: Design and Operating Requirements

- (1) Each applicant for a license for land treatment shall persuade the Department that the land treatment unit will be designed, constructed, operated and maintained in compliance with 310 CMR 30.654.
- (2) The owner or operator shall design, construct, operate, and maintain the land treatment unit to maximize the degradation, transformation, and immobilization of the hazardous constituents in the treatment zone. The owner or operator shall design, construct, operate and maintain the unit in accordance with all design and operating conditions that were used in the treatment demonstration pursuant to 310 CMR 30.653. At a minimum, the Department shall specify the following in each license for a land treatment unit:
  - (a) The rate and method of waste application to the treatment zone;
  - (b) Measures to control soil pH;
  - (c) Measures to enhance microbial or chemical reaction (e.g., fertilization, tilling);
  - (d) Measures to control the moisture content of the treatment zone; and
  - (e) The maximum quantity of waste that can be applied to the treatment zone over the operating life of the facility.

#### 30.654: continued

- (3) Hazardous waste shall not be applied to soil which is frozen, covered by ice or snow, and/or saturated with water. Hazardous waste shall not be applied to soil during any period of rainfall.
- (4) Hazardous waste shall not be applied to land with a slope of greater than 4%.
- (5) The owner or operator shall design, construct, operate and maintain the treatment zone to minimize run-off of hazardous constituents during the active life of the land treatment unit.
- (6) The owner or operator shall design, construct, operate and maintain a run-off management system to collect and control at least the water volume resulting from a 24 hour, 100-year storm. If the collected run-off is hazardous waste pursuant to 310 CMR 30.100, it shall be managed as hazardous waste in compliance with 310 CMR 30.000. If the collected run-off is discharged to surface water or groundwater, it is subject to regulation pursuant to M.G.L. c. 21 § 43.
- (7) The owner or operator shall design, construct, operate, and maintain a run-on control system capable of preventing flow onto the treatment zone during peak discharge from at least a 100-year storm.
- (8) To maintain the design capacity of the system, collection and holding facilities (*e.g.*, tanks or basins) associated with run-on and run-off control systems shall be emptied or otherwise managed expeditiously after storms.
- (9) If the treatment zone contains particulate matter which may be subject to wind dispersal, the owner or operator shall manage the unit to control wind dispersal.
- (10) The owner or operator shall inspect the unit weekly and after storms to detect evidence of:
  - (a) Deterioration, malfunctions, or improper operation of run-on and run-off control systems; and
  - (b) Improper functioning of wind-dispersal control measures.
- (11) The growing of any food chain crop on the active portion or the closed portion of a land treatment facility is prohibited.

## 30.655: Unsaturated Zone Monitoring

An owner or operator subject to 310 CMR 30.650 shall establish an unsaturated zone monitoring program which shall include the following:

- (1) The owner or operator shall monitor the soil and soil-pore liquid to determine whether hazardous constituents migrate out of the treatment zone.
  - (a) In the land treatment license, the Department shall specify the hazardous constituents to be monitored. Except as provided in 310 CMR 30.655(1)(b), the owner or operator shall monitor for all the hazardous constituents identified pursuant to 310 CMR 30.652(2).
  - (b) The Department may require monitoring for principal hazardous constituents (PHCs) in lieu of the constituents specified pursuant to 310 CMR 30.652(2). PHCs are hazardous constituents contained in the wastes to be land applied at the unit that are the most difficult to treat, considering the combined effects of degradation, transformation, and immobilization. The Department may establish PHCs if the Department determines, based on waste analyses, treatment demonstrations, or other data, that effective degradation, transformation, or immobilization of the PHCs will assure at least equivalent levels of treatment for the other hazardous constituents in the waste.

## 30.655: continued

- (2) The owner or operator shall install an unsaturated zone monitoring system that shall include both soil monitoring using soil cores and also soil-pore liquid monitoring using devices such as lysimeters. The unsaturated zone monitoring system shall consist of a sufficient number of sampling points at appropriate locations and depths to yield samples that:
  - (a) Represent the quality of background soil-pore liquid quality and the chemical make-up of soil that has not been affected by leakage from the treatment zone; and
  - (b) Indicate the quality of soil-pore liquid and the chemical make-up of the soil below the treatment zone.
- (3) The owner or operator shall establish a background value for each hazardous constituent to be monitored pursuant to 310 CMR 30.655(1). The license shall specify the background value for each hazardous constituent or specify the procedures to be used to calculate the background values.
  - (a) Background soil values may be based on a one-time sampling at a background plot that is on the site of the facility and that has characteristics similar to those of the treatment zone. The Department shall specify in the land treatment license the number of samples to be taken. In no case shall less than three samples be taken.
  - (b) Background soil-pore liquid values shall be based on at least quarterly sampling for one year at a background plot having characteristics similar to those of the treatment zone.
  - (c) The owner or operator shall express all background values in a form suitable for the determination of statistically significant increases to be determined pursuant to 310 CMR 30.655(6).
  - (d) In taking samples used in the determination of all background values, the owner or operator shall use an unsaturated zone monitoring system that is in compliance with 310 CMR 30.655(2).
- (4) The owner or operator shall conduct soil monitoring and soil-pore liquid monitoring immediately below the treatment zone. The Department shall specify the frequency and timing of soil and soil-pore liquid monitoring in the facility license after considering the frequency, timing, and rate of waste application, and the soil permeability. The owner or operator shall express the results of soil and soil-pore liquid monitoring in a form suitable for the determination of statistically significant increases to be determined pursuant to 310 CMR 30.655(6).
- (5) The owner or operator shall use consistent sampling and analysis procedures that are designed to ensure sampling results that provide a reliable indication of soil-pore liquid quality and the chemical makeup of the soil below the treatment zone. At a minimum, the owner or operator shall implement and document procedures and techniques for:
  - (a) Sample collection;
  - (b) Sample preservation and shipment;
  - (c) Analytical procedures; and
  - (d) Chain-of-custody control.
- (6) Using a statistical procedure specified in the land treatment license, the owner or operator shall determine whether there is a statistically significant increase over background values for any hazardous constituent to be monitored, pursuant to 310 CMR 30.655(1), below the treatment zone each time he conducts soil monitoring and soil-pore liquid monitoring pursuant to 310 CMR 30.655(4). In the land treatment license, the Department shall specify a statistical procedure which shall provide reasonable confidence that migration from the treatment zone will be identified, shall be appropriate for the distribution of the data used to establish background values, and shall provide a reasonable balance between the probability of falsely identifying migration from the treatment zone and the probability of failing to identify real migration from the treatment zone.
  - (a) In determining whether a statistically significant increase has occurred, the owner or operator shall compare the value of each constituent, as determined pursuant to 310 CMR 30.655(4), to the background value for that constituent, using the statistical procedure specified in the land treatment license.

- (b) Within a reasonable time period after completion of sampling, the owner or operator shall determine whether there has been a statistically significant increase below the treatment zone. The Department shall specify that time period in the land treatment license after considering the complexity of the statistical test and the availability of laboratory facilities to perform the analysis of soil and soil-pore liquid samples.
- (7) If the owner or operator determines, pursuant to 310 CMR 30.655(6), that there is a statistically significant increase of hazardous constituents below the treatment zone, he shall:
  - (a) Notify the Department immediately by the quickest available means and also notify the Department in writing within seven days; the notification shall indicate what constituents have shown statistically significant increases; and
  - (b) Within 90 days of determining that there is such a statistically significant increase, submit to the Department an application for a land treatment license modification to modify the operating practices at the facility in order to maximize the success of degradation, transformation, or immobilization processes in the treatment zone.
- (8) If the owner or operator determines, pursuant to 310 CMR 30.655(6), that there is a statistically significant increase of hazardous constituents below the treatment zone, he may demonstrate to the Department that a source other than licensed land treatment units caused the increase or that the increase resulted from an error in sampling, analysis, or evaluation. Such a demonstration shall be in addition to, and not in lieu of, submitting a land-treatment license modification pursuant to 310 CMR 30.655(7)(b). If such a demonstration is made to the satisfaction of the Department, and the Department so determines in writing before the expiration of the 90 day period specified in 310 CMR 30.655(7)(b), the owner or operator need not submit a land treatment license modification application. If such an application is submitted, it may be withdrawn upon a written determination by the Department that the owner or operator has made this demonstration to the satisfaction of the Department. In making such a demonstration, the owner or operator shall:
  - (a) Within seven days of determining a statistically significant increase below the treatment zone, notify the Department in writing that he intends to make a determination pursuant to 310 CMR 30.655(8); and
  - (b) Within 90 days of such a determination, submit a report to the Department demonstrating that a source other than the regulated unit(s) caused the increase or that the increase resulted from error in sampling, analysis, or evaluation; and
  - (c) Within 90 days of such a determination, submit to the Department an application for a license modification to make any appropriate changes to the unsaturated zone monitoring program at the facility, unless the Department has determined in writing that such an application need not be submitted; and
  - (d) Continue to monitor in compliance with the unsaturated zone monitoring program established pursuant to 310 CMR 30.655.

## 30.656: Record Keeping

The owner or operator of a land treatment facility shall include the following in the operating record required by 310 CMR 30.542:

- (1) the application dates, application rates, total quantities, and location of each hazardous waste treated at the facility; and
- (2) A record of all vegetation grown at the site and of the dates, quantities and destination of all vegetation and soil removed from the site; and
- (3) The results of all monitoring done to comply with 310 CMR 30.650, and a record of everything else done to comply with 310 CMR 30.650.

# 30.657: Special Requirements for Ignitable, Reactive, Incompatible, and Acutely Hazardous Wastes, and Hazardous Wastes that are Polyhalogenated Aromatic Hydrocarbons

(1) The owner or operator shall not apply ignitable or reactive waste to the treatment zone unless the waste and the treatment zone meet all applicable requirements of 310 CMR 30.750 and the waste is immediately incorporated into the soil so that:

#### 30.657: continued

- (a) The resulting material is no longer ignitable or reactive hazardous waste pursuant to 310 CMR 30.122 or 30.124; and
- (b) 310 CMR 30.560(3) is complied with.
- (2) Incompatible hazardous wastes, or materials incompatible with hazardous wastes (*see* 310 CMR 30.561 for examples) shall not be placed in or on the same treatment zone unless 310 CMR 30.560(3) is complied with.
- (3) Acutely hazardous waste identified in 310 CMR 30.136 shall not be treated or disposed of at a land treatment facility.
- (4) Polyhalogenated aromatic hydrocarbons shall not be placed in a land treatment facility except in accordance with all other applicable provisions of 310 CMR 30.650 and in accordance with the terms and conditions of a management plan, approved by the Department, for such placement. Compliance with such a plan, when approved, shall be a condition of a license issued pursuant to 310 CMR 30.000. The Department may approve a management plan for the placement of polyhalogenated aromatic hydrocarbons in a land treatment facility only if, after considering at least the following criteria, the Department determines that such approval is in accordance with provisions set forth in 310 CMR 30.810 through 30.814.
  - (a) The volume and physical and chemical characteristics of the polyhalogenated aromatic hydrocarbons, including their potential to migrate through the soil or to volatilize or escape into the atmosphere.
  - (b) The volume and physical and chemical characteristics of the other materials placed into the land treatment facility, including their potential to migrate through the soil or to volatilize or escape into the atmosphere.
  - (c) The attenuative properties of the soil and other materials surrounding or underlying the land treatment facility.
  - (d) The effectiveness of additional treatment, design, or monitoring techniques used by the owner or operator of the land treatment facility. The Department may require the use of additional or different treatment, design, or monitoring techniques to reduce the possibility of migration or emission of these materials into ground water, surface water, soil, or air.

## 30.658: Application Rates and Capacity

- (1) With the land treatment license application, the owner or operator shall submit information identifying the annual rate limiting constituent, the single application limiting constituent, and the soil capacity limiting constituent of the wastes to be treated at the facility (*see* 310 CMR 30.010).
- (2) The annual application rate of hazardous waste shall not be greater than the maximum rate established by the annual rate limiting constituent for that waste.
- (3) The amount of each hazardous waste applied at any one time shall not exceed that established by the single application limiting constituent identified for that waste.
- (4) The total amount of each hazardous waste applied to the land over the operating life of the facility shall not exceed that established by the soil capacity limiting constituent for that waste.
- (5) The application rates and capacities shall be determined taking into consideration:
  - (a) The potential for volatilization of hazardous constituents from the applied waste;
  - (b) The need to prevent migration of hazardous constituents from the treatment zone;
  - (c) The ability of the treatment zone to degrade, transform or immobilize hazardous constituents;
  - (d) The soil characteristics, including the anticipated pH of the soil following the post-closure care period of the facility;

#### 30.658: continued

- (e) The potential for run-off;
- (f) Climatic conditions;
- (g) The toxic effects of the waste to decomposer organisms;
- (h) The toxic effects of the waste on the vegetative cover;
- (i) The potential for odor problems at the site; and
- (j) The potential for long-term anoxic conditions in the soil.
- (6) In the waste analysis plan required pursuant to 310 CMR 30.513, the owner or operator shall include provisions for determining the concentrations of the annual rate limiting constituent, the single application limiting constituent, the soil capacity limiting constituent, and those constituents which are within 25% of the concentration level which would make them limiting constituents.

## 30.659: Closure and Post-Closure Care

- (1) During the closure period of the land treatment facility, the owner or operator shall:
  - (a) Continue all operations (*e.g.*, pH control) necessary to maximize degradation, transformation, and immobilization of hazardous constituents within the treatment zone as required by 310 CMR 30.654(2), except to the extent such measures are inconsistent with 310 CMR 30.659(1)(h);
  - (b) Continue all operations in the treatment zone to minimize runoff of hazardous constituents, as required by 310 CMR 30.654(5);
  - (c) Maintain the run-off management system required by 310 CMR 30.654(6).
  - (d) Maintain the run-on control system required by 310 CMR 30.654(7);
  - (e) Control wind dispersal of hazardous waste if required by 310 CMR 30.654(9);
  - (f) Continue to comply with the prohibition on growing food chain crops as set forth in 310 CMR 30.654(11);
  - (g) Continue unsaturated zone monitoring in compliance with 310 CMR 30.655 except that soil-pore liquid monitoring may be terminated 90 days or more after the last application of waste to the treatment zone; and
  - (h) Establish a vegetative cover on the portion of the land treatment unit being closed at such time that the cover will not substantially impede degradation, transformation or immobilization of hazardous constituents in the treatment zone. The vegetative cover shall be capable of maintaining growth without extensive maintenance.
- (2) For the purpose of complying with 310 CMR 30.587, when closure of the land treatment facility is completed, the owner or operator may submit to the Department certification by an independent qualified soil scientist, in lieu of an independent Massachusetts registered professional engineer, that the land treatment facility has been closed in compliance with the specifications in the approved closure plan.
- (3) During the post-closure care period the owner or operator shall:
  - (a) Continue all operations (e.g., pH control) necessary to maximize degradation and transformation and sustain immobilization of hazardous constituents in the treatment zone to the extent that such measures are consistent with other post-closure activities;
  - (b) Maintain a vegetative cover over closed portions of the land treatment unit;
  - (c) Maintain the run-on control system required by 310 CMR 30.654(7);
  - (d) Maintain the run-off management system required by 310 CMR 30.654(6);
  - (e) Control wind dispersal of hazardous waste if required by 310 CMR 30.654(9);
  - (f) Continue to comply with the prohibition concerning growth of food-chain crops as set forth in 310 CMR 30.654(11); and
  - (g) Continue unsaturated zone monitoring in compliance with 310 CMR 30.655, except that soil-pore liquid monitoring may be terminated 90 days or more after the last application of waste to the treatment zone.

#### 30.659: continued

- (4) An owner or operator need not comply with 310 CMR 30.659(1)(h) and (3) if the Department determines that the level of hazardous constituents in the treatment zone soil does not exceed the background value of those constituents by an amount that is statistically significant when using the test specified pursuant to 310 CMR 30.659(4)(c). The owner or operator may submit such a demonstration to the Department at any time during the closure or post-closure care periods. For this purpose:
  - (a) The owner or operator shall establish background soil values and determine whether there is a statistically significant increase over those values for all hazardous constituents specified in the land treatment license pursuant to 310 CMR 30.652(2).
    - 1. Background soil values may be based on a one-time sampling of a background plot that is on the site and that has characteristics similar to those of the treatment zone. The Department shall specify the number of samples to be taken, which number shall be no less than three.
    - 2. The owner or operator shall express background values and values for hazardous constituents in the treatment zone in a form suitable for the determination of statistically significant increases pursuant to 310 CMR 30.659(4)(c).
  - (b) In taking samples used in the determination of background soil values and treatment zone values, the owner or operator shall take samples at a sufficient number of sampling points and at appropriate locations and depths to yield samples that represent the chemical makeup of:
    - 1. soil that has not been affected by leakage from the treatment zone; and
    - 2. soil within the treatment zone.
  - (c) In determining whether a statistically significant increase has occurred, the owner or operator shall compare the value of each constituent in the treatment zone to the background value for that constituent using a statistical procedure that:
    - 1. Provides reasonable confidence that constituent presence in the treatment zone will be identified.
    - 2. Is appropriate for the distribution of the data used to establish background values;
    - 3. Provides a reasonable balance between the probability of falsely identifying the presence of hazardous constituents in the treatment zone and the probability of failing to identify real presence of hazardous constituents in the treatment zone; and
    - 4. Is approved, in writing, by the Department.
- (5) The owner or operator need not comply with 310 CMR 30.660: *Groundwater Protection* if the Department finds that the owner or operator meets the requirements of 310 CMR 30.659(4) and if unsaturated zone monitoring required by 310 CMR 30.655 indicates that hazardous constituents have not migrated beyond the treatment zone during the active life of the land treatment unit.

## 30.660: Groundwater Protection

## 30.661: Applicability

- (1) Except as provided in 310 CMR 30.661(2) and (3), 30.661 through 30.673, cited collectively as 310 CMR 30.660, prescribe requirements which apply to owners and operators of regulated units that receive hazardous waste after July 26, 1982. As used in 310 CMR 30.660, the term "regulated unit" shall mean a surface impoundment, waste pile, miscellaneous units, land treatment unit or landfill which treats, stores or disposes of hazardous waste. Any hazardous waste or hazardous waste constituent found beyond a waste management area described in 310 CMR 30.669(2) shall be presumed to originate from a regulated unit unless the Department determines that such waste or waste constituent originated from another source.
- (2) 310 CMR 30.660 shall not apply to a waste pile that is designed and operated in compliance with 310 CMR 30.640(4).

#### 30.661: continued

- (3) The requirements in 310 CMR 30.660 apply during the active life of each regulated unit and during the closure period for each regulated unit. After closure of each regulated unit, 310 CMR 30.660 shall:
  - (a) Apply during the post-closure period pursuant to 310 CMR 30.590 through 30.595 if the owner or operator is conducting a detection monitoring program pursuant to 310 CMR 30.664;
  - (b) Apply during the compliance period specified in 310 CMR 30.670 if the owner or operator is conducting a compliance monitoring program pursuant to 310 CMR 30.671 or a corrective action program pursuant to 310 CMR 30.672.
  - (c) Not apply if all hazardous waste, hazardous waste residues, contaminated containment system components, and contaminated subsoils are removed or decontaminated during closure, unless 310 CMR 30.661(3)(b) applies;
  - (d) Not apply if the Department determines, pursuant to 310 CMR 30.659(4), that:
    - 1. The treatment zone of a land treatment unit does not contain levels of hazardous constituents that, by amounts that are statistically significant, are above background levels of those constituents; and
    - 2. The unsaturated zone monitoring program done in compliance with 310 CMR 30.655 has not shown a statistically significant increase in hazardous constituents below the treatment zone during the operating life of the land treatment unit.
- (4) The Department may waive any requirement of 310 CMR 30.660 otherwise applicable to a miscellaneous unit if the Department is persuaded that, as applied to that miscellaneous unit, the requirement is unnecessary to protect public health, safety or welfare or the environment.

## 30.662: Required Programs

- (1) Each owner and operator subject to 310 CMR 30.660 shall conduct a monitoring and response program as follows:
  - (a) Whenever those hazardous constituents specified pursuant to 310 CMR 30.666 are detected at a compliance point described in 310 CMR 30.669, the owner or operator shall institute a compliance monitoring program pursuant to 310 CMR 30.671 unless the Department determines that such constituents originated from another source. Detected is defined as statistically significant evidence of increased contamination as described in 310 CMR 30.664(6).
  - (b) Whenever a requirement of 310 CMR 30.665: *Groundwater Protection Standard* is not complied with, the owner or operator shall institute a corrective action program pursuant to 310 CMR 30.672.
  - (c) Whenever those hazardous constituents specified pursuant to 310 CMR 30.666 exceed concentration limits specified pursuant to 310 CMR 30.667 in groundwater between a compliance point specified pursuant to 310 CMR 30.669 and the downgradient facility property boundary, the owner or operator shall institute a corrective action program pursuant to 310 CMR 30.672, unless the Department determines that such constituents originated from another source. Exceeded is defined as statistically significant evidence of increased contamination as described in 310 CMR 30.671(4).
  - (d) In all other cases, the owner or operator shall institute a detection monitoring program pursuant to 310 CMR 30.664.
- (2) In the facility license, the Department shall specify the specific elements of the monitoring and response program. The Department may include one or more of the programs identified in 310 CMR 30.662(1) in the facility license and shall specify the circumstances under which each such program shall be required.

## 30.663: General Groundwater Monitoring Requirements

The owner or operator shall comply with the following requirements for any groundwater monitoring program developed to comply with the requirements of 310 CMR 30.664, 30.671, or 30.672:

#### 30.663: continued

- (1) The groundwater monitoring system shall consist of a sufficient number of wells, installed at appropriate locations and depths, to yield from the uppermost aquifer groundwater samples that:
  - (a) Represent the quality of background groundwater that has not been affected by leakage from a regulated unit.

A determination of background quality may include sampling of wells that are not hydraulically upgradient of the waste management area where:

- 1. Hydrogeologic conditions do not allow the owner or operator to determine what wells are hydraulically upgradient; and
- 2. Sampling at other wells will provide an indication of background ground-water quality that is representative or more representative than that provided by upgradient wells; and
- (b) Represent the quality of groundwater passing a point of compliance; and
- (c) Allow for the detection of contamination when hazardous waste or hazardous constituents have migrated from the waste management area to the uppermost aquifer.
- (2) If a facility contains more than one regulated unit, separate groundwater monitoring systems shall not be required for each regulated unit if sampling of groundwater in the uppermost aquifer at a compliance point will enable detection and measurement of hazardous constituents from the regulated units.
- (3) All monitoring wells shall be cased in a manner that maintains the integrity of the monitoring well bore hole. To enable collection of groundwater samples, this casing shall be screened or perforated and, where necessary, packed with gravel or sand. The annular space (*i.e.*, the space between the bore hole and well casing) above and below the sampling depth shall be sealed to prevent contamination of samples and of the groundwater.
  - (a) The inside diameter shall be sized to facilitate the collection of samples.
  - (b) The casing shall be constructed of a material which will not be reactive with or corroded by any leachate from any regulated unit.
  - (c) PVC casing shall be joined in a manner which does not contribute organics to water samples.
  - (d) The casing shall be screened or perforated in a manner that allows water to enter the well freely at low velocity, prevents sand from entering the well, and serves as the structural retainer to support loose formation material.
  - (e) All monitoring wells shall be protected by a length of protective casing which is larger in diameter than the monitoring well casing and which extends below the land surface.
    - 1. The protective casing shall be grouted and placed with a protective collar to hold it firmly in position.
    - 2. The protective casing shall be identified by a highly visible color.
    - 3. The protective casing shall be higher above grade than the inner well casing.
    - 4. The protective casing shall have a vented cap that will allow the well to be secured against acts of vandalism.
  - (f) All borings for monitoring wells shall be done by a technique that enables the well driller to obtain representative soil samples at five-foot intervals.
    - 1. The soil samples shall be placed in covered glass jars and labelled so that a stratigraphic log can be prepared.
    - 2. Sample jars containing soil samples shall be placed in the custody of the facility owner or operator after examination by an engineer or geologist, and shall be available for inspection by the Department.
    - 3. When well clusters are used, soil sampling is only necessary at the deepest boring and at other borings at the screened depth.
  - (g) As technology changes in the field of groundwater monitoring, the Department may approve, in writing, different but equivalent or better methods for obtaining the information required to prepare a stratigraphic log, take water level measurements, or obtain representative groundwater samples.

## 30.663: continued

- (4) The groundwater monitoring program shall include consistent sampling and analysis procedures that are designed to ensure monitoring results that provide a reliable indication of groundwater quality below the waste management area, as described in 310 CMR 30.669(2). At a minimum, the program shall include procedures and techniques for:
  - (a) Sample collection;
  - (b) Sample preservation, storage and shipment;
  - (c) Analytical procedures, including quality control and assurance techniques; and
  - (d) Chain-of-custody control.
- (5) The groundwater monitoring program shall include sampling and analytical methods that are appropriate for groundwater sampling and that accurately measure hazardous constituents in groundwater samples.
- (6) The groundwater monitoring program shall include a determination of the groundwater surface elevation each time groundwater is sampled. These data shall be plotted to make a map showing water table contours and presumed flow directions. Care shall be taken in preparing this map to consider the portions of the aquifer screened by each of the wells. All measurements shall be referenced to sea level, based on USGS or USC&GS data. By April 30th of each year, the owner or operator shall evaluate the data on groundwater elevations obtained in compliance with 310 CMR 30.663(6) to determine whether the requirements set forth in 310 CMR 30.663(1) for well locations continue to be met. If any such requirement is not met, the owner or operator shall:
  - (a) Within ten days, notify the Department of this fact, and request, in writing, a license modification; and
  - (b) Within a period of time specified by the Department, locate and install new wells to meet the requirements of 310 CMR 30.663(1).
- (7) In detection monitoring or where appropriate in compliance monitoring, data on each hazardous constituent specified in the license shall be collected from background wells and wells at compliance point(s). The number and kinds of samples collected to establish background shall be appropriate for the form of statistical test employed, following generally accepted statistical principles. The sample size shall be as large as necessary to ensure with reasonable confidence that a contaminant release to ground water from a facility will be detected. The owner or operator shall determine an appropriate sampling procedure and interval for each hazardous constituent listed in the facility license which shall be specified in the unit license upon approval by the Department. This sampling procedure shall be:
  - (a) A sequence of at least four samples, taken at an interval that assures, to the greatest extent technically feasible, that an independent sample is obtained, by reference to the uppermost aquifer's effective porosity, hydraulic conductivity, and hydraulic gradient, and the fate and transport characteristics of the potential contaminants, or
  - (b) An alternate sampling procedure proposed by the owner or operator and approved by the Department.
- (8) The owner or operator shall specify one of the following statistical methods to be used in evaluating ground-water monitoring data for each hazardous waste constituent which, upon approval by the Department, shall be specified in the unit license. The statistical test chosen shall be conducted separately for each hazardous constituent in each well. Where practical quantification limits (pql's) are used in any of the following statistical procedures to comply with 310 CMR 30.663(10)(e), the pql shall be proposed by the owner or operator and approved by the Department. Use of any of the following statistical methods shall be protective of public health, safety and welfare and the environment and shall comply with the performance standards outlined in 310 CMR 30.663(10).
  - (a) A parametric analysis of variance (ANOVA) followed by multiple comparisons procedures to identify statistically significant evidence of contamination. The method shall include estimation and testing of the contrasts between each compliance well's mean and the background mean levels for each constituent.

30.663: continued

- (b) An analysis of variance (ANOVA) based on ranks followed by multiple comparison procedures to identify statistically significant evidence of contamination. The method shall include estimation and testing of the contrasts between each compliance well's median and the background median levels for each constituent.
- (c) A tolerance or prediction interval procedure in which an interval for each constituent is established from the distribution of the background data, and the level of each constituent in each compliance well is compared to the upper tolerance or prediction limit.
- (d) A control chart approach that gives control limits for each constituent.
- (e) Another statistical test method submitted by the owner or operator and approved by the Department.
- (9) In addition to using a statistical test to determine whether background values or concentration limits have been exceeded, each owner or operator conducting a groundwater monitoring program shall compile the information for each water quality parameter at each sampling point in the form of a table covering the current year and on a graph showing the historical trend. This information shall be submitted to the Department annually by March 1 of each year.
- (10) Any statistical method chosen pursuant to 310 CMR 30.663(8) for specification in the unit license shall comply with the following performance standards, as appropriate:
  - (a) The statistical method used to evaluate ground-water monitoring data shall be appropriate for the distribution of chemical parameters or hazardous constituents. If the distribution of the chemical parameters or hazardous constituents is shown by the owner or operator to be inappropriate for a normal theory test, then the data shall be transformed or a distribution-free theory test shall be used. If the distributions for the constituents differ more than one statistical method may be needed.
  - (b) If an individual well comparison procedure is used to compare an individual compliance well constituent concentration with background constituent concentrations or a ground-water protection standard, the test shall be done at a Type I error level no less than 0.01 for each testing period. If a multiple comparison procedure is used, the Type I experimentwise error rate for each testing period shall be no less than 0.05; however, the Type I error of no less than 0.01 for individual well comparisons shall be maintained. This performance standard does not apply to tolerance intervals, prediction intervals or control charts.
  - (c) If a control chart approach is used to evaluate ground-water monitoring data, the specific type of control chart and its associated parameter values shall be proposed by the owner or operator and approved by the Department if the Department finds it to be protective of public health, safety and welfare and the environment.
  - (d) If a tolerance interval or a prediction interval is used to evaluate groundwater monitoring data, the levels of confidence and, for tolerance intervals, the percentage of the population that the interval shall contain, shall be proposed by the owner or operator and approved by the Department if the Department finds these parameters to be protective of public health, safety and welfare and the environment. These parameters will be determined after considering the number of samples in the background data base, the data distribution, and the range of the concentration values for each constituent of concern.
  - (e) The statistical method shall account for data below the limit of detection with one or more statistical procedures that are protective of public health, safety and welfare and the environment. Any practical quantification limit (pql) approved by the Department pursuant to 310 CMR 30.663(8) that is used in the statistical method shall be the lowest concentration level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions that are available to the facility.
  - (f) If necessary, the statistical method shall include procedures to control or correct for seasonal and spatial variability as well as temporal correlation in the data.
- (11) Ground-water monitoring data collected in accordance with 310 CMR 30.663(7), including actual levels of constituents shall be maintained in the facility operating record. The Department will specify in the license when the data shall be submitted for review.

#### 30.664: Detection Monitoring Program

An owner or operator required to establish a detection monitoring program pursuant to 310 CMR 30.661 and 30.662 shall, at a minimum, comply with the following:

- (1) The owner or operator shall monitor for all indicator parameters (e.g., pH, specific conductance, total organic carbon, or total organic halogen), waste constituents, or reaction products that provide a reliable indication of the presence of hazardous constituents in groundwater. In the facility license, the Department shall specify the parameters or constituents to be monitored after considering:
  - (a) The types, quantities, and concentrations of constituents in hazardous wastes managed at the regulated unit;
  - (b) The mobility, stability, and persistence of waste constituents or their reaction products in the unsaturated zone beneath the waste management area, as described in 310 CMR 30.669(2);
  - (c) The detectability of indicator parameters, waste constituents, and reaction products in groundwater; and
  - (d) The concentrations or values, and in all cases the coefficients of variation of proposed monitoring parameters or constituents in the groundwater background.
- (2) The owner or operator shall install a groundwater monitoring system at compliance points as specified pursuant to 310 CMR 30.669. The groundwater monitoring system shall be in compliance with 310 CMR 30.663(1)(b), (2) and (3).
- (3) The owner or operator shall conduct a ground-water monitoring program for each chemical parameter and hazardous constituent specified in the license pursuant to 310 CMR 30.664(1) in accordance with 310 CMR 30.663(7). The owner or operator shall maintain a record of ground-water analytical data as measured and in a form necessary for determination of statistical significance pursuant to 310 CMR 30.663(7).
- (4) The Department will specify the frequencies for collecting samples and conducting statistical tests to determine whether there is statistically significant evidence of contamination for any parameter or hazardous constituent specified in the license pursuant to 310 CMR 30.664(1) in accordance with 310 CMR 30.663(7). A sequence of at least four samples from each well (background and compliance wells) shall be collected at least semiannually during detection monitoring.
- (5) The owner or operator shall determine the groundwater flow rate and direction in the uppermost aquifer at least annually.
- (6) The owner or operator shall determine whether there is statistically significant evidence of contamination for any chemical parameter or hazardous constituent specified in the license pursuant to 310 CMR 30.664(1) at a frequency specified pursuant to 310 CMR 30.664(4).
  - (a) In determining whether statistically significant evidence of contamination exists, the owner or operator shall use the method(s) specified in the license pursuant to 310 CMR 30.663(8). These methods shall compare data collected at the compliance point(s) to the background ground-water quality data.
  - (b) The owner or operator shall determine whether there is statistically significant evidence of contamination at each monitoring well as the compliance point within a reasonable period of time after completion of sampling. The Department will specify in the facility license what period of time is reasonable, after considering complexity of the statistical test and the availability of laboratory facilities to perform the analysis of ground-water samples.
- (7) If the owner or operator determines pursuant to 310 CMR 30.664(6) that there is statistically significant evidence of contamination for chemical parameters or hazardous constituents specified pursuant to 310 CMR 30.664(1) at any monitoring well at the compliance point, the owner or operator shall:

#### 30.664: continued

- (a) Notify the Department of this finding in writing within seven days. The notification shall indicate what chemical parameters or hazardous constituents have shown statistically significant evidence of contamination.
- (b) Immediately sample the ground water in all monitoring wells and determine whether constituents in 310 CMR 30.161 are present and, if so, in what concentration.
- (c) For any 310 CMR 30.161 compounds found in the analysis pursuant to 310 CMR 30.664(7)(b), the owner or operator may resample within one month and repeat the analysis for those compounds detected. If the results of the second analysis confirm the initial results, then these constituents shall form the basis for compliance monitoring. If the owner or operator does not resample for compounds found pursuant to 310 CMR 30.664(7)(b), the hazardous constituents found during the initial analysis for compounds in 310 CMR 30.161 shall form the basis for compliance monitoring.
- (d) Within 90 days, submit to the Department an application for a license modification to establish a compliance monitoring program meeting the requirements of 310 CMR 30.671. The application shall include the following information:
  - 1. An identification of the concentration or any 310 CMR 30.161 constituent detected in the ground water at each monitoring well at the compliance point;
  - 2. Any proposed changes to the ground-water monitoring system at the facility necessary to meet the requirements of 310 CMR 30.671;
  - 3. Any proposed additions or changes to the monitoring frequency, sampling and analysis procedures or methods, or statistical methods used at the facility necessary to meet the requirements of 310 CMR 30.671;
  - 4. For each hazardous constituent detected at the compliance point, a proposed concentration limit pursuant to 310 CMR 30.667(1)(a) or (b), or a notice of intent to seek an alternate concentration limit pursuant to 310 CMR 30.667(2); and
- (e) Within 180 days, submit to the Department:
  - 1. All data necessary to justify an alternate concentration limit sought pursuant to 310 CMR 30.667(2); and
  - 2. An engineering feasibility plan for a corrective action program necessary to meet the requirements of 310 CMR 30.672, unless:
    - a. All hazardous constituents identified pursuant to 310 CMR 30.664(7)(b) are listed in 310 CMR 30.668 and their concentrations do not exceed the respective values given in Table 30.668; or
    - b. The owner or operator has sought an alternate concentration limit pursuant to 310 CMR 30.667(2) for every hazardous constituent identified pursuant to 310 CMR 30.664(7)(b).
- (f) If the owner or operator determines, pursuant to 310 CMR 30.664(6), that there is a statistically significant difference for chemical parameters or hazardous constituents specified pursuant to 310 CMR 30.664(1) at any monitoring well at the compliance point, the owner or operator may demonstrate that a source other than a regulated unit has caused the contamination or that the detection is an artifact caused by error in sampling, analysis, or statistical evaluation or natural variation in ground water. The owner or operator may make a demonstration pursuant to 310 CMR 30.664(7)(f) in addition to, or in *lieu* of, submitting a license modification application pursuant to 310 CMR 30.664(7)(d); however, the owner or operator is not relieved of the requirement to submit a license modification application within the time specified in 310 CMR 30.664(7)(d) unless the demonstration made pursuant to 310 CMR 30.664(7)(f) successfully shows that a source other than a regulated unit caused the increase, or that the increase resulted from error in sampling, analysis or evaluation. In making a demonstration pursuant to 310 CMR 30.664(7)(f), the owner or operator shall:
  - 1. Notify the Department in writing within seven days of determining statistically significant evidence of contamination at the compliance point that the owner or operator intends to make a demonstration pursuant to 310 CMR 30.664(7)(f);
  - 2. Within 90 days, submit a report to the Department which demonstrates that a source other than a regulated unit caused the contamination or that the contamination resulted from an error in sampling, analysis, or evaluation;

#### 30.664: continued

- 3. Within 90 days, submit to the Department an application for a license modification to make any appropriate changes to the detection monitoring program; and
- 4. Continue to monitor in accordance with the detection monitoring program established pursuant to 310 CMR 30.664.
- (8) If the owner or operator determines that the detection monitoring program no longer satisfies the requirements of 310 CMR 30.664, the owner or operator shall, within 90 days, submit an application for license modification to make any appropriate changes to the program.

## 30.665: Groundwater Protection Standard

The Department shall impose, and the owner or operator shall comply with, conditions in the facility's license that are designed to ensure that hazardous constituents which are identified pursuant to 310 CMR 30.666 and which are detected in the groundwater from a regulated unit do not exceed the concentration limits specified pursuant to 310 CMR 30.667. Such concentration limits shall not be exceeded in the uppermost aquifer underlying the waste management area at or beyond a point of compliance identified pursuant to 310 CMR 30.669 during the compliance period specified pursuant to 310 CMR 30.670. When hazardous constituents have been detected the groundwater from a regulated unit, the Department shall, in the facility's license, impose conditions which meet the requirements of 310 CMR 30.665. The Department may impose such conditions in the facility's license before hazardous constituents have been detected in the groundwater from a regulated unit.

#### 30.666: Hazardous Constituents

The Department shall specify, in the facility's license, those specific hazardous constituents identified in 310 CMR 30.161 to which the requirements of 310 CMR 30.665: *Groundwater Protection Standard* shall apply. The Department shall identify such hazardous constituents upon establishing a compliance monitoring or corrective action program in the facility's license. Hazardous constituents which shall be specified in the license shall be constituents identified in 310 CMR 30.160 that the Department reasonably expects to be in or derived from waste contained in a regulated unit. The Department may exclude such a constituent from the list of hazardous constituents in the facility's license if the constituent is unstable in water and has not been detected in the groundwater.

## 30.667: Concentration Limits

- (1) If the Department specifies in a facility's license a compliance monitoring program or a corrective action program, the Department shall also specify in the facility's license concentration limits, established pursuant to 310 CMR 30.666, for hazardous constituents in the groundwater. The concentration of a hazardous constituent:
  - (a) Shall not, at the time that such limit is specified in the license, exceed the background level of that constituent in the groundwater; or
  - (b) For any of the constituents listed in 310 CMR 30.000: *Table* 30.668, shall not exceed the respective maximum concentration set forth in 310 CMR 30.000: *Table* 30.668 if the background level of the constituent is below the value set forth in 310 CMR 30.000: *Table* 30.668; or
  - (c) Shall not exceed an alternate limit established by the Department pursuant to 310 CMR 30.667(2).
- (2) The Department may establish an alternate concentration limit for a hazardous constituent if the Department determines that the constituent will not pose a substantial present or potential hazard to public health or safety or the environment as long as the alternate concentration limit is not exceeded. In establishing each alternate concentration limit, the Department shall consider the following factors:

#### 30.667: continued

- (a) Potential adverse effects on groundwater quality, considering:
  - 1. The physical and chemical properties of the waste in the regulated unit, including its potential for migration;
  - 2. The hydrogeologic characteristics of the facility and surrounding land;
  - 3. The quantity of groundwater and the direction of groundwater flow;
  - 4. The proximity and withdrawal rates of groundwater users;
  - 5. The current and potential uses of groundwater in the area;
  - 6. The existing quality of groundwater, including other sources of contamination and their cumulative impact on the groundwater quality;
  - 7. The potential for health or safety risks caused by human exposure to waste constituents;
  - 8. The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents;
  - 9. The persistence and permanence of the potential adverse effects; and
- (b) Potential adverse effects on hydraulically-connected surface water quality, considering:
  - 1. The volume and physical and chemical properties of the waste in the regulated unit;
  - 2. The hydrogeologic characteristics of the facility and surrounding land;
  - 3. The quantity and quality of groundwater, and the direction of groundwater flow;
  - 4. The patterns of rainfall in the region;
  - 5. The proximity of the regulated unit to surface water(s);
  - 6. The current and potential uses of surface water(s) in the sources of contamination and the cumulative impact on surface water quality;
  - 7. The existing quality of surface water, including other sources of contamination and the cumulative impact on surface water quality;
  - 8. The potential for health or safety risks caused by human exposure to waste constituents;
  - 9. The potential damage to wildlife, crops, vegetation, and physical structure caused by exposure to waste constituents; and
  - 10. The persistence and permanence of the potential adverse effects.
- (3) In making any determination, pursuant to 310 CMR 30.667(2), about the use of groundwater in the area around the facility, the Department shall consider any identification, made pursuant to 310 CMR 27.00: *Underground Water Source Protection*, of underground sources of drinking water and exempted aquifers.

## 30.668: Maximum Concentration of Constituents for Groundwater Protection

Except as provided in 310 CMR 30.667, the concentration in groundwater of each constituent listed in Table 30.668 shall not exceed the maximum concentration specified in 310 CMR 30.000: *Table* 30.688 for that constituent.

30.668: continued

Table 30.668

Constituent	Maximum Concentration (Milligrams per liter)
	per mer)
Arsenic	0.05
Barium	1.0
Cadmium	0.01
Chromium	0.05
Lead	0.05
Mercury	0.002
Selenium	0.01
Silver	0.05
Endrin (1,2,3,4,10,10-hexachloro-1,7-	0.0002
epoxy-1,4,4a,5,6,7,8,9a-octahydro-1,	
4-endo, endo-5,8-dimethano naphthalene)	
Lindane (1,2,3,4,5,6-hexachlorocyclohexane, gamma isomer)	0.004
Methoxychlor (1,1,1-Trichloro-2,2-bis (p-methoxyphenylethane)	0.1
Toxaphene (C <sub>10</sub> H <sub>10</sub> C1 <sub>6</sub> , Technical chlorinated camphene, 67-69% chlorine)	0.005
2,4-D (2,4-Dichlorophenoxyacetic acid)	0.1
2,4,5-TP Silvex (2,4,5-Trichlorophenoxypropionic acid)	0.01

## 30.669: Point of Compliance

- (1) In the facility's license, the Department shall specify points of compliance at which the requirements of 310 CMR 30.665: *Groundwater Protection Standard* shall apply and at which monitoring shall be conducted. A point of compliance is a vertical surface which is located at the hydraulically downgradient limit of the waste management area and which extends down into the uppermost aquifer underlying the regulated unit(s).
- (2) The waste management area is the limit projected in the horizontal plane of the area on which hazardous waste will be placed during the active life of the regulated unit(s).
  - (a) The waste management area includes, without limitation, horizontal space taken up by any liner, dike, or other barrier designed to contain waste in a regulated unit.
  - (b) If the facility contains more than one regulated unit, the waste management area is described by the boundary circumscribing all the regulated units.
- (3) Monitoring wells installed at points of compliance shall be designed and operated in a manner that will provide an early warning system to alert the owner or operator of the migration of hazardous constituents from a regulated unit to the groundwater in the uppermost aquifer. In the license, the Department may require additional downgradient monitoring wells beyond those points of compliance specified pursuant to 310 CMR 30.669(1). The re- quirements of 310 CMR 30.665 (Groundwater Protection Standard) shall apply to such additional wells.

## 30.670: Compliance Period

In the facility's license, the Department shall specify the compliance period during which the requirements of 310 CMR 30.665: *Groundwater Protection Standard* shall apply. In no event shall the duration of the compliance period be less than the duration of the active life of the waste management area, including, without limitation, the period prior to licensing, and the closure period. The compliance period shall begin when the owner or operator initiates a compliance monitoring program meeting the requirements of 310 CMR 30.671. If the owner or operator is engaged in a corrective action program, the compliance period shall not end until the owner or operator has persuaded the Department, and the Department has determined in writing, that the requirements of 310 CMR 30.665 have been complied with for a period of at least three consecutive years.

## 30.671: Compliance Monitoring Program

Each owner or operator required to establish a compliance monitoring program pursuant to 310 CMR 30.661 and 30.662 shall, at a minimum, comply with the following:

- (1) The owner or operator shall monitor the groundwater to determine whether each regulated unit is in compliance with the requirements of 310 CMR 30.665: *Groundwater Protection Standard*. The Department shall specify what the facility shall do to comply with 310 CMR 30.665, including specifying:
  - (a) A list of the hazardous constituents identified pursuant to 310 CMR 30.666;
  - (b) Concentration limits specified pursuant to 310 CMR 30.667 for each of those hazardous constituents:
  - (c) The compliance points specified pursuant to 310 CMR 30.669; and
  - (d) The compliance period specified pursuant to 310 CMR 30.670.
- (2) The owner or operator shall install a groundwater monitoring system at the compliance points as specified pursuant to 310 CMR 30.669. The groundwater monitoring system shall comply with 310 CMR 30.663(1)(b), (2), and (3).
- (3) The Department will specify the sampling procedures and statistical methods appropriate for the constituents and the facility, consistent with 310 CMR 30.664(7) and (8).
  - (a) The owner or operator shall conduct a sampling program for each chemical parameter or hazardous constituent in accordance with 310 CMR 30.664(7).
  - (b) The owner or operator shall record ground-water analytical data as measured and in a form necessary for the determination of statistical significance pursuant to 310 CMR 30.664(8) for the compliance period of the facility.
- (4) The owner or operator shall determine whether there is statistically significant evidence of increased contamination for any chemical parameter or hazardous constituent specified in the license, pursuant to 310 CMR 30.671(1), at a frequency specified pursuant to 310 CMR 30.671(6).
  - (a) In determining whether statistically significant evidence of increased contamination exists, the owner or operator shall use the method(s) specified in the license pursuant to 310 CMR 30.663(8). The method(s) shall compare data collected at the compliance point(s) to a concentration limit developed in accordance with 310 CMR 30.667.
  - (b) The owner or operator shall determine whether there is statistically significant evidence of increased contamination at each monitoring well at the compliance point within a reasonable time period after completion of sampling. The Department will specify that time period in the facility license, after considering the complexity of the statistical test and the availability of laboratory facilities to perform the analysis of ground-water samples.
- (5) The owner or operator shall determine the groundwater flow rate and direction in the uppermost aquifer at least annually.

- (6) The Department will specify the frequencies for collecting samples and conducting statistical tests to determine statistically significant evidence of increased contamination in accordance with 310 CMR 30.663(7). A sequence of at least four samples from each well (background and compliance wells) shall be collected at least semi-annually during the compliance period of the facility.
- (7) The owner or operator shall analyze samples from all monitoring wells at the compliance point for all constituents contained in 310 CMR 30.161 at least annually to determine whether additional hazardous constituents are present in the uppermost aquifer and, if so, at what concentration, pursuant to procedures in 310 CMR 30.664(6). If the owner or operator finds constituents in 310 CMR 30.161 in the ground water that are already identified in the license as monitoring constituents, the owner or operator may resample within one month and repeat the 310 CMR 30.161 analysis. If the second analysis confirms the presence of new constituents, the owner or operator shall report the concentration of these additional constituents to the Department within seven days after the completion of the second analysis and add them to the monitoring list. If the owner or operator chooses not to resample, then the owner or operator shall report the concentrations of these additional constituents to the Department within seven days after completion of the initial analysis and add them to the monitoring list.
- (8) If the owner or operator determines pursuant to 310 CMR 30.671(4) that any concentration limits pursuant to 310 CMR 30.667 are being exceeded at any monitoring well at the point of compliance the owner or operator shall:
  - (a) Immediately notify the Department by the quickest available means and also notify the Department in writing within seven days. The notification shall indicate each concentration limit that has been exceeded and by how much.
  - (b) Within 180 days, submit to the Department an application for a license modification to establish a corrective action program meeting the requirements of 310 CMR 30.672, or within 90 days if an engineering feasibility study has been previously submitted to the Department pursuant to 310 CMR 30.664(8)(e). The application shall at a minimum include the following information:
    - 1. A detailed description of corrective actions that will achieve compliance with the requirements specified in the license pursuant to 310 CMR 30.671(1); and
    - 2. A plan for a groundwater monitoring program that will demonstrate the effectiveness of the corrective action. Such a groundwater monitoring program may be based on a compliance monitoring program developed to meet the requirements of 310 CMR 30.671.
- (9) If the owner or operator determines pursuant to 310 CMR 30.671(4) that the ground-water concentration limits pursuant to 310 CMR 30.671 are being exceeded at any monitoring well at the point of compliance, the owner or operator shall demonstrate a source other than a regulated unit caused the contamination or that the detection is an artifact caused by an error in sampling, analysis, or statistical evaluation or natural variation in the ground water. In making a demonstration pursuant to 310 CMR 30.671(9), the owner or operator shall:
  - (a) Within seven days of determining that a requirement of 310 CMR 30.665 is not being met, notify the Department in writing that he intends to make such a demonstration;
  - (b) Within 90 days of determining that a requirement of 310 CMR 30.665 is not being met, submit a report to the Department which demonstrates that a source other than a regulated unit caused the requirement not to be met or that the apparent noncompliance with the standards resulted from error in sampling, analysis, or evaluation; and
  - (c) Within 90 days of determining that a requirement of 310 CMR 30.665 is not being met, submit to the Department a completed application for a license modification to make all appropriate changes to the compliance monitoring program at the facility, unless the Department has determined in writing that such an application need not be submitted; and (d) Continue to monitor in accordance with the compliance monitoring program established pursuant to 310 CMR 30.671.

#### 30.671: continued

(10) If either the owner or operator or the Department determines that the compliance monitoring program no longer satisfies the requirements of 310 CMR 30.671, the owner or operator shall, within 90 days, submit an application for a license modification to make all appropriate changes to the program.

## 30.672: Corrective Action Program

An owner or operator required to establish a corrective action program pursuant to 310 CMR 30.661 and 30.662 shall, at a minimum, comply with the following:

- (1) The owner or operator shall take corrective action to ensure that each regulated unit is in compliance with the requirements of 310 CMR 30.665: *Groundwater Protection Standard* which shall be specified by the Department in the facility's license. These requirements shall include, at a minimum:
  - (a) A list of the hazardous constituents specified pursuant to 310 CMR 30.666;
  - (b) Concentration limits, specified pursuant to 310 CMR 30.667, for each of those hazardous constituents;
  - (c) The compliance points specified pursuant to 310 CMR 30.669; and
  - (d) The compliance period specified pursuant to 310 CMR 30.670.
- (2) The owner or operator shall implement a corrective action program that prevents hazardous constituents from exceeding their respective concentration limits at compliance points by removing the hazardous waste constituents or treating them in place.
- (3) The owner or operator shall begin corrective action within a reasonable time period after a requirement of 310 CMR 30.665: *Groundwater Protection Standard* has not been complied with. The Department shall specify that time period in the facility's license. If a facility's license includes a corrective action program in addition to a compliance monitoring program, the license shall specify when the corrective action will begin and such a requirement will operate in lieu of the requirement of 310 CMR 30.671(9)(b).
- (4) In conjunction with a corrective action program, the owner or operator shall establish and implement a groundwater monitoring program to demonstrate the effectiveness of the corrective action program. Such a monitoring program may be based on the requirements for a compliance monitoring program pursuant to 310 CMR 30.671 and shall be as effective as that program in determining compliance with the requirements of 310 CMR 30.665: *Groundwater Protection Standard*, and in determining the success of a corrective action program pursuant to 310 CMR 30.672(5), where appropriate.
- (5) In addition to the other requirements of 310 CMR 30.672, the owner or operator shall conduct a corrective action program to remove or treat in place all hazardous constituents that are specified pursuant to 310 CMR 30.666 and that exceed concentration limits, specified pursuant to 310 CMR 30.667, in groundwater between the compliance point, specified pursuant to 310 CMR 30.668, and the downgradient facility property boundary. The license shall specify the measures to be taken.
  - (a) Corrective action measures shall be:
    - 1. Initiated within 60 days of detection of noncompliance with a requirement of 310 CMR 30.665; and
    - 2. Completed within a reasonable period of time, considering the extent of contamination.
  - (b) Corrective action measures may be terminated once the concentration of hazardous constituents specified pursuant to 310 CMR 30.666 is reduced, for three consecutive years, to a level below the respective concentration limits specified pursuant to 310 CMR 30.667.
- (6) In addition to the other requirements of 310 CMR 30.672, if so required by the Department, the owner or operator shall conduct a corrective action program to remove or treat in place all hazardous constituents which are specified pursuant to 310 CMR 30.666, and which exceed concentration limits, specified pursuant to 310 CMR 30.667, in groundwater beyond the downgradient property boundary.

- (a) Corrective action measures shall be initiated within 60 days of a determination by the Department that such measures are necessary, and shall be completed within a reasonable period of time considering the extent of contamination. Corrective action measures may be terminated once the concentration of hazardous constituents specified pursuant to 310 CMR 30.666 is reduced, for three consecutive years, to levels below their respective concentration limits specified pursuant to 310 CMR 30.667.
- (b) The owner or operator shall, by certified mail, immediately notify the owners of abutting property which may be affected by such contamination. The owner or operator shall take immediate steps to acquire permission from such property owner(s) to initiate groundwater monitoring, and, if necessary, corrective action on such abutting property.
- (7) The owner or operator shall continue corrective action measures during the compliance period to the extent necessary to ensure that the requirements of 310 CMR 30.665 are complied with. If the owner or operator is conducting corrective action at the end of the compliance period, he shall continue that corrective action for as long as necessary to achieve compliance with the requirements of 310 CMR 30.665. The owner or operator may terminate corrective action measures when he has persuaded the Department that, based on data from the groundwater monitoring program implemented pursuant to 310 CMR 30.672(4), the requirements of 310 CMR 30.665 have been met for a period of three consecutive years.
- (8) The owner or operator shall submit to the Department semi-annual reports on the effectiveness of the corrective action program.
- (9) If the owner or operator or the Department determines that the corrective action program no longer satisfies the requirements of 310 CMR 30.672, the owner or operator shall, within 90 days, submit an application for a license modification to make all appropriate changes to the program.

## 30.673: Cochran's Approximation to the Behrens-Fisher Students' t-Test

- (1) Using all the available background data ( $n_b$  readings), calculate the background mean ( $X_B$ ) and background variance ( $s_b$ <sup>2</sup>). For the single monitoring well under investigation ( $n_m$  reading), calculate the monitoring mean ( $X_m$ ) and monitoring variance ( $s_m$ <sup>2</sup>).
- (2) For any set of data  $(X_1, X_2 \dots X_n)$  the mean is calculated by:

$$X = \frac{X_1 + X_2 \dots + X_n}{n}$$

and the variance is calculated by:

$$s^2 = \frac{(X_1 - X)^2 + (X_2 - X)^2 \dots + (X_n - X)^2}{n-1}$$

where "n" denotes the number of observations in the set of data.

(3) The t-test uses these data summary measures to calculate a t-statistic ( $t^*$ ) and a comparison t-statistic ( $t_c$ ). The  $t^*$  value is compared to the  $t_c$  value and a conclusion reached as to whether there has been a statistically significant change in any indicator parameter.

(4) The t-statistic for all parameters except pH and similar monitoring parameters is:

$$t^* = \frac{\overline{X_m} - \overline{X_B}}{\sqrt{\frac{S_m^2}{n_m} + \frac{S_m^2}{n_B}}}$$

If the value of this t-statistic is negative, there is no significant difference between the monitoring data and background data. It should be noted that significantly small negative values may be indicative of a failure of the assumption made for test validity, or errors have been made in collecting the background data.

(5) The t-statistic ( $t_c$ ), against which t\* will be compared, necessitates finding  $t_B$  and  $t_m$  from standard (one-tailed) tables where,

 $t_B$  = t-tables with ( $n_B$  - 1) degrees of freedom, at the 0.05 level of significance.  $t_m$  = t-tables with ( $n_m$  - 1) degrees of freedom, at the 0.05 level of significance.

Finally, the special weightings  $W_{\scriptscriptstyle B}$  and  $W_{\scriptscriptstyle m}$  are defined as:

and so the comparison t-statistic is:

- (6) The t-statistic ( $t^*$ ) is now compared with the comparison t-statistic ( $t_c$ ) using the following decision-rule:
  - If  $\underline{t^*}$  is equal to or larger than  $t_c$ , then conclude that there most likely has been a significant change in this specific parameter.
  - If  $\underline{t^*}$  is less than  $t_c$ , then conclude that, most likely, there has not been a change in this specific parameter.
- (7) The t-statistic for testing pH and similar monitoring parameters is constructed in the same manner as previously described except the negative sign (if any) is discarded and the caveat concerning the negative value is ignored. The standard (two-tailed) tables are used in the construction  $t_c$  for pH and similar monitoring parameters.
- (8) If  $t^*$  is equal to or larger than  $t_c$ , then conclude that there most likely has been a significant increase (if the initial  $t^*$  had been negative, this would imply a significant decrease). If  $t^*$  is less than  $t_c$ , then conclude that there most likely has been no change.
- (9) A further discussion of the test may be found in *Statistical Methods* (6th Edition, Section 4.14) by G.W. Snedecor and W.G. Cochran, or *Principles and Procedures of Statistics* (1st Edition, Section 5.8) by R.G.D. Steel and J.H. Torrie.

## 30.673: continued

## (10) Standard T-Tables 0.05 Level Of Significance.

Degrees of Freedom	t-values (one-tail)	t-values (two-tail)
1	6.314	12.706
2	2.920	4.303
3	2.353	3.182
4	2.132	2.776
5	2.015	2.571
6	1.943	2.447
7	1.895	2.365
8	1.860	2.306
9	1.833	2.262
10	1.812	2.228
11	1.796	2.201
12	1.782	2.179
13	1.771	2.160
14	1.761	2.145
15	1.753	2.131
16	1.746	2.120
17	1.740	2.110
18	1.734	2.101
19	1.729	2.093
20	1.725	2.086
21	1.721	2.080
22	1.717	2.074
23	1.714	2.069
24	1.711	2.064
25	1.708	2.060
30	1.697	2.042
40	1.684	2.021

Adopted from Table III of *Statistical Tables for Biological, Agricultural, and Medical Research* (1947, R.A. Fisher and F. Yates).

## 30.675: Probable High Groundwater Levels

## (1) For areas in Massachusetts other than Cape Cod:

(a) <u>Sand and gravel areas</u>. For estimating the probable high groundwater levels in sand and gravel areas in Massachusetts except Cape Cod, the following formula shall be used wherever practicable. Use of this formula allows for the estimation of the potential groundwater level rise at the facility site by correlation with the potential rise in an off-site observation well if the climatic trends and hydrogeologic conditions at the site and the well are similar. For an in-depth discussion of the derivation of this formula and its use see: *Probable High Groundwater Levels in Massachusetts*, U.S. Geological Survey, Water Resources Investigations, Open-File Report 80-1205 by Michael H. Frimpter.

$$S_{h} = S_{c} - S_{r} \qquad (OW_{c} - OW_{max})$$

$$OW_{r}$$

where:

 $S_h$  = estimated depth to probable high water level at the site;

 $S_c$  = measured depth to water at the site (ground level to water table);

 $OW_c$  = measured depth to water in the observation well which is used to correlate with

the water levels at the site (ground level to water table);

 $OW_{max}$  = depth to recorded maximum water level at the observation well which is used to

correlate with the water levels at the site;

 $S_r$  = range of water level where the site is located; and

OW<sub>r</sub> = recorded maximum value of annual range of water level at the observation well

which is used to correlate with the water levels at the site.

In the above equation, S<sub>c</sub> and OW<sub>c</sub> shall be measured in the same month. The observation well which is chosen to correlate with the water levels at the facility site shall be among those included in the report *Groundwater Levels in Massachusetts*, 1936-74: U.S. Geological Survey Open-File report, Massachusetts Hydrologic-Data Report 17 by Anthony Maevsky. The observation well shall be located in the same type of climate and hydrogeologic environment as the facility site.

Values of  $OW_{max}$  and  $OW_{r}$  shall be obtained from the chosen observation-well record.  $OW_{max}$  shall be found by reviewing the historical record of measurements and finding the depth from ground level to water table level that corresponds to the maximum water level ever recorded at the observation well site.  $OW_{r}$  shall be determined by finding the maximum water level fluctuation that ever occurred during one year of recordings at the observation well (*i.e.*, the "range" or the maximum difference in water table levels ever recorded during a one year period).

The value of  $S_r$  shall be as follows:

Sand and gravel deposits on terraces and hillsides

10 feet
Sand and gravel deposits in valleys

4 feet

These values represent a range of water level at the site that is unlikely to be exceeded.

(b) <u>Areas of till</u>. For estimating the probable high groundwater level in areas of till, a series of measurements shall be taken to determine the high groundwater level for a particular year, and the following method shall be used, wherever practicable.

To estimate the maximum water level, a proportion is used. That proportion is: The potential water-level rise at the site is to the maximum annual water-level range at the site as the potential water-level rise at an observation well is to the maximum annual water-level range at the observation well, where the potential rise is the difference between the highest and current water levels. For the use of the formula below, a value of five feet was chosen to represent the maximum annual water-level range at the site. Analysis of records of over 5000 water level measurements in 15 wells in till between 1936 and 1982 show that the mean range of maximum annual water levels is about five feet. For an illustration of the variables which are used in the formula, *see* Figure 30.675(1)(b).

Difference between current and maximum levels at site Range of maximum annual level at site

$$S_c - S_m$$
 $S_m = S_c - 5 x$ 

Difference between current and maximum levels at observation well Range of maximum annual level at observation well

 $S_c - S_m$ 
 $S_m = S_c - 5 x$ 
 $S_m = S_c - 5 x$ 
 $S_m = S_c - 5 x$ 

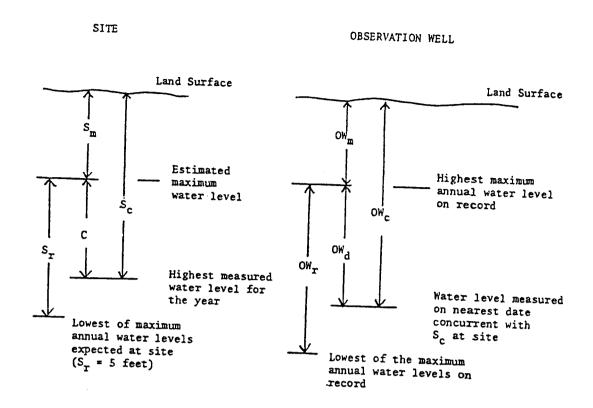
Steps in the method are as follows: Measure and record the water level on a weekly basis from March 15 to May 15. From the observation well location map select the most representative observation well on a basis of geographic proximity. From reports of the U.S. Geological Survey determine the water level  $(OW_c)$  in that observation well for the concurrent date, the date closest to the date at which the highest water level was measured at the site. Determine from Table 30.675(1)(b), provided here, the maximum recorded water level  $(OW_m)$  and the range of annual maximum water level  $(OW_r)$  for the same observation well. Substitute these values of  $OW_c$ ,  $OW_m$  and  $OW_r$ , and the current maximum annual water level measured at the site  $(S_c)$  in the formula and solve for the estimated maximum water level at the site  $(S_m)$ .

Based on the small available sample of 10 representative observation wells in till there is a 10% chance that the maximum annual range at a site would exceed the estimate by about one foot. See the range of  $OW_r$  in Table 30.675(1)(b).

TABLE 30.675(1)(b)

Maximum Water Levels and Maimum Annual Water-Level Ranges for Observation Wells in Till				
LOCATION	NUMBER	$\mathrm{OW}_{\mathrm{m}}$	$OW_r$	
Andover	AJW-26	3.47	5.48	
Cheshire	CJW-2	0.14	4.00	
East Bridgewater	EBW-30	2.40	5.78	
Great Barrington	GMW-2	5.09	5.65	
Lowell	L2W-14	7.79	6.11	
Middleborough	MTW-82	1.57	4.68	
Northborough	NUW-38	0.96	3.58	
Topsfield	TQW-1	5.64	4.49	
Weymouth	XGW-2	5.25	4.44	
Winchester	XOW-14	4.03	4.69	

Most, but not all, facility sites will be located in one of the hydrogeologic settings discussed above. As an example, a surface impoundment might be located on a terrace composed largely of silt. In such a case, the formula is not valid. The estimation of the probable high groundwater levels shall be based upon measurements of the water level at the facility site in the months of March, April and May and a best possible prediction of the highest water table levels that can reasonably be expected throughout the facility's operating life (and beyond if a land disposal facility). Soil mottling may help to verify this prediction. In rare instances, long term historical data (15 years or more) of water levels may actually be available at the facility site. In these cases, the probable high groundwater levels can be determined directly from this data.



(2) <u>Probable High Groundwater Levels For Cape Cod</u>. For estimating the probable high water level in sand and gravel areas of Cape Cod, the following method shall be used wherever practicable. It cannot be applied in areas where low permeability layers of silt, clay or till are present. Some parts of Cape Cod show no pattern for annual water level range. In these locations, soil conditions are unsuitable for water level estimation. In cases where the following procedure is not applicable, tests for water levels shall be conducted at the site during March, April and May and a best possible judgment made of the probable high groundwater levels considering hydro-geologic and climatic trends.

Probable high groundwater levels at a site in Cape Cod shall be made by correlation of a single water-level measurement from a facility test site with water level records from one of nine index wells which have been established by the U.S. Geological Survey. For the rationale behind the establishment of the estimating procedure, and for an in-depth discussion of its use, see: *Probable High Groundwater Levels on Cape Cod, Massachusetts*, U.S. Geological Survey, Water-Resources Investigations, Open-File Report 80-1008 by Michael H. Frimpter. Also, in order to estimate the probable high groundwater levels, Plate 1 and Plate 2 from that report will need to be utilized. These plates subdivide Cape Cod into nine areas in which water level fluctuations in each area are best represented by a particular index well.

The formula which is used to estimate the depth to the probable high water level at the site is similar to the formula that is used for finding probable high water levels for areas in Massachusetts other than Cape Cod:

$$S_{h} = S_{c} - S_{r} \quad (OW_{c} - OW_{max})$$

$$\overline{OW_{r}}$$

or

Estimated depth to probable = measured depth to - water level high water table water at the site adjustment

where 
$$S_r(OW_c - OW_{max})$$
 = the water level adjustment  $OW_c$ 

#### 30.675: continued

However, in this case  $S_r$ , the maximum value of the annual range of water level at the facility site, will be one of five values (2, 3, 4, 5 or 6 feet), depending upon the particular geographical zone in which the facility is situated. In areas of perched groundwater tables, a value  $S_r = 10$  may be used, but only with written approval of the Department.

In order to simplify the use of this formula, a series of nine tables has been developed. These tables appear in the Report cited in 310 CMR 30.675(2). One table has been prepared for each of the nine index observation wells. The water level adjustment value shall be found from these tables once the geographic zone of the facility site is known and the water levels in the index well and at a specific site have been measured.

## **Procedure**

- 1. Measure, to the nearest 1/10th of a foot, the depth to the water table below land surface at the facility site.
- 2. Find the location on Plate 1 or Plate 2 of the facility test site. From this Plate determine the geographical zone in which the facility site exists (Zone A, B, C, D or E). Also determine the index well which shall be used.
- 3. Determine the depth to water in the appropriate index well for the month in which the depth to water was measured at the facility site (or previous month if current data are not yet available; see the NOTE below). (The U.S. Geological survey reports the index-well measurements monthly to the Regional Environmental Engineers of the Department and to the Cape Cod Planning and Economic Development Commission.)
- 4. Use the appropriate table (*See* Sample Table 30.675(2)) and find the depth to water level adjustment value from the Table based upon the geographical zone where the site is located and the reported depth to water in the index well. (Refer to the U.S.G.S. report for the complete set of tables).
- 5. Subtract the water-level adjustment value from the measured depth to water at the facility site to obtain the estimate of depth to the probable high water level.

NOTE:

Because the locations of the boundaries between the areas represented by the index wells are somewhat inexact, the above-cited report suggests that, when the site being evaluated is within 1,000 feet of such a boundary, estimates should be calculated from both index wells. The higher of the two groundwater levels calculated would be less likely to be exceeded.

The water level for the month in which the site testing was done should be used in Procedure 3. However, the water level reported for the index well for the month previous to the month in which the site was tested may be used, provided that 0.25 feet is subtracted from the depth to the water level for each week or fraction thereof between the date of the site test and the end of the previous month. For example, if an estimate for a site test made on the 8th of August (8/7 = 1.14) should be adjusted by subtracting 0.3 feet from the reported July water level for the index well. This adjustment need only be applied when the test site is measured in the months of May, June, July, August, September, or October. The adjustment is based on the recorded maximum water level decline of 0.99 feet over a one month period in all nine index wells and the observation that groundwater levels on Cape Cod generally decline from May through October.

## SAMPLE TABLE 30.675(2)

# Water-level Adjustments, in Feet, for Use with Index Well Barnstable A1W-230 (Located in Zone C)

Measured water level (OW <sub>c</sub> in feet below land	Zone A	Zone B	Zone C	Zone D	Zone E
surface)	$(2/4)^1$	$(3/4)^1$	$(4/4)^1$	$(5/4)^1$	$(6/4)^1$
$21.1^{2}$	0.0	0.0	0.0	0.0	0.0
21.2	.0	.1	.1	.1	.1
21.3	.1	.1	.2	.2	.3
21.4	.1	.2	.3	.4	.4
21.5	.2	.3	.4	.5	.6
21.6	.2	.4	.5	.6	.7
21.7	.3	.4	.6	.7	.9
21.8	.3	.5	.7	.9	1.0
21.9	.4	.6	.8	1.0	1.2
22.0	.4	.7	.9	1.1	1.3
22.1	.5	.7	1.0	1.2	1.5
22.2	.5	.8	1.1	1.4	1.6
22.3	.6	.9	1.2	1.5	1.8
22.4	.6	1.0	1.3	1.6	1.9
22.5	.7	1.0	1.4	1.7	2.1
22.6	.7	1.1	1.5	1.9	2.2
22.7	.8	1.2	1.6	2.0	2.4
22.8	.8	1.3	1.7	2.1	2.5
22.9	.9	1.3	1.8	2.2	2.7
23.0	.9	1.4	1.9	2.4	2.8
23.1	1.0	1.5	2.0	2.5	3.0
23.2	1.0	1.6	2.1	2.6	3.1
23.3	1.1	1.6	2.2	2.7	3.3
23.4	1.1	1.7	2.3	2.9	3.4
23.5	1.2	1.8	2.4	3.0	3.6
23.6	1.2	1.9	2.5	3.1	3.7
23.7	1.3	1.9	2.6	3.2	3.9
23.8	1.3	2.0	2.7	3.4	4.0
23.9 24.0	1.4 1.4	2.1 2.2	2.8 2.9	3.5 3.6	4.2 4.3
24.0	1.4	2.2	3.0	3.7	4.5
24.1	1.5	2.2	3.0	3.7	4.5
24.2	1.6	2.3	3.2	4.0	4.8
24.4	1.6	2.5	3.3	4.1	4.9
24.5	1.7	2.5	3.4	4.2	5.1
24.6	1.7	2.6	3.5	4.4	5.2
24.7	1.8	2.7	3.6	4.5	5.4
24.8	1.8	2.8	3.7	4.6	5.5
24.9	1.9	2.8	3.8	4.7	5.7
25.0	1.9	2.9	3.9	4.9	5.8
25.1	2.0	3.0	4.0	5.0	6.0
25.2	2.0	3.1	4.1	5.1	6.1
25.3	2.1	3.1	4.2	5.2	6.3
25.4	2.1	3.2	4.3	5.4	6.4
25.5	2.2	3.3	4.4	5.5	6.6
25.6	2.2	3.4	4.5	5.6	6.7

30.675: continued

## SAMPLE TABLE 30.675(2) (continued) Water-level Adjustments, in Feet, for Use with Index Well Barnstable A1W-230 (Located in Zone C)

Measured water level (OW° in feet below land surface)	Zone A	Zone B	Zone C	Zone D	Zone E
	$(2/4)^1$	(3/4) <sup>1</sup>	(4/4) <sup>1</sup>	(5/4) <sup>1</sup>	(6/4) <sup>1</sup>
25.7	2.3	3.4	4.6	5.7	6.9
25.8	2.3	3.5	4.7	5.9	7.0
25.9	2.4	3.6	4.8	6.0	7.2
26.0	2.4	3.7	4.9	6.1	7.3
26.1	2.5	3.7	5.0	6.2	7.5
26.2	2.5	3.8	5.1	6.4	7.6
26.3	2.6	3.9	5.2	6.5	7.8
26.4	2.6	4.0	5.3	6.6	7.9
26.5	2.7	4.0	5.4	6.7	8.1
26.6	2.7	4.1	5.5	6.9	8.2
26.7	2.8	4.2	5.6	7.0	8.4

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(3) <u>Alternative Methods</u>. The Department may accept alternative methods for determining probable high groundwater levels if such methods are demonstrated to give equally reliable results. For the purposes of 310 CMR 30.000, alternative methods may be used only following written approval by the Department.

## 30.680: Use and Management of Containers

## 30.681: Applicability

310 CMR 30.681 through 30.689, cited collectively as 310 CMR 30.680, prescribe requirements which apply to owners and operators of all facilities that use containers to store hazardous waste.

## 30.682: Labelling and Marking

Throughout the period of storage, the side of each container of hazardous waste shall be clearly labeled and marked in a manner which identifies, in words, the hazardous waste(s) being stored in the container (*e.g.*, acetone, toluene) and the hazard(s) associated with the waste (*e.g.*, ignitable, toxic, dangerous when wet). Each container shall also be marked with the words "Hazardous Waste".

## 30.683: Condition of Containers

If a container holding hazardous waste is not in good condition (*e.g.*, severe rusting, apparent structural defects) or if it begins to leak, the owner or operator shall transfer the hazardous waste from this container to a container that is in good condition, or manage the hazardous waste in some other way that complies with the requirements of 310 CMR 30.000.

## 30.684: Compatibility of Waste with Containers

The owner or operator shall store hazardous waste in a container made of or lined with materials which will not react with, and are otherwise compatible with, the hazardous waste to be stored in the container.

 $S_r/OW_r =$ 

<sup>&</sup>lt;sup>2</sup> Recorded highest water level (OW<sub>max</sub>).

#### 30.685: Management of Containers

- (1) A container holding hazardous waste shall always be closed during storage, except when waste is being added or removed. In the event that Federal, State or local law or regulation requires a container to be vented, the container shall be vented only through devices such as pressure relief valves that satisfy ASTM or fire prevention standards (as opposed to open venting) and only in a manner that does not present a threat to public health, safety, or welfare or the environment.
- (2) A container holding hazardous waste shall not be opened, handled or stored in a manner which may rupture the container or cause it to leak. If containers are stacked, they shall be stacked in a manner that allows the containers to be easily and safely inspected, and pallets shall be used to separate the containers.
- (3) Aisle spacing for container storage of ignitable or reactive hazardous waste shall meet the guidelines set forth in the National Fire Protection Association's Flammable and Combustible Liquids Code (NFPA-30, Chapter 4) 2003 Edition.
- (4) Aisle spacing for container storage of hazardous waste shall be such that the owner or operator or the Department can inspect each row of containers to ensure compliance with 310 CMR 30.680.

## 30.686: Inspections

At least weekly, the owner or operator shall inspect areas where containers are stored, looking for leaking and for deterioration, caused by corrosion or other factors, of containers and the containment system.

## 30.687: Containment

- (1) Each container storage area shall have a containment system that is designed and operated in compliance with 310 CMR 30.687(2), except as otherwise provided by 310 CMR 30.687(3).
- (2) Each containment system shall be designed, constructed, operated and maintained as follows:
  - (a) Underlying the containers shall be a base which is free of cracks and gaps and is sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed;
  - (b) Unless the containers are elevated or are otherwise protected from contact with accumulated liquids, the base shall be sloped or the containment system shall be otherwise designed, constructed, operated and maintained to drain and remove liquids resulting from leaks, spills, or precipitation.
  - (c) For containers which are stored indoors or under a roof, the containment system shall have the capacity to contain either 10% of the total possible contained volume of the containers or 100% of the volume of the largest container, whichever is greater. For containers which are stored outdoors, the containment system shall have the capacity to contain either 10% of the total possible contained volume of the containers or 110% of the volume of the largest container, whichever is greater. Containers that do not contain free liquids need not be considered in determining the containment system's required capacity.
  - (d) The owner or operator shall prevent run-on into the containment system, unless the collection system has sufficient excess capacity, in addition to that required by 310 CMR 30.687(2)(c), to contain the run-on which would enter the system from a 24-hour, 25-year storm.
  - (e) To prevent overflow of the collection system, the owner or operator shall remove spilled or leaked waste and accumulated precipitation from the sump or collection area in as timely a manner as possible. If the collected material is hazardous waste pursuant to 310 CMR 30.100, it shall be managed as hazardous waste in compliance with 310 CMR 30.000.

#### 30.687: continued

- (3) Storage areas that store containers holding only hazardous wastes that do not contain free liquids and that do not contain any polyhalogenated aromatic hydrocarbons, need not have a containment system required by 310 CMR 30.687(2), if:
  - (a) The storage area is sloped or is otherwise designed and operated to drain and remove liquid resulting from precipitation; or
  - (b) The containers are elevated or are otherwise protected from contact with accumulated liquid.

# 30.688: Special Requirements for Ignitable, Reactive, and Incompatible Hazardous Wastes, and Hazardous Wastes that are Polyhalogenated Aromatic Hydrocarbons

- (1) Containers holding ignitable or reactive hazardous waste shall be located at least 15 meters from the facility's property line.
- (2) Incompatible hazardous wastes or materials incompatible with hazardous wastes (*see* 310 CMR 30.561 for examples) shall not be placed in the same container unless 310 CMR 30.560(3) is complied with.
- (3) Hazardous waste shall not be placed in an unwashed container that previously held waste or material incompatible with such hazardous waste.
- (4) A container holding a hazardous waste that is incompatible with any waste or other material stored nearby in other containers or in piles, open tanks or surface impoundments shall be separated from the other waste or other material or protected from it by means of a dike, berm, wall, or other device.
- (5) If containers holding polyhalogenated aromatic hydrocarbons are to be located or used at the facility, the facility's contingency plan shall include the following:
  - (a) Procedures for responding to spills or leaks of polyhalogenated aromatic hydrocarbons into the containment system.
  - (b) Procedures for removing polyhalogenated aromatic hydrocarbons from the containment system.
  - (c) Procedures for repairing or replacing leaking containers.

## 30.689: Closure

- (1) At closure, the owner or operator shall remove all hazardous waste and hazardous waste residues from the containment system and shall decontaminate or remove all remaining containers, liners, bases and soil containing or contaminated with hazardous waste or hazardous waste residues.
- (2) Upon removing hazardous waste from the containment system, the owner or operator shall become a generator of hazardous waste and shall manage it in compliance with all applicable requirements of 310 CMR 30.000.

## 30.690: STORAGE AND TREATMENT IN TANKS

## 30.691: Applicability

- 310 CMR 30.691 through 30.699, cited collectively as 310 CMR 30.690, prescribe requirements which apply to owners and operators of facilities that use tanks to treat or store hazardous waste, except:
- (1) Tank systems that are used to store or treat hazardous waste which contains no free liquids and are situated inside a building with an impermeable floor are exempted from the requirements in 310 CMR 30.694. To demonstrate the absence or presence of free liquids in the stored/treated waste, EPA method 9095B (Paint Filter Liquids Test) as specified in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, EPA Publication SW-846, as incorporated by reference at 310 CMR 30.012 shall be used.

## 30.691: continued

(2) Tank systems, including sumps, that serve as part of a secondary containment system to collect or contain releases of hazardous waste are exempted from the requirements of 310 CMR 30.694.

## 30.692: Assessment of Existing Tank System's Integrity

- (1) For each existing tank system that does not have secondary containment meeting the requirements of 310 CMR 30.694, the owner or operator shall determine that the tank system is not leaking and does not pose a threat of release of hazardous waste to the environment. By no later than June 1, 1989, the owner or operator shall obtain a written assessment that has been reviewed and certified by a Massachusetts registered professional engineer, in accordance with 310 CMR 30.009, and that attests to the system's integrity. Once obtained, this assessment shall be kept on file at the facility until the facility has been closed pursuant to 310 CMR 30.699.
- (2) This assessment shall correctly determine that the tank system is adequately designed and has sufficient structural strength and compatibility with the waste(s) to be stored or treated, to ensure that it will not collapse, rupture, or fail. In addition, the assessment shall correctly demonstrate that a minimum shell thickness has been maintained at all times to ensure sufficient shell strength. At a minimum, this assessment shall consider the following:
  - (a) Design standard(s), if available, according to which the tank and ancillary equipment were constructed;
  - (b) The design of the tank, including, without limitation, the foundation, structural support, seams, and pressure controls;
  - (c) Hazardous characteristics of the waste(s) that have been or are intended to be, handled;
  - (d) Existing corrosion protection measures;
  - (e) Documented age of the tank system, if available (otherwise, an estimate of the age);
  - (f) A soil corrosion survey as described in 310 CMR 30.693(1)(c);
  - (g) The width, height, and materials of construction of the tank, and the specific gravity of the waste that has been, and is intended to be, placed in the tank, in establishing minimum shell thickness; and
  - (h) Results of a leak test, internal inspection, or other tank integrity examination such that 1. For non-enterable underground tanks, the assessment shall include a leak test method that has been approved by the State Fire Marshal and that is capable of taking into account the effects of temperature variations, tank end deflection, vapor pockets, and high water table effects. Such a leak test must have an accuracy equal to or greater than 0.1 gallons per hour for detecting leakage from the tank with a probability of detection of 0.99 and a probability of false positive of 0.01. As the state of the art of the technology for testing underground tanks improves, the Department may specify that a test with an accuracy of better than 0.1 gallons per hour be used; and
    - 2. For other than non-enterable underground tanks and for ancillary equipment, this assessment shall include a leak test in compliance with 310 CMR 30.692(2)(h)1., or other integrity examination, that is certified by a Massachusetts registered professional engineer in accordance with 310 CMR 30.009, that addresses leaks, cracks, corrosion, and erosion. (Note: The practices described in the American Petroleum Institute (API) Publication, Guide for Inspection of Refinery Equipment, Chapter XIII, *Atmospheric and Low-Pressure Storage Tanks*, 4th edition, 1981, may be used, where applicable, as guidelines for conducting other than a leak test.)
- (3) Owners or operators of tank systems in which are stored or treated materials that are classified as hazardous waste, pursuant to amendments to 310 CMR 30.000, that take effect on or after June 1, 1989, shall conduct and complete this assessment within 12 months after the date on which the materials became a hazardous waste.

#### 30.692: continued

- (4) If, as a result of the assessment conducted in accordance with 310 CMR 30.692(2)(h), a tank system is found to be leaking or to pose a threat of release to the environment, the owner or operator must comply with the requirements of 310 CMR 30.697.
- (5) Until such time as secondary containment in compliance with 310 CMR 30.694 is provided, all existing tank systems shall comply with the following:
  - (a) For non-enterable underground tanks, a leak test that meets the requirements of 310 CMR 30.692(2)(h)1. must be conducted at least once every 12 months;
  - (b) For other than non-enterable tanks, an integrity assessment in compliance with 310 CMR 30.692(2)(h)1. or 2. must be conducted at least once every 12 months;
  - (c) For all existing tanks:
    - 1. The owner or operator shall maintain accurate daily inventory records and shall check such records for indication of possible leakage from each tank. Inventory shall be based on the actual daily measurement and recording of tank liquid levels and the daily recording of a material balance for wastes entering and exiting the tank. Measurements shall be taken on all days except days (e.g., Sundays, holidays) when facility business is not transacted. The inventory records shall include a daily computation of gain or loss. All records shall be made part of the operating record of the facility and shall be kept at the facility, readily available to the personnel of the Department for inspection until the facility has been closed pursuant to 310 CMR 30.699.
    - 2. With the license application, the owner or operator shall submit a proposed test for determining whether any gain or loss of material in the tank system shall be considered a statistically significant gain or loss for any one (daily) material balance or series of material balances (*e.g.*, the running balance for a weekly period). Upon approval by the Department, this test for statistical significance shall be made a condition of the license;
    - 3. If the inventory control program required by 310 CMR 30.692(5)(c)1. indicates a statistically significant gain or loss of material as determined in compliance with 310 CMR 30.692(5)(c)2., the owner or operator shall comply with 310 CMR 30.697.
    - 4. If the Department determines in writing that it is infeasible for the owner or operator to comply with the inventory control program specified in 310 CMR 30.692(5)(c), the Department may specify in writing an alternate leak detection program.

## 30.693: Design and Installation of New Tank Systems or Components

- (1) Owners or operators of new tank systems or components shall obtain and submit to the Department, at the time information is submitted to the Department pursuant to 310 CMR 30.099(6) and 310 CMR 30.802, 310 CMR 30.099(7) and (8), or 310 CMR 30.850, a written assessment, reviewed and certified by an independent, qualified, registered professional engineer, in accordance with 310 CMR 30.009, attesting that the tank system has sufficient structural integrity and is acceptable for the storing and treating of hazardous waste. The assessment shall show that the foundation, structural support, seams, connections and pressure controls (if applicable) are adequately designed and that the tank system has sufficient structural strength, compatibility with the waste(s) to be stored or treated, and corrosion protection to ensure that it shall not collapse, rupture, or fail. This assessment be used by the Department, but which the Department will not be limited to considering, to determine the acceptability of the tank system design, must include, at a minimum, the following information:
  - (a) Design standard(s) according to which the tank(s) and/or ancillary equipment are constructed.
  - (b) Hazardous characteristics of the waste(s) to be handled.
  - (c) For new tank systems or components in which the external shell of a metal tank or any external metal component of the tank system will be in contact with the soil or with water, a determination by a corrosion expert of

#### 30.693: continued

- 1. Factors affecting the potential for corrosion, including but not limited to:
  - a. Soil moisture content;
  - b. Soil pH;
  - c. Soil sulfides level;
  - d. Soil resistivity;
  - e. Structure to soil potential;
  - f. Influence of nearby underground structures (e.g. piping);
  - g. Existence of stray electric current;
  - h. Existing corrosion protection measures (e.g. coating, cathodic protection); and
- 2. The type and degree of external corrosion protection that are needed to ensure the integrity of the tank system during the use of the tank system or component, consisting of one or more of the following
  - a. Corrosion-resistant materials of construction such as special alloys, fiberglass reinforced plastic, *etc.*;
  - b. Corrosion-resistant coating (such as epoxy, fiberglass, *etc.*) with cathodic protection (*e.g.* impressed current or sacrificial anodes); and
  - c. Electrical isolation devices such as insulating joints, flanges, etc.
- (NOTE Practices in providing corrosion protection for tank systems are published in the National Association of Corrosion Engineers (NACE) standard, *Recommended Practice* (RP-02-85) Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems, and the American Petroleum Institute (API) Publication 1632, Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems.)
- (d) For underground tank system components that are likely to be adversely affected by vehicular traffic, a determination of design or operational measures that will protect the tank system against potential damage; and
- (e) Design considerations to ensure that:
  - 1. Tank foundations will maintain the load of a full tank;
  - 2. Tank systems will be anchored to prevent flotation or dislodgement where the tank system is placed within ten feet of a saturated zone; and
  - 3. Tank systems will withstand the effects of a frost heave.
- (2) All tanks installed on or after October 15, 1983 must be equipped with a means (e.g. manhole) for an individual to enter for inspection.
- (3) The owner or operator of a new tank system shall ensure that proper handling procedures shall be adhered to in order to prevent damage to the system during installation. Prior to covering, enclosing, or placing a new tank system or component in use, a Massachusetts registered professional engineer who is trained and experienced in the proper installation of tank systems or components shall inspect the system for the presence of weld breaks, punctures, scrapes of protective coatings, cracks, corrosion, or other structural damage or inadequate construction/installation. All discrepancies shall be remedied before the tank system is covered, enclosed, or placed in use.
- (4) New tank systems or components that are placed underground and that are backfilled must be provided with a backfill material that is a noncorrosive, porous, homogeneous substance and that is installed so that the backfill is placed completely around the tank and compacted to ensure that the tank and piping are fully and uniformly supported.
- (5) All new tanks and ancillary equipment must be tested for tightness pursuant to 310 CMR 30.692(2)(h)1. prior to being covered, enclosed, or placed in use. If a tank system is found not to be tight, all repairs necessary to remedy the leak(s) in the system must be performed before the tank system is covered, enclosed, or placed into use.

## 30.693: continued

- (6) Ancillary equipment must be supported and protected against physical damage and excessive stress due to settlement, vibration, expansion, or contraction.
- (7) The owner or operator must provide the type and degree of corrosion protection recommended by an independent corrosion expert, based on the information provided in 310 CMR 30.693(1)(c), or other corrosion protection if the Department believes that other corrosion protection is necessary to ensure the integrity of the tank system during use of the tank system. The installation of a tank system that is field fabricated must be supervised by an independent corrosion expert to ensure proper installation.
- (8) There shall be a rebuttable presumption that the Department should not license the storage or treatment, in an underground tank, of acutely hazardous waste identified or described in 310 CMR 30.136. Without limiting the generality of 310 CMR 30.810 through 30.813, the owner or operator may rebut this presumption by persuading the Department that there are no feasible alternatives to the storage or treatment of acutely hazardous waste in an underground tank (*e.g.*, by showing that another permitting authority requires that the waste be stored or treated underground).
- (9) No portion of an underground tank storing or treating hazardous waste shall be placed at or below the probable high groundwater level, as determined pursuant to 310 CMR 30.675, unless the owner or operator takes suitable measures, approved by the Department, which shall minimize the potential for corrosion or collapse of the tank and prevent flotation of the tank in the event that the tank is emptied.
- (10) The owner or operator must obtain written statements by those persons required to certify the design of the tank system and supervise the installation of the tank system in accordance with the requirements of 310 CMR 30.693(3), (4), (5), (6), and (7), that attest that the tank system was properly designed and installed and that repairs pursuant to 310 CMR 30.693(3) and (5), were performed. These written statements must be in compliance with 310 CMR 30.009. Once obtained, these statements shall be kept on file at the facility until the facility has been closed pursuant to 310 CMR 30.699.

# 30.694: Containment and Detection of Releases

- (1) In order to prevent the release of hazardous waste or hazardous constituents into the environment, secondary containment that meets the requirements of 310 CMR 30.694 must be provided except as provided in 310 CMR 30.694(6):
  - (a) For all new tank systems or components, before they are put into service;
  - (b) For all existing tank systems which are, or are intended to be, used to store polyhalogenated aromatic hydrocarbons or the hazardous waste no. F023, or located in an interim Zone II, or constructed of porous materials such as brick or concrete, by no later than two years from June 1, 1989;
  - (c) For all existing tank systems in which the tank is single-walled, bare steel, and cathodically unprotected, before the tank system reaches ten years of age, or by no later than two years from June 1, 1989, whichever comes later;
  - (d) For those tank systems referred to in 310 CMR 30.694(1)(c) for which the age cannot be documented, by no later than three years from June 1, 1989; but if the age of the facility is greater than seven years, secondary containment shall be provided before the facility reaches ten years of age, or by no later than two years from June 1, 1989, whichever comes later;
  - (e) For all other existing tank systems, when they reach 15 years of age, or by no later than two years from June 1, 1989, whichever comes later;
  - (f) For those tank systems referred to in 310 CMR 30.694(1)(e) for which the age cannot be documented, by no later than eight years from June 1, 1989; but if the age of the facility is greater than seven years, secondary containment shall be provided by the time the facility reaches 15 years of age, or by no later than two years from June 1, 1989, whichever comes later; and

#### 30.694: continued

- (g) For tank systems in which are stored or treated materials that are classified as hazardous waste pursuant to 310 CMR 30.000, on or after June 1, 1989, by no later than the time intervals required in 310 CMR 30.694(1)(a) through (f), except that the date that a material becomes a hazardous waste shall be used in place of the June 1, 1989 date set forth therein.
- (2) Secondary containment systems must be:
  - (a) Designed, installed, and operated to prevent any migration of wastes or accumulated liquid out of the system to the soil, groundwater, surface water, sewer system, or adjoining property at any time during the use of the tank system; and
  - (b) Capable of detecting and collecting releases and accumulated liquids until the collected material is removed.
- (3) To meet the requirements of 310 CMR 30.694(2), secondary containment systems must be at a minimum:
  - (a) Constructed of or lined with materials that are compatible with the waste(s) to be placed in the tank system. Such material must have sufficient strength and thickness to prevent failure owing to pressure gradients (including static head and external hydrological forces), physical contact with the waste to which it is exposed, climatic conditions, and the stress of daily operation (including stresses from nearby vehicular traffic);
  - (b) Placed on a foundation or base capable of providing support to the secondary containment system, resistance to pressure gradients above and below the system, and capable of preventing failure due to settlement, compression, or uplift; and
  - (c) Sloped or otherwise designed or operated to drain and remove liquids resulting from leaks spills, or precipitation. Spilled or leaked waste and accumulated precipitation must be removed from the secondary containment within 24 hours, or in as timely a manner as is possible to prevent a threat to public health, safety, welfare, or the environment, if the owner or operator can demonstrate to the Department that removal of the released waste or accumulated liquid cannot be accomplished within 24 hours. If the collected material is hazardous waste pursuant to 310 CMR 30.100, it shall be managed as hazardous waste in compliance with 310 CMR 30.000.
- (4) Secondary containment for all underground tanks must consist of either a double wall that is:
  - (a) Designed as an integral structure (*i.e.* an inner structure completely enveloped within an outer shell) so that any release from the inner tank is contained by the outer shell;
  - (b) Designed to prevent deterioration of the primary tank interior and of the external surface of the outer shell; and
  - (c) Provided with a leak detection system that is designed and operated so that that it will detect the failure of either the primary or secondary containment structure or the presence of any release of hazardous waste or accumulated liquid in the secondary containment system. Leak detection systems must be equipped with a visual or audible alarm to signal such a failure or release.
- (5) Secondary containment for aboveground tanks shall consist of:
  - (a) A double wall in compliance with 310 CMR 30.694(4)(a); or
  - (b) An external liner system that is:
    - 1. Designed or operated to contain either 10% of the total possible contained volume of the tanks or 110% of the volume of the largest single tank, whichever is greater. Where two or more tanks are connected, the owner or operator shall make provisions for shutting off the connection in the event of a release or threat of a release from the tank system;

#### 30.694: continued

- 2. Designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system unless the containment system has sufficient excess capacity to contain run-on or infiltration. Such additional capacity must be sufficient to contain precipitation from a 25-year, 24-hour rainfall event;
- 3. Provided with a continuous, impermeable interior coating or lining that is compatible with the stored waste and that will prevent migration of the waste into the substrate material:
- 4. Free of cracks or gaps; and
- 5. Designed and installed to surround the tank completely and to cover all surrounding surface likely to come into contact with the waste if the waste is released from the tank(s) (*i.e.*, capable of preventing lateral as well as vertical migration of the waste); or
- (c) A vault system that is:
  - 1. In compliance with 310 CMR 30.694(5)(b)1. through 3.;
  - 2. Constructed with chemical resistant water stops in place at all joints (if any);
  - 3. Provided with a means to protect against the formation and ignition of vapors within the vault, if the waste being stored or treated is ignitable or reactive as defined in 310 CMR 30.122 or 30.124;
  - 4. Provided with an exterior moisture barrier or is otherwise designed or operated to prevent migration of moisture into the vault if the vault is subject to hydraulic pressure.
- (6) Ancillary equipment shall be provided with secondary containment (*e.g.*, trench, jacketing, double-walled piping) that meets the requirements of 310 CMR 30.694(2) and (3) except for any of the following that are visually inspected for leaks on a daily basis:
  - (a) Aboveground piping (exclusive of flanges, joints, valves, and other connections);
  - (b) Welded flanges, welded joints, and welded connections;
  - (c) Sealless or magnetic coupling pumps and sealless valves; and
  - (d) Pressurized aboveground piping systems with automatic shut-off devices (e.g., excess flow check valves, flow metering shutdown devices, loss of pressure actuated shut-off devices).

# 30.695: General Operating Requirements

- (1) Hazardous wastes and other materials (*e.g.*, treatment reagents) which are incompatible with the material of construction of the tank shall not be placed in the tank unless the tank is protected from accelerated corrosion, erosion or abrasion through the use of:
  - (a) An inner liner or coating which is compatible with the hazardous waste or other material and which is free of leaks, cracks, holes and other deterioration; or
  - (b) Alternate means of protection (e.g., cathodic protection or corrosion inhibitors).
- (2) The owner or operator shall use appropriate controls and practices to prevent overfilling (e.g., waste feed cut-off or by-pass system to standby tank).
  - (a) Controls to prevent overfilling (e.g., waste feed cut-off or by-pass system to standby tank); and
  - (b) For uncovered tanks, maintenance of sufficient freeboard to prevent overtopping by wave or wind action or by precipitation.
- (3) Throughout the period of storage or treatment, each tank shall be clearly marked and labelled in a manner which clearly identifies, in words, the hazardous waste(s) being stored or treated in the tank (e.g., acetone, toluene) and the hazard(s) associated with the hazardous waste (e.g., ignitable, toxic, dangerous when wet). Each tank shall also be marked clearly with the words "Hazardous Waste".
- (4) In the event of a release of hazardous waste from the tank system, the owner or operator shall comply with 310 CMR 30.697.
- (5) A tank holding hazardous waste shall always be closed during storage, except when waste is being added or removed.

#### 30.696: Inspections

- (1) The owner or operator shall inspect:
  - (a) Controls to prevent overfilling (*e.g.*, waste feed cut-off systems and by-pass systems to a stand-by tank) at least once each operating day to ensure that such controls are in good working order;
  - (b) Data gathered from monitoring equipment (e.g., pressure and temperature gauges), where present, at least once each operating day to ensure that the tank is being operated according to its design;
  - (c) The construction materials and the area immediately surrounding the externally accessible portion of the tank system, including the secondary containment system (e.g., dikes), at least once daily, to detect erosion or signs of releases of hazardous waste (e.g., wet spots, dead vegetation).
- (2) The owner or operator must inspect cathodic protection systems, if present, according to, at a minimum, the following schedule to ensure that they are functioning properly:
  - (a) The proper operation of the cathodic protection system must be confirmed within six months after initial installation and annually thereafter; and
  - (b) All sources of impressed current must be inspected and/or tested, as appropriate, at least bimonthly (*i.e.*, every other month).
- (3) The frequency of the comprehensive assessment required by 310 CMR 30.696(2) shall be based on the material of construction of the tank, the type of corrosion or erosion protection used, the rate of corrosion or erosion observed during previous inspections, and the properties of the hazardous waste being treated or stored. The frequency of inspection shall also be based upon any anticipated change(s) in the waste or properties of the waste(s) that will be treated or stored throughout the tank's operating life and any impurities in a waste or mixture(s) of waste(s) which may result in a deterioration rate different from one which would be projected using standard corrosion charts and calculations.
- (4) As part of the contingency plan required by 310 CMR 30.520 through 30.524, the owner or operator shall specify the procedures he intends to use to respond to tank spills or leakage, including procedures and timing for expeditious removal of leaked or spilled waste and for repair of the tank.
- (5) The owner or operator must document in the operating record of the facility an inspection of those items in 310 CMR 30.696.

#### 30.697: Response to Leaks or Spills and Disposition of Leaking Tank Systems

The owner or operator shall remove from service immediately a tank system or secondary containment system from which there has been a leak or spill, or which poses a threat of release to the environment and shall satisfy the following requirements:

- (1) <u>Cessation of Use; Prevent Flow or Addition of Wastes</u>. The owner or operator shall immediately stop the flow of hazardous waste into the tank system or secondary containment system and determine the cause of the release.
- (2) Removal of Waste from the Tank System or Secondary Containment System.
  - (a) If the release was from the tank system, the owner or operator shall within 24 hours of the release or, if the owner or operator demonstrates that it is not possible, at the earliest practicable time, remove as much of the waste as is necessary to prevent further release of hazardous waste to the environment and to allow inspection and repair of the tank system to be performed.
  - (b) If the material released was to a secondary containment system, the owner or operator shall remove all released materials within 24 hours or in as timely a manner as possible to prevent a threat to public health, safety, welfare, or the environment.

#### 30.697: continued

- (3) <u>Containment of Visible Releases to the Environment</u>. The owner or operator shall immediately conduct a visual inspection of the release and, based upon that inspection:
  - (a) Prevent further migration of the leak or spill to soils or surface water; and
  - (b) Remove, and properly dispose of, any visible contamination of the soil or surface water.

# (4) Notifications, Reports.

- (a) The owner or operator shall report to the Department all releases or threats of releases of hazardous wastes to the environment as soon as possible but not more than two hours after obtaining knowledge thereof, and in compliance with 310 CMR 40.0000.
- (b) For any hazardous waste not having a reportable quantity pursuant to 310 CMR 40.0000 the owner or operator shall report to the Department releases or threats of release exceeding one pound in compliance with 310 CMR 30.697(4)(a).
- (c) The owner or operator shall report to the local fire departments releases from tanks.
- (d) Within seven days of the detection of a release to the environment, the owner or operator shall submit to the Department's Division of Hazardous Waste a written report containing the following information:
  - 1. Likely route of migration of the release;
  - 2. Characteristics of the surrounding soil (soil composition, geology, hydrology, climate);
  - 3. Results of any monitoring or sampling conducted in connection with the release (if available). If sampling or monitoring data relating to the release are not available within seven days, these data must be submitted to the Department as soon as they become available;
  - 4. Proximity to downgradient drinking water, surface water, and populated areas; and
  - 5. Description of response actions taken or planned.

#### (5) Provision of Secondary Containment, Repair, or Closure.

- (a) Unless the requirements of 310 CMR 30.697(5) are met, the owner or operator shall close the tank system in compliance with 310 CMR 30.699.
- (b) If the cause of the release was a spill that has not damaged the integrity of the system, the owner or operator may return the system to service as soon as the released waste is removed and repairs, if necessary, are made.
- (c) If the cause of the release was a leak from the primary tank system into the secondary containment system, the owner or operator shall repair the primary tank system prior to returning the tank system to service.
- (d) If the source of the release was a leak to the environment from a component of the tank system without secondary containment, the owner or operator shall provide the secondary containment for the component of the system from which the leak occurred. Such secondary containment shall meet the requirements of 310 CMR 30.694 before the component of the tank system may be returned to service, unless the source of the leak is an aboveground portion of a tank system that can be inspected visually.
- (e) If the source is an aboveground component that can be inspected visually, the owner or operator shall repair and may return the component to service without secondary containment provided that the requirements of 310 CMR 30.697(6) are met.
- (f) If a component is replaced to comply with the requirements of 310 CMR 30.697(5)(d), that component must meet the provisions of 310 CMR 30.693 and 30.694.
- (g) If a leak has occurred in any portion of a tank system component that is not readily accessible for visual inspection, (e.g., the bottom of an onground tank), the entire component must be provided with secondary containment in accordance with 310 CMR 30.694 prior to being returned to use.

#### 30.697: continued

(6) <u>Certification of Major Repairs</u>. If the owner or operator has repaired a tank system in accordance with 310 CMR 30.697(5), and the repair has been extensive (*e.g.*, repair of a ruptured primary containment or secondary containment vessel), the tank system must not be returned to service unless the owner or operator has obtained a certification by a Massachusetts registered professional engineer in accordance with 310 CMR 30.009 that the repaired system is capable of handling hazardous waste without release for the intended life of the system. This certification must be submitted to the Department within seven days after returning the tank system to use.

# 30.698: Special Requirements for Ignitable, Reactive, and Incompatible Hazardous Wastes, and Hazardous Wastes That Are Polyhalogenated Aromatic Hydrocarbons

- (1) Ignitable or reactive waste shall not be placed in a tank unless:
  - (a) The waste is treated before or immediately after placement in the tank so that the resulting waste is no longer ignitable or reactive hazardous waste pursuant to 310 CMR 30.122 or 30.124, and 30.560(3) is complied with; or
  - (b) The waste is stored or treated in such a way that it is protected from any material or conditions which might cause the waste to ignite or react; or
  - (c) The tank is used solely for emergencies.
- (2) The owner or operator of a facility which treats or stores ignitable or reactive waste in covered tanks shall comply with the National Fire Protection Association's (NFPA) buffer zone requirements in tables 2-1 through 2-6 of the *Flammable and Combustible Code*, 1981 and with the tank location requirements of 527 CMR 1.05: *Modifications to NFPA 1 2012 Edition*.
- (3) Incompatible hazardous wastes or materials incompatible with hazardous waste (*see* 310 CMR 30.561 for examples) shall not be placed in the same tank unless 310 CMR 30.560(3) is complied with.
- (4) Hazardous waste shall not be placed in an unwashed tank which previously held an incompatible waste or material unless 310 CMR 30.560(3) is complied with.
- (5) If tanks holding polyhalogenated aromatic hydrocarbons are to be located or used at the facility, the following requirements, in addition to any other set forth in 310 CMR 30.000, shall be complied with:
  - (a) Each such tank shall have a system designed and operated to detect and contain spills, leaks, or other releases from each such tank. The Department may approve the design and operation of such a system only if, after considering at least the following criteria, the Department determines that such approval is in accordance with provisions set forth in 310 CMR 30.810 through 30.814.
    - 1. the capacity of each such tank.
    - 2. the volume and characteristics of the waste stored or treated in each such tank.
    - 3. the method used for the collection of spills, leaks, or other releases from each such tank.
    - 4. the construction materials used for each such tank and for the system.
    - 5. the method used to prevent precipitation and run-on from entering the system.
  - (b) The facility's contingency plan shall include the following:
    - 1. procedures for responding to spills or leaks of polyhalogenated aromatic hydrocarbons into the containment system.
    - 2. procedures for removing polyhalogenated aromatic hydrocarbons from the containment system.
    - 3. procedures for repairing or replacing leaking tanks.

# 30.699: Closure and Post-closure Care

- (1) At closure of a tank system, the owner or operator shall remove or decontaminate all waste residues, contaminated containment system components, contaminated soils, and structures and equipment contaminated with waste, and manage them as hazardous waste, unless the conditions of 310 CMR 30.141 are met. The owner or operator shall be in compliance with all requirements for a closure plan, closure activities, cost estimates for closure, and financial responsibility for tank systems as set forth in 310 CMR 30.580, 30.590, and 30.900.
- (2) If the owner or operator demonstrates that not all contaminated soils can be practicably removed or decontaminated as required in 310 CMR 30.699(1), then the owner or operator shall close the tank system and perform post-closure care in accordance with the closure and post-closure care requirements that apply to landfills (310 CMR 30.633). In addition, for the purposes of closure, post-closure, and financial responsibility, such a tank system is considered to be a landfill, and the owner or operator shall meet all of the requirements for landfills specified in 310 CMR 30.580, 30.590 and 30.900.
- (3) If an owner or operator has a tank system that does not have secondary containment that meets the requirements of 310 CMR 30.694, then:
  - (a) The closure plan for the tank system shall include a plan for complying with 310 CMR 30.699(1) and a contingent plan for complying with 310 CMR 30.699(2).
  - (b) A contingent post-closure plan for complying with 310 CMR 30.699(2) shall be prepared and submitted as part of the permit application.
  - (c) The cost estimates calculated for closure and post-closure care shall reflect the costs of complying with the contingent closure plan and the contingent post-closure plan, if those costs are greater than the costs of complying with the closure plan prepared for the expected closure under 310 CMR 30.699(1).
  - (d) Financial assurance must be based on the cost estimates in 310 CMR 30.699(3)(c).
  - (e) For the purpose of the contingent closure and post-closure plans, such a tank system is considered to be a landfill, and the owner or operator shall be in compliance with all requirements for all of the closure, post-closure, and financial responsibility requirements for landfills under 310 CMR 30.580, 30.590, and 30.900.

# 30.700: FACILITY LOCATION STANDARDS

310 CMR 30.701 through 30.799, cited collectively as 310 CMR 30.700, set standards for the location of facilities subject to 310 CMR 30.800: *Licensing Requirements and Procedures*, and establish restrictions for generators, transporters, universal waste handlers, and facilities (whether licensed or operating pursuant to interim status) relating to the land disposal of specified hazardous wastes.

# 30.701: Land Subject to Flooding

310 CMR 30.701 applies to all inland and coastal land subject to flooding. The provisions that apply vary with the category of hazardous waste management unit and when the unit came into existence. 310 CMR 30.701(6) (for new or expanding units) and 30.701(7) (for existing units) apply to landfills, land treatment units, surface impoundments, waste piles and miscellaneous units. 310 CMR 30.701(1) through (5) apply to all other treatment or storage units.

- (1) No active portion of a new storage or treatment facility which receives hazardous waste from any off-site source shall be located within the boundary of land subject to flooding from the statistical 100-year frequency storm.
  - (a) This boundary shall be determined by reference to the most recently available flood profile data prepared pursuant to the National Flood Insurance Program (NFIP) for the city or town within which the facility is proposed to be located. Said boundary, as so determined, shall be presumed accurate. Whenever required by the Department, the owner or operator shall submit such information with the license application to the Department. This presumption may be overcome only by credible evidence, persuasive to the Department, submitted by an independent Massachusetts registered professional engineer or other professional competent in such matters.

#### 30.701: continued

- (b) Where NFIP profile data is unavailable, the license applicant shall determine the boundary of the land subject to flooding by using engineering calculations which shall be based upon the standard methodologies set forth in the U.S. Soil Conservation Service Technical Release No. 55, *Urban Hydrology For Small Watersheds* and section 4 of the U.S. Soil Conservation Service, *National Engineering Hydrology Handbook*. Another methodology may be used with written approval from the Department. This determination shall be made by an independent Massachusetts registered professional engineer or other professional competent in such matters.
- (2) The owner or operator of a new or expanding storage or treatment facility which receives no hazardous waste from any off-site source, and the active portion of which is located within the boundary of land subject to flooding from the statistical 100-year frequency storm, shall floodproof the active portion of the facility.
  - (a) Floodproofing shall be designed, constructed, operated and maintained to prevent floodwaters from coming into contact with hazardous waste.
  - (b) Either:
    - 1. Floodproofing shall be designed, constructed, operated and maintained to prevent floodwaters from coming into contact with any container or tank or other unit holding hazardous waste; or
    - 2. Any container, tank or other unit holding hazardous waste shall be designed, constructed, operated and maintained to withstand hydrostatic, dynamic and buoyant forces so as to be secured during the 100-year flood.
- (3) Each owner or operator shall floodproof each active portion of each existing storage or treatment facility which is located within the boundary of land subject to flooding from the statistical 100-year frequency storm. Floodproofing shall be in compliance with 310 CMR 30.701(2)(a) and (b).
- (4) No facility which receives hazardous waste from any off-site source shall be expanded into or within the boundary of land which is subject to flooding from the statistical 100-year frequency storm.
- (5) The owner or operator of each new storage or treatment facility which receives hazardous waste fron any off-site source shall floodproof each active portion located outside the boundary of land subject to flooding from the statistical 100-year frequency storm but within the boundary of land subject to flooding from the statistical 500-year frequency storm. For the purposes of 310 CMR 30.701(5) only, the term off-site shall not include the same or geographically contiguous property in single ownership which may be divided by public or private right-of-way, other than a limited access highway or a way to which the owner or operator has no physical or legal access, regardless of whether access is by crossing or by going along the right-of-way.
  - (a) Floodproofing shall be designed, constructed, operated and maintained to prevent floodwaters from coming into contact with hazardous waste.
  - (b) Either:
    - 1. Floodproofing shall be designed, constructed, operated and maintained to prevent floodwaters from coming into contact with any container, tank or other unit holding hazardous waste; or
    - 2. Any container, tank or other unit holding hazardous waste shall be designed, constructed, operated and maintained to withstand hydrostatic, dynamic and buoyant forces so as to be secured during the 500-year flood.
- (6) No active portion of a landfill, land treatment unit, surface impoundment, waste pile or miscellaneous unit shall be constructed or expanded into or within the boundary of land subject to flooding from the statistical 500-year frequency storm. This boundary shall be determined as set forth in 310 CMR 30.701(1)(a) and (b).

#### 30.701: continued

- (7) The owner or operator of each existing landfill, land treatment unit, surface impoundment, waste pile, disposal facility, or miscellaneous unit which is located within the boundary of land subject to flooding from the statistical 100-year frequency storm shall floodproof the active portion of the facility so that washout will not occur in the event of such a storm, unless the owner or operator persuades the Department that:
  - (a) taking into consideration the volume and physical and chemical properties of the waste in the facility and the impact of the concentrations of hazardous constituents on the current and potential uses of, and water quality standards established for, the affected surface waters and groundwater, as well as the impact on the sediments of affected surface waters or the soils of the 100- year flood plain that could result from washout, there will be no adverse effect on public health nd the environment if washout of hazardous waste occurs; and
  - (b) for surface impoundments, the waste contained in a surface impoundment is hazardous only because it is corrosive pursuant to 310 CMR 30.123(1).

# 30.702: Surface Water Supplies

- (1) No active portion of a new hazardous waste landfill, land treatment unit, surface impoundment or waste pile shall be located within the watershed of a class A or class SA segment of a surface water body as that term is defined in 310 CMR 30.010. The watershed area shall be as delineated by the Department on overlays of U.S.G.S. topographic maps.
- (2) No new or replacement underground tank shall be located within the watershed of a class A or class SA segment of a surface water body unless the owner or operator persuades the Department that there is no feasible alternative to storage or treatment in an underground tank (e.g., another permitting authority requires that a particular waste be stored underground). The watershed area shall be as delineated by the Department on overlays of U.S.G.S. topographic maps.

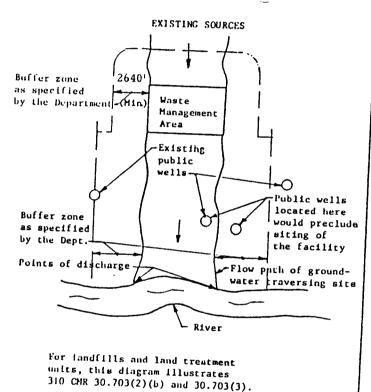
# 30.703: Actual, Planned, and Potential Public Underground Drinking Water Supplies

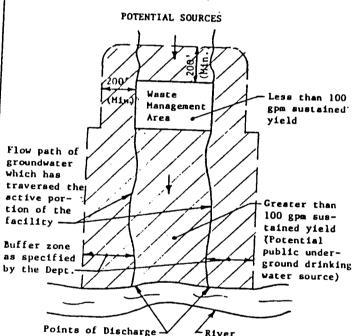
- (1) No new or replacement underground tank shall be located on land overlying an actual, planned or potential public underground drinking water source (see 310 CMR 30.010) unless the owner or operator persuades the Department that there is no feasible alternative to storage or treatment in an underground tank (e.g., another permitting authority requires that the waste be stored or treated underground).
- (2) No active portion of a new hazardous waste landfill, land treatment unit, surface impoundment, miscellaneous unit or waste pile shall be located:
  - (a) on land which is overlying an actual, planned or potential public underground drinking water source (see 310 CMR 30.010); or
  - (b) within a ½ mile (2640 feet) radius of an existing well used as a source of drinking water for a public water system, or within a Zone 2 if a Zone 2 has been delineated for that area.
- (3) No active portion of a hazardous waste landfill or land treatment unit shall be located in the flow path of groundwater supplying any well for any public water system. If a well which supplies a public water system is outside the natural flow path of groundwater traversing the facility site, the Department may specify an appropriate buffer zone to ensure that groundwater which has traversed the facility site does not supply such well (*see* Figure 30.703).
- (4) No active portion of a new hazardous waste landfill or land treatment facility shall be located in the flow path of a planned or potential public underground drinking water source. For the purposes of 310 CMR 30.703(4), an area shall not be considered to contain a potential public underground drinking water source if the area is already served by a public water system, the drinking water sources of which are all located outside the area described in 310 CMR 30.703(5)(a) and (b).

#### 30.703: continued

- (5) The owner or operator of a hazardous waste landfill or land treatment unit shall not be subject to 310 CMR 30.703(4) if he or she demonstrates to the Department that he owns the water rights within the area described as follows (*see* Figure 30.703):
  - (a) In the downgradient direction, the area is bounded by the edge of the active portion of the facility and by the points of discharge of groundwater traversing the active portion of the facility; and
  - (b) The other boundaries of the area are the boundaries of the flow path of groundwater traversing the active portion of the facility plus an adequate buffer zone as specified by the Department.
- (6) 310 CMR 30.703(1), (2), or (4) shall not apply to an aquifer if the owner or operator persuades the Department, after public notice and opportunity for public hearing, that said aquifer cannot and will not serve as a source of drinking water for a public water system because it is economically or technologically impractical to render that water fit for human consumption.

# FIGURE 30.703: PROTECTION OF EXISTING AND POTENTIAL PUBLIC UNDERGROUND DRINKING WATER SOURCES FROM LANDFILLS AND LAND TREATMENT FACILITIES



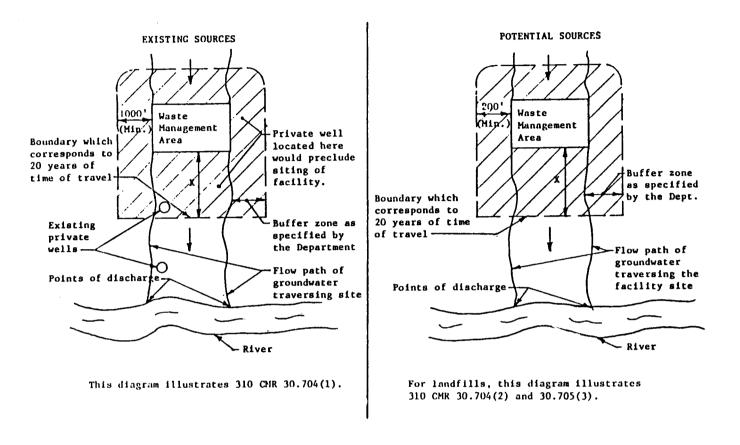


This diagram illustrates 310 CMR 30.703(5). Assume the waste management area is not over an aquifer that yields at least 100 gallons per minute of drinking water but that such yields can be obtained further downgradient. The facility cannot be located at this site unless the water rights within the shaded area are purchased.

#### 30.704: Private Water Supplies

- (1) (a) Except as provided in 310 CMR 30.704(1)(b), no active portion of a new hazardous waste landfill shall be located in the flow path of groundwater supplying water to an existing well which is used as a source of drinking water supply by a person other than a public water system and which is located within a distance that corresponds to 20 years of travel of groundwater which has traversed the facility site (*see* Figure 30.704). If such a well is located outside the natural flowpath of groundwater traversing the facility site, the Department may specify an appropriate buffer zone to ensure that groundwater traversing the facility site does not supply such a well. The owner or operator need not make such a determination of time-of-travel for any such well located one mile or more downgradient from the active portion of the facility. In no case shall any active portion of any hazardous waste landfill be located within 1000 feet of an existing well used as a source of drinking water supply by a person other than a public water system.
  - (b) 310 CMR 30.704(1)(a) shall not apply if the owner or operator:
    - 1. provides to the affected person(s) alternative drinking water which is acceptable to the Department; or
    - 2. purchases the affected water rights.
- (2) No active portion of a hazardous waste landfill shall be located in the flow path of groundwater supplying a potential private underground drinking water source (*see* 310 CMR 30.010) unless the owner or operator owns the water rights within the area described as follows (*see* 310 CMR 30.000: *Figure* 30.704):
  - (a) In the downgradient direction, the area is bounded by the edge of the active portion of the facility and by a boundary downgradient which represents 20 years of travel time of groundwater which has traversed the active portion of the facility; and
  - (b) The other boundaries of the area are the boundaries of the flow path of groundwater which has traversed the active portion of the facility plus an adequate buffer zone as specified by the Department.
- (3) The active portion of a new surface impoundment, land treatment unit or waste pile shall not be located within a 1000-foot radius of an existing well which is used as a source of drinking water supply by a person other than a public water system.
- (4) 310 CMR 30.704(2) shall not apply to a groundwater source if the owner or operator persuades the Department, after public notice and opportunity for public hearing, that said source cannot and will not serve as a source of drinking water because it is economically or technologically impractical to render that water fit for human consumption.

# FIGURE 30.704 PROTECTION OF EXISTING AND POTENTIAL PRIVATE UNDERGROUND DRINKING WATER SOURCES FROM LANDFILLS



NOTE: In order to simplify the diagram, the soil is assumed to be homogeneous and therefore, the boundary representing 20 years of travel is shown as linear.

## 30.705: Other Location Considerations

- (1) In making each licensing decision pursuant to 310 CMR 30.800, the Department shall evaluate the following factors with regard to the location of each new facility:
  - (a) The transportation risk(s) associated with waste(s) arriving at, or leaving, the facility;
  - (b) The adequacy of buffer zones between the active portion(s) of the facility and areas of public access;
  - (c) The population density in the vicinity of the facility site;
  - (d) The proximity of the facility to sensitive receptors (e.g., schools, hospitals, nursing homes, day care centers); and
  - (e) Where applicable, the proposed method(s) of evacuation of threatened populations within a reasonable time after an accident.
- (2) The owner or operator shall submit with the license application all pertinent data and information so that the Department may make the evaluation specified in 310 CMR 30.705(1).
- (3) The owner or operator of a new landfill, surface impoundment, land treatment unit, or waste pile shall provide for a buffer zone of at least 200 feet between the active portion of the facility and the facility property line (*see* Figure 30.704).
- (4) The requirements of 310 CMR 30.705(4)(a) and (b) apply only to new hazardous waste facilities at new installations, as that term is defined in 310 CMR 30.010, at which a license applicant proposes the storage or treatment of hazardous waste which is ignitable pursuant to 310 CMR 30.122(1) or reactive pursuant to 310 CMR 30.124(1).
  - (a) There shall be a minimum distance of at least 300 feet from the active portion of the facility to the facility property line. The Department may approve a lesser distance if the owner or operator persuades the Department that such lesser distance is sufficient to protect public health, safety and welfare. The owner or operator shall submit with the license application a written justification for a lesser distance. In determining whether a lesser distance would be sufficient to protect public health, safety and welfare, the Department shall consider, but shall not be limited to, the following factors:
    - 1. The volumes, properties, and degree(s) of hazard of the ignitable or reactive waste(s) to be stored or treated at the facility;
    - 2. The method(s) of storage or treatment;
    - 3. Topographic features in the vicinity of the site;
    - 4. Atmospheric conditions in the vicinity of the site;
    - 5. Proximity of the facility to receptors and the types of receptors (e.g., homes, businesses, schools, hospitals, nursing homes, day care centers);
    - 6. Specific facility design features and operation procedures which eliminate or reduce potential dangers to public health, safety or welfare.
  - (b) The Department may require a distance greater 300 feet between the active portion of the facility and the property line if the Department determines, considering the factors listed in 310 CMR 30.705(4)(a)1. through 6., that 300 feet is not sufficient to protect public health, safety or welfare.
  - (c) In no case shall the distance between the active portion of the facility and the property line be less than those distances specified in 310 CMR 30.688(1) for containers and 310 CMR 30.698(2) for tanks.
- (5) The requirements of 310 CMR 30.705(5) apply only to each existing installation at which there is an existing hazardous waste facility, or at which there is a proposed expansion of an existing hazardous waste facility or a new waste facility at which a license applicant does or proposes to store or treat hazardous waste which is ignitable pursuant to 310 CMR 30.122(1) or reactive pursuant to 310 CMR 30.124(1). The owner or operator shall submit with the license application a written evaluation of existing or proposed buffer zones between the active portion(s) of the facility and the facility property line. The evaluation shall include, but not be limited to, consideration of the factors set forth in 310 CMR 30.705(4)(a)1. through 6. In the license, the Department may specify such requirements as may be appropriate to protect public health, safety and welfare.

#### 30.705: continued

(6) No active portion of a landfill, land treatment unit, surface impoundment or waste pile shall be constructed or expanded into wetlands defined pursuant to M.G.L. c. 130, § 105 or M.G.L. c. 131, § 40.

#### 30.706: Disposal into Waterbodies

The disposal of hazardous waste into the ocean, or into any lake or pond, whether naturally occurring or man-made, or into any river, stream, spring, or estuary, or into any land under the ocean or under any lake or pond, whether naturally occurring or man-made, or under any river, stream, spring, or estuary, is prohibited.

# 30.707: Disposal into Salt Domes, Salt Bed Formations, Underground Mines, and Caves

No person shall place any hazardous waste, or any container or tank holding hazardous waste, in any salt dome, salt bed formation, underground mine, or cave.

#### 30.708: Areas of Critical Environmental Concern

Notwithstanding any other provision of 310 CMR 30.000, no facility shall be located where such location or any portion thereof:

- (1) Would be within an Area of Critical Environmental Concern (ACEC), as designated by the Secretary of the Executive Office of Energy and Environmental Affairs; or
- (2) Would fail to protect the outstanding resources of an ACEC as identified in the Secretary's designation if the facility is to be located outside, but adjacent to or in close proximity to, an ACEC.

# 30.750: Land Disposal Restrictions

- (1) 310 CMR 30.750 identifies those wastes which shall not be land disposed and describes the limited circumstances under which an otherwise prohibited waste may continue to be land disposed.
  - (a) The requirements for hazardous wastes that are prohibited or restricted from land disposal are contained in the following provisions which are hereby incorporated by reference: 40 CFR 268.1 through 268.4; 268.7, 268.9(b) through (d); 268.14, 268.20, 268.30 through 268.50 (except for 268.42(b) and 268.44(a) through (g)); and Appendices III, IV, VI, and XI, subject to the exceptions, modifications and additions set forth in 310 CMR 30.750(2) and (3).
  - (b) The requirements regarding the use of hazardous waste numbers for hazardous wastes that are prohibited or restricted from land disposal are contained in 310 CMR 30.103 and 30.302 rather than incorporating by reference 40 CFR 268.9(a).
  - (c) The following requirements are not incorporated by reference but instead will continue to be administered and enforced by EPA:
    - 1. 40 CFR 268.5, 268.6, 268.42(b) and 268.44(a) through (g);
    - 2. "effective dates" referenced within 40 CFR 268.20 through 268.50 to the extent that they are earlier than the effective dates of these state regulations under 310 CMR 30.004; and
    - 3. Appendices VII and VIII.
- (2) Notwithstanding any of the incorporated provisions of 40 CFR 268 to the contrary, the following provisions of the federal land disposal restrictions shall not be incorporated into 310 CMR 30.000 and shall not have effect within the Commonwealth of Massachusetts:
  - (a) In 40 CFR 268.1(c)(3), 268.2 (definition of land disposal), 268.7(a)(7), 268.37(a) and (b), 268.38(a) and(b), 268.39(b), 268.40(e), fn. 9 of the Treatment Standards Table, and any other applicable provisions any phrase implicitly or explicitly allowing the use of underground injection within the Commonwealth of Massachusetts as an allowable means of hazardous waste disposal is precluded from having effect within the Commonwealth of Massachusetts. The use of underground injection as a means of land disposal within the Commonwealth of Massachusetts is prohibited.
  - (b) 40 CFR 268.1(e)(2) Hazardous waste pesticides discarded by farmers, even when managed in compliance with 40 CFR 262.70, remain subject to the provisions of 310 CMR 30.000 including 30.750.
  - (c) 40 CFR 268.2(b), (c), (e), (g) and (h) The definitions of "Debris", "Hazardous constituent or constituents", "Hazardous debris", "Land disposal", "Polychlorinated biphenyls or PCBs" at 310 CMR 30.010 shall apply in *lieu* of the federal definitions.

#### 30.750: continued

- (d) In 40 CFR 268.7(a)(9), 268.42(c), Appendix IV, and any other applicable provisions any phrase implicitly or explicitly allowing the land disposal of lab packs, or ignitable or reactive hazardous wastes, within the Commonwealth of Massachusetts shall not have effect within the Commonwealth of Massachusetts. The placement of any lab packs containing hazardous waste, or ignitable or reactive hazardous wastes, in any land disposal unit within the Commonwealth of Massachusetts are both prohibited. Persons shipping lab packs for land disposal in other States, or for incineration, shall comply with the requirements specified in 40 CFR 268.42(c).
- (e) 40 CFR 268.2(k) The definition of "Soil" at 310 CMR 40.0006 is incorporated by reference and shall apply in *lieu* of the federal definition.
- (f) 40 CFR 268.4(a)(3)(ii) and (iii) The waiver and variance provisions for surface impoundments, are inapplicable within the Commonwealth of Massachusetts.
- (g) 40 CFR 268.44(h) through (o) No variance from treatment standards shall be granted by the Department.
- (h) In 40 CFR 268.7(a)(5), 268.50(a)(1), and any other applicable provisions any phrase implicitly or explicitly allowing generators to conduct treatment other than that which is allowed pursuant to 310 CMR 30.300 and any phrase explicitly or implicitly allowing generators or licensed facilities to accumulate, store or treat hazardous waste in containment buildings shall not have effect within the Commonwealth of Massachusetts.
- (3) References to federal provisions within the incorporated provisions of 40 CFR 268 are adopted subject to the following supplementations or substitutions of state terms for the federal program references cited therein:
  - (a) Statutory references within the incorporated provisions of 40 CFR Part 268 are supplemented in accordance with 310 CMR 30.750: *Table 1*:

30.750: Table 1.

Federal Reference:	Corresponding Reference included at 310 CMR 30.750:
Resource Conservation and Recovery Act (RCRA), "Subtitle C" or particular sections within RCRA	M.G.L. c. 21C and implementing regulations; provided however, authority to act relative to RCRA Section 3004(h) remains with EPA
federal permit issued pursuant to § 402 (NPDES) or § 307 (pretreatment) of the Clean Water Act (CWA)	permit issued pursuant to comparable state statutory provisions such as M.G.L. c. 21 and implementing regulations
Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) or particular sections within CERCLA	M.G.L. c. 21E and implementing regulations or the comparable state provisions within M.G.L. c. 21E and implementing regulations
Clean Air Act (CAA) or particular sections within the CAA	M.G.L. c. 111, § 142A through § 142O and implementing regulations or the comparable state provisions within M.G.L. c. 111, § 142A through § 142O and implementing regulations
"Subtitle D facility" or "RCRA Subtitle D facility"	facility permitted pursuant to comparable state statutory provisions such as M.G.L. c. 111, §150A (Solid Waste Management Act) and implementing regulations
Clean Water Act (CWA) or particular sections within the CWA	M.G.L. c. 21 and implementing regulations or the comparable state provisions within M.G.L. c. 21 and implementing regulations

30.750: continued

(b) Unless otherwise specified in 310 CMR 30.750: *Table 3*, state regulatory references are substituted for the federal regulatory references within the incorporated provisions of 40 CFR Part 268 in accordance with 310 CMR 30.750: *Table 2*:

30.750: Table 2.

Corresponding Reference Within 310 CMR to be Referenced Within 310 CMR 30.750:

Federal Reference to provisions within 40 CFR:	Referenced Within 310 CMR 30.750:
260.10	30.010
260.11/SW-846 incorporation at 260.11	30.012(1)
Part 261	30.100
Subpart C of Part 261	30.120 - 30.125
Subpart D of Part 261	30.130 - 30.136
261.21	30.122
261.22	30.123
261.23	30.124
261.24	30.125
261.31	30.131
261.32	30.132
261.33	30.133 (for U wastes)/30.136 (for P wastes)
262.11	30.302
262.34	30.300
264.13/265.13	30.513
Subpart F of Part 264/Subpart F of Part 265	30.660
Subpart O of Part 264	7.00
Subpart H of Part 266	30.240
266.20(b)	30.231(6)
264.554	30.602(14)
debris excluded from the definition of hazardous waste under § 261.3(f) of this chapter	debris exempt from 310 CMR 30.000 pursuant to 310 CMR 30.104(2)(w)

30.750: continued

268.4(a)(2)(ii)

268.4(a)(3)

40 CFR 268 provision affected

260.22

264.221(c) or 265.221(a)

(c) The following specific state regulatory references are substituted for the federal regulatory references within the incorporated provisions of 40 CFR Part 268 in accordance with 310 CMR 30.750: *Table 3*:

Corresponding Reference

30.612 or 30.099(6)(g) referencing

265.221(a), respectively

30.750: Table 3.

Internal Reference within

	incorporated provision	to 310 CMR 30.000
268.31(c)	"parts 264 and 265 of this chapter"	30.610 and 30.620
268.42, Table 1	40 CFR 260.10 (1), (6), (7), (11) & (12)	30.010, Industrial Furnace (a), (f), (g) and (k)
268.50(a)(1)	"parts 264 and 265 of this chapter"	30.500 through 30.707 and 30.900
268.50(a)(2)(ii)	264.73 or 265.73	30.542

268.7(a)(1) 268.9 30.103 and 30.750(1) referencing 268.9(b) 268.7(d)(2) 261.3(f)(1) 30.104(2)(w)

(d) Additional modifications to the incorporated provisions of 40 CFR 268 are as follows:

30.142

- 1. 40 CFR 268.1(b) is modified to read as follows: Except as specifically provided otherwise in this part, 310 CMR 30.100, or 30.353, the requirements of this part apply to persons who generate or transport hazardous waste and owners and operators of hazardous waste treatment, storage, and disposal facilities.
  - 2. At 40 CFR 268.1(e)(1), replace "small quantity generators of less than 100 kilograms of non-acute hazardous waste or less than one kilogram of acute hazardous waste per month, as defined in § 261.5 of this chapter" with "Very Small Quantity Generators managing waste in compliance with 310 CMR 30.353".
  - 3. 40 CFR 268.1(f) is modified to read as follows: Universal waste handlers and universal waste transporters managing universal waste in compliance with 310 CMR 30.1000 are exempt from 40 CFR 268.7 and 268.50.
  - 4. 40 CFR 268.2 is modified by adding that "Administrator", "Regional Administrator", "EPA Regional Administrator", "EPA Regional Administrator (or his designee) or State authorized to implement part 268 requirements" shall mean "Department" except in regards to the federally enforceable provisions referenced at 310 CMR 30.750(1)(c).
  - 5. 40 CFR 268.3 is modified by adding the following: Any deliberate mixing of one or more prohibited hazardous wastes with debris that changes its treatment classification from waste to hazardous debris or debris is prohibited.
  - 6. 40 CFR 268.4(a)(3) is modified to read as follows: Except as provided in 310 CMR 30.613(4), a surface impoundment shall meet the design requirements set forth in 310 CMR 30.612, regardless of whether or not the unit is new, expanded, or a replacement. The impoundment shall be in compliance with all applicable ground water monitoring requirements set forth in 310 CMR 30.660.
  - 7. 40 CFR 268.7(a)(1) is modified by replacing "RCRA-permitted hazardous waste treatment facility" with "a treatment facility licensed pursuant to 310 CMR 30.800".
  - 8. 40 CFR 268.7(a)(7) is modified to read as follows: If a generator determines that he is managing a prohibited waste that is exempted from regulation under 310 CMR 30.000 subsequent to the point of generation (including deactivated characteristic hazardous wastes managed in wastewater treatment systems subject to the Clean Water Act (CWA) as specified at 310 CMR 30.104(1)(b) or that are CWA-equivalent), the generator must place a one-time notice describing such generation, subsequent exclusion from hazardous waste regulation, and the disposition of the waste, in the generator's on-site files.
  - 9. 40 CFR 268.7(a)(8), last sentence is revised to read as follows: The requirements of this paragraph apply to wastes even when the hazardous characteristic is removed prior to disposal or when the waste is exempted from regulation subsequent to the point of generation.

#### 30.750: continued

- 10. 40 CFR 268.7(a)(10) is modified by replacing "small quantity generators with tolling agreements pursuant to 40 CFR 262.20(e)" with "small quantity generators that reclaim waste pursuant to a contractual agreement in compliance with 310 CMR 30.314".
- 11. 40 CFR 268.7(e)(2) is modified to read as follows: Maintain that information in the generator's and/or the facility's files and other records for a minimum of three years.
- 12. At 40 CFR 268.33(d)(1) and footnote 12 to 268.40, Treatment Standard Table, "Subtitle C monofill" is hereby replaced with "hazardous waste landfill".
- 13. At 40 CFR 268.33(d)(2), footnote 12 to 268.40, Treatment Standard Table, at 268.45(c), and at 268.49(e)(2)(A), "Subtitle C" or "RCRA Subtitle C" is replaced with "hazardous waste".
- 14. At 40 CFR 268.40, in note regarding Lead Acid Batteries Subcategory (see D008), note is modified by replacing "EPA regulations (see 40 CFR 266.80)" with "hazardous waste regulations (See 310 CMR 30.280.)."
- 15. At 40 CFR 268.50(a)(3),"transfer facility for ten days or less" is replaced with "transfer-related area in compliance with 310 CMR 30.408".
- 16. At 40 CFR 268.7(a)(9)(iii), "D001 D0043" is replaced by "D001 D008 and D010 D043."

# 30.800: LICENSING REQUIREMENTS AND PROCEDURES

310 CMR 30.801 through 30.899, cited collectively as 310 CMR 30.800, set forth the procedures and requirements for licensing hazardous waste facilities and transporters.

# 30.801: Who Must Have a License

No person shall transport, use, collect, store, treat, or dispose of hazardous waste or construct, operate or maintain any facility for the use, storage, treatment, or disposal of hazardous waste, unless said person has applied for and obtained, and has in effect, a valid license issued by the Department pursuant to M.G.L. c. 21C and 310 CMR 30.000, except that a license is not required for the following:

- (1) The accumulation of hazardous waste at the site of generation by the generator thereof for up to and including 90 days, as provided in 310 CMR 30.340.
- (2) Accumulation by a small quantity generator in compliance with 310 CMR 30.351, or by a very small quantity generator in compliance with 310 CMR 30.353, or by a generator who is in compliance with 310 CMR 30.222(4).
- (3) Treatment which is an integral part of a manufacturing process at the point of generation.
- (4) Municipal or industrial wastewater treatment facilities which are permitted pursuant to M.G.L. c. 21, § 43.
- (5) The handling, treating, storing, use, processing or disposing of infectious hazardous waste which is regulated by the Department of Public Health pursuant to M.G.L. c. 111, §§ 3 and 51 through 56.
- (6) The holding of manifested shipments of hazardous waste in transit in compliance with the requirements of 310 CMR 30.408.
- (7) The emergency containment or treatment of a hazardous waste or hazardous material which becomes a waste at the time of the spill.
- (8) The transport of hazardous waste by certain interstate carriers exempted pursuant to 310 CMR 30.401(4).
- (9) The transport of hazardous waste by any air or rail transporter subject to regulation by the DOT.
- (10) The transport of hazardous waste by bulk shipment water transporter subject to regulation by the U.S. Coast Guard.

- (11) The exemptions from the requirement to obtain a license provided in 310 CMR 30.801(11), 310 CMR 40.0031(3) and 40.0041(4) shall apply, subject to the following provisions. In the event of any inconsistency between 310 CMR 30.801(11) and 310 CMR 40.0031(3) or 40.0041(4), the provisions of 310 CMR 30.801(11) shall govern.
  - (a) No license shall be required for any emergency action initiated or ordered by the Department or by a court of competent jurisdiction and conducted by the Department or a contractor authorized by the Department to secure a site where hazardous waste has been deposited or abandoned. Emergency action shall mean the actions specified in 40 CFR 270.1(c)(3)(i).
  - (b) No license shall be required for any remedial action ordered by a court of competent jurisdiction or ordered by the Department through issuance of an enforceable order, provided that the applicable substantive requirements from 310 CMR 30.000 governing any activities that would have required a license are instead included in the court or administrative order. The Department will provide an opportunity for public comment on any order being utilized in place of a license. Remedial action is defined in 310 CMR 40.0006: *Terminology, Definitions and Acronyms*.
  - (c) No license shall be required for any response action involving remediation waste from a disposal site which is conducted within the boundaries of that same disposal site in compliance with the provisions of 310 CMR 40.0000: *Massachusetts Contingency Plan* with the following exceptions:
    - 1. The combustion of Hazardous Waste shall be subject to a License under 310 CMR 30.801(11), as well as an Air Quality permit pursuant to 310 CMR 7.08(4): *Hazardous Waste Incinerators*. Combustion means incineration as defined in 310 CMR 30.010 and any other thermal destruction of hazardous waste. However, the flaring of an uncompressed gaseous material which is not itself a hazardous waste (*e.g.*, the flaring of methane gas from landfills or the flaring of off-gas emissions from thermal oxidation units) is not considered to involve the combustion of Hazardous Waste subject to a license under these regulations if the flaring results from a remedial activity, the gaseous materials are collected in an enclosed system at the site of generation, and the operations is conducted in compliance with all applicable Air Quality requirements including any permit required pursuant to 310 CMR 7.08(4): *Hazardous Waste Incinerators*.
    - 2. A license for other response actions may be required by the Department pursuant to 310 CMR 40.0033(5).
    - 3. Response action and remediation waste are defined in 310 CMR 40.0006: *Terminology, Definitions and Acronyms*. Disposal Site shall be as defined in 310 CMR 40.0006: *Terminology, Definitions and Acronyms*, except that the exemption from licensing with respect to uncontainerized waste, contaminated debris and contaminated soil shall apply only within the place or area where uncontainerized waste, contaminated media and contaminated soil has come to be located whereas the exemption from licensing with respect to contaminated ground or surface water shall apply within the place or area where contaminated ground or surface water has come to be located.
    - 4. The exemption from licensing in 310 CMR 30.801(11)(c) does not apply to any response action conducted outside the boundaries of a disposal site or to any response action involving non-remediation wastes (*e.g.*, containerized wastes). However, any person undertaking such a response action may seek approval from the Department to employ one or more of the management units in 310 CMR 30.602(12) through (14), [Corrective Action Management Units (CAMUs), Temporary Units (TUs), Staging Piles] for increased flexibility in performing the response action.
    - 5. The exemptions from licensing in 310 CMR 30.801(11)(a) through (c) do not exempt persons from any other applicable requirements in 310 CMR 30.000. Remediation wastes which are hazardous wastes (*i.e.*, that meet the criteria defining a listed hazardous waste or which are themselves a characteristic hazardous waste) shall be accumulated, treated, and stored or otherwise managed at a disposal site in a manner that achieves a level of control and protection equivalent to that provided by the technical and management requirements in 310 CMR 30.000. Non-remediation wastes (*e.g.* containerized wastes) which are hazardous wastes shall be accumulated, treated, and stored or otherwise managed at a disposal site in accordance with 310 CMR 30.000. Both remediation wastes and non-remediation, wastes which are hazardous wastes, shall be managed in accordance with 310 CMR 30.000 when transported from a disposal site.

#### 30.801: continued

- (12) The storage, treatment, or disposal of hazardous wastes containing polychlorinated biphenyls (PCBs) in concentrations equal to or greater than 50 parts per million by facilities which meet all the requirements in 310 CMR 30.501(3)(a) through (c) and 310 CMR 30.708.
- (13) The operation of a research, development, and/or demonstration facility having a valid permit issued by the EPA pursuant to § 3005(g) of RCRA and a valid approval issued by the Department pursuant to 310 CMR 30.863, provided that the facility is operated in full compliance with the terms and conditions of the permit issued by the EPA, the approval issued by the Department, and all applicable provisions of 310 CMR 30.000.
- (14) the handling of the wastes listed at 310 CMR 30.143(2) in compliance with 310 CMR 30.1000 by universal waste handlers and universal waste transporters.
- (15) The accumulation of a laboratory waste by a University participating in the Laboratory XL project at the site of generation for less than 120 days, provided that the requirements of 310 CMR 30.340 and 30.355 are met.
- (16) The accumulation of a laboratory waste by a University participating in the Laboratory XL project at the site of generation for less than 210 days, provided that the requirements of 310 CMR 30.351 and 30.355 are met.
- (17) The elementary neutralization of corrosive hazardous waste at the site of generation in an elementary neutralization unit provided that the generator is in compliance with 310 CMR 30.1103.

# 30.802: Application Form

- (1) Any person required to have a hazardous waste license shall complete, sign, and submit an original application, plus three copies, to the Department.
- (2) The applicant shall be required to submit such information concerning the proposed hazardous waste facility or activity as the Department may require. The Department may prescribe a form(s) which shall be used by all applicants.

(PAGES 1213 THROUGH 1240 ARE <u>RESERVED</u> FOR FUTURE USE.)

#### 30.803: Requirements for all License Applications

All license applications shall include at least the following:

- (1) The name, mailing address, and location of the site or activity.
- (2) The operator's name, address, telephone number, ownership status and status as a public, private or other entity.
- (3) The owner's name, address, telephone number, ownership status and status as a public, private, or other entity, if different from 310 CMR 30.803(2).
- (4) A general description of the hazardous waste facility or activity, and a complete description of all proposed activities, including, but not limited to, processes, structures, and equipment.
- (5) A listing and current status of all required permits or construction approvals for the proposed facility or activity.
- (6) A detailed description of the applicant's qualifications and experience in managing and operating the proposed facility or activity.
- (7) A statement of the applicant's financial condition, prepared by a certified public accountant, including profit and loss statements, balance sheets, and any other information which may be relevant for the three-year period prior to the date of application. For new business entities, the statement shall describe how the business is to be capitalized, the source(s) of loans and in what amount(s), and any other financial data deemed by the Department to be relevant. This provision does not apply to applications for transport licenses or to applications for facilities at the site of generation if the applicant is the generator of all the hazardous wastes which will be stored, treated, used, or disposed of at that facility.
- (8) A description of training programs for all employees, including emergency procedures for preventing or containing spills or explosions of hazardous waste, emergency medical procedures, and basic knowledge of the wastes being handled. For transport license applications, this description shall demonstrate compliance with 310 CMR 30.409. For facility license applications, this description shall demonstrate compliance with 310 CMR 30.516.
- (9) The names and addresses of all officers, directors, or partners of the person applying for a license, all of the applicant's key staff individuals, and all individuals and other persons holding, directly or indirectly, greater than 5% equity in, or more than 5% liability of, the applicant. This provision does not apply to applications for facilities at the site of generation if the applicant is the generator of all the hazardous waste which will be stored, treated, disposed of, or used at that facility.
- (10) The names and addresses of all persons in the field of hazardous waste management, including transportation, doing business in the United States, in which the person applying for a license or in which any officer, director, or partner of said person, or in which any key staff individual of said person, holds an equity interest, directly or indirectly.
- (11) A listing and explanation of all past and pending criminal convictions, criminal indictments, civil penalties, notices of violation, administrative orders, and license revocations and suspensions issued or obtained by any State or Federal authority citing a violation of any statute, regulation, or court order relating to hazardous waste management or transportation, and other related environmental or public health statutes or regulations, or any crime involving moral turpitude by the person applying for a license or by an officer, director, or partner, or any person named in 310 CMR 30.803(9) covering a five year period prior to the date of receipt of the application by the Department.
- (12) A listing, by docket number and court, of all past and pending civil suits relating to the applicant's hazardous waste management or transportation operations or activities.

#### 30.803: continued

- (13) The certification required by M.G.L. c. 62C; § 49A(a).
- (14) The following statement, which shall be separately signed by the person or persons listed in 310 CMR 30.807:

While this application is pending, and while any license issued pursuant to this application remains in effect, [insert name of applicant] hereby authorizes personnel or authorized agents of the Department, or authorized EPA representatives, to, without a warrant,

- (a) enter [insert name of applicant]'s premises at all reasonable times for the purpose of investigating, sampling, or inspecting any records, condition, equipment, practice, or property relating to activities subject to M.G.L. c. 21C or RCRA;
- (b) enter [insert name of applicant]'s premises at any time for the purpose of protecting public health, safety, or welfare, or to prevent damage to the environment;
- (c) at all reasonable times have access to and copy all of [insert name of applicant]'s records that are relevant to this application or any license issued pursuant to this application.

# 30.804: Additional Requirements for Facility License Applications

Each facility license application shall state whether the facility is a new facility or an existing facility, whether the application is a first or revised application, and shall include at least the following additional information. The extent of such information, and of any additional information that may be requested by the Department, shall be determined by the Department on a case-by-case basis, depending upon the specifics of the proposed facility or activity and its location.

- (1) The names and qualifications of the emergency coordinator and all persons who at any time may be placed in charge of facility operations.
- (2) The names and qualifications of key management personnel at the hazardous waste facility.
- (3) A U.S.G.S. topographic map showing the location of the site.
- (4) Two sets of maps, of which:
  - (a) One set shall show a distance of 1000 feet around the facility, shall be at a scale of 2.5 cm. equal to not more than 61.0 meters unless specified otherwise by 310 CMR 30.804(19)(k)3. or M.G.L. c. 21C, and shall include, but not be limited to:
    - 1. topographic contours sufficient to clearly show the pattern of water flow in the vicinity of and from each operational unit in the facility;
    - 2. map scale and date;
    - 3. legal boundaries of the site;
    - 4. geology of the site area;
    - 5. groundwater locations;
    - 6. surface water locations;
    - 7. location of residences;
    - 8. roads and access control;
    - 9. wells;
    - 10. 100-year flood elevations; and
    - 11. seismic data, as may be required by the Department.
  - (b) The other set shall show all aspects of the proposed facility and associated works, including landscaping.
  - (c) The Department may require that a hydrogeologic study be submitted to the Department.
- (5) A description of physical and chemical analyses which the applicant intends to use in treating, storing, using, or disposing of hazardous waste and hazardous debris in compliance with 310 CMR 30.600.

- (6) The general waste analysis plan required by 310 CMR 30.513.
- (7) The security plan required by 310 CMR 30.514, including any demonstration which the applicant wishes to make pursuant to 310 CMR 30.514(2).
- (8) The inspection plan required by 310 CMR 30.515.
- (9) The personnel training plan required by 310 CMR 30.516.
- (10) The contingency plans and emergency procedures required by 310 CMR 30.520 through 30.524, including any justification for the determination referred to in 310 CMR 30.524(2).
- (11) Detailed engineering plans and specifications of the hazardous waste facility including, without limitation, on-site traffic pattern diagrams, on-site traffic volume and control data, on-site access road surfacing and load-bearing capacity information, and designation of traffic-control signals and estimates of traffic volume.
- (12) The closure plan required by 310 CMR 30.583.
- (13) The post-closure plan required by 310 CMR 30.593, if applicable.
- (14) All meteorological data relevant to the facility, including prevailing winds, as may be required by the Department.
- (15) Data regarding land subject to flooding as specified in 310 CMR 30.701.
- (16) A description of how the applicant intends to meet the financial responsibility requirements of 310 CMR 30.900.
- (17) If the owner or operator of the facility is not the owner of the site on which, or the buildings in which, the proposed activity will take place, a copy of the lease(s) or other written agreement(s) between the owner or operator and the owner of the site or building(s).
- (18) For each facility that stores, treats or disposes of hazardous waste in a surface impoundment:
  - (a) A list of all hazardous wastes placed or to be placed in each surface impoundment.
  - (b) Detailed plans and an engineering report describing how the surface impoundment is or shall be designed, constructed, operated and maintained to meet the requirements of 310 CMR 30.612, including a description of:
    - 1. The liner system, including the leak detection, collection and removal system, and for each new impoundment, the elevation of the probable high groundwater level;
    - 2. Measures for prevention of overtopping and the maintenance of freeboard;
    - 3. The means to shut off flow into the impoundment in the event of an emergency;
    - 4. Measures for diversion of run-on from the impoundment; and
    - 5. The design of the dikes and measures for maintaining their structural integrity.
  - (c) If applicable, a demonstration of waste/liner compatibility in compliance with 310 CMR 30.614(6).
  - (d) A description of how each surface impoundment, including the liner and cover systems and appurtenances for control of overtopping, shall be inspected in order to meet the requirements of 310 CMR 30.614(1) and (3). This information shall be included in the inspection plan submitted pursuant to 310 CMR 30.804(8).
  - (e) The owner or operator shall submit a statement by an independent Massachusetts registered professional engineer that he will provide a certification, in accordance with 310 CMR 30.614(2), upon completion of the liner system in accordance with 310 CMR 30.614(1).

- (f) A certification by an independent Massachusetts registered professional engineer which attests to the structural integrity of each dike as required by 310 CMR 30.614(4). For each new unit, the owner or operator shall submit a statement by an independent Massachusetts registered professional engineer that he will provide such a certification upon completion of construction in compliance with the plans and specifications.
- (g) A description and listing of all procedures and equipment used to clean and/or expose the liner surface of the impoundment.
- (h) A description of the procedure to be used for removing a surface impoundment from service, as required pursuant to 310 CMR 30.615(2) and (3). This information shall be included in the contingency plan submitted pursuant to 310 CMR 30.804(10).
- (i) If ignitable or reactive wastes are to be placed in a surface impoundment, an explanation of how 310 CMR 30.616(1) and (2) shall be complied with.
- (j) If incompatible hazardous wastes or materials incompatible with hazardous waste will be placed in a surface impoundment, an explanation of how 310 CMR 30.616(3) shall be complied with.
- (k) A description of how hazardous waste residues and contaminated materials will be removed from the unit at closure, as required pursuant to 310 CMR 30.617(1) or 30.617(2)(a), as applicable.
- (l) For existing impoundments from which the owner or operator does not intend to remove all hazardous waste residues and contaminated materials at closure, a justification demonstrating that it is impracticable to do so. For any wastes not to be removed from the unit upon closure, the owner or operator shall submit detailed plans and an engineering report describing how 310 CMR 30.617(2)(b) and (4) shall be complied with. This information shall be included in the closure plan and the post-closure plan submitted pursuant to 310 CMR 30.804(12) and 30.804(13).
- (m) If polyhalogenated aromatic hydrocarbons are to be placed in a surface impoundment, a management plan for such placement pursuant to 310 CMR 30.616(5).
- (n) Information, reasonably ascertainable by the owner or operator, on the potential for the public to be exposed to hazardous wastes or hazardous constituents through releases related to the unit. At a minimum such information shall address:
  - 1. Reasonably foreseeable potential releases from both normal operations and accidents at the unit, including releases associated with transportation to or from the unit;
  - 2. The potential pathways of human exposure to hazardous wastes or constituents resulting from the releases described in 310 CMR 30.804(18)(n)1.; and
  - 3. The potential magnitude and nature of the human exposure resulting from such releases.
- (19) For each facility that disposes of hazardous waste in a landfill:
  - (a) A list of all hazardous wastes to be placed in each landfill or landfill cell.
  - (b) Detailed plans and an engineering report describing how the landfill shall be designed, constructed, operated and maintained to comply with the requirements of 310 CMR 30.622, including a description of:
    - 1. The location of the probable high groundwater level in relation to the landfill liners;
    - 2. The design of the double liner system, including the leak detection, collection and removal system between the liners and the leachate collection and removal system above the liners:
    - 3. The foundation or base for the liners;
    - 4. Measures for control of run-on;
    - 5. Measures for control of run-off;
    - 6. How collection and holding facilities associated with run-on and run-off control systems will be managed;
    - 7. Measures for control of wind dispersal of particulate matter, where applicable;
    - 8. Any gas migration and emission control systems used at the facility; and
    - 9. Any leachate treatment and/or disposal systems at the facility site.

- (c) A demonstration of waste/liner compatibility in compliance with 310 CMR 30.623.
- (d) A description of how each landfill, including the liner and cover systems, shall be inspected in order to meet the requirements of 310 CMR 30.624(1) and (3). This information shall be included in the inspection plan submitted pursuant to 310 CMR 30.804(8).
- (e) A map which meets the requirements of 310 CMR 30.626.
- (f) If incompatible wastes are to be landfilled, an explanation of how 310 CMR 30.628(2) shall be complied with.
- (g) If containers of hazardous waste are to be landfilled, a description of how 310 CMR 30.629 and 30.630 shall be complied with;
- (h) A copy of the stabilization/solidification plan required pursuant to 310 CMR 30.632.
- (i) Detailed plans and an engineering report describing the final cover which shall be applied to each landfill or landfill cell at closure in compliance with 310 CMR 30.633(1), and a description of how each landfill shall be maintained and monitored after closure in compliance with 310 CMR 30.633(2). This information shall be included in the closure and post-closure plans submitted pursuant to 310 CMR 30.804(12) and (13).
- (j) An indication of the maximum depth of fill of wastes for any portion of the landfill.
- (k) Detailed design drawings, profiles, and maps of the landfill and surrounding geology and hydrology showing the depth to the uppermost aquifer beneath the facility, topographic contours, and a characterization of consolidated and unconsolidated deposits in the vicinity of the site. A detailed description of the hydrology and geology shall accompany the drawings and maps, including:
  - 1. A listing of all pertinent published and open file text material and mapping available from the Department, the United States Geological Survey, the Soil Conservation Service, the Massachusetts Water Resources Commission and other agencies. Text material and mapping from such public sources relied upon in preparing the description shall be referenced and that which was not relied upon shall be discussed with reference to the reasons it was not used. Any other published or unpublished text material or mapping used in preparing the description shall also be referenced.
  - 2. The logs of borings, test pits and wells taken to establish or improve the understanding of the geology and the hydrology of the area of the waste disposal activity and the location of all such borings, wells, and test pits established by field survey.
  - 3. A detailed set of maps, drawn to a scale of 100 feet to one inch, and profiles of the disposal site and surrounding area including, but not limited to, the names and locations of all streams (intermittent or perennial), ponds and groundwater systems. All wells supplying public water systems and all existing wells shall be shown on the map.
  - 4. A description of any change in topographic contours, consolidated rock profiles, groundwater profiles and groundwater flow that will result from the construction or operation of the facility.
  - 5. A characterization of the consolidated and unconsolidated materials in the site vicinity with regard to: type of material, grain size distribution, permeability, porosity, weathering (of consolidated rock), fracturing (of consolidated rock and clay), fault zones (of consolidated rock) and swelling (of clay).
  - 6. A description, including maps and profiles, of the groundwater flow system as shown on a flow net.
  - 7. A report describing the present quality of the groundwater and surface waters in the vicinity of the proposed facility, as determined by chemical analyses, and of any groundwater and surface waters which may receive discharge from the facility in the event of a release of hazardous constituents from the facility.
  - 8. Information demonstrating how the facility shall be in compliance with 310 CMR 30.702 through 30.704.
- (l) If polyhalogenated aromatic hydrocarbons are to be placed in a landfill, a management plan for such placement pursuant to 310 CMR 30.628(3).
- (m) Any other information which the Department deems necessary to ensure compliance with any of the provisions of 310 CMR 30.620.

- (n) Information, reasonably ascertainable by the owner or operator, on the potential for the public to be exposed to hazardous wastes or hazardous constituents through releases related to the unit. At a minimum such information shall address:
  - 1. Reasonably foreseeable potential releases from both normal operations and accidents at the unit, including releases associated with transportation to or from the unit;
  - 2. The potential pathways of human exposure to hazardous wastes or constituents resulting from the releases described in 310 CMR 30.804(19)(n)1.; and
  - 3. The potential magnitude and nature of the human exposure resulting from such releases.
- (20) For facilities that store or treat hazardous waste in waste piles:
  - (a) A list of all hazardous wastes placed or to be placed in each waste pile.
  - (b) If an exemption is sought from the liner requirements of 310 CMR 30.641 and the groundwater protection requirements of 310 CMR 30.660, an explanation of how the requirements of 310 CMR 30.640(4) shall be complied with.
  - (c) Detailed plans and an engineering report describing how the pile is or will be designed, constructed, operated and maintained to meet the requirements of 310 CMR 30.641, including a description of:
    - 1. The liner system, including its relationship to the probable high groundwater level;
    - 2. The leachate collection and removal system;
    - 3. Measures for control of run-on;
    - 4. Measures for control of run-off;
    - 5. How collection and holding units associated with run-on and run-off control systems will be managed; and
    - 6. Measures for control of wind dispersal of particulate matter, where applicable;
  - (d) Detailed plans and an engineering report describing how the requirements of 310 CMR 30.642(2) shall be complied with, if an exemption from the inspection requirements of 310 CMR 30.643 is sought, as provided in 310 CMR 30.642, including an explanation of why it is impracticable to meet the inspection requirements of 310 CMR 30.643.
  - (e) Unless an exemption is being sought pursuant to 310 CMR 30.642, a description of how 310 CMR 30.643 shall be complied with.
  - (f) A description of how each waste pile, including the liner and appurtenances for control of run-on and run-off, shall be inspected in order to meet the requirements of 310 CMR 30.644(1) and 30.644(2). This information shall be included in the inspection plan submitted pursuant to 310 CMR 30.804(8).
  - (g) A demonstration of waste/liner compatibility in compliance with 310 CMR 30.645.
  - (h) If treatment is carried out on or in the pile, details of the process and equipment used, and the nature and quality of the residuals.
  - (i) If ignitable or reactive wastes are placed or to be placed in the pile, an explanation of how the requirements of 310 CMR 30.646 shall be complied with.
  - (j) If incompatible wastes, or materials incompatible with hazardous waste, will be placed in the waste pile, an explanation of how 310 CMR 30.647 shall be complied with.
  - (k) A description of how hazardous waste residues and contaminated materials shall be removed from the waste pile at closure, as required pursuant to 310 CMR 30.649(1).
  - (l) If polyhalogenated aromatic hydrocarbons are to be placed in a waste pile, a management plan for such placement pursuant to 310 CMR 30.646(4).
- (21) For land treatment demonstrations pursuant to 310 CMR 30.653:
  - (a) A description of plans to conduct a land treatment demonstration required pursuant to 310 CMR 30.653, including a description of:
    - 1. The hazardous wastes for which the demonstration will be made and the potential hazardous constituents in the wastes;
    - 2. The data sources to be used to make the demonstration (*e.g.*, literature, laboratory data, field data, operating data);

- 3. Any specific laboratory or field test that will be conducted, including:
  - a. the type of test (e.g., column leaching, degradation);
  - b. materials and methods, including analytical procedures;
  - c. expected time for completion; and
  - d. characteristics of the unit that will be simulated in the demonstration, including treatment zone characteristics, climatic conditions, and operating practices;
- (b) A description of the proposed land treatment program, as required pursuant to 310 CMR 30.652, including a description of:
  - 1. The hazardous wastes to be land treated;
  - 2. Design measures and operating practices necessary to maximize treatment in compliance with 310 CMR 30.654(2) and 30.658, including:
    - a. Waste application method and rate;
    - b. Measures to control soil pH;
    - c. Enhancement of microbial or chemical reactions;
    - d. Control of moisture content; and
    - e. Treatment zone capacity;
  - 3. Provisions for unsaturated zone monitoring, including:
    - a. Sampling equipment, procedures, and frequency;
    - b. Procedures for selecting sampling locations;
    - c. Analytical procedures;
    - d. Chain-of-custody control;
    - e. Procedures for establishing background values;
    - f. Statistical methods for interpreting results; and
    - g. The justification for any hazardous constituents recommended for selection as principal hazardous constituents, in accordance with the criteria for such selection in 310 CMR 30.655(1);
  - 4. A list of hazardous constituents reasonably expected to be in, or derived from, the wastes to be land treated, based on waste analysis performed pursuant to 310 CMR 30.513; and
  - 5. The proposed dimensions of the treatment zone.
- (c) A description of how the unit is or will be designed, constructed, operated and maintained in order to meet the requirements of 310 CMR 30.654, including a description of:
  - 1. Measures for control of run-on;
  - 2. Measures for collection and control of run-off;
  - 3. Measures for minimization of run-off of hazardous constituents from the treatment zone;
  - 4. How collection and holding facilities associated with run-on and run-off control systems will be managed;
  - 5. Periodic inspection of the unit; this information shall be included in the inspection plan submitted pursuant to 310 CMR 30.804(8); and
  - 6. Measures for control of wind dispersal of particulate matter, if applicable.
- (d) If ignitable or reactive wastes will be placed in or on the land treatment zone, an explanation of how the requirements of 310 CMR 30.657(1) shall be complied with.
- (e) If incompatible wastes, or materials incompatible with hazardous waste, will be placed in or on the same treatment zone, an explanation of how 310 CMR 30.657(2) shall be complied with.
- (f) A description of the treatment zone soil and treatment demonstration zone soil including, but not limited to, soil texture, pH and the cation exchange capacity expressed in milliequivalents per 100 grams of soil.
- (g) A prediction and approximate quantification of any hazardous waste decomposition by-products expected to be produced as a result of the land treatment process or the land treatment demonstration process.
- (h) A description of the quantities and the destination of all soils or vegetation that are to be removed from the site.
- (i) The results of a hydrogeologic investigation of the site as specified in 310 CMR 30.804(19)(k) for landfills.

- (j) If polyhalogenated aromatic hydrocarbons are to be placed in a land treatment facility, a management plan for such placement pursuant to 310 CMR 30.657(4).
- (22) For facilities that use land treatment to dispose of hazardous waste:
  - (a) The results of the land treatment demonstration conducted pursuant to 310 CMR 30.653;
  - (b) The information required by 310 CMR 30.804(21)(b) through (i), including all changes made to reflect the results of the land treatment demonstration.
  - (c) A description of the vegetative cover to be applied to closed portions of the facility, and a plan for maintaining such cover during the post-closure care period, as required pursuant to 310 CMR 30.659(1)(h) and (3)(b). This information shall be included in the closure plan submitted pursuant to 310 CMR 30.804(12) and, where applicable, the post-closure plan submitted pursuant to 310 CMR 30.804(13).
- (23) The following additional information, regarding protection of groundwater, from owners or operators of hazardous waste surface impoundments, piles, land-treatment units, and landfills, except as otherwise provided in 310 CMR 30.661(2):
  - (a) A summary of the groundwater monitoring data obtained during the interim-status period pursuant to 40 CFR 265.90 through 265.94, as incorporated by reference with modifications at 310 CMR 30.099(6), where applicable.
  - (b) Identification of the uppermost aquifer and aquifers hydraulically interconnected beneath the facility property, including groundwater flow direction and rate and the basis for such identification (*i.e.*, the information obtained from hydrogeologic investigations of the facility area).
  - (c) On the map required pursuant to 310 CMR 30.804(4)(a), a delineation of the waste management area, the property boundary, the proposed "point of compliance" as described in 310 CMR 30.669, the proposed location of groundwater monitoring wells as required pursuant to 310 CMR 30.663 and, to the extent possible, the information required by 310 CMR 30.804(23)(b).
  - (d) A description of any plume of contamination that has entered the groundwater from a regulated unit at the time that the application is submitted. This description shall:
    - 1. Delineate the extent of the plume on the topographic map required pursuant to 310 CMR 30.804(4)(a); and
    - 2. Identify the concentration of each constituent listed in 310 CMR 30.161 throughout the plume or identify the maximum concentrations of each such constituent.
  - (e) Detailed plans and an engineering report describing the proposed groundwater monitoring program to be implemented to meet the requirements of 310 CMR 30.663.
  - (f) If the presence of hazardous constituents has not been detected in the groundwater at the time the license application is submitted to the Department, the owner or operator shall submit sufficient information, supporting data, and analyses to establish a detection monitoring program which meets the requirements of 310 CMR 30.664, including:
    - 1. A proposed list of indicator parameters, waste constituents or reaction products that will provide a reliable indication of the presence of hazardous constituents in the groundwater;
    - 2. A proposed groundwater monitoring system;
    - 3. Background values for each proposed monitoring parameter or constituent, or procedures to calculate such values; and
    - 4. A description of proposed sampling, analysis and statistical com- parison procedures to be utilized in evaluating groundwater monitoring data.
  - (g) If the presence of hazardous constituents has been detected in the groundwater at the point of compliance at the time the license application is submitted to the Department, the owner or operator shall submit sufficient information, supporting data and analyses to establish a compliance monitoring program which meets the requirements of 310 CMR 30.671. The owner or operator shall also submit an engineering feasibility plan for a corrective action program necessary to meet the requirements of 310 CMR 30.672, except as provided in 310 CMR 30.664(8)(e). To demonstrate compliance with 310 CMR 30.671, the owner or operator shall submit the following:

- 1. A description of the wastes previously handled at the facility;
- 2. A characterization of the contaminated groundwater, including concentrations of hazardous constituents;
- 3. A list of hazardous constituents for which compliance monitoring shall be undertaken in compliance with 310 CMR 30.663 and 30.671;
- 4. Proposed concentration limits for each hazardous constituent, based on the criteria set forth in 310 CMR 30.667(1), including a justification for establishing any alternate concentration limit;
- 5. Detailed plans and an engineering report describing the proposed groundwater monitoring system, in compliance with the requirements of 310 CMR 30.663; and
- 6. A description of proposed sampling, analysis and statistical comparison procedures to be utilized in evaluating groundwater monitoring data.
- (h) If hazardous constituents have been detected in the groundwater in concentrations exceeding the concentration limits established pursuant to 310 CMR 30.668, or if groundwater monitoring conducted pursuant to 40 CFR 265.90 through 265.94 at the time the license application is submitted to the Department indicates the presence in groundwater of hazardous constituents from the facility in concentrations exceeding background concentrations, the owner or operator shall submit sufficient information, supporting data, and analyses to establish a corrective action program which meets the requirements of 310 CMR 30.672. However, an owner or operator is not required to submit information to establish a corrective action program if he persuades the Department that alternate concentration limits will protect human health and the environment, taking into consideration the criteria listed in 310 CMR 30.667(2). Such an owner or operator shall instead submit sufficient information to establish a compliance monitoring program which meets the requirements of 310 CMR 30.671 and 30.804(23)(g). To demonstrate compliance with 310 CMR 30.672, the owner or operator shall submit, at a minimum, the following:
  - 1. A characterization of the contaminated groundwater, including concentrations of hazardous constituents;
  - 2. The concentration limit for each hazardous constituent found in the groundwater as set forth in 310 CMR 30.667;
  - 3. Detailed plans and an engineering report describing the corrective action to be taken; and
  - 4. A description of how the groundwater monitoring program will assess the adequacy of the corrective action.
- (24) For facilities that store hazardous waste in containers:
  - (a) A description of the containment system to demonstrate compliance with 310 CMR 30.687, showing at least the following:
    - 1. Basic design parameters, dimensions, and materials of construction;
    - 2. How the design promotes drainage or how containers are kept from contact with standing liquids in the containment system;
    - 3. The capacity of the containment system relative to the number and volume of containers to be stored;
    - 4. Provisions for preventing or managing run-on; and
    - 5. How accumulated liquids shall be analyzed and removed to prevent overflow.
  - (b) For each storage area that stores containers holding wastes that do not contain free liquid, a demonstration of how 310 CMR 30.687(3) will be complied with, including:
    - 1. Test procedures and results or other documentation or information showing that the wastes do not contain free liquid; and
    - 2. A description of how each storage area is designed or operated to drain and remove liquid, or how containers are kept from contact with standing liquid.
  - (c) Sketches, drawings, data, or a description of procedures demonstrating compliance with 310 CMR 30.688: Special Requirements for Ignitable, Reactive, and Incompatible Hazardous Wastes, and Hazardous Wastes That Are Polyhalogenated Aromatic Hydrocarbons.

- (25) For facilities that store or treat hazardous waste in tanks, a description of the design and operating procedures to demonstrate compliance with 310 CMR 30.692, 30.693, 30.694, 30.695, and 30.698, including:
  - (a) A written assessment that is reviewed and certified by a Massachusetts registered professional engineer as to the structural integrity and suitability for handling hazardous waste of each tank system, as required by 310 CMR 30.692 and 30.693. This assessment shall include an explanation of the inventory control program and the statistical test required by 310 CMR 30.692(5)(c);
  - (b) Tank dimensions, capacity and shell thickness;
  - (c) A description of feed systems, safety cutoff, bypass systems, pressure controls (e.g., vents), and emission controls;
  - (d) A diagram of piping, instrumentation, and process flow for each tank system;
  - (e) References to design standards and other available information used in the design and construction of the tank;
  - (f) A description of design specifications including identification of construction materials, lining materials, and equipment used to provide external corrosion protection, as required under 310 CMR 30.693(1)(c)2.;
  - (g) For new tank systems, a detailed description of how the tank system(s) will be installed in compliance with 310 CMR 30.693(3) through (6);
  - (h) Detailed plans and a description of how the secondary containment system is or will be designed, constructed, and operated to meet the requirements of 310 CMR 30.694;
  - (i) For new underground tanks, the relationship between the probable high-groundwater level (*see* 310 CMR 30.675) and the bottom of the tank, and a description of how 310 CMR 30.693(9) shall be complied with;
  - (j) A description of the procedures for handling incompatible, ignitable, or reactive wastes, or wastes that are polyhalogenated aromatic hydrocarbons, including the use of buffer zones.
  - (k) A statement of the capacity of the containment system and of the design capacity of each of the tank(s) within the system, and a description of the methods to be used to prevent precipitation and run-on from entering the containment system; and
  - (l) A description of the methods and practices to be used to prevent and detect leaks, spills, and other releases from each of the tank(s) within the containment system.
- (26) For land disposal units or facilities that have been closed, documentation that notices required pursuant to 310 CMR 30.040 and 30.594 have been recorded.
- (27) For facilities that treat, store, or dispose of hazardous waste in miscellaneous units, except as otherwise provided in 310 CMR 30.606:
  - (a) A detailed description of the unit being used or proposed for use, including the following:
    - 1. Physical characteristics, materials of construction, and dimensions of the unit;
    - 2. Detailed plans and engineering reports describing how the unit will be located, designed, constructed, operated, maintained, monitored, inspected, and closed to comply with the requirements set forth or referred to in 310 CMR 30.606(2) and (3); and
    - 3. For disposal units, a detailed description of the plans to comply with the post-closure requirements of 310 CMR 30.606(4).
  - (b) Detailed hydrologic, geologic, and meterologic assessments and land-use maps for the region surrounding the site that address, and that are sufficient to persuade the Department of, the unit's compliance with 310 CMR 30.606(2). If the applicant persuades the Department that 310 CMR 30.606(2) will be complied with, preliminary hydrologic, geologic, and meterologic assessments will suffice.
  - (c) Information on the potential pathways of exposure of humans or environmental receptors to hazardous waste or hazardous constituents and on the potential magnitude and nature of such exposures.
  - (d) For any treatment unit, a report on a demonstration of the effectiveness of the treatment, based on laboratory or field data.
  - (e) Any additional information determined by the Department to be necessary for evaluation of compliance of the unit with the environmental performance standards set forth or referred to in 310 CMR 30.606(2).

#### 30.804: continued

- (28) For land disposal facilities, if a case-by-case extension has been approved by EPA pursuant to the federal land disposal restrictions (see 40 CFR 268.5) or a petition has been approved pursuant to the federal land disposal restrictions (see 40 CFR 268.6), a copy of the notice of approval for the extension or petition if required.
- (29) For facilities subject to corrective action requirements under 310 CMR 30.602(9) or (10), the information required by 40 CFR 270.14(d) (July 1, 2005). For facilities being issued post closure licenses/permits or orders, the information required by 40 CFR 270.28 (July 1, 2005).

# 30.805: Additional Requirements for Transport License Applications

All hazardous waste transport license applications shall include at least the following additional information, and any other information that may be requested by the Department.

- (1) A certification, issued by the Department of Public Utilities, that the applicant has conformed to all of the requirements of M.G.L. c. 159B.
- (2) A plan for cleaning all vehicles used in transporting hazardous waste.
- (3) Evidence that all employees handling hazardous waste in Massachusetts are bondable for the handling and transport of hazardous waste.
- (4) Evidence of financial responsibility as required by 310 CMR 30.410 and 30.411.
- (5) A list of trucks and other vehicles owned or operated by the applicant for the transport of hazardous waste, including the registration number, state of registration, vehicle identification number and model year of each vehicle.
- (6) A description of the methods, and a list of equipment carried on the vehicles, to be used for handling transportation-related spills of hazardous wastes.
- (7) Information indicating the types and physical states of hazardous waste to be transported and the approximate annual quantity of hazardous waste to be transported.
- (8) Written documentation that the applicant has furnished a copy of the application to the local board of health (*i.e.*, in the Massachusetts town/city of the applicant's office address where transportation related activities take place and license records are maintained) at the time the application was submitted to the Department. Such documentation includes, but is not limited to, a certified mail receipt. Applicants with no office in Massachusetts (as defined above) are exempt from 310 CMR 30.805(8).

# 30.806: Record Keeping

Every person who applies for and obtains a hazardous waste license shall keep records of all data used to complete the license application for at least three years from the date the application is signed. This period may be extended by order of the Department.

#### 30.807: Signatories

- (1) All license applications and all final licenses issued by the Department shall be signed as follows:
  - (a) If the applicant is a corporation, by an individual who is a responsible corporate officer of the corporation and who is authorized by the corporation, in accordance with corporate procedures, to sign such documents on behalf of the corporation. The corporate seal shall be included. As used in 310 CMR 30.807, the term "responsible corporate officer" shall mean a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy-making or decision-making functions for the corporation.
  - (b) If the applicant is a partnership, by a general partner.
  - (c) If the applicant is a sole proprietorship, by the proprietor.
  - (d) If the applicant is a municipality or other public agency, by a principal executive officer or ranking elected official who is empowered to enter into contracts on behalf of the municipality or public agency.

## 30.807: continued

- (2) When a facility is owned by one person and operated by another person, both persons shall be considered applicants and both shall sign the application and the final license issued by the Department.
- (3) Every person signing a hazardous waste license application and the final license issued by the Department shall do so in compliance with 310 CMR 30.006 and 30.009.

# 30.810: Requirements For Obtaining and Keeping a License

310 CMR 30.811 through 30.813 set forth requirements and standards which must be met by every person who wishes to obtain and keep in effect any hazardous waste license pursuant to 310 CMR 30.000.

# 30.811: Burden Of Persuasion

In every proceeding, the burden shall be on the applicant for, or the holder of, a license to persuade the Department that the applicant is competent with respect to the proposed activity, and that if the Department grants a license, or allows a license to remain in effect, the applicant will continue to be otherwise in compliance with M.G.L. c. 21C, and 310 CMR 30.000. The Department shall grant a license, and shall allow a license to remain in effect, only to the extent, and only while, the Department is persuaded that such action is, and will continue to be, in compliance with M.G.L. c. 21C, and 310 CMR 30.000.

# 30.812: Compliance With Standards

A license authorizing the collection, transport, storage, treatment, use, or disposal of hazardous waste shall be granted, and shall be allowed to remain in effect, only to the extent, and only while, the Department is persuaded that the applicant for or holder of the license is in compliance, and will be in compliance routinely and on a continuing basis, with all standards and requirements set forth in 310 CMR 30.000 and M.G.L. c. 21C for such collection, transport, storage, treatment, use or disposal.

# 30.813: Competence

In determining whether or not an applicant or licensee is competent with respect to the licensed activity, the Department may consider, among other things:

- (1) The record, history and expertise of the applicant or licensee, and any officer, trustee, director, or partner thereof, and any key staff individual thereof, in the field of hazardous waste management and other related environmental and public health matters, including any pertinent information which may be presented to the Department;
- (2) Whether all required information has been submitted truthfully, accurately, and completely and on time;
- (3) Whether the applicant or licensee, or any officer, director, trustee, or partner thereof, or any key staff individual thereof, has been convicted of a crime involving moral turpitude;
- (4) Whether the applicant or licensee, or any officer, director, trustee, or partner thereof, or any key staff individual thereof, has ever been subject to any criminal prosecution, civil penalty, civil action in any court, any notice of violation, administrative order, or license suspension or revocation issued by any State or Federal authority citing a violation of any statute, regulation, or court order relating to hazardous waste management or transportation, or other related environmental or public health statutes or regulations;
- (5) If the applicant or licensee is required by 310 CMR 30.803(9) to disclose the names and addresses of all individuals or other persons directly or indirectly holding greater than 5% equity in, or more than 5% liability of, the applicant, the Department may consider, with respect to those persons and individuals, the matters listed in 310 CMR 30.813(1) through (4).

#### 30.814: Additional Requirements for Prevention of Air Pollution

Each hazardous waste facility shall be in compliance with all applicable requirements of 310 CMR 7.00 through 7.99.

# 30.820: License Conditions

310 CMR 30.820 through 30.829 set forth conditions which apply to all licenses, regardless of whether or not such conditions are written into the license. Licensees shall comply with such conditions whether or not they are written into the license. Failure to comply shall be grounds for an enforcement action, including, without limitation, license suspension or revocation.

#### 30.821: License Expiration

- (1) Unless otherwise provided in 310 CMR 30.821, or in a written order by the Department, every license shall expire at the end of its term.
- (2) Any license which is scheduled to expire shall be automatically extended if, not less than 30 nor more than 90 days before the scheduled expiration date, the licensee files an application for a new license. This automatic extension shall apply only to that activity which is both authorized by the existing license and included in the application for a new license. Any activity which is authorized by the existing license but not included in the application for a new license shall be deemed not to be licensed after the expiration date on the license. This automatic extension shall remain in effect until:
  - (a) The Department issues a new license to the licensee and all opportunities for adjudicatory hearing before the Department have been exhausted, in which case the new license shall supersede the extended license; or
  - (b) The Department denies the application for a new license and all opportunies for adjudicatory hearing before the Department have been exhausted, in which case the extended license shall be deemed expired; or
  - (c) The Department suspends or revokes the extended license; or
  - (d) The Department in writing orders otherwise, in which case the order shall be controlling.
- (3) Any license which is scheduled to expire may be extended in writing by the Department when the Department determines such extension would prevent injustice to the licensee and would not harm public health, safety, or welfare, or the environment. Such an extension may be granted and allowed to remain in effect only while an application is pending before the Department for the same activity.
- (4) If a license is extended pursuant to 310 CMR 30.831(2) or (3), the terms and conditions of the license shall remain in full force and effect, unless the Department in writing orders otherwise, in which case the order shall be controlling.

# 30.822: General Conditions

The following conditions apply to all licenses:

- (1) <u>Duty to Comply</u>. The licensee shall comply at all times with the terms and conditions of the license, 310 CMR 30.000, M.G.L. c. 21C, and all other applicable State and Federal statutes and regulations.
- (2) <u>Duty to Maintain</u>. The licensee shall always properly operate and maintain all facilities, treatment and control systems, vehicles, and equipment which the licensee installs or uses.
- (3) <u>Duty to Halt or Reduce Activity</u>. The licensee shall halt or reduce activity whenever necessary to maintain compliance with the license conditions, or to prevent an actual or potential threat to the public health, safety, or welfare, or to the environment.

#### 30.822: continued

- (4) <u>Duty to Mitigate</u>. The licensee shall remedy and shall act to prevent all potential and actual adverse impacts to persons and the environment resulting from non-compliance with the terms and conditions of the license. The licensee shall repair at his own expense all damages caused by such non-compliance.
- (5) <u>Duty to Provide Information</u>. The licensee shall furnish to the Department, within a reasonable time, any information which the Department may request and which is deemed by the Department to be relevant in determining whether cause exists to modify, revoke, or suspend a license, or to determine whether the licensee is complying with the terms and conditions of the license.
- (6) <u>Entries and Inspections</u>. The licensee shall allow personnel or authorized agents of the Department or authorized EPA representatives, upon presentation of credentials or other documents as may be required by law, to, without a warrant:
  - (a) Enter at all reasonable times any premises, public or private, for the purpose of investigating, sampling, or inspecting any records, condition, equipment, practice, or property relating to activities subject to M.G.L. c. 21C or RCRA;
  - (b) Enter at any time such premises for the purpose of protecting the public health, safety, or welfare, or to prevent damage to the environment;
  - (c) Have access to and copy at all reasonable times all records that are required to be kept pursuant to the conditions of the license, and all other records relevant to the licensee's hazardous waste activities.
- (7) <u>Records</u>. All records and copies of all reports required by 310 CMR 30.000 shall be kept by the licensee for at least three years. This period shall be extended automatically for the duration of any enforcement action. This period may be extended by order of the Department. All record-keeping shall be in compliance with 310 CMR 30.007.

#### (8) Signatory Requirements.

- (a) All reports, and all information requested or ordered by the Department, shall be signed by an individual described in 310 CMR 30.807 or by a duly authorized representative of such individual. An individual is an "authorized representative" only if an individual identified in 310 CMR 30.807 has designated in writing to the Department that such individual is an "authorized representative."
- (b) Any individual signing a document pursuant to 310 CMR 30.822(8) shall do so in compliance with 310 CMR 30.006 and 30.009.
- (9) <u>Continuing Duty To Inform</u>. The licensee shall have a continuing duty to immediately:
  - (a) Correct any incorrect facts in an application.
  - (b) Report or provide to the Department any omitted facts which should have been submitted to the Department at any time.
  - (c) In advance report to the Department each planned change in the licensed facility or activity which may result in non-compliance with a term or condition of the license, except as provided in 310 CMR 30.852.
  - (d) Report to the Department each change in the information listed in 310 CMR 30.803(9), (10), (11), or (12).
- (10) <u>Notification of Bankruptcy</u>. The licensee shall notify the Department by certified mail of the commencement of a voluntary or involuntary proceeding pursuant to Title 11 (Bankruptcy) of the United States Code in which the licensee is named as a debtor within ten days after commencement of the proceeding.

# 30.823: Additional Conditions of Transport Licenses

The following additional conditions apply to all transport licenses:

(1) The transporter shall not contract with any subcontractor to perform any of the activities authorized by its transport license.

#### 30.823: continued

(2) The transporter shall ensure that all vehicles which it uses for transporting hazardous waste shall bear prominent markings identifying the vehicle and its owner and operator, and all other markings, including placards, required by statute or regulation.

# 30.824: Issuance of Transporter License

- (1) After the close of the public comment period, the Department shall, by first-class mail, give notice of its final license determination to the applicant and to each person who has submitted written comments, or has otherwise requested notice of the final determination.
- (2) A final license determination shall become effective 21 days after the date of the notice of determination given pursuant to 310 CMR 30.824(1), unless a request for adjudicatory hearing is made pursuant to M.G.L. c. 21C, and M.G.L. c. 30A, and 310 CMR 1.00.

# 30.825: Additional Conditions of Facility Licenses

(1) <u>Compliance With Plans</u>. The owner and operator shall comply with the plans, as approved by the Department, listed in 310 CMR 30.502.

#### (2) Incident Reporting.

- (a) The licensee shall, immediately upon discovering it, orally report to the Department any incident, circumstance, or non-compliance which may endanger public health, safety, or welfare, or the environment. The following shall be included in such report:
  - 1. The name, address, and telephone number of the owner and operator;
  - 2. The name, address, and telephone number of the facility;
  - 3. The date, time, location, and type, of incident;
  - 4. The name, description, and quantity of materials involved;
  - 5. The extent of injuries, if any;
  - 6. An assessment of actual or potential hazards to public health, safety, or welfare, or the environment outside the facility, where this is applicable; and
  - 7. The estimated quantity and disposition of recovered material that resulted from the incident.
- (b) The licensee shall also provide a written report to the Department within seven days of the time the licensee becomes aware of the incident, circumstance, or noncompliance. The written report shall contain:
  - 1. A description of the incident, circumstance, or non-compliance and its cause;
  - 2. The exact date(s), time(s), and location(s) of the incident, circumstance, or non-compliance;
  - 3. If the incident, circumstance, or non-compliance has not been corrected, the anticipated time it is expected to continue; and
  - 4. A plan to remedy and prevent recurrence of a similar incident, circumstance, or noncompliance.
- (3) <u>Manifest Discrepancy Report.</u> If the licensee discovers a significant discrepancy in a manifest or shipping paper, the licensee shall attempt to reconcile the discrepancy. Within 15 days of receipt of the hazardous waste by the facility, or within 15 days after the licensee first notices the discrepancy if the facility does not receive the hazardous waste during said 15 days, the licensee shall submit to the Department a written report describing the discrepancy and all attempts to reconcile it. A copy of the manifest or shipping paper at issue shall accompany said report.

### 30.825: continued

- (4) <u>Annual Audits</u>. The licensee shall cause to be performed annually a financial audit of the licensee. This audit shall be performed by a certified public accountant ("CPA") according to generally accepted accounting principles. The licensee shall provide a copy of the financial audit to the Department within 30 days of completion by the CPA. Failure to do so shall be a violation of this condition and of 310 CMR 30.000. This provision does not apply to facilities which are licensed solely for the storage, treatment, use, or disposal of hazardous waste at the site of generation thereof if the owner or operator is also the generator.
- (5) Monitoring and Record-Keeping. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. Records of monitoring information shall include the date, place, and time of sampling or measurement, the person who performed the sampling or measurement, the date the analysis or measurement was performed, the name of the individual who performed the analysis or measurement, the analytical technique(s) or measurement(s) used, and the results of such analysis or measurement. If the monitoring is groundwater monitoring for the purpose of complying with 310 CMR 30.660, the licensee shall maintain records from all groundwater monitoring wells and associated groundwater surface elevations throughout the active life of the facility and, if applicable, throughout the post-closure care period.

# 30.826: Additional Conditions For Corporations

Every corporate applicant or licensee shall provide the Department with a copy of all records, reports, or other information required to be submitted to the Secretary of the Commonwealth, and shall have a continuing duty to provide the Department with any changes or additions made thereto. Such copies shall include the book and page number assigned by the Secretary of the Commonwealth. This provision does not apply to facilities which are licensed solely for the storage, treatment, use or disposal of hazardous waste at the site of generation thereof if the owner or operator is also the generator.

### 30.827: License Duration

All licenses shall be for a fixed term of not more than five years, unless sooner revoked or terminated, and shall not be extended by modification except as provided in 310 CMR 30.821.

# 30.828: Transfer of Licenses

Each license issued pursuant to 310 CMR 30.800 shall be valid only for the person to whom it is issued and may not be transferred. Operation by an owner or operator other than those named in the license shall be in violation of 310 CMR 30.000, and a basis for suspension or revocation of the license, or for other enforcement action.

# 30.829: Requiring Additional Conditions

All licenses for use, collection, treatment, storage, disposal, or transport shall include additional conditions as may be set by the Department on a case-by-case basis to assure compliance with 310 CMR 30.000 and M.G.L. c. 21C.

# 30.830: Processing of Applications

# 30.831: Completeness of Application

(1) A license application shall be deemed complete for the purpose of initiating the review process described in 310 CMR 30.831 through 30.838 when the Department receives the application and determines that all required information has been submitted and all applicable fees have been paid to the Department, provided that the Department may require additional information at any time. The Department shall request such additional information in writing.

#### 30.831: continued

- (2) The Department shall notify the applicant in writing within 60 days of receipt of an application whether the application is complete. If the application is not complete, the Department shall list the information necessary to make the application complete.
- (3) The Department may either deem a license application incomplete or deny a license if an applicant fails or refuses to correct deficiencies in the application.
- (4) For each complete application for a license for a new facility, the Department shall set a project decision schedule estimating dates by which it intends to:
  - (a) Prepare a draft license;
  - (b) Give public notice;
  - (c) Complete the public comment period; and
  - (d) Issue a final license decision.
- (5) The Director may deny a license for the active life of a hazardous waste management facility or unit before receiving a complete application for a license.

# 30.832: Draft Facility License

- (1) When a facility license application is complete, the Department shall either prepare a draft license or draft denial. A draft license shall include all required conditions, standards, and requirements which are necessary to own and operate the facility and which are in addition to those set forth in 310 CMR 30.820 through 30.829.
- (2) If the Department decides to deny the facility license application, it shall issue a draft denial, the procedures for which shall be the same as for a draft license prepared pursuant to 310 CMR 30.800.
- (3) Each facility license shall be accompanied by a fact sheet briefly describing
  - (a) the facility,
  - (b) the proposed hazardous waste activity at the facility,
  - (c) the reasons for the terms and conditions set forth therein, and
  - (d) reasons why requested alternatives were not accepted.

Each facility license and accompanying fact sheet shall be made available for public comment pursuant to 310 CMR 30.833.

- (4) The Department shall send a copy of the draft facility license and of the accompanying fact sheet to the applicant, the local board of health, each person described in 310 CMR 30.833(4)(a)7., and, on request, to any other person.
- (5) A description of the procedures for reaching a final decision on the draft facility license shall accompany the copy of the draft license and shall include:
  - (a) The beginning and ending dates of the comment period and the address where comments will be received;
  - (b) Any other procedures by which the public may participate in the process leading to the final license decision;
  - (c) The relationship, if any, of the application to M.G.L. c. 111 § 150B and M.G.L. c. 21D and regulations thereunder; and
  - (d) The name and telephone number of an individual to contact for additional information.

# 30.833: Public Notice and Public Comment for Facility License Actions

310 CMR 30.833 applies to facility license applications.

### 30.833: continued

- (1) The Department shall give public notice of the following:
  - (a) That a facility license application has been tentatively denied;
  - (b) That a draft facility license has been prepared;
  - (c) That a Class 2 or 3 modifications pursuant to 310 CMR 30.852 at a facility has been proposed; and
  - (d) That an informal public hearing on a draft license has been scheduled.
- (2) Public notices may describe more than one license or license action.
- (3) Public notice issued pursuant to 310 CMR 30.833 shall allow at least 45 days for public comment, except for notices pursuant to 310 CMR 30.833(1)(d).
- (4) Public notices pursuant to 310 CMR 30.833, shall be given by the following methods:
  - (a) By mailing notice to:
    - 1. the applicant;
    - 2. EPA, c/o Regional Administrator, Region I;
    - 3. the board of health of the city or town in which the facility is to be located;
    - 4. the Environmental Monitor, to the extent practicable;
    - 5. each city or town having jurisdiction over the area in which the facility is proposed to be located;
    - 6. each State agency having any authority pursuant to State law with respect to the construction and operation of the facility;
    - 7. each Federal and State agency, including agencies of any affected State other than Massachusetts, with jurisdiction over fish, shellfish, or wildlife resources, coastal zone management plans, or historic preservation; and
    - 8. persons on a mailing list developed by the Department.
  - (b) By publication, paid for by the applicant, in a daily or weekly newspaper of general circulation within the locality affected by the facility.
  - (c) By broadcasting the notice on radio stations serving the locality affected by the facility.
- (5) All public notices issued pursuant to 310 CMR 30.833 shall, at a minimum, contain the following information:
  - (a) The name and address of the office of the Department processing the license application for which notice is being given;
  - (b) The name and address of the licensee or applicant and, if different, of the facility which is the subject of the application;
  - (c) The name, address, and telephone number of an individual from whom interested persons may obtain further information, including a copy of the draft license or application, and the accompanying fact sheet;
  - (d) A brief description of the required public comment procedures; provided that in the case of a public notice relating to a license modification being proposed pursuant to 310 CMR 30.851, the notice need only describe the proposed modification;
  - (e) Any additional information considered necessary or appropriate, including any other procedures by which a person may request a public hearing or otherwise participate in the process leading to the final license decision; and
  - (f) A tentative schedule for the decision-making process.

# 30.834: Public Notice of Transport License Actions

310 CMR 30.834(1), (2), and (5) applies to hazardous waste transporter license applications and 310 CMR 30.834(3), (4), and (5) applies to hazardous waste transporter license modifications.

- (1) The transporter applicant shall publish a "Notice of Application for a Transporter License" in a newspaper with circulation in the Massachusetts town/city of the applicant's office address where transportation-related activities take place and license records are maintained. The notice shall be on a form provided by the Department.
  - (a) The notice must appear in the newspaper within 15 days after the Department signs for receipt of the written application;

- (b) Within 21 days after the Department signs for receipt of the written application, the applicant must provide a copy of the published newspaper notice to the Department and the local (Massachusetts) board of health.
- (c) The notice shall provide for a 45-day comment period, beginning on the date of the publication of the notice, during which comments may be submitted to the Department at the address provided in the notice form.
- (2) The transporter license application shall be available at the Department's Boston office and, for in-state applicants, at the local board of health for public review and comment for 45 days after the notice publication date.
- (3) For changes in office address or parking location address, the transporter license modification applicant shall publish a "Notice of Application for a Transporter License Modification" in a newspaper with circulation in the Massachusetts town/city of the applicant's office address (and proposed office address) where transportation-related activities (e.g. vehicle parking) take place (or are proposed to take place) and license records are maintained (or are proposed to be maintained). Public notice is not required for other types of transporter license modifications, including change in EPA identification number, telephone number, waste code/category, or the following which are not 310 CMR 30.828 license transfers: name changes, stock transfers, or new owners/operators. Public Notice shall be on a form provided by the Department.
  - (a) The notice must appear in the newspaper within four business days after the Department signs for receipt of the written application;
  - (b) Within 21 days after the Department signs for receipt of the written application, the applicant must provide a copy of the published newspaper notice to the Department and the local (Massachusetts only) board of health.
  - (c) The notice shall provide for a 21-day comment period, beginning on the date of the publication of the notice, during which comments may be submitted to the Department at the address provided in the notice form.
- (4) The transporter license modification application shall be available to the Department's Boston office for public review and comment for 14 days after the notice publication date.
- (5) All public notices issued pursuant to 310 CMR 30.834, shall at a minimum, contain the following information:
  - (a) The name and address of the office of the Department processing the license application or license modification application for which notice is being given;
  - (b) The name and address of the licensee or applicant;
  - (c) A brief description of what is proposed by the applicant, provided that in the case of a public notice of a license modification being proposed pursuant to 310 CMR 30.851, the notice need only describe the proposed modification;
  - (d) The name, address, and telephone number of an individual from whom interested persons may obtain further information, including a copy of the application;
  - (e) A brief description of the required public comment procedures; and
  - (f) Any additional information considered necessary or appropriate, including any other procedures by which a person may participate in the process leading to a final license or license modification determination.

# 30.835: Written Comments

During the public comment period provided for in 310 CMR 30.833 or 30.834, any interested person may submit written comments on the draft license to the office of the Department processing the license application.

# 30.836: Extending the Public Comment Period

The Department may extend the public comment period prescribed in 310 CMR 30.833 or 30.834 to allow for issuance of a modified draft license or to give interested persons an opportunity to comment on information or arguments submitted. If the Department gives such an extension, notice thereof shall be given in the manner prescribed in 310 CMR 30.833 or 30.834, whichever is applicable. Such notice shall specify any new issues to be considered.

### 30.837: Informal Public Hearing for Facility Licenses

310 CMR 30.837 applies to facility license actions.

- (1) If during the comment period or within 15 days of the close of the comment period, pursuant to 310 CMR 30.833, the Department receives written notice requesting an informal public hearing, or if the Department determines on its own that there is significant public interest in a draft license, the Department shall schedule an informal public hearing on the proposed action to give the public an opportunity to present written and oral comment.
- (2) Whenever possible, the Department shall schedule such hearing at a convenient location near the population center nearest the proposed facility or activity. Such notice shall be given in the manner described in 310 CMR 30.833, and shall include:
  - (a) The dates of previous notices relating to the license;
  - (b) The date, time, and place of the informal public hearing;
  - (c) The nature and purpose of the informal public hearing; and
  - (d) A description of how the informal public hearing shall be conducted.
- (3) An informal public hearing concerning a license modification pursuant to 310 CMR 30.851 may be limited by the Department to such modification.
- (4) Any informal public hearing may be scheduled in conjunction with any other public hearing being held in connection with the subject facility or activity.
- (5) The Department shall, when practicable, schedule the informal public hearing to be held within 30 days of receipt of the written request, but in no case sooner than 30 days after the date of the public notice of said hearing.

### 30.838: Issuance of Facility License

- (1) After the close of the public comment period, or following any informal public hearing, the Department shall, by first-class mail, give notice of the final license determination to the applicant and to each person who has submitted written comments, or has otherwise requested notice of the final license determination.
- (2) A final license determination shall become effective 21 days after the date of the notice of determination given pursuant to 310 CMR 30.838(1), unless a request for adjudicatory hearing is made pursuant to M.G.L. c. 21C, M.G.L. c. 30A, and 310 CMR 1.00.

# 30.839: Summary Response to Comments

At the time that any license is issued pursuant to 310 CMR 30.838, the Department shall prepare a summary response to comments which shall be available to the public and which shall describe any changes made to the draft license, including the reason(s) for each such change.

# 30.840: Inspection of New or Modified Facilities

For a new hazardous waste facility, the licensee may not begin treatment, use, storage, or disposal of hazardous waste, and for a facility being modified, the licensee may not treat, store, use, or dispose of hazardous waste in the modified portion of the facility, until:

- (1) The licensee has submitted to the Department, by certified mail or hand delivery, a letter, signed by the owner or operator and by a Massachusetts registered professional engineer, stating that the facility has been constructed or modified in compliance with the license; and
- (2) Either,
  - (a) The Department has inspected the modified or newly constructed facility and has determined in writing that it complies with the conditions of the license, or
  - (b) The Department has determined in writing that no inspection by the Department is required.

# 30.841: Compliance Schedules in Licenses

When the Department is persuaded that such action is appropriate to protect public health, safety, and welfare and the environment and that such action is not inconsistent with M.G.L. c. 21C and 310 CMR 30.000, the Department may specify in a license a schedule for the licensee to come into compliance with M.G.L. c. 21C and 310 CMR 30.000. Each compliance schedule shall be in accordance with the following requirements:

(1) Compliance shall be required as soon as possible.

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- (2) Except as provided in 310 CMR 30.841(3), if the compliance schedule exceeds one year from the date of issuance of the license, the schedule shall include interim requirements and interim dates for their achievement. In no event shall the time between any two interim dates exceed one year. If the time for completion of any interim requirement is more than one year and is not readily divisible into stages for completion, the license shall specify interim dates for the submission of reports of progress toward completion of the interim requirements and indicate a projected completion date. Within 14 days after each interim date and the final date of compliance, the licensee shall notify the Department in writing of its compliance or noncompliance with the interim or final requirements, as the case may be.
- (3) The compliance schedule may provide for cessation of activities authorized by the license.
  - (a) If the Department decides that activities authorized by the license shall cease on or before the expiration date of the license, the license shall be issued or modified as appropriate to include a compliance schedule leading to timely cessation of such activities. If a license was issued with a compliance schedule, the licensee shall cease such activities before noncompliance with any interim or final requirement specified in such compliance schedule.
  - (b) If the Department decides to allow the licensee to choose between ceasing activities authorized by the license and engaging in such activities in compliance with a compliance schedule, the license shall be issued or modified as appropriate to include two schedules as follows:
    - 1. Both schedules shall contain an identical interim deadline requiring the licensee to make a final decision on whether to cease conducting activities authorized by the license. The license shall require the licensee to make this decision by a date established by the Department, which date shall be no later than that necessary to ensure sufficient time for the licensee to comply with applicable requirements in a timely manner if the licensee's decision is to continue engaging in activities authorized by the license.
    - 2. One schedule shall lead to engaging in activities authorized by the license in timely compliance with applicable requirements. If the licensee makes a final decision to continue engaging in such activities, the licensee shall follow this schedule.
    - 3. The second schedule shall lead to cessation of activities authorized by the license by a date which shall ensure timely compliance with applicable requirements. If the licensee makes a final decision to cease engaging in such activities, the licensee shall follow this schedule.
  - (c) If the licensee decides to cease engaging in activities authorized by the license, the licensee shall make that decision in a form satisfactory to the Department, such as resolution of the board of directors if the licensee is a corporation.

# 30.850: License Modification, Suspension, and Revocation

# 30.851: License Modifications

### (1) General Provisions.

- (a) A license may be modified by the Department for cause. The filing of a request by a licensee for a license modification or of a notification of planned changes or anticipated non-compliance does not stay any license condition.
- (b) The Department may modify a license upon its own initiative, upon request by a local board of health or other municipal authority, upon request via written application by a licensee, or upon request of any other interested person. If the Department decides to deny a request to modify a license, the Department shall send to the person making the request a brief written response giving a reason for the Department's decision. Except as provided in 310 CMR 30.890, denial of a request for modification of a license shall not be subject to public notice, public comment, or public hearings. If the Department decides to grant a request to modify a license, the Department shall proceed in accordance with 310 CMR 30.850.

# (2) Presumptively Approved Transporter License Modifications.

(a) A transporter who seeks to modify a license shall submit an application to the Department on a form provided by the Department. Such modification shall be effective 30

#### 30.851: continued

days after the Department's receipt of the application, unless the Department notifies the applicant within that 30 days of a deficiency in accordance with 310 CMR 4.00, or denies the license modification in writing. A presumptively approved license modification shall be a "license modification" as that term is used in 310 CMR 30.851, even though the Department has not issued a written approval.

(b) Licensees must submit presumptive approval modification applications by hand delivery with receipt or by certified mail.

# (3) Facility License Modifications.

- (a) A license may be modified for reasons which include, but are not limited to, the following:
  - 1. The licensee desires to make material and substantial alterations or additions to the licensed facility, or any other change to a license condition.
  - 2. The Department has information which was not available at the time of license issuance and which would have justified the application of different license conditions.
  - 3. The standards, regulations, or statute on which the license was based have been changed by promulgation of amended standards and regulations, by judicial decision, or by a change in the statute after the license was issued.
  - 4. The corrective action program specified in the license pursuant to 310 CMR 30.672 has not brought the regulated unit(s) into compliance with the requirements of 310 CMR 30.665: *Groundwater Protection Standard*.
  - 5. The owner or operator has been conducting a compliance monitoring program pursuant to 310 CMR 30.671 or a corrective action program pursuant to 310 CMR 30.672 and the compliance period ends, in which case the license modification shall include a detection monitoring program meeting the requirements of 310 CMR 30.664.
  - 6. A license requires a compliance monitoring program pursuant to 310 CMR 30.671 and monitoring data collected indicates that the facility is not meeting the requirements of 310 CMR 30.665: *Groundwater Protection Standard*.
  - 7. A land treatment unit is not achieving complete treatment of hazardous contituents.
- (b) Suitability of the facility location shall not be considered at the time of license modification unless new information or standards indicate that a threat to public health, safety, or welfare, or the environment exists which was unknown or not understood at the time of license issuance.
- (c) If a license modification is requested by the licensee, the Department shall approve or deny the request according to the procedures set forth in 310 CMR 30.852.

### 30.852: Facility License Modification at the Request of the Licensee

(1) Prior to submitting any modification request to the Department, the licensee shall comply with M.G.L. c. 21D, if applicable.

# (2) Class 1 modifications

- (a) Except as provided in 310 CMR 30.852(2)(b), the licensee may put into effect Class 1 modifications listed in Table 310 CMR 30.852 pursuant to the following conditions:
  - 1. The licensee shall notify the Department concerning the modification by certified mail or other means that establish proof of delivery within seven calendar days after the change is put into effect. This notice shall specify the changes being made to license conditions or supporting documents referenced by the license and shall explain why they are necessary. Along with the notice, the licensee shall provide the information required by 310 CMR 30.801 through 30.804 or other information which is relevant to the modification request.
  - 2. The licensee shall send a notice of the modification to all persons on the facility mailing list and the appropriate units of State and local government as specified in 310 CMR 30.833(4). This notification shall be made within 90 calendar days after the change is put into effect. For the Class 1 modifications that require prior Department approval, the notification shall be made within 90 calendar days after the Department approves the request.

# 30.852: continued

- 3. Any person may request the Department to review, and the Department may for cause reject, any Class 1 modification. The Department shall inform the licensee by certified mail that a Class 1 modification has been rejected, explaining the reasons for the rejection. If the Class 1 modification has been rejected, the licensee shall comply with the original license conditions.
- (b) Class 1 modifications identified in Table 310 CMR 30.852 with a footnote may be made only with the prior written approval of the Department.

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### 30.852: continued

(c) For a Class 1 license modification, the licensee may elect to follow the procedures in 310 CMR 30.852(3) for Class 2 modifications instead of Class 1 procedures. The licensee shall inform the Department of this decision in the notice required in 310 CMR 30.852(3)(a).

### (3) Class 2 modifications.

- (a) For Class 2 modifications listed in Table 310 CMR 30.852, the licensee shall submit a modification request to the Department that:
  - 1. Describes the exact change to be made to the license conditions and supporting documents referenced by the license;
  - 2. Identifies that the modification is a Class 2 modification;
  - 3. Explains why the modification is needed; and
  - 4. Provides the applicable information required by 310 CMR 30.801 through 30.804 or other information which is relevant to the modification request.
- (b) The licensee shall send a notice of the modification request to all persons on the facility mailing list and to the appropriate units of State and local government as specified in 310 CMR 30.833(4) and must publish this notice in a major local newspaper of general circulation. This notice shall be mailed and published within seven days before or after the date of submission of the modification request, and the licensee shall provide to the Department evidence of the mailing and publication. The notice shall include:
  - 1. Announcement of a 60-day comment period, in accordance with 310 CMR 30.852(3)(e), and the name and address of a Department contact to whom comment shall be sent;
  - 2. Announcement of the date, time, and place for a public meeting on the modification request held in accordance with 310 CMR 30.852(3)(d);
  - 3. Name and telephone number of the licensee's contact person;
  - 4. Name and telephone number of the Department's contact person;
  - 5. Location where copies of the modification request and any supporting documents can be viewed and copied; and
  - 6. The following statement: "The licensee's compliance history during the life of the license being modified is available from the Department contact person."
- (c) The licensee shall submit two copies of the license modification request and supporting documents to the Department and to the regional office in which the facility is located to give the public opportunity to review the proposed modification.
- (d) The Department shall hold a public meeting no earlier than 15 days after the publication of the notice required in 310 CMR 30.852(3)(b) and no later than 15 days before the close of the 60-day comment period. The meeting shall be held to the extent practicable in the vicinity of the licensed facility.
- (e) The public shall be provided 60 days to comment on the modification request. The comment period will begin on the date the licensee publishes the notice in the local newspaper. Comments shall be submitted to the Department contact identified in the public notice.
- (f) 1. No later than 120 days after receipt of the modification request, the Department shall:
  - a. Approve the modification request, with or without changes, and modify the license accordingly;
  - b. Deny the request;
  - c. Determine that the modification request shall follow the procedures in 310 CMR 30.852(4) for Class 3 modifications for the following reasons:
    - (i) There is significant public concern about the proposed modification; or
    - (ii) The complex nature of the change requires the more extensive procedures of 310 CMR 30.852(4) for Class 3 modifications.
  - 2. In making a decision to approve or deny a modification request, including a decision to reclassify a modification as a Class 3, the Department shall consider all written comments submitted to the Department during the public comment period and shall respond in writing to all significant comments in its decision.
  - 3. With written consent of the licensee, the Department may extend indefinitely or for a specified period the time periods for final approval or denial of a modification request or for reclassifying a modification as a Class 3.

#### 30.852: continued

- (g) The Department may deny or change the terms of a Class 2 license modification request for the following reasons:
  - 1. The modification request is incomplete;
  - 2. The requested modification does not comply with the appropriate requirements of 310 CMR 30.500 and 30.600 or other applicable requirements; or
  - 3. The reasons specified in 310 CMR 30.853(3)(f)1...

# (4) Class 3 modifications.

- (a) For Class 3 modifications listed in Table 310 CMR 30.852, the licensee shall submit a modification request to the Department that:
  - 1. Describes the exact change to be made to the license conditions and supporting documents referenced by the license;
  - 2. Identifies that the modification is a Class 3 modification;
  - 3. Explains why the modification is needed; and
  - 4. Provides the applicable information required by 310 CMR 30.801 through 30.804 or other information which is relevant to the modification request.
- (b) The licensee shall send a notice of the modification request to all persons on the facility mailing list maintained by the Department and to the appropriate units of State and local government as specified in 310 CMR 30.833(4) and must publish this notice in a major local newspaper of general circulation. This notice shall be mailed and published within seven days before or after the date of submission of the modification request, and the licensee shall provide to the Department evidence of the mailing and publication. The notice shall include:
  - 1. Announcement of a 60-day comment period, in accordance with 310 CMR 30.853(4)(e), and the name and address of a Department contact to whom comment shall be sent;
  - 2. Announcement of the date, time, and place for a public meeting on the modification request held in accordance with 310 CMR 30.852(4)(d);
  - 3. Name and telephone number of the licensee's contact person;
  - 4. Name and telephone number of the Department's contact person;
  - 5. Location where copies of the modification request and any supporting documents can be viewed and copied; and
  - 6. The following statement: "The licensee's compliance history during the life of the license being modified is available from the Department contact person."
- (c) The licensee shall submit two copies of the license modification request and supporting documents to the Department and to the regional office in which the facility is located to give the public opportunity to review the proposed modification.
- (d) The Department shall hold a public meeting no earlier than 15 days after the publication of the notice required in 310 CMR 30.852(4)(b) and no later than 15 days before the close of the 60-day comment period. The meeting shall be held to the extent practicable in the vicinity of the licensed facility.
- (e) The public shall be provided 60 days to comment on the modification request. The comment period will begin on the date the licensee publishes the notice in the local newspaper. Comments shall be submitted to the Department contact identified in the public notice
- (f) After the conclusion of the comment period, the Department shall grant or deny the license modification request according to the license modification procedures of 310 CMR 30.830 through 30.840.

# (5) Other modifications.

(a) In the case of modifications not explicitly listed in Table 310 CMR 30.852, the licensee shall request from the Department a determination of the appropriate class of the modification. The licensee shall provide the Department with the necessary information to support the classification decision.

#### 30.852: continued

- (b) The Department shall make the determination described in 310 CMR 30.852(5)(a) as promptly as practicable. In determining the appropriate class for a specific modification, the Department shall consider the similarity of the modification to other modifications codified in Table 310 CMR 30.852 and the following criteria:
  - 1. Class 1 modifications apply to minor changes that keep the license current with routine changes to the facility or its operation. These changes do not substantially alter the license conditions or reduce the capacity of the facility to protect public health, safety and welfare or the environment. In the case of Class 1 modifications, the Department may require prior approval.
  - 2. Class 2 modifications apply to changes that are necessary to enable a licensee to respond, in a timely manner to:
    - a. Common variations in the types and quantities of the wastes managed pursuant to the facility license.
    - b. Technological advancements, and
    - c. Changes necessary to comply with new regulations, where these changes can be implemented without substantially changing design specifications or management practices in the license.
  - 3. Class 3 modifications substantially alter the facility or its operations.
- (6) Public notice and appeals of license modification decisions.
  - (a) The Department shall notify persons on the facility mailing list and appropriate units of State and local government as specified in 310 CMR 30.833(4) within ten days of any decision pursuant to 310 CMR 30.852 to grant or deny a Class 2 or 3 license modification request.
  - (b) The Department's decision to grant or deny a Class 2 or 3 license modification request pursuant to 310 CMR 30.852 may be appealed pursuant to 310 CMR 30.890.

# (7) Newly listed or identified wastes.

- (a) The licensee is authorized to continue to manage wastes listed or identified as hazardous pursuant to 310 CMR 30.100 if the licensee:
  - 1. Was in existence as a hazardous waste facility and managed the newly listed or characterized waste prior to and on the effective date of the final rule listing or identifying the waste;
  - 2. Submits a Class 1 modification request on or before the date on which the waste becomes subject to the new requirements;
  - 3. Is in compliance with the standards of 310 CMR 30.099(6);
  - 4. In the case of Class 2 and 3 modifications, also submits a complete license modification request within 180 days after the effective date of the rule listing or identifying the waste; and
  - 5. In the case of land disposal units, certifies that such unit is in compliance with all applicable 310 CMR 30.099(6) ground water monitoring and financial responsibility requirements on the date 12 months after the effective date of the rule identifying or listing the waste as hazardous. If the owner or operator fails to clarify compliance with these requirements, he or she shall lose authority to operate pursuant to 310 CMR 30.852.
- (b) New wastes or units added to a facility's license pursuant to 310 CMR 30.852(7) do not constitute expansions for the purpose of the 25% capacity expansion limit for Class 2 modifications.
- (8) <u>License modification list</u>. The Department shall maintain a list of all approved license modifications and shall publish a notice once a year in a State-wide newspaper stating that an updated list is available for review.

### 30.852: continued

# 310 CMR 30.852: Classification of License Modifications

A.	General License Provisions	
1.	Administrative or informational changes	1
2.	Correction of typographical errors	1
3.	Equipment replacement or upgrading with functionally equivalent	
	components (e.g. pipes, valves, pumps, conveyors, controls)	11
4.	Changes in the frequency of or procedures for monitoring,	
	reporting, sampling, or maintenance activities by the	
	licensee:	
	a. To provide for more frequent monitoring, reporting,	
	sampling, or maintenance	1
	b. Other changes	2
5.	Schedule of compliance:	
	a. Changes in interim compliance dates	$1^{1}$
	b. Extension of final compliance date	3
6.	Changes in expiration date of permit to allow earlier	
	license termination	11
В.	General Facility Standards	
1.	Changes to waste sampling or analysis methods:	
	a. To conform with Department guidance or regulations	1

a. To conform with Department guidance or re	egulations l
b. To incorporate changes associated with F03	39 (multisource leachate)
sampling or analysis	1
c. To incorporate changes associated with und	lerlying hazardous
constituents in ignitable or corrosive wastes	1
d. Other changes	2
Changes to analytical quality assurance/control pla	n:
a. To conform with Department guidance or re	egulations 1
b. Other changes	2
Changes in procedures for maintaining the operating	ng record 1
Changes in frequency or content of inspection sche	edules 2
Changes in the training plan:	
a. That affect the type or decrease the amount	of training
given to employees	2
1 0.1 1	4

b. Other changes 1

Contingency plan:

2.

3.

4.

a. Changes in emergency procedures (i.e. spill or release response procedures)

2

b. Replacement with functionally equivalent, upgrade, or relocate emergency equipment listed  $1^1$ 2

c. Removal of equipment from emergency equipment list d. Changes in name, address, or phone numbers of

coordinators or other persons or agencies identified in the plan

When a license modification (such as introduction of a new unit) requires a change in facility Note: plans or other general facility standards, that change shall be reviewed under the same procedures as the license modification.

#### C. **Ground Water Protection**

1. Changes to wells:

> a. Changes in the number, location, depth or design of upgradient or downgradient wells of permitted ground-water monitoring system 2 b. Replacement of an existing well that has been damaged or rendered inoperable, without change to location, design or depth of the well 1

# 30.852: continued

# Table 310 CMR 30.852 - Classification of License Modifications (con't)

2.	Changes in ground-water sampling or analysis procedures or	
	monitoring schedule	$1^{1}$
3.	Changes in statistical procedure for determining whether a	
	statistically significant change in ground-water quality	
	between upgradient and downgradient wells has occurred	$1^{1}$
4.	Changes in point of compliance	2
5.	Changes in indicator parameters, hazardous constituents,	
	or concentration limits (including ACLs):	
	a. As specified in the ground water protection standard	3
	b. As specified in the detection monitoring program	2
6.	Compliance monitoring program:	2
	a. Addition of compliance monitoring program	3
	b. Changes to a compliance monitoring program, unless	2
7	otherwise specified in Table 310 CMR 30.852	2
7.	Corrective action program:	2
	a. Addition of a corrective action program	3
	b. Changes to a corrective action program, unless otherwise	2
	specified in Table 310 CMR 30.852	2
D.	Closure	
<b>D</b> .	Closure	
1.	Changes to the closure plan:	
	a. Changes in estimate of maximum extent of operations or	
	maximum inventory of waste on site at any time during the	
	active life of the facility	$1^1$
	b. Changes in closure schedule for any unit, changes in	
	the final closure schedule for the facility, or extension	
	of the closure period	$1^{1}$
	c. Changes in the expected year of final closure, where	
	other license conditions are not changed	$1^1$
	d. Changes in procedures for decontamination of facility	
	equipment or structures	$1^1$
	e. Changes in approved closure plan resulting from	
	unexpected events occurring during partial or final closure,	
	unless otherwise specified in Table 310 CMR 30.852	2
2.	Creation of a new landfill unit as part of a closure	3
3.	Addition of the following new units to be used temporarily	
	for closure activities:	_
	a. Surface impoundments	3
	b. Incinerators	3
	c. Waste piles that do not comply with 310 CMR 30.640(4)	3 3 2 2
	d. Waste piles that comply with 310 CMR 30.640(4)	2
	e. Tanks or containers (other than specified below)	2
	f. Tanks used for neutralization, dewatering, phase	$1^1$
	separation, or component separation	1
E.	Post-Closure	
ட.	1 ost Closure	
1.	Changes in name, address or phone number of contact in post-	
••	closure plan	1
2.	Extension of post-closure care period	2
3.	Reduction in the post-closure care period	3
4.	Changes to the expected year of final closure, where other	-
	license conditions are not changed	1
5.	Changes in post-closure plan necessitated by events occurring	
	during the active life of the facility, including partial	
	and final closure	2

# 30.852: continued

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F.	Container	rc
1 .	Containe	

1.	Modification or addition of container units:  a. Resulting in greater than 25% increase in the facility's container storage capacity  b. Resulting in up to 25% increase in the facility's	3
2.	container storage capacity	2
۷.	<ul><li>a. Modification of a container unit without increasing the capacity of the unit</li><li>b. Addition of a roof to a container unit without</li></ul>	2
2	alteration of the containment system	1
3.	Storage of different wastes in containers:  a. That require additional or different management practices from those authorized in the license  b. That do not require additional or different management.	3
	b. That do not require additional or different management practices from those authorized in the license	2
Not	e: See 310 CMR 30.852(7) for modification procedures to be used for newly listed or identified wastes.	or the management of
4.	Other changes in container management practices (e.g. aisle spaces; types of containers; segregation)	2
G.	Tanks	
1.	a. Modification or addition of tank units resulting in greater than a 25% increase in the facility's tank capacity,	
	except as provided in Table 310 CMR 30.852G(1)(c) and G(1)(d) b. Modification or addition of tank units resulting in	3
	up to 25% increase in the facility's tank capacity, except as provided in Table 310 CMR 30.852 G(1)(d)	2
	<ul><li>c. Addition of a new tank that will operate for more than</li><li>90 days using any of the following physical or chemical</li></ul>	
	treatment technologies: neutralization, dewatering, phase separation or component separation d. Addition of a new tank that will operate up to 90 days	2
	using any of the following physical or chemical treatment technologies: neutralization, dewatering, phase separation	
2.	or component separation  Modification of a tank unit or secondary containment system	11
3.	without increasing the capacity of the unit Replacement of a tank with a tank that meets the same design standards and has a capacity within +/- 10% of the	2
	replaced tank provided  - the tank difference is no more than 1500 gallons	
	<ul> <li>the facility's licensed tank capacity is not increased, and</li> </ul>	
	- the replacement tank meets the same conditions in the license	1
4. 5.	Modification of a tank management practice  Management of different wastes in tanks:	2
	a. That require additional or different management practices, tank design, different fire protection specifications, or	
	significantly different tank treatment process from that authorized in the license	3

#### 30.852: continued

b. That do not require additional or different management practices tank design, different fire protection specifications or significantly different tank treatment process from that authorized in the license

2

### H. Land Disposal Facilities

1. The classification of modifications for surface impoundments, enclosed waste piles, landfills and unenclosed waste piles, and land treatment facilities at 40 CFR 270.42, Appendix I, Sections H through K, exclusive of notes, is hereby incorporated by reference

3

Note: See 310 CMR 30.852(7) for modification procedures to be used for the management of newly listed or identified wastes.

Requires prior approval by the Department.

# 30.853: License Denial, Suspension or Revocation

- (1) The Department may deny, suspend, or revoke a license for cause at any time if it determines that any term or condition thereof has been violated, that the licensee or applicant has violated any provision of M.G.L. c. 21C, RCRA, or 310 CMR 30.000, or that the licensee or applicant is not competent with respect to the licensed activity. Such action by the Department shall be subject to opportunity for an adjudicatory hearing pursuant to M.G.L. c. 21C and c. 30A, and 310 CMR 1.00. In an adjudicatory hearing held pursuant to 310 CMR 30.853, the issue to be adjudicated shall be whether the Department's decision to deny, suspend or revoke a license was reasonable in light of the particular facts and circumstances available to the Department at the time of its decision.
- (2) Causes for suspending or revoking a license during its term, or for denying a license, shall include, but shall not be limited to, the following:
  - (a) Non-compliance by the licensee with 310 CMR 30.000, M.G.L. c. 21C, or any condition of the license;
  - (b) Failure of the applicant or licensee to fully and accurately disclose in the application, during the license issuance process, or at any time during the term of the license, all relevant facts which the licensee or applicant knew or should have known;
  - (c) The licensee's or applicant's misrepresentation of any relevant facts at any time;
  - (d) A determination by the Department that the licensed activity or facility could or does endanger public health, safety, or welfare, or the environment; or
  - (e) Failure of the licensee or applicant to meet a standard set forth in 310 CMR 30.811 or 30.812.
- (3) Any interested person may request the Department to suspend or revoke a license. If the Department decides to deny a request to suspend or revoke a license, the Department shall send to the person making the request a brief written response giving a reason for the Department's decision. Except as provided in 310 CMR 30.890, denial of a request to suspend or revoke a license shall not be subject to public notice, public comment, or public hearings.

# 30.854: Effect of License Denial, Suspension, or Revocation on Other Hazardous Waste Activities

The denial, suspension, or revocation of a license for any class of hazardous waste or category of hazardous waste license may be grounds for the denial, suspension, or revocation of a license to that licensee or applicant for all other hazardous waste classes and license categories. Any person whose license renewal is denied or whose license is revoked for cause shall be barred from applying for any class or category of license issued pursuant to 310 CMR 30.000 for a period of not more than five years. The period during which reapplication shall be barred shall be established as part of the decision or determination of the Department in the proceedings relative to the denial or revocation.

### 30.860: SPECIAL FORMS OF LICENSES

### 30.861: Emergency License

Notwithstanding any other provision of 310 CMR 30.000, if the Department finds that an imminent and substantial endangerment to public health, safety, or welfare, or the environment may exist unless the Department takes such action, the Department may issue to a non-licensed facility a temporary emergency license for the treatment, storage, or use of hazardous waste by said facility, and may issue a temporary emergency license to a non-licensed transporter for the transportation of hazardous waste by said transporter. This temporary emergency license:

- (1) Shall be either oral or written, provided that if it is oral, it shall be followed within five days by a written temporary emergency license;
- (2) Shall only be for a period necessary to abate the emergency, and in no case shall exceed a period of 90 days;
- (3) Shall clearly specify the hazardous wastes to be received or transported and the manner and location of their transport, treatment, use, or storage, which manner and location shall be in compliance with 310 CMR 30.000, except to the extent that the temporary emergency license expressly specifies otherwise because such compliance is determined by the Department to be not possible or not consistent with the emergency situation;
- (4) May be terminated by the Department at any time the Department deems such action appropriate to protect public health, safety, or welfare, or the environment, or when the Department determines that the emergency has been abated;
- (5) Shall be accompanied by a public notice given in compliance with the notice provisions of 310 CMR 30.833 or 30.834, whichever is applicable. The content of this notice shall include, at a minimum, the following:
  - (a) The address and telephone number of the office of the Department issuing the temporary emergency license;
  - (b) The name and location of the facility or transporter, as applicable;
  - (c) A brief description of the wastes involved;
  - (d) A brief description of the temporary emergency license and the reasons for the issuance thereof;
  - (e) The duration of the temporary emergency license.

# 30.862: License for Land Treatment Demonstration

- (1) For the purpose of allowing an owner or operator to meet the land treatment demonstration requirements of 310 CMR 30.653, the Department may issue a land treatment demonstration license. The license shall contain those requirements necessary to meet the standards set forth in 310 CMR 30.653(3). The license shall be issued as a treatment and disposal license authorizing only the field test and laboratory analyses.
- (2) In the land treatment demonstration license, the Department shall establish conditions for conducting the field tests and laboratory analyses required by 310 CMR 30.653. These license conditions shall include design and operating parameters (including the duration of the tests and analyses and, in the case of field tests, the horizontal and vertical dimensions of the treatment zone), monitoring procedures, post-demonstration clean-up activities, and any other condition which the Department determines may be necessary or appropriate.

# 30.863: Research, Development, and Demonstration Facilities and Approvals

(1) The Department may issue a research, development, and/or demonstration approval for any hazardous waste facility which proposes to utilize an innovative and experimental hazardous waste technology or process for which standards have not been promulgated. Each such approval, and each application for such approval, shall be in writing and shall be subject to the provisions set forth in 310 CMR 30.801 through 30.803, 30.806, 30.807, 30.810 through 30.822, 30.825(2), (3), and (5), 30.831(1) through (3), 30.853, 30.854, 30.870, 30.880, 30.890, and 30.862, and shall not be subject to any other provision of 310 CMR 30.800.

### 30.863: continued

- (2) Such research, development and/or demonstration approval shall include such terms and conditions as will assure protection of public health, safety and welfare and the environment. Such approvals shall:
  - (a) Provide for the construction and maintenance of whatever is necessary to assure compliance with requirements set forth or referred to in 310 CMR 30.862;
  - (b) Provide for the operation of the research, development, and/or for demonstration for not longer than one year unless renewed as provided in 310 CMR 30.867(3);
  - (c) Provide for the receipt and treatment by the facility of only those types and quantities of hazardous waste which the Department determines are necessary for purposes of determining the efficacy and performance capabilities of the technology or process and the effects of such technology or process on public health, safety and welfare and the environment; and
  - (d) Include such requirements as the Department determines are necessary to protect public health, safety and welfare and the environment including, but not limited to, requirements regarding monitoring, operation, financial responsibility, closure and remedial action, and such requirements as the Department determines are necessary regarding testing and providing information to the Department, with respect to the operation of the facility.
- (3) Any approval issued pursuant to 310 CMR 30.862 may be renewed not more than three times. Each such renewal shall be for a period of not more than one year. A person applying for a renewal shall submit such a renewal request at least one month before the expiration of the approval.
- (4) No research, development, and/or demonstration facility subject to 310 CMR 30.862 shall be operated without the prior issuance of an approval issued by the Department pursuant to 310 CMR 30.863. No research, development, and/or demonstration facility subject to 310 CMR 30.862 shall be operated except in accordance with 310 CMR 30.862, all other applicable provisions of 310 CMR 30.000, and the terms and conditions of an approval issued by the Department pursuant to 310 CMR 30.862. The Department may order an immediate termination of all operations at the facility at any time that termination is necessary to protect public health, safety and welfare, and the environment. The Department may order an immediate termination of all operations at the facility at any time the Department determines that such action is necessary to protect public health, safety or welfare or the environment, or to assure compliance with 310 CMR 30.000 or any other applicable statute or regualtion.
- (5) All hazardous waste delivered to a research, development, and/or demonstration facility shall be handled in full compliance with 310 CMR 30.863 and all other applicable provisions of 310 CMR 30.000.

# 30.864: Research Facility License

### (1) Applicability.

- (a) 310 CMR 30.864 is intended to protect public health, safety, and welfare, and the environment, by regulating the handling of hazardous waste on which a research study, as defined in 310 CMR 30.010, is being conducted. 310 CMR 30.864 applies to hazardous wastes on which a research study is being conducted, and does not apply to non-hazardous wastes on which such study is being conducted.
- (b) 310 CMR 30.864 is promulgated pursuant to the authority set forth in 310 CMR 30.001. 310 CMR 30.864 is also promulgated pursuant to the authority set forth in M.G.L. c. 21C, § 4 to waive regulation where there is no significant potential hazard to the public health, safety, or welfare, or the environment.
- (c) Except as otherwise provided in 310 CMR 30.864, all procedures and requirements for licensing hazardous waste facilities, set forth in 310 CMR 30.000, are presumed to apply unless the Department is persuaded by the applicant for, or the holder of, a research facility license that the waiver of any of these requirements will not present a significant potential hazard to the public health, safety, or welfare, or the environment. The burden shall be on the applicant for, or the holder of, a research facility license to persuade the Department that the waiver of any of these requirements will not present a significant potential hazard to the public health, safety, or welfare, or the environment. The Department may deem any license requirement in 310 CMR 30.800 to be applicable. The Department may modify or waive any

requirements in 310 CMR 30.800, except that the Department may modify, but may not waive, requirements regarding financial responsibility, including insurance, or procedures regarding public participation.

- (d) Nothing in 310 CMR 30.864 shall preclude a site or works licensed or otherwise authorized pursuant to 310 CMR 30.099, 30.104(3)(b) and (c), 30.200, 30.801, 30.862 or 30.863 from being licensed additionally as a research facility pursuant to 310 CMR 30.864, provided that such site or works shall obtain and have in effect a valid research facility license prior to commencing construction, operation or maintenance directly associated with research study activity.
- (e) Nothing in 310 CMR 30.864 shall preclude a research facility licensed pursuant to 310 CMR 30.864 from being licensed or otherwise authorized pursuant to 310 CMR 30.099, 30.104(3)(b) and (c), 30.200, 30.801, 30.862 or 30.863, provided that such research facility shall obtain and have in effect such license or authorization prior to commencing construction, operation or maintenance directly associated with such license or authorization.
- (f) A license issued pursuant to 310 CMR 30.864 authorizes the licensee to store, treat, dispose or recycle hazardous waste, or otherwise to accept, handle or process hazardous waste at the research facility, only for the purpose of conducting research study activity, and only in strict compliance with the terms and conditions of such license. If any person intends to store, treat, dispose or recycle hazardous waste for a purpose other than to conduct research study activity, such person shall be licensed or otherwise authorized pursuant to 310 CMR 30.099, 30.104(3)(b) and (c), 30.200, 30.801, 30.862, or 30.863.

# (2) <u>License Application Process and Requirements</u>.

- (a) Application Form and Completeness.
  - 1. Any person required to have a research facility license shall complete, sign, and submit an original application, plus five copies, to the Department. The Department may prescribe a form(s) which shall be used by all applicants.
  - 2. The applicant shall be required to submit such information concerning the proposed research facility or activity as the Department may require.
  - 3. An application, or any part thereof, shall be deemed complete when the Department receives the application or partial submission, and determines that all required information has been submitted and all applicable fees have been paid to the Department. If, however, the Department determines at any time during the review of the application that additional information is required in order to understand and evaluate the proposed research facility or activity, the Department may require such information. The Department shall request such additional information in writing.
  - 4. The Department may either deem a license application incomplete or deny a license if an applicant fails or refuses to correct deficiencies in the application.
  - 5. The Department may deny a research facility license before receiving a complete application for a license.
  - 6. Research facility license applications are designated as individual rule projects and subject to the requirements set forth in 310 CMR 4.05.
- (b) <u>Preliminary Application</u>. All research facility license applications shall include at least the following information:
  - 1. All information required in 310 CMR 30.803;
  - 2. A checklist of all requirements applicable to hazardous waste facilities, as set forth in 310 CMR 30.000, on a form provided by the Department, and on which the applicant preliminarily identifies those requirements that may be applicable to the research facility; and
  - 3. A detailed description of the proposed research study activity, including, but not limited to, the following information:
    - a. A discussion of the purposes of the research study activity, as set forth in the definition of research study, 310 CMR 30.010, and the goals and objectives of each proposed technology, process or activity, and the methods by which the applicant will evaluate whether the proposed technology, process or activity has achieved the specified goals and objectives;
    - b. An analysis indicating the benefits of each proposed technology, process or activity:
    - c. A description of the applicability of each proposed technology, process or activity to hazardous waste management in general;

- d. Identification of all types and quantities of hazardous wastes, including chemical names and waste codes, proposed to be received, handled and processed at the research facility at any one time, and to be necessary for purposes of determining the efficiency and performance capabilities of each proposed technology, process or activity;
- e. A description of how the applicant intends to provide for the receipt, sampling, screening, handling, processing and ultimate treatment or disposal after processing of those types and quantities of hazardous waste proposed to be necessary for purposes of determining the efficiency and performance capabilities of each technology, process or activity;
- f. A technical analysis indicating environmental, public health and safety benefits and risks from each proposed technology, process or activity to the extent such benefits and risks can be evaluated at the time of application;
- g. A site plan indicating the location of the research facility if a location has been selected at the time of application, provided that if a location has not been selected at the time of application, a license decision may be granted, but shall not become final and effective until a site plan has been submitted and reviewed by the Department;
- h. A preliminary operational plan generally outlining operations of the research facility, including a flow diagram, the particular types of equipment required for proper operation, and a discussion of measures to be taken to ensure the protection of public health, safety and the environment;
- i. Such other descriptions, plans or information as the applicant may believe, or the Department may deem necessary to review the preliminary application.

### (c) Public Notice of Preliminary Application.

- 1. Within ten days of determining that a preliminary application is complete, the Department will issue public notice inviting comment on the scope of the preliminary application.
- 2. Public notice issued pursuant to 310 CMR 30.864(2)(c) shall allow at least 15 days from the date of the notice for public comment.
- 3. Public notice shall be given, at a minimum, by:
  - a. publication, paid for by the applicant, in a daily newspaper of general circulation within the locality affected by the research facility, or in a daily newspaper of general circulation statewide if a site has not been selected at the time of preliminary application;
  - b. mailing notice to each city or town having jurisdiction over the area in which the facility is proposed to be located;
  - c. mailing notice to the board of health and the fire department of the city or town in which the research facility is proposed to be located; and
  - d. mailing notice to such other persons as the Department may identify.
- 4. All public notices issued pursuant to 310 CMR 30.864(2)(c) shall, at a minimum, contain the following information:
  - a. the name and address of the offices of the Department processing the license application for which notice is being given;
  - b. the name and address of the applicant and, if different, of the facility which is the subject of the application;
  - c. the name, address, and telephone number of an individual(s) from whom interested persons may obtain further information, including the locations where copies of the preliminary application may be reviewed;
  - d. a brief description of the research facility licensing and public comment procedures; and
  - e. any additional information considered necessary or appropriate.
- (d) <u>Applicability Determination</u>. Within 15 days of the close of the public comment period provided in 310 CMR 30.864(2)(c), the Department may either:
  - 1. Approve the scope of the application, as proposed by the applicant pursuant to 310 CMR 30.864(2)(b)2. and 3., at which time the Department shall establish, consistent with the provisions of 310 CMR 4.05, a schedule with dates by which the applicant shall supplement the preliminary application by submitting information concerning requirements identified by the applicant as being applicable to the research facility; or

- 2. Hold a scoping meeting, or otherwise determine, with the applicant whether any license application requirements in 310 CMR 30.800, not identified by the applicant as applicable, should be deemed applicable, modified or waived. Upon such determination, the Department shall establish, consistent with the provisions of 310 CMR 4.05, a schedule with dates by which the applicant shall supplement the preliminary application by submitting information concerning requirements determined to be applicable to the research facility.
- (e) Final Application, Technical Review and Decision Schedule.
  - 1. A final application shall consist of all preliminary application submittals and all information submitted as required by the Department after public comment on the preliminary application and an applicability determination.
  - 2. Within 30 days of deeming a final license application administratively complete for the purpose of initiating the technical review process, the Department shall prescribe the form of public participation and opportunity for comment appropriate for the level of public interest in the research facility, and establish, consistent with the provisions of 310 CMR 4.05, a decision schedule estimating dates by which it intends to conduct the technical review of the application, give public notice, complete the public comment period and issue a final license decision.
- (f) Extending the Public Comment Period. The Department may extend any public comment period, prescribed pursuant to 310 CMR 30.864, and consistent with the provisions of 310 CMR 4.00, to give interested persons an opportunity to comment on information submitted. If the Department grants such an extension, notice thereof shall be given in the manner prescribed in 310 CMR 30.864(2)(c)3. Such notice shall specify any new issues to be considered.

### (3) Additional Conditions of Research Facilities.

- (a) Accumulation Limits and Inventory Control.
  - 1. The research facility shall initiate, in any one day, processing on no greater total quantity of as received hazardous waste than is necessary for purposes of conducting a research study. The Department may specify limitations on the quantity of hazardous waste processed daily as a specific condition of the license.
  - 2. The total quantity of hazardous waste accumulated at a research facility at any one time shall not at any time exceed the quantity specified in the license.
  - 3. Until such time as the Department may issue to the research facility a license for the storage of hazardous waste pursuant to 310 CMR 30.800, the research facility shall accumulate hazardous waste, in compliance with the quantity specified in the license, for a period not to exceed 90 days from the date of generation of such wastes. The date of generation shall be either:
    - a. The date of receipt of as received hazardous waste by the research facility from the original generator or sample collector; or
    - b. The date of the processing run from which hazardous waste results.
  - 4. Except as otherwise provided in 310 CMR 30.864(3)(a), the research facility shall accumulate all hazardous waste in compliance with the requirements of 310 CMR 30.340.
  - 5. The research facility shall maintain a daily inventory of the type and volume of hazardous waste in each accumulation, storage, flo-bin and processing unit.
  - 6. Any deadline set forth in 310 CMR 30.864(3)(a) may be extended only by prior written approval of the Department.
- (b) <u>Disposition of Unprocessed As Received Hazardous Waste.</u>
  - 1. The research facility may return all as received hazardous waste which is not used in processing a specific waste stream to the original generator or sample collector if a contractual agreement exists for the return of such waste. All such waste returned to the original generator or sample collector is subject to all applicable provisions of 310 CMR 30.310 through 30.317.
  - 2. If the research facility does not return unprocessed as received hazardous waste to the original generator or sample collector, the research facility shall be deemed the generator of all such as received hazardous waste. All such as received hazardous waste is subject to 310 CMR 30.305 and all other applicable provisions of 310 CMR 30.000.

- (c) Disposition of Waste, Residue and Material Remaining After Processing.
  - 1. All waste and residue which result from or remain after processing a specific waste stream shall be considered hazardous waste, subject to all applicable provisions of 310 CMR 30.000, and disposed of pursuant to 310 CMR 30.864(3)(c)3. and all other applicable provisions of 310 CMR 30.000, unless the licensee demonstrates to the satisfaction of the Department that:
    - a. where the as received waste is a characteristic hazardous waste, the processed waste does not exhibit any of the characteristics identified and defined in 310 CMR 30.120 through 30.125; and
    - b. where the as received waste is a listed hazardous waste, pursuant to 310 CMR 30.130, the processed waste does not contain any of the constituents listed in Appendix VII, 40 CFR Part 261, as incorporated by reference at 310 CMR 30.162, which caused the as received waste to be listed in 310 CMR 30.130 as a hazardous waste, and does not exhibit any of the characteristics identified and defined in 310 CMR 30.120 through 30.125.
  - 2. All other material which results from or remains after processing a specific waste stream shall be considered hazardous waste, and disposed of pursuant to 310 CMR 30.864(3)(c)3., unless the licensee manages such material as a commodity, and demonstrates to the satisfaction of the Department that such material:
    - a. Is commodity-like by:
      - i. Having commercial application as an effective substitute for a similar or corresponding virgin material or commercial product;
      - ii. Meeting industry-recognized and/or customer-specific quality specifications; and
      - iii. Being handled and stored in a manner consistent with its use as an analogous virgin material or commercial product substitute; and
    - b. Does not exhibit any of the characteristics identified and defined in 310 CMR 30.120 through 30.125; and either
    - c. Does not contain any of the constituents listed in Appendix VII, 40 CFR Part 261, as incorporated by reference at 310 CMR 30.162, which caused the as received waste to be listed in 310 CMR 30.130 as a hazardous waste; or
    - d. Contains constituents listed in Appendix VII, 40 CFR Part 261, as incorporated by reference at 310 CMR 30.162, which caused the as received waste to be listed in 310 CMR 30.130, and the licensee demonstrates to the Department, and obtains prior approval, that the presence of these constituents does not pose a threat to the public health, safety, and welfare, and the environment.
  - 3. The research facility shall handle all waste, residue and material which is hazardous waste, and is not commodity-like, or if commodity-like, is not being managed as a commodity, by:
    - a. Returning the hazardous waste to the original generator or sample collector in full compliance with all applicable provisions of 310 CMR 30.310 through 30.317; or
    - b. Causing the hazardous waste, of which the research facility is deemed the generator, to be sent off-site in full compliance with 310 CMR 30.305 and all other applicable provisions of 310 CMR 30.000; or
    - c. Petitioning the Department to classify the waste as non-hazardous, pursuant to the terms of 310 CMR 30.142.

# (d) Recordkeeping and Reporting.

- 1. The research facility shall prepare and submit a report to the Department by March 15 of each year, beginning in the 1995 reporting year due March 15, 1996, that estimates the number of research studies and the amount of waste expected to be used in each study during the current year, and includes, but is not limited to, the following information about activity during the previous calendar year:
  - a. The name, address and EPA identification number of the research facility;
  - b. The type (by process) of research study being conducted;
  - c. The total quantity and type, including waste code, of each hazardous waste subjected to research studies;
  - d. The total quantity of hazardous waste in storage each day, specifying:
    - i. The total quantity of as received hazardous waste; and
    - ii. The total quantity of hazardous waste which results from processing a specific waste stream;

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- e. The name, address and EPA identification number of each generator or sample collector for whom a research study is being conducted;
- f. The date on which each shipment was received from each generator or sample collector, and the amount of each shipment;
- g. The dates on which each research study was initiated and completed;
- h. A detailed description of how each as received waste stream was processed throughout the course of a research study, reporting in either mass or volume as appropriate, and specifying:
  - i. The total volume or mass of each waste stream introduced into each processing run;
  - ii. The type and volume or mass of each co-reactant that may be introduced into each processing run;

- iii. The type, volume or mass, and market value of each product that may be recovered from each processing run;
- iv. The type, volume or mass, disposition and cost of disposal of all residual waste that may result from each processing run;
- v. The net incremental operating cost of conducting each processing run; and
- vi. The gross mass balance of hazardous waste, including total amount of as received waste received from the generator or sample collector, unprocessed as received waste, and the waste, residue and material which result from or remain after processing, including co-reactants and other treatment materials (including non-hazardous solid waste) added to as received waste.
- i. The final disposition of all hazardous waste generated by the research facility, as defined in 310 CMR 30.864(3)(a)1., including:
  - i. The name, address and EPA identification number of each transporter employed by the research facility to transport such waste;
  - ii. The name, address and EPA identification number of each generator or sample collector to which the research facility returns hazardous waste pursuant to a contractual agreement, or each designated facility to which the research facility transports hazardous waste;
  - iii. Types of waste, including waste codes, returned to each generator or sample collector pursuant to a contractual agreement, or transported to each designated facility; and
  - iv. Dates of each shipment.
- j. An evaluation, with supporting data, analyses and any other documentation necessary to demonstrate the degree to which the research facility is achieving the goals and objectives described in accordance with 310 CMR 30.864(2)(b)3.a., including the rate of treatment, recycling and/or disposal achieved;
- k. Documentation to demonstrate that the research facility accumulated each waste stream in compliance with 310 CMR 30.864(3)(a) and the terms and conditions of its license; and
- 1. Documentation to demonstrate that the research facility processed each waste stream in compliance with 310 CMR 30.864(3)(a) and any term and condition that may be set forth in its license.
- 2. The research facility shall keep on-site a copy of each contractual agreement for each research study and all shipping papers associated with the transport of hazardous waste for each study to and from the facility for a period ending not less than three years from the completion date of each study, or for the duration of any unresolved enforcement action, whichever period is longer.
- 3. For three years following completion of each research study conducted, or for the duration of any unresolved enforcement action, whichever period is longer, the research facility shall maintain copies of all records, documentation and information required in 310 CMR 30.864(3)(c).
- 4. Except as other provided in 310 CMR 30.864(3)(c), all records and copies of all applications, reports, and other documents required by 310 CMR 30.000 and the terms and conditions of a license shall be subject to 310 CMR 30.543.

# 30.870: License and Vehicle Identification Fees

The amount of any license or vehicle identification device fee charge pursuant to 310 CMR 30.000 shall be as prescribed by M.G.L. c. 21C, unless otherwise prescribed by the Secretary of Administration and Finance pursuant to authorizing legislation. No license shall issue until all applicable license and vehicle identification fees have been paid to the Department.

# 30.880: Compliance With MEPA

Before the Department may act on an application, it shall determine whether the application is subject to the Massachusetts Environmental Policy Act, M.G.L. c. 30, §§ 61 through 62H, and 301 CMR 11.00, cited as MEPA throughout 310 CMR 30.000. If the application is subject to MEPA, the Department shall verify that the applicant has satisfactorily complied with all applicable provisions of MEPA.

### 30.890: ADJUDICATORY HEARING PROCESS

Pursuant to M.G.L. c. 21C, § 11, any person aggrieved by a determination by the Department to issue, deny, modify, revoke, or suspend any license or approval, or to issue an order, may request an adjudicatory hearing before the Department pursuant to the provisions of M.G.L. c. 30A. For the purposes of 310 CMR 30.000, an "aggrieved person" shall be deemed to be any person who is or may become a "party" or "intervenor" pursuant to 310 CMR 1.00. A person aggrieved by a final decision in any adjudicatory proceeding may obtain judicial review thereof pursuant to the provisions of M.G.L. c. 30A.

# 30.900: FINANCIAL RESPONSIBILITY REQUIREMENTS FOR TREATMENT, STORAGE, AND DISPOSAL FACILITIES

310 CMR 30.901 through 30.999, cited collectively as 310 CMR 30.900, set forth the requirements, procedures and options for obtaining and maintaining in effect financial assurance for all facilities which treat, store, or dispose of hazardous waste.

# 30.901: Applicability and Compliance

- (1) The requirements of 310 CMR 30.900 shall apply to owners or operators of all hazardous waste facilities, except as provided otherwise in 310 CMR 30.901, or in 310 CMR 30.580 and 30.590, except as provided otherwise in 310 CMR 30.901. All documents submitted to the Department for the purpose of demonstrating compliance with 310 CMR 30.900 shall be public records, and no such document shall be deemed to be, or treated as, confidential pursuant to 310 CMR 3.00.
  - (a) The requirements of 310 CMR 30.905 and 30.906 apply only to owners or operators of facilities subject to 310 CMR 30.590 through 30.595.
  - (b) The requirements of 310 CMR 30.908(2) apply only to owners or operators of miscellaneous units, hazardous waste landfills, surface impoundments, hazardous waste incinerators, land treatment facilities, waste piles, underground tanks, and above-ground tanks for which secondary containment has not been demonstrated. A waiver from 310 CMR 30.908(2) may be granted, at the discretion of the Department, for miscellaneous units at which there has been no disposal of hazardous waste and underground storage tanks that may be visually inspected.
  - (c) The State and Federal governments are exempt from the requirements of 310 CMR 30.900.
- (2) No owner or operator of a new hazardous waste facility shall accept hazardous waste for treatment, storage or disposal until at least 60 days after:
  - (a) such owner, operator, or person has submitted to the Department a closure cost estimate pursuant to 310 CMR 30.903; and
  - (b) such owner, operator, or person has submitted to the Department evidence of financial responsibility meeting the requirements of 310 CMR 30.908; and
  - (c) such owner, operator, or person has submitted to the Department evidence of:
    - 1. a financial assurance mechanism meeting the requirements of 310 CMR 30.904, and
    - 2. payment, if applicable, into the financial assurance mechanism described in 310 CMR 30.901(2)(c)1.; and

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- (d) the Department has:
  - 1. approved the closure cost estimate submitted pursuant to 310 CMR 30.901(2)(a) and 30.903; and
  - 2. approved the financial mechanism submitted pursuant to 310 CMR 30.901(2)(c)1.; and
  - 3. received evidence that, pursuant to 310 CMR 30.901(2)(c)2, the first required payment has been paid into or for the financial assurance mechanism. The date on which such first required payment was made shall be considered the "anniversary date" as that term is used in 310 CMR 30.904.
- (3) No owner or operator of a new hazardous waste facility described in 310 CMR 30.901(1)(a) shall accept hazardous waste at such facility until at least 60 days after:
  - (a) such owner or operator has submitted to the Department a post-closure cost estimate pursuant to 310 CMR 30.905; and
  - (b) such owner or operator has submitted to the Department evidence of:
    - 1. a financial assurance mechanism meeting the requirements of 310 CMR 30.906, and
    - 2. payment, if applicable, into the financial mechanism described in 310 CMR 30.901(3)(b)1.; and
  - (c) the Department has:
    - 1. approved the post-closure cost estimate submitted pursuant to  $310 \, \text{CMR} \, 30.901(3)(a)$  and 30.905; and
    - 2. approved the financial mechanism submitted pursuant to 310 CMR 30.901(3)(b)1.; and
    - 3. received evidence that, pursuant to 310 CMR 30.901(3)(b)2., the first required payment has been paid into or for the financial assurance mechanism. The date on which such first required payment was made shall be considered the "anniversary date" as that term is used in 310 CMR 30.906.
- (4) The owner or operator of each facility in existence on October 15, 1983 shall, no later than February 13, 1984:
  - (a) Submit to the Department a current closure cost estimate pursuant to 310 CMR 30.903, and, if the facility is described in 310 CMR 30.901(1)(a), a current post-closure cost estimate pursuant to 310 CMR 30.905; and
  - (b) Provide to the Department evidence of a financial mechanism meeting all applicable requirements of 310 CMR 30.904, 30.906, and 30.908 as in effect on October 15, 1983; and
  - (c) Provide to the Department evidence that the first required payment, if applicable, has been paid into or for the financial mechanism(s) required pursuant to 310 CMR 30.904, and 30.906 if applicable.
    - 1. The date on which the first required payment was paid into or for a financial mechanism meeting the requirements of 310 CMR 30.904 shall be considered the "anniversary date" as that term is used in 310 CMR 30.904.
    - 2. The date on which the first required payment was paid into or for a financial mechanism meeting the requirements of 310 CMR 30.906 shall be considered the "anniversary date" as that term is used in 310 CMR 30.906.
- (5) An owner or operator who fulfills the requirements of 310 CMR 30.900 by establishing a trust fund or by obtaining a surety bond, letter of credit, or insurance policy shall be deemed to be in noncompliance with 310 CMR 30.900 if:
  - (a) the amount of financial assurance provided is at any time less than the amount required; or
  - (b) the trust fund, surety bond, letter of credit, or insurance policy ceases to provide the required financial assurance; or
  - (c) the trustee or issuing institution is named as a debtor in a voluntary or involuntary proceeding pursuant to Title 11 (Bankruptcy) of the United States Code; or
  - (d) there is a suspension or revocation of the trustee's authority to act as trustee or of the issuing institution's authority to issue or keep in effect the surety bond, letter of credit, or insurance policy; or

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- (e) the owner or operator does not have in effect a contract with a Claims Administrator in compliance with 310 CMR 30.908 and 30.910 whenever such a contract is required pursuant to 310 CMR 30.908 and 30.910.
- (6) Owners and operators of facilities shall comply with 310 CMR 30.908 as follows.
  - (a) The owner or operator of each facility in existence on December 31, 1985 shall, by no later than January 31, 1986, provide to the Department evidence of a financial mechanism meeting all requirements of 310 CMR 30.908, as in effect on December 31, 1985.
  - (b) The owner or operator of each facility in existence on April 1, 1986 shall, by no later than April 30, 1986, provide to the Department evidence of a financial mechanism meeting all requirements of 310 CMR 30.908, as in effect on April 1, 1986. After April 30, 1986, no facility shall commence or continue operating unless the owner or operator has provided to the Department evidence of a financial mechanism meeting all requirements of 310 CMR 30.908, as in effect on April 30, 1986, and said financial mechanism is in effect.
  - From July 1 through December 31, 1987, the owner or operator of each facility in existence on July 1, 1987, shall have, and maintain in effect, evidence of a financial mechanism meeting all requirements of 310 CMR 30.908, as in effect on June 30, 1987. After December 31, 1987, no facility in existence on October 1, 1987 shall commence or continue operating unless the owner or operator has provided to the Department evidence of a financial mechanism meeting all requirements of 310 CMR 30.908, as in effect on December 31, 1987, and said financial mechanism is in effect. After July 1, 1987, no facility not in existence on July 1, 1987 shall commence or continue operating unless the owner or operator has provided to the Department evidence of a financial mechanism meeting all requirements of 310 CMR 30.908, as in effect on July 1, 1987, and said financial mechanism is in effect. After October 1, 1987, no facility not in existence on October 1, 1987 shall commence or continue operating unless the owner or operator has provided to the Department evidence of a financial mechanism meeting all requirements of 310 CMR 30.908, as in effect on December 31, 1987, and said financial mechanism is in effect. If an owner or operator is required by 310 CMR 30.908 to obtain and maintain in effect a contract with a Claims Administrator, the requirements and deadlines set forth in 310 CMR 30.901(6)(c) shall apply to said contract.
- (7) Any attempt by any person to obtain money from a trust fund, surety bond, letter of credit, insurance policy, or any other financial responsibility instrument or mechanism established in whole or in part for the purpose of complying with 310 CMR 30.000 by submitting a claim, or assisting in the submission of a claim, that is fraudulent, inflated, or otherwise unlawful or unjustified shall be a violation of 310 CMR 30.000 and, in addition, shall be subject to all laws governing fraud.

### 30.902: Mailing of Notices

All notices required to be sent to the Department pursuant to 310 CMR 30.900 shall be sent to:

Director
Division of Hazardous Waste
Department of Environmental Quality Engineering
Commonwealth of Massachusetts
One Winter Street
Boston, Massachusetts 02108

### 30.903: Cost Estimation for Closure

- (1) (Effective on and after July 1, 1988) The owner or operator shall, within the applicable time period prescribed in 310 CMR 30.901, prepare and submit to the Department a written estimate, in current dollars, of the cost of closing the facility pursuant to 310 CMR 30.580. This cost estimate shall equal the cost of closure at the point in the facility's operating life when the extent and manner of its operation would make closure the most expensive, as indicated by the closure plan. This cost estimate shall be certified by an independent Massachusetts registered professional engineer.
- (2) The preparation of a current closure cost estimate shall be subject to the following provisions:
  - (a) To the extent that quantities of different hazardous wastes being stored or treated at the facility vary over the operating life of the facility, the owner or operator shall base the current closure cost estimate upon the cost of removing the maximum inventory of each hazardous waste that may occur during the operating life of the facility, regardless of whether a maximum inventory occurs simultaneously with any other maximum inventory or with the point in the facility's operating life when the extent and manner of its operations would make closure most expensive; and
  - (b) The current closure cost estimate may show at a cost no lower than zero those hazardous wastes for which the owner or operator persuades the Department that there is not a cost of alternate disposal of such hazardous wastes, that such hazardous wastes have a current economic value, and that such economic value will continue over the remaining operating life of the facility.
- (3) Within 30 days after each anniversary of the date on which the first current closure cost estimate was prepared, the owner or operator shall prepare and submit to the Department an adjustment for inflation of the current closure cost estimate. The adjustment shall be made as specified in 310 CMR 30.903, using an inflation factor derived from the annual implicit Price Deflator for Gross Domestic Product as established by the U.S. Department of Commerce in its *Survey of Current Business*. The inflation factor shall be calculated by dividing the latest published annual Deflator by the Deflator for the previous year.
  - (a) The first adjustment shall be made by multiplying the current closure cost estimate by the inflation factor. The result shall be the adjusted current closure cost estimate.
  - (b) Subsequent adjustments shall be made by multiplying the latest adjusted closure cost by the inflation factor.
- (4) The owner or operator shall revise the current closure cost estimate whenever a change in the closure plan increases the cost of closure. The revised current closure cost estimate shall be adjusted for inflation as specified in 310 CMR 30.903(3). The Department may authorize or require the use of an adjusted inflation factor if the Department determines that the inflation factor calculated pursuant to 310 CMR 30.903(3) does not accurately reflect change in the cost of closing the facility.
- (5) During the operating life of the facility, the owner or operator shall keep in the facility's records all closure cost estimates prepared pursuant to 310 CMR 30.903.

# 30.904: Financial Assurance for Closure

The owner or operator of each facility shall establish and continuously maintain financial assurance for closure of the facility using the options specified in 310 CMR 30.904(1) through (6).

### (1) Closure trust fund.

- (a) An owner or operator may satisfy the requirements of 310 CMR 30.904 by establishing a closure trust fund which conforms to 310 CMR 30.904(1) and by sending an originally signed duplicate of the trust agreement to the Department within the applicable time period prescribed in 310 CMR 30.901(2) or (4). The trustee shall be a bank or other financial institution which has the authority to act as a trustee and whose trust operations are regulated and examined by the Massachusetts Commissioner of Banking, or the trustee shall be a national bank.
- (b) The wording of the trust agreement shall be identical to the wording specified in 310 CMR 30.909(1)(a), and the trust agreement shall be accompanied by a formal certification of acknowledgement identical to the wording specified in 310 CMR 30.909(1)(b). Schedule A of the trust agreement shall be updated within 60 days after a change in the amount of the current closure cost estimate which is the subject of the trust agreement.
- (c) The owner or operator shall make payments into the closure trust fund no less frequently than annually over the term of the license issued pursuant to 310 CMR 30.000 in the case of a new facility, or over a period no greater than ten years in the case any other facility, or the remaining operating life of the facility as estimated in the closure plan, whichever period is the shortest. This period is hereinafter referred to as the "pay-in period". The payments into the closure trust fund shall be made as follows:
  - 1. For each facility, the first payment shall be made pursuant to the applicable time period prescribed in 310 CMR 30.901(2) or (4). A receipt from the trustee for this payment shall be submitted by the owner or operator to the Department as evidence of payment. Except as provided in 310 CMR 30.904(6), the first payment shall be at least equal to the current closure cost estimate, divided by the number of years in the pay-in period. Such pay-in period shall be no greater than the operating life of the facility. Subsequent payments shall be made no later than 30 days after each anniversary date of the first payment. The amount of each subsequent payment shall be calculated by the formula:

$$Next Payment = \frac{CE - CV}{Y}$$

where CE is the current closure cost estimate, CV is the current value of the trust fund, and Y is the number of years in the pay-in period.

2. If an owner or operator of a facility which has interim status pursuant to RCRA establishes a trust fund pursuant to 310 CMR 30.904(1), and the value of that trust fund is less than the current closure cost estimates when a license is issued for that facility, the amount of the current closure cost estimate still to be paid into the trust fund shall be paid over the pay-in period specified in 310 CMR 30.904(1)(c). Payment by an owner or operator of a facility which has interim status pursuant to RCRA which has become licensed shall continue to be made no later than 30 days after each anniversary date of the first payment made as an interim status facility pursuant to 310 CMR 30.901(4). The amount of each payment shall be determined by the formula:

$$Next Payment = \frac{CE - CV}{Y}$$

where CE is the current closure cost estimate, CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in period.

(d) The owner or operator may accelerate payments into the closure trust fund, or deposit into the closure trust fund the full amount of the current closure cost estimate at the time the closure trust fund is established. However, the owner or operator shall maintain the value of the fund at no less than the value that the fund would have if annual payments were made as specified in 310 CMR 30.904(1)(c).

- (e) If the owner or operator establishes a closure trust fund after having used one or more alternate mechanisms specified in 310 CMR 30.904, the owner's or operator's first payment shall be in at least the amount that the fund would contain if the trust fund were established initially and annual payments made in compliance with 310 CMR 30.904.
- (f) After the pay-in period is completed, whenever the current closure cost estimate changes, the owner or operator shall compare the new estimate with the trustee's most recent annual valuation of the trust fund.
  - 1. If the value of the closure trust fund is less than the amount of the new current closure cost estimate, the owner or operator shall, within 60 days after the change in the cost estimate, either deposit an amount into the fund so that the fund's value after this deposit at least equals the amount of the current closure cost estimate, or obtain other financial assurance as specified in 310 CMR 30.904 to cover the difference.
  - 2. If the value of the closure trust fund is greater than the total amount of the new current closure cost estimate, the owner or operator may submit a written request to the Department for release of the amount in excess of the current closure cost estimate.
- (g) If an owner or operator substitutes other financial assurance as specified in 310 CMR 30.904 for all or part of the closure trust fund, he may submit a written to the Department for release of the amount in excess of the current closure cost estimate covered by the closure trust fund.
- (h) After receiving a written request from the owner or operator for release of the funds as specified in 310 CMR 30.904(1)(f)2., or 310 CMR 30.904(1)(g), the Department may instruct the trustee to release to the owner or operator such funds as the Department may specify in writing.
- (i) After beginning final closure, an owner or operator or any other person authorized by the Department to perform closure may request reimbursement for closure expenditures by submitting itemized bills to the Department. After receiving bills for closure activities, the Department shall determine whether the closure expenditures are in accordance with the closure plan or otherwise justified, and, if so, the Department may instruct the trustee to make reimbursement in such amounts as the Department may specify in writing. Whenever the Department is not persuaded that the cost of closure will not be significantly greater than the value of the closure trust fund, the Department may withhold reimbursement of such amounts as it deems prudent until it determines, in accordance with 310 CMR 30.904(8), that the owner or operator is no longer required to maintain financial assurance for closure.
- (j) The Department may agree to termination of the trust when:
  - 1. Either the Department is persuaded that the owner or operator has substituted alternate financial assurance for closure as specified in 310 CMR 30.904, or the Department has released the owner or operator from the requirements of 310 CMR 30.904, pursuant to 310 CMR 30.904(8); and
  - 2. The Department gives prior written consent for such termination.

# (2) Surety bond guaranteeing payment into a closure trust fund.

- (a) An owner or operator may satisfy the requirements of 310 CMR 30.904 by obtaining a surety bond which conforms to 310 CMR 30.904(2) and by submitting the surety bond to the Department within the applicable time period prescribed in 310 CMR 30.901(2) or (4). The surety company issuing the bond shall, at a minimum, be among those listed as acceptable sureties on Federal bonds in Circular 570 of the U.S. Department of the Treasury.
- (b) The wording of the surety bond shall be identical to the wording specified in 310 CMR 30.909(2).
- (c) An owner or operator who uses a surety bond to satisfy the requirements of 310 CMR 30.904 shall also establish a standby trust fund. Under the terms of the surety bond, all payments made thereunder shall be deposited by the surety directly into the standby trust fund in accordance with instructions from the Department. This standby trust fund shall meet the requirements in 310 CMR 30.904(1), except that:

- An originally signed duplicate of the trust agreement shall be submitted to the Department with the surety bond; and
- 2. Until the standby trust fund is funded pursuant to the requirements of 310 CMR 30.904, the following are not required:
  - a. Payment into the trust fund as specified in 310 CMR 30.904(1);
  - Annual valuations as required by the trust agreement (see 310 CMR 90.909(1)(a)10.); and
  - Notices of nonpayment as required by the trust agreement (see 310 CMR 30.909(1)(a)15.).
- (d) The bond shall guarantee that the owner or operator shall:
  - 1. Fund the standby trust fund in an amount equal to the penal sum of the bond (see 310 CMR 30.909(2)) before the beginning of final closure of the facility; or
  - 2. Fund the standby trust fund in an amount equal to the penal sum within 15 days after the Department or a court of competent jurisdiction issues an order to begin closure; or
  - 3. Provide alternate financial assurance as specified in 310 CMR 30.904, and obtain the Department's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and by the Department of a notice of cancellation of the surety bond from the surety.
- (e) Under the terms of the bond (see 310 CMR 30.909(2)), the surety shall become liable on the bond obligation when the owner or operator does not perform as guaranteed by the bond (see 310 CMR 30.909(2)).
- (f) The penal sum of the bond shall be an amount at least equal to the current closure cost estimate, except as provided in 310 CMR 30.904(6).
- (g) Whenever the current closure cost estimate increases to an amount greater than the penal sum, the owner or operator, within 60 days after the increase, shall either cause the penal sum to be increased to an amount at least equal to the current closure cost estimate and submit evidence of such increase to the Department, or obtain other financial assurance as specified in 310 CMR 30.904 to cover the increase. Whenever the current closure cost estimate decreases, the penal sum may be reduced to the amount of the current closure cost estimate following written approval by the Department.
- (h) Under the terms of the bond, the surety may cancel the bond by sending written notice of cancellation by certified mail to the owner or operator and to the Department. Cancellation may not take effect, however, until at least 120 days after the date of receipt of the notice of cancellation by both the owner or operator and the Department, as shown by the later return receipt.
- (i) The Department may agree to cancellation of the bond when:
  - Either the Department is persuaded that the owner or operator has substituted alternate financial assurance for closure as specified in 310 CMR 30.904, or the Department has released the owner or operator from the requirements of 310 CMR 30.904, pursuant to 310 CMR 30.904(8); and
  - 2. The Department gives prior written consent for such cancellation.

# (3) Surety bond guaranteeing performance of closure.

- (a) An owner or operator may satisfy the requirements of 310 CMR 30.904, by obtaining a surety bond which conforms to 310 CMR 30.904(3) and by submitting the surety bond to the Department within the applicable time period prescribed in 310 CMR 30.901(2) or (4). The surety company issuing the bond shall, at a minimum, be among those listed as acceptable sureties on Federal bonds in Circular 570 of the U.S. Department of the Treasury. (b) The wording of the surety bond shall be identical to the wording specified in 310 CMR
- 30.909(3).
- (c) An owner or operator who uses a surety bond to satisfy the requirements of 310 CMR 30.904 shall also establish a standby trust fund. Under the terms of the surety bond, all payments made thereunder shall be deposited by the surety directly into the standby trust fund in accordance with instructions from the Department. This standby trust fund shall meet the requirements in 310 CMR 30.904(1), except that:

- 1. An originally signed duplicate of the trust agreement shall be submitted to the Department with the surety bond; and
- 2. Until the standby trust fund is funded pursuant to the requirements of 310 CMR 30.904, the following are not required:
  - a. Payment into the trust fund as specified in 310 CMR 30.904(1);
  - b. Annual valuations as required by the trust agreement (see 310 CMR 30.909(1)(a)10.; and
  - c. Notices of nonpayment as required by the trust agreement (see 310 CMR 30.909(1)(a)15.).
- (d) The bond shall guarantee that the owner or operator shall:
  - 1. Perform final closure in accordance with the closure plan and other requirements of the license for the facility whenever required to do so; or
  - 2. Provide alternate financial assurance as specified in 310 CMR 30.904, and obtain the Department's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and by the Department of a notice of cancellation of the surety bond from the surety.
- (e) Under the terms of the bond (*see* 310 CMR 30.909(3)), the surety shall become liable on the bond obligation when the owner or operator does not perform as guaranteed by the bond (*see* 310 CMR 30.909(3)). When the owner or operator does not perform final closure in accordance with 310 CMR 30.580A through 30.586A (Effective through 6/30/88) or 30.580B through 30.586B (Effective on and after 7/1/88), the surety shall become liable on the bond obligation to:
  - 1. Perform final closure as guaranteed by the bond; and
  - 2. Deposit the amount of the penal sum into the standby trust fund.
- (f) The penal sum of the bond shall be an amount at least equal to the current closure cost estimate, except as provided in 310 CMR 30.904(6).
- (g) Whenever the current closure cost estimate increases to an amount greater than the penal sum, the owner or operator, within 60 days after the increase, shall either cause the penal sum to be increased to an amount equal to the current closure cost estimate and submit evidence of such increase to the Department, or obtain other financial assurance as specified in 310 CMR 30.904, to cover the increase. Whenever the current closure cost estimate decreases, the penal sum may be reduced to the amount of the current closure cost estimate following written approval by the Department.
- (h) Under the terms of the bond, the surety may cancel the bond by sending written notice of cancellation by certified mail to the owner or operator and to the Department. Cancellation may not take effect, however, until at least 120 days after the date of receipt of the notice of cancellation by both the owner or operator and the Department, as shown by the later return receipt.
- (i) The Department may agree to cancellation of the bond when:
  - 1. Either the Department is persuaded that the owner or operator has substituted alternate financial assurance for closure as specified in 310 CMR 30.904, or the Department has released the owner or operator from the requirements of 310 CMR 30.904 pursuant to 310 CMR 30.904(8); and
  - 2. The Department gives prior written consent for such cancellation.
- (j) The surety will not be liable for deficiencies in the performance of closure by the owner or operator after the Department releases the owner or operator from the requirements of 310 CMR 30.904 pursuant to 310 CMR 30.904(8).

### (4) Closure letter of credit.

- (a) An owner or operator may satisfy the requirements of 310 CMR 30.904, by obtaining an irrevocable standby letter of credit which conforms to 310 CMR 30.904(4) and by submitting the letter to the Department within the applicable time period prescribed in 310 CMR 30.901(2) or (4). The institution issuing the letter of credit shall be an entity which has the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by the Massachusetts Commissioner of Banking, or the institution shall be a national bank.
- (b) The wording of the letter of credit shall be identical to the wording specified in 310 CMR 30.909(4).

- (c) An owner or operator who uses a letter of credit to satisfy the requirements of 310 CMR 30.904, shall also establish a standby trust fund. Under the terms of the letter of credit, all payments made thereunder shall be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the Department. This standby trust fund shall meet the requirements in 310 CMR 30.904(1), except that:
  - 1. An originally signed duplicate of the trust agreement shall be submitted to the Department with the letter of credit; and
  - 2. Until the standby trust fund is funded pursuant to the requirements of 310 CMR 30.904, the following are not required:
    - a. Payment into the trust fund as specified in 310 CMR 30.904(1);
    - b. Annual valuations as required by the trust agreement (see 310 CMR 30.909(1)(a)10.); and
    - c. Notices of nonpayment as required by the trust agreement (see 310 CMR 30.909(1)(a)15.)
- (d) The letter of credit shall be accompanied by a letter from the owner or operator which shall state:
  - 1. The letter of credit number;
  - 2. The name of the issuing institution;
  - 3. The date of issuance of the letter of credit:
  - 4. The EPA identification number of the facility;
  - 5. The name and address of the facility; and
  - 6. The amount of funds assured by the letter of credit for closure of the facility.
- (e) The letter of credit shall be irrevocable and shall be issued for a period of at least one year. The letter of credit shall provide that the expiration date will be automatically extended for a period of at least one year unless, no later than 120 days before the current expiration date pursuant to the terms of the letter of credit, the issuing institution notifies both the owner or operator and the Department by certified mail of a decision not to extend the expiration date. Under the terms of the letter of credit, the 120 days shall not begin before the date when both the owner or operator and the Department have received the notice, as shown by the later return receipt.
- (f) The letter of credit shall be issued in an amount at least equal to the current closure cost estimate, except as provided in 310 CMR 30.904(6).
- (g) Whenever the current closure cost estimate increases to an amount greater than the amount of the credit, the owner or operator, within 60 days after the increase, shall either cause the amount of the credit to be increased to an amount equal to the current closure cost estimate and submit evidence of such increase to the Department, or obtain other financial assurance as specified in 310 CMR 30.904, to cover the increase. Whenever the current closure cost estimate decreases, the amount of the credit may be reduced to the amount of the current closure cost estimate following written approval by the Department.
- (h) The Department may draw upon the letter of credit when the owner or operator does not perform final closure in accordance with 310 CMR 30.580A through 30.586A (Effective through 6/30/88) or 30.580B through 30.586B (Effective on and after 7/1/88).
- (i) If the owner or operator does not establish alternate financial assurance as required by 310 CMR 30.904, and does not obtain written approval from the Department of any such alternate financial assurance within 90 days of receipt by both the owner or operator and by the Department of a notice that the issuing institution will not extend the letter of credit beyond the current expiration date, the Department shall draw on the letter of credit. The Department may delay drawing on the letter of credit if the issuing institution grants an extension of the term of the letter of credit. During the last 30 days of any such extension, the Department shall draw on the letter of credit if the owner or operator has failed to provide alternate financial assurance as specified in 310 CMR 30.904, or has failed to obtain written approval by the Department of such assurance.
- (j) The Department may return the letter of credit to the issuing institution for termination when:
  - 1. Either the Department is persuaded that the owner or operator has substituted alternate financial assurance for closure as specified in 310 CMR 30.904, or the Department has released the owner or operator from the requirements of 310 CMR 30.904, pursuant to 310 CMR 30.904(8); and
  - 2. The Department gives prior written consent for such termination.

### (5) Closure Insurance.

- (a) An owner or operator may satisfy the requirements of 310 CMR 30.904, by obtaining closure insurance which conforms to the requirements of 310 CMR 30.904(5) and by submitting a certificate of such insurance to the Department within the applicable time period prescribed in 310 CMR 30.901(2) or (4). The Department may require submission of a duplicate of the complete insurance policy. At a minimum, the insurer shall be licensed to transact the business of insurance or authorized to provide insurance as an excess or surplus lines insurer in the Commonwealth of Massachusetts.
- (b) The wording of the certificate of insurance shall be identical to the wording specified in 310 CMR 30.909(5).
- (c) The closure insurance policy shall be issued for a face amount at least equal to the current closure cost estimate, except as provided in 310 CMR 30.904(6). The term "face amount" means the total amount the insurer is obligated to pay pursuant to the policy. Actual payments by the insurer shall not change the face amount, although the insurer's future liability may be lowered by the amount of the payments.
- (d) The closure insurance policy shall guarantee that funds in an amount equal to the face amount of the closure insurance policy shall be available to close the facility whenever final closure occurs. The policy shall also guarantee that once final closure begins, the insurer shall be responsible for paying out funds up to an amount equal to the face amount of the closure insurance policy, upon the direction of the Department, to such persons as the Department may specify in writing.
- (e) After beginning final closure, an owner or operator or any other person authorized to perform closure may request reimbursement for closure expenditures by submitting itemized bills to the Department. After receiving bills for closure activities, the Department shall determine whether the closure expenditures are in accordance with the closure plan or otherwise justified, and, if so, the Department may instruct the insurer to make reimbursement in such amounts as the Department may specify in writing. Whenever the Department is not persuaded that the cost of closure will not be significantly greater than the face amount of the closure insurance policy, the Department may withhold reimbursement of such amounts as it deems prudent until it determines, in accordance with 310 CMR 30.904(8), that the owner or operator is no longer required to maintain financial assurance for closure.
- (f) The Department may agree to termination of the closure insurance policy when:
  - 1. Either the Department is persuaded that the owner or operator has substituted alternate financial assurance for closure as specified in 310 CMR 30.904 or the Department has released the owner or operator from the requirements of 310 CMR 30.904, pursuant to 310 CMR 30.904(8); and
  - 2. The Department gives prior written consent for such termination.

Failure to pay the premium, without substitution of alternate financial assurance as specified in 310 CMR 30.904, shall constitute violation of 310 CMR 30.000. Such violation shall be deemed to begin upon receipt by the Department of a notice of future cancellation, termination, or failure to renew due to nonpayment of premium, rather than upon the date of expiration.

- (g) The closure insurance policy shall provide that the insurer may not cancel, terminate, or fail to renew the closure insurance policy except for failure to pay the premium. The automatic renewal of the policy shall, at a minimum, provide the insured with the option of renewal at the face amount of the expiring closure insurance policy. If there is a failure to pay the premium, the insurer may elect to cancel, terminate or fail to renew the closure insurance policy by sending notice by certified mail to the owner or operator and to the Department. Cancellation, termination, or failure to renew may not take effect, however, until at least 120 days after the date of receipt of the notice by both the Department and the owner or operator, as shown by the later return receipt. Cancellation, termination, or failure to renew may not occur, and the closure insurance policy shall remain in full force and effect, in the event that on or before the date of expiration:
  - 1. The Department deems the facility abandoned; or
  - 2. The license is suspended or revoked or an application for a new license is denied; or

- 3. Closure is ordered by the Department or a court of competent jurisdiction; or
- 4. The owner or operator is named a debtor in a voluntary or involuntary bankruptcy proceeding; or
- 5. The premium due is paid.
- (h) Whenever the current closure cost estimate increases to an amount greater than the face amount of the closure insurance policy, the owner or operator, within 60 days after the increase, shall either cause the face amount of the closure insurance policy to be increased to an amount at least equal to the current closure cost estimate and submit evidence of such increase to the Department, or obtain other financial assurance as specified in 310 CMR 30.904, to cover the increase. Whenever the current closure cost estimate decreases, the face amount of the closure insurance policy may be reduced to the amount of the current closure cost estimate following written approval by the Department.
- (i) The Department may agree to cancellation of the closure insurance policy when:
  - 1. Either the Department is persuaded that the owner or operator has substituted alternate financial assurance for closure as specified in 310 CMR 30.904, or the Department has released the owner or operator from the requirements of 310 CMR 30.904, pursuant to 310 CMR 30.904(8); and
  - 2. The Department gives prior written consent for such cancellation.
- (6) <u>Use of multiple financial mechanisms</u>. An owner or operator may satisfy the requirements of 310 CMR 30.904, by establishing more than one financial mechanism per Massachusetts facility. These mechanisms shall be limited to trust funds, surety bonds guaranteeing payment into a trust fund, letters of credit, and insurance. These mechanisms shall be in compliance with 310 CMR 30.904(1), (2), (3), (4), and (5), except that it shall be the combination of mechanisms, rather than a single mechanism, which shall provide financial assurance for an amount at least equal to the current closure cost estimate. If an owner or operator uses a trust fund in combination with any other mechanism, he shall use the trust fund for those mechanisms for which the establishment of a standby trust fund is required. A single standby trust fund may be used for two or more mechanisms. The Department may use any or all of the mechanisms to provide for closure of the facility.
- (7) <u>Use of a financial mechanism for multiple facilities</u>.
  - (a) An owner or operator may use a financial assurance mechanism specified in 310 CMR 30.904 to meet the requirements of 310 CMR 30.904, for more than one Massachusetts facility.
  - (b) Evidence of financial assurance submitted to the Department shall include a list showing, for each facility, the EPA identification number, name, address, and amount of funds for closure assured by the mechanism.
  - (c) The amount of funds available through the mechanism shall be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for each facility. In directing funds available through the mechanism for closure of any facility covered by the mechanism, the Department may direct only the amount of funds designated for that facility, unless the owner or operator agrees to the use of additional funds available under the mechanism.
- (8) (Effective on and after July 1, 1988) Release of the owner or operator from the requirements of 310 CMR 30.904. When the Department has certified, pursuant to 310 CMR 30.587(3), that closure of a facility is complete, the Department shall notify the owner or operator in writing that he is no longer required to maintain financial assurance for closure of the facility pursuant to 310 CMR 30.904.

### 30.905: Cost Estimation for Post-closure Care

- (1) The owner or operator shall, within the applicable time period prescribed in 310 CMR 30.901(3) or (4), prepare and submit to the Department a written estimate, in current dollars, of the cost of post-closure monitoring and maintenance of the facility pursuant to 310 CMR 30.590 through 30.595. This cost estimate shall be calculated by multiplying the annual post-closure cost estimate by the number of years of post-closure care required in 310 CMR 30.592. This cost estimate shall be certified by an independent Massachusetts registered professional engineer.
- (2) Within 60 days prior to each anniversary of the date on which the first post-closure cost estimate was prepared, the owner or operator shall prepare and submit to the Department an adjustment for inflation of the post-closure cost estimate. The adjustment shall be made as specified in 310 CMR 30.905, using an inflation factor derived from the annual implicit Price Deflator for Gross National Product as established by the U.S. Department of Commerce in its *Survey of Current Business*. The inflation factor shall be calculated by dividing the latest published annual Deflator by the Deflator for the previous year.
  - (a) The first adjustment shall be made by multiplying the post-closure cost estimate by the inflation factor. The result shall be the adjusted post-closure cost estimate.
  - (b) Subsequent adjustments shall be made by multiplying the latest adjusted post-closure cost by the inflation factor.
- (3) The owner or operator shall revise the post-closure cost estimate whenever a change in the post-closure plan increases the cost of postclosure care. The revised post-closure cost estimate shall be adjusted for inflation as specified in 310 CMR 30.905(2). The Department may authorize or require the use of an adjusted inflation factor if the Department determines that the inflation factor calculated pursuant to 310 CMR 30.905(2) does not accurately reflect change in the cost of post-closure care of the facility.
- (4) During the operating life of the facility, the owner or operator shall keep in the facility's records all post-closure cost estimates prepared pursuant to 310 CMR 30.905.

# 30.906: Financial Assurance for Post-closure Care

The owner or operator of each facility shall establish and continuously maintain financial assurance for post-closure care of the facility using the options specified in 310 CMR 30.906(1) through (6).

# (1) Post-closure Trust Fund.

- (a) An owner or operator may satisfy the requirements of 310 CMR 30.906, by establishing a post-closure trust fund which conforms to 310 CMR 30.906(1) and by sending an originally signed duplicate of the trust agreement to the Department within the applicable time period prescribed in 310 CMR 30.901(3) or (4). The trustee shall be a bank or other financial institution which has the authority to act as a trustee and whose trust operations are regulated and examined by the Massachusetts Commissioner of Banking, or the trustee shall be a national bank.
- (b) The wording of the trust agreement shall be identical to the wording specified in 310 CMR 30.909(1)(a), and the trust agreement shall be accompanied by a formal certification of acknowledgment identical to the wording specified in 310 CMR 30.909(1)(b). Schedule A of the trust agreement shall be updated within 60 days after a change in the amount of the current post-closure cost estimate which is the subject of the trust agreement.
- (c) The owner or operator shall make payments into the post-closure trust fund no less frequently than annually over the term of the license issued pursuant to 310 CMR 30.000 in the case of a new facility, or over a period no greater than ten years in the case of any other facility, or the remaining operating life of the facility as estimated in the post-closure plan, whichever period is the shortest. This period is hereinafter referred to as the "pay-in period." The payments into the post-closure trust fund shall be made as follows:

1. For each facility, the first payment shall be made pursuant to the applicable time period prescribed in 310 CMR 30.901(3) or (4). A receipt from the trustee for this payment shall be submitted by the owner or operator to the Department as evidence of payment. Except as provided in 310 CMR 30.906(6), the first payment shall be at least equal to the current post-closure cost estimate, divided by the number of years in the pay-in period. Such pay-in period shall be no greater than the operating life of the facility. Subsequent payments shall be made no later than 30 days after each anniversary date of the first payment. The amount of each subsequent payment shall be calculated by the formula:

$$Next Payment = \frac{CE - CV}{Y}$$

where CE is the current post-closure cost estimate, CV is the current value of the trust fund, and Y is the number of years in the pay-in period.

2. If an owner or operator of a facility which has interim status pursuant to RCRA establishes a trust fund pursuant to 310 CMR 30.906(1), and the value of that trust fund is less than the current post-closure cost estimate when a license is issued for that facility, the amount of the current post-closure cost estimate still to be paid into the trust fund shall be paid over the pay-in period specified in 310 CMR 30.906(1)(c). Payment by an owner or operator of a facility which has interim status pursuant to RCRA which has become licensed shall continue to be made no later than 30 days after each anniversary date of the first payment made as an interim status facility pursuant to 310 CMR 30.901(4). The amount of each payment shall be determined by the formula:

$$Next Payment = \frac{CE - CV}{Y}$$

where CE is the current post-closure cost estimate, CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in period.

- (d) The owner or operator may accelerate payments into the post-closure trust fund, or deposit into the post-closure trust fund the full amount of the current post-closure cost estimate at the time the post-closure trust fund is established. However, the owner or operator shall maintain the value of the fund at no less than the value that the fund would have if annual payments were made as specified in 310 CMR 30.906(1)(c).
- (e) If the owner or operator establishes a post-closure trust fund after having used one or more alternate mechanisms specified in 310 CMR 30.906, the owner's or operator's first payment shall be in at least the amount that the fund would contain if the post-closure trust fund were established initially and annual payments were made in compliance with 310 CMR 30.906.
- (f) After the pay-in period is completed, whenever the current post-closure cost estimate changes, the owner or operator shall compare the new estimate with the trustee's most recent annual valuation of the trust fund.
  - 1. If the value of the post-closure trust fund is less than the amount of the new current post-closure cost estimate, the owner or operator shall, within 60 days after the change in the cost estimate, either deposit an amount into the fund so that the fund's value after this deposit at least equals the amount of the current post-closure cost estimate, or obtain other financial assurance as specified in 310 CMR 30.906, to cover the difference.
  - 2. If the value of the post-closure trust fund is greater than the total amount of the new current post-closure cost estimate, the owner or operator may submit a written request to the Department for release of the amount in excess of the current post-closure cost estimate.

- (g) If an owner or operator substitutes other financial assurance as specified in 310 CMR 30.906 for all or part of the post-closure trust fund, he may submit a written request to the Department for release of the amount in excess of the current post-closure cost estimate covered by the post-closure trust fund.
- (h) After receiving a written request from the owner or operator for release of the funds as specified in 310 CMR 30.906(1)(f)2, or 310 CMR 30.906(1)(g), the Department may instruct the trustee to release to the owner or operator such funds as the Department may specify in writing.
- (i) During the period of post-closure care, the Department may approve a release of funds if the owner or operator demonstrates to the Department that the value of the post-closure trust fund exceeds the remaining cost of post-closure care.
- (j) After beginning post-closure care, an owner or operator or any other person authorized by the Department to perform post-closure care may request reimbursement for post-closure expenditures by submitting itemized bills to the Department. After receiving bills for post-closure activities, the Department shall determine whether the post-closure expenditures are in accordance with the post-closure plan or otherwise justified, and, if so, the Department may instruct the trustee to make reimbursement in such amounts as the Department may specify in writing. Whenever the Department is not persuaded that the cost of post-closure care will not be significantly greater than the value of the post-closure trust fund, the Department may withhold reimbursement of such amounts as it deems prudent until it determines, in accordance with 310 CMR 30.906(8), that the owner or operator is no longer required to maintain financial assurance for post-closure care.
- (k) The Department may agree to termination of the trust when:
  - 1. Either the Department is persuaded that the owner or operator has substituted alternate financial assurance for post-closure care as specified in 310 CMR 30.906, or the Department has released the owner or operator from the requirements of 310 CMR 30.906, pursuant to 310 CMR 30.906(8); and
  - 2. The Department gives prior written consent for such termination.

### (2) Surety bond guaranteeing payment into a post-closure trust fund.

- (a) An owner or operator may satisfy the requirements of 310 CMR 30.906, by obtaining a surety bond which conforms to 310 CMR 30.906(2) and by submitting the surety bond to the Department within the applicable time period prescribed in 310 CMR 30.901(3) or (4). The surety company issuing the bond shall, at a minimum, be among those listed as acceptable sureties on Federal bonds in Circular 570 of the U.S. Department of the Treasury. (b) The wording of the surety bond shall be identical to the wording specified in 310 CMR 30.909(2).
- (c) An owner or operator who uses a surety bond to satisfy the requirements of 310 CMR 30.906 shall also establish a standby trust fund. Under the terms of the surety bond, all payments made thereunder shall be deposited by the surety directly into the standby trust fund in accordance with instructions from the Department. This standby trust fund shall meet the requirements in 310 CMR 30.906(1), except that:
  - 1. An originally signed duplicate of the trust agreement shall be submitted to the Department with the surety bond; and
  - 2. Until the standby trust fund is funded pursuant to the requirements of 310 CMR 30.906, the following are not required:
    - a. Payment into the trust fund as specified in 310 CMR 30.906(1);
    - b. Annual valuations as required by the trust agreement (see 310 CMR 30.909(1)(a)10.); and
    - c. Notices of nonpayment as required by the trust agreement (see 310 CMR 30.909(1)(a)15.).
- (d) The bond shall guarantee that the owner or operator shall:
  - 1. Fund the standby trust fund in an amount equal to the penal sum of the bond (see 310 CMR 30.909(2)) before the beginning of final closure of the facility; or
  - 2. Fund the standby trust fund in an amount equal to the penal sum within 15 days after the Department or a court of competent jurisdiction issues an order to begin closure; or

- 3. Provide alternate financial assurance as specified in 310 CMR 30.906, and obtain the Department's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and by the Department of a notice of cancellation of the surety bond from the surety.
- (e) Under the terms of the bond (*see* 310 CMR 30.909(2)), the surety shall become liable on the bond obligation when the owner or operator does not perform as guaranteed by the bond (*see* 310 CMR 30.909(2)).
- (f) The penal sum of the bond shall be an amount at least equal to the current post-closure cost estimate, except as provided in 310 CMR 30.906(6).
- (g) Whenever the current post-closure cost estimate increases to an amount greater than the penal sum, the owner or operator, within 60 days after the increase, shall either cause the penal sum to be increased to an amount at least equal to the current post-closure cost estimate and submit evidence of such increase to the Department, or obtain other financial assurance as specified in 310 CMR 30.906, to cover the increase. Whenever the current post-closure cost estimate decreases, the penal sum may be reduced to the amount of the current post-closure cost estimate following written approval by the Department.
- (h) Under the terms of the bond, the surety may cancel the bond by sending written notice of cancellation by certified mail to the owner or operator and to the Department. Cancellation may not take effect, however, until at least 120 days after the date of receipt of the notice of cancellation by both the owner or operator and the Department, as shown by the later return receipt.
- (i) The Department may agree to cancellation of the bond when:
  - 1. Either the Department is persuaded that the owner or operator has substituted alternate financial assurance for post-closure care as specified in 310 CMR 30.906, or the Department has released the owner or operator from the requirements of 310 CMR 30.906, pursuant to 310 CMR 30.906(8); and
  - 2. The Department gives prior written consent for such cancellation.

# (3) Surety bond guaranteeing performance of post-closure care.

- (a) An owner or operator may satisfy the requirements of 310 CMR 30.906, by obtaining a surety bond which conforms to 310 CMR 30.906(3) and by submitting the surety bond to the Department within the applicable time period prescribed in 310 CMR 30.901(3) or (4). The surety company issuing the bond shall, at a minimum, be among those listed as acceptable sureties on Federal bonds in Circular 570 of the U.S. Department of the Treasury. (b) The wording of the surety bond shall be identical to the wording specified in 310 CMR 30.909(3).
- (c) An owner or operator who uses a surety bond to satisfy the requirements of 310 CMR 30.906, shall also establish a standby trust fund. Under the terms of the surety bond, all payments made thereunder shall be deposited by the surety directly into the standby trust fund in accordance with instructions from the Department. This standby trust fund shall meet the requirements in 310 CMR 30.906(1), except that:
  - 1. An originally signed duplicate of the trust agreement shall be submitted to the Department uith the surety bond; and
  - 2. Until the standby trust fund is funded pursuant to the requirements of 310 CMR 30.906, the following are not required:
    - a. Payment into the trust fund as specified in 310 CMR 30.906(1);
    - b. Annual valuations as required by the trust agreement (see 310 CMR 30.909(1)(a)10.); and
    - c. Notices of nonpayment as required by the trust agreement (see 310 CMR 30.909(1)(a)15.).
- (d) The bond shall guarantee that the owner or operator shall:
  - 1. Perform post-closure care in accordance with the post-closure plan and other requirements of the license for the facility whenever required to do so; or
  - 2. Provide alternate financial assurance as specified in 310 CMR 30.906, and obtain the Department's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and by the Department of a notice of cancellation of the surety bond from the surety, as shown by the later return receipt.

- (e) Under the terms of the bond (*see* 310 CMR 30.909(3)), the surety shall become liable on the bond obligation when the owner or operator does not perform as guaranteed by the bond (*see* 310 CMR 30.909(3)). When the owner or operator does not perform post-closure care in accordance with 310 CMR 30.590A through 30.595A (Effective through 6/30/88) or 30.590B through 30.595B (Effective on and after 7/1/88), the surety shall become liable on the bond obligation to:
  - 1. Perform post-closure care as guaranteed by the bond; and
  - 2. Deposit the amount of the penal sum into the standby trust fund.
- (f) The penal sum of the bond shall be an amount at least equal to the current post-closure cost estimate, except as provided in 310 CMR 30.906(6).
- (g) Whenever the current post-closure cost estimate increases to an amount greater than the penal sum, the owner or operator, within 60 days after the increase, shall either cause the penal sum to be increased to an amount equal to the current post-closure cost estimate and submit evidence of such increase to the Department, or obtain other financial assurance as specified in 310 CMR 30.906, to cover the increase. Whenever the current post-closure cost estimate decreases, the penal sum may be reduced to the amount of the current post-closure cost estimate following written approval by the Department.
- (h) Under the terms of the bond, the surety may cancel the bond by sending written notice of cancellation by certified mail to the owner or operator and to the Department. Cancellation may not take effect, however, until at least 120 days after the date of receipt of the notice of cancellation by both the owner or operator and the Department, as shown by the later return receipt.
- (i) The Department may agree to cancellation of the bond when:
  - 1. Either the Department is persuaded that the owner or operator has substituted alternate financial assurance for post-closure care as specified in 310 CMR 30.906, or the Department has released the owner or operator from the requirements of 310 CMR 30.906, pursuant to 310 CMR 30.906(8); and
  - 2. The Department gives prior written consent for such cancellation.
- (j) The surety will not be liable for deficiencies in the performance of post-closure care by the owner or operator after the Department releases the owner or operator from the requirements of 310 CMR 30.906, pursuant to 310 CMR 30.906(8).

### (4) Post-closure letter of credit.

- (a) An owner or operator may satisfy the requirements of 310 CMR 30.906, by obtaining an irrevocable standby letter of credit which conforms to 310 CMR 30.906(4) and by submitting the letter to the Department within the applicable time period prescribed in 310 CMR 30.901(3) or (4). The institution issuing the letter of credit shall be an entity which has the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by the Massachusetts Commissioner of Banking, or the institution shall be a national bank.
- (b) The wording of the letter of credit shall be identical to the wording specified in 310 CMR 30.909(4).
- (c) An owner or operator who uses a letter of credit to satisfy the requirements of 310 CMR 30.906, shall also establish a standby trust fund. Under the terms of the letter of credit, all payments made thereunder shall be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the Department. This standby trust shall meet the requirements in 310 CMR 30.906(1), except that:
  - 1. An originally signed duplicate of the trust agreement shall be submitted to the Department with the letter of credit; and
  - 2. Until the standby trust fund is funded pursuant to the requirements of 310 CMR 30.906, the following are not required:
    - a. Payment into the trust fund as specified in 310 CMR 30.906(1);
    - b. Annual valuations as required by the trust agreement (see 310 CMR 30.909(1)(a)10.); and
    - c. Notices of nonpayment as required by the trust agreement (see 310 CMR 30.909(1)(a)15.).

30.906: continued

- (d) The letter of credit shall be accompanied by a letter from the owner or operator which shall state:
  - 1. The letter of credit number;
  - 2. The name of the issuing institution;
  - 3. The date of issuance of the letter of credit;
  - 4. The EPA identification number of the facility;
  - 5. The name and address of the facility; and
  - 6. The amount of funds assured by the letter of credit for post-closure care of the facility.
- (e) The letter of credit shall be irrevocable and shall be issued for a period of at least one year. The letter of credit shall provide that the expiration date will be automatically extended for a period of at least one year unless, no later than 120 days before the current expiration date pursuant to the terms of the letter of credit, the issuing institution notifies both the owner or operator and the Department by certified mail of a decision not to extend the expiration date. Under the terms of the letter of credit, the 120 days shall not begin before the date when both the owner or operator and the Department have received the notice, as shown by the later return receipt.
- (f) The letter of credit shall be issued in an amount at least equal to the current post-closure cost estimate, except as provided in 310 CMR 30.906(6).
- (g) Whenever the current post-closure cost estimate increases to an amount greater than the amount of the credit during the operating life of the facility, the owner or operator, within 60 days after the increase, shall either cause the amount of the credit to be increased to an amount equal to the current post-closure cost estimate and submit evidence of such increase to the Department, or obtain other financial assurance as specified in 310 CMR 30.906, to cover the increase. Whenever the current post-closure cost estimate decreases, the amount of the credit may be reduced to the amount of the current post-closure cost estimate following written approval by the Department.
- (h) The Department may draw upon the letter of credit when the owner or operator does not perform post-closure care in accordance with 310 CMR 30.590A through 30.595A (Effective through 6/30/88) or 30.590B through 30.595B (Effective on and after 7/1/88).
- (i) If the owner or operator does not establish alternate financial assurance as required by 310 CMR 30.906, and does not obtain written approval from the Department of any such alternate financial assurance within 90 days of receipt by both the owner or operator and by the Department of a notice that the issuing institution will not extend the letter of credit beyond the current expiration date, the Department shall draw on the letter of credit. The Department may delay drawing on the letter of credit if the issuing institution grants an extension of the term of the letter of credit. During the last 30 days of any such extension, the Department shall draw on the letter of credit if the owner or operator has failed to provide alternate financial assurance as specified in 310 CMR 30.906, or has failed to obtain written approval by the Department of any such assurance.
- (j) The Department may return the letter of credit to the issuing institution for termination when:
  - 1. Either the Department is persuaded that the owner or operator has substituted alternate financial assurance for post-closure as specified in 310 CMR 30.906, or the Department has released the owner or operator from the requirements of 310 CMR 30.906, pursuant to 310 CMR 30.906(8); and
  - 2. The Department gives prior written consent for such termination.

### (5) Post-Closure Insurance.

- (a) An owner or operator may satisfy the requirements of 310 CMR 30.906, by obtaining post-closure insurance which conforms to the requirements of 310 CMR 30.906(5) and by submitting a certificate of such insurance to the Department within the applicable time period prescribed in 310 CMR 30.901(3) or (4). The Department may require submission of a duplicate of the complete insurance policy. At a minimum, the insurer shall be licensed to transact the business of insurance or authorized to provide insurance as an excess or surplus lines insurer in the Commonwealth of Massachusetts.
- (b) The wording of the certificate of insurance shall be identical to the wording specified in 310 CMR 30.909(5).

- (c) The post-closure care insurance policy shall be issued for a face amount at least equal to the current post-closure cost estimate, except as provided in 310 CMR 30.906(6). The term "face amount" means the total amount the insurer is obligated to pay pursuant to the policy. Actual payments by the insurer shall not change the face amount, although the insurer's future liability may be lowered by the amount of the payments.
- (d) The post-closure care insurance policy shall guarantee that funds in an amount equal to the face amount of the post-closure care insurance policy shall be available to perform post-closure care whenever final closure ends. The policy shall also guarantee that once post-closure care begins, the insurer shall be responsible for paying out funds up to an amount equal to the face amount of the post-closure insurance policy, upon the direction of the Department, to such persons as the Department may specify in writing.
- (e) After beginning post-closure care, an owner or operator or any other person authorized to perform post-closure care may request reimbursement for post-closure care expenses by submitting itemized bills to the Department. After receiving bills for post-closure care activities, the Department shall determine whether the post-closure care expenditures are in accordance with the post-closure plan or otherwise justified, and, if so, the Department may instruct the insurer to make reimbursement in such amounts as the Department may specify in writing. Whenever the Department is not persuaded that the cost of post-closure care will not be significantly greater than the face amount of the post-closure care insurance policy, the Department may withhold reimbursement of such amounts as it deems prudent until it determines, in accordance with 310 CMR 30.906(8), that the owner or operator is no longer required to maintain financial assurance for post-closure care.
- (f) The Department may agree to termination of the post-closure care insurance policy when:
  - 1. Either the Department is persuaded that the owner or operator has substituted alternate financial assurance for post-closure care as specified in 310 CMR 30.906, or the Department has released the owner or operator from the requirements of 310 CMR 30.906, pursuant to 310 CMR 30.906(8); and
  - 2. The Department gives prior written consent for such termination.

Failure to pay the premium, without substitution of alternate financial assurance as specified in 310 CMR 30.906, shall constitute violation of 310 CMR 30.000. Such violation shall be deemed to begin upon receipt by the Department of a notice of future cancellation, termination, or failure to renew due to nonpayment of premium, rather than upon the date of expiration.

- (g) The post-closure care insurance policy shall provide that the insurer may not cancel, terminate, or fail to renew the post-closure care insurance policy except for failure to pay the premium. The automatic renewal of the policy shall, at a minimum, provide the insured with the option of renewal at the face amount of the expiring post-closure care insurance policy. If there is a failure to pay the premium, the insurer may elect to cancel, terminate, or fail to renew the post-closure care insurance policy by sending notice by certified mail to the owner or operator and to the Department. Cancellation, termination, or failure to renew may not take effect, however, until at least 120 days after the date of receipt of the notice by both the Department and the owner or operator, as shown by the later return receipt. Cancellation, termination, or failure to renew may not occur, and the post-closure care insurance policy shall remain in full force and effect, in the event that on or before the date of expiration:
  - 1. The Department deems the facility abandoned; or
  - 2. The license is suspended or revoked or an application for a new license is denied; or
  - 3. Closure is ordered by the Department or a court of competent jurisdiction; or
  - 4. The owner or operator is named a debtor in a voluntary or involuntary bankruptcy proceeding; or
  - 5. The premium due is paid.

- (h) Whenever the current post-closure cost estimate increases to an amount greater than the amount of the post-closure care insurance policy, the owner or operator, within 60 days after the increase, shall either cause the face amount of the post-closure care insurance policy to be increased to an amount at least equal to the current post-closure cost estimate and submit evidence of such increase to the Department, or obtain other financial assurance as specified in, 310 CMR 30.906, to cover the increase. Whenever the current post-closure cost estimate decreases, the face amount of the post-closure care insurance policy may be reduced to the amount of the current post-closure cost estimate following written approval by the Department.
- (i) The Department may agree to cancellation of the post-closure care insurance policy when:
  - 1. Either the Department is persuaded that the owner or operator has substituted alternate financial assurance for post-closure care as specified in 310 CMR 30.906, or the Department has released the owner or operator from the requirements of 310 CMR 30.906, pursuant to 310 CMR 30.906(8); and
  - 2. The Department gives prior written consent for such cancellation.
- (j) Commencing on the date that liability accrues to make payments pursuant to the policy, the insurer shall thereafter annually increase the face amount of the policy. At a minimum, such increase shall be equivalent to the face amount of the policy, less any payments made, multiplied by an amount equivalent to 85% of the most recent investment rate or of the equivalent coupon-issue yield announced by the U.S. Treasury for 26 week Treasury securities.
- (6) <u>Use of multiple financial mechanisms</u>. An owner or operator may satisfy the requirements of 310 CMR 30.906, by establishing more than one financial mechanism per Massachusetts facility. These mechanisms shall be limited to trust funds, surety bonds guaranteeing payment into a trust fund, letters of credit, and insurance. These mechanisms shall be in compliance with 310 CMR 30.906(1), (2), (3), (4), and (5), except that it shall be the combination of mechanisms, rather than a single mechanism, which shall provide financial assurance for an amount at least equal to the current post-closure cost estimate. If an owner or operator uses a trust fund in combination with any other mechanism, he shall use the trust fund as a standby trust fund for those mechanisms for which the establishment of a standby trust fund is required. A single standby trust fund may be used for two or more mechanisms. The Department may use any or all of the mechanisms to provide for post-closure care of the facility.
- (7) Use of a financial mechanism for multiple facilities.
  - (a) An owner or operator may use a financial assurance mechanism specified in 310 CMR 30.906 to meet the requirements of 310 CMR 30.906, for more than one Massachusetts facility.
  - (b) Evidence of financial assurance submitted to the Department shall include a list showing, for each facility, the EPA identification number, name, address, and amount of funds for post-closure care assured by the mechanism.
  - (c) The amount of funds available through the mechanism shall be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for each facility. In directing funds available through the mechanism for post-closure care of any facility covered by the mechanism, the Department may direct only the amount of funds designated for that facility, unless the owner or operator agrees to the use of additional funds available under the mechanism.
- (8) Release of the owner or operator from the requirements of 310 CMR 30.906. When an owner or operator has completed, to the satisfaction of the Department, all post-closure care of the facility pursuant to 310 CMR 30.590A through 30.595A (Effective through 6/30/88) or 30.590B (Effective on and after 7/1/88), the Department shall, at the request of the owner or operator, notify him in writing that he is no longer required to maintain financial assurance for post-closure care of the facility pursuant to 310 CMR 30.906.

# 30.907: Use of a Mechanism for Financial Assurance of Both Closure and Post-Closure Care

An owner or operator may satisfy the requirements for financial assurance for both closure and post-closure care for more than one facility by using a trust fund, surety bond, letter of credit, or insurance, or a combination thereof, which meets the specifications set forth in 310 CMR 30.904 and 30.906. The amount of funds available through the mechanism(s) shall be no less than the sum of funds that would be available if a separate mechanism(s) were to be established and required to be maintained for financial assurance of closure and post-closure care.

# 30.908: Liability Requirements (Effective July 1, 1987)

- (1) Coverage for sudden accidental occurrences. An owner or operator of a hazardous waste treatment, storage, or disposal facility, or a group of such facilities in Massachusetts, shall demonstrate assurance of financial responsibility for bodily injury and property damage to third parties caused by each sudden accidental occurrence arising from operation of the facility(ies). The owner or operator of each facility shall have and continuously maintain such coverage using either the options specified in 310 CMR 30.908(1)(a) through (d) or the options specified in 310 CMR 30.910. The options specified in 310 CMR 30.908(1)(a) through (d) may be used by the owner or operator of a facility, or a group of such facilities in Massachusetts, provided that the use of such options shall be subject to the provisions of 310 CMR 30.908(5), (6), and (7). The options specified in 310 CMR 30.910 may be used by the owner or operator of each facility, provided that the use of such options shall be subject to the provisions of 310 CMR 30.910. If the owner or operator of a facility, or a group of such facilities in Massachusetts, uses the options specified in 310 CMR 30.908(1)(a) through (d), said owner or operator, subject to the provisions of 310 CMR 30.908(3), (4), and (5), shall have and continuously maintain coverage for sudden accidental occurrences in the amount of at least \$3-million per each sudden accidental occurrence with an annual aggregate of at least \$6-million, exclusive of legal defense costs. If the owner or operator of a facility uses the options specified in 310 CMR 30.910, said owner or operator shall have and continuously maintain coverage for sudden accidental occurrences in the amount set forth in 310 CMR 30.910. Unless such assurance of financial responsibility is demonstrated entirely by liability insurance in compliance with 310 CMR 30.908(1)(a), the owner or operator shall also obtain and maintain in effect a contract with a Claims Administrator in compliance with 310 CMR 30.908(1)(e). As used in 310 CMR 30.908(1), the term "Claims Administrator" shall mean a person who shall be responsible for the processing and administration of all requests to make payments from a trust fund, standby trust fund, surety bond, or letter of credit pursuant to 310 CMR 30.908(1). The owner or operator of each facility shall give notice to both the Department and the Claims Administrator of every claim for bodily injury and/or property damage caused by a sudden accidental occurrence or occurrences arising from the operation of the facility(ies). The owner or operator of each facility shall give such notice to both the Department and the Claims Administrator as soon as possible and in any event no later than 30 days after learning of such claim. The owner or operator of each facility shall give notice to both the Department and the Claims Administrator of every judgment against the owner or operator for bodily injury and/or property damage caused by a sudden accidental occurrence or occurrences arising from the operation of the facility. The owner or operator of each facility shall give such notice to both the Department and the Claims Administrator as soon as possible and in any event no later than 30 days after learning of said judgment. The owner or operator of each facility shall submit to the Department a copy of every judgment against the owner or operator for bodily injury and/or property damage caused by a sudden accidental occurrence or occurrences arising from the operation of the facility. The owner or operator of each facility shall submit a copy of such judgment to the Department as soon as possible and in any event no later than 30 days after receiving a copy thereof.
  - (a) An owner or operator may demonstrate the required coverage by having liability insurance, as specified in 310 CMR 30.901(2) or (6), which conforms to 310 CMR 30.908(1)(a).

- 1. Each liability insurance policy shall include a Hazardous Waste Facility Liability Endorsement (the "endorsement") and may be evidenced by a Certificate of Liability Insurance. The wording of the endorsement shall be identical to the wording specified in 310 CMR 30.909(6). The wording of the certificate of insurance shall be identical to the wording specified in 310 CMR 30.909(7). The owner or operator shall submit a signed duplicate original of the endorsement or the certificate of liability insurance to the Department. If requested by the Department, the owner or operator shall provide a signed duplicate original of the liability insurance policy. An owner or operator of a facility shall submit the signed duplicate original of the Hazardous Waste Facility Liability Endorsement or the Certificate of Liability Insurance to the Department within the applicable period prescribed in 310 CMR 30.901(2) or (6).
- 2. At a minimum, the insurer shall be licensed to transact the business of insurance in Massachusetts, or authorized to provide insurance as an excess or surplus lines insurer in Massachusetts, or a risk retention group lawfully providing insurance to its members in Massachusetts.
- (b) An owner or operator may demonstrate the required coverage by establishing a sudden accidental occurrence liability trust fund, as specified in 310 CMR 30.901(2) or (6), which conforms to 310 CMR 30.908(1)(b), and by sending an originally signed duplicate of the trust agreement to the Department within the applicable time period prescribed in 310 CMR 30.901(2) or (6).
  - 1. The trustee shall be a bank or other financial institution which has the authority to act as a trustee and whose trust operations are regulated and examined by the Massachusetts Commissioner of Banking, or the trustee shall be a national bank.
  - 2. The wording of the trust agreement shall be identical to the wording specified in 310 CMR 30.909(8)(a), and the trust agreement shall be accompanied by a formal certification of acknowledgement identical to the wording specified in 310 CMR 30.909(8)(b).
  - 3. On the date of the initial establishment of the sudden accidental occurrence liability trust fund, the value of the fund shall be at least \$6,000,000, or such other amount as required by the Department pursuant to 310 CMR 30.908(4) or (5).
  - 4. If an owner or operator substitutes other financial assurance as specified in 310 CMR 30.908(1) for all or part of the sudden accidental occurrence liability trust fund, he may submit a written request to the Department for release of the amount in excess of the amount to be covered by the sudden accidental occurrence liability trust fund.
  - 5. Any person who obtains final judgment against the owner or operator for bodily injury and/or property damage caused by a sudden accidental occurrence or occurrences arising from the operation of the facility may request payment from the sudden accidental occurrence liability trust fund in satisfaction of the judgment by submitting to the Claims Administrator a certified copy of the judgment and a statement, signed subject to 310 CMR 30.006 and 30.009, that the judgment was either (1) rendered by the highest court in the jurisdiction where the action was brought and the owner or operator exhausted all rights of appeal, or (2) rendered by the highest court which rendered a judgment and no appeal was made by the owner or operator to a higher court within the time allowed by applicable statute or rule, or (3) agreed to by the owner or operator.
  - 6. After receiving the material described in 310 CMR 30.908(1)(b)5., the Claims Administrator shall determine whether the judgment was either (1) rendered by the highest court in the jurisdiction where the action was brought and the owner or operator exhausted all rights of appeal, or (2) rendered by the highest court which rendered a judgment and no appeal was made by the owner or operator to a higher court within the time allowed by applicable statute or rule, or (3) agreed to by the owner or operator. If so, the Claims Administrator shall instruct the trustee to pay to the person who obtained the judgment such amounts, not to exceed the amount of the judgment or the amount of the limits set forth in 310 CMR 30.908(1), whichever amount is less, as the Claims Administrator may specify in writing.

- 7. No trust shall be terminated without prior written consent of the Department. The Department may agree to termination of the trust when the Department is persuaded that the owner or operator has substituted alternate financial assurance as specified in 310 CMR 30.908(1), or when the Department certifies closure of the facility pursuant to 310 CMR 30.099(6) or 310 CMR 30.587(3).
- (c) An owner or operator may demonstrate the required coverage by obtaining a surety bond which conforms to 310 CMR 30.908(1)(c) and by submitting the surety bond to the Department within the applicable time period prescribed in 310 CMR 30.901(2) or (6).
  - 1. The surety company(ies) issuing the bond shall, at a minimum, be among those lawfully selling surety bonds in Massachusetts.
  - 2. The wording of the surety bond shall be identical to the wording specified in 310 CMR 30.909(9).
  - 3. An owner or operator who uses a surety bond to satisfy the requirements of 310 CMR 30.908 shall also establish a standby trust fund. Under the terms of the surety bond, all payments made thereunder shall, in accordance with instructions from the Department, either be paid by the surety directly to a person described in 310 CMR 30.908(1)(c)5. or deposited by the surety directly into the standby trust fund. This standby trust fund shall meet the requirements in 310 CMR 30.908(1)(b), except that:
    - a. An originally signed duplicate of the trust agreement shall be submitted to the Department with the surety bond; and
    - b. Until the standby trust fund is funded pursuant to the requirements of 310 CMR 30.908, the following are not required:
      - (i) payment into the trust fund as specified in 310 CMR 30.908(1)(b);
      - (ii) annual valuations as required by the trust agreement (see 310 CMR 30.909(8)(a)10.); and
      - (iii) notices of nonpayment as required by the trust agreement (see 310 CMR 30.909(8)(a)15.).
  - 4. Any person who obtains final judgment against the owner or operator for bodily injury and/or property damage caused by a sudden accidental occurrence or occurrences arising from the operation of the facility may request payment from the surety bond in satisfaction of the judgment by submitting to the Claims Administrator a certified copy of the judgment and a statement, signed subject to 310 CMR 30.006 and 310 CMR 30.009, that the judgment was either:
    - a. rendered by the highest court in the jurisdiction where the action was brought and the owner or operator exhausted all rights of appeal;
    - b. rendered by the highest court which rendered a judgment and no appeal was made by the owner or operator to a higher court within the time allowed by applicable statute or rule; or
    - c. agreed to by the owner or operator.
  - 5. After receiving the material described in 310 CMR 30.908(1)(c)4., the Claims Administrator shall determine whether the judgment was either:
    - a. rendered by the highest court in the jurisdiction where the action was brought and the owner or operator exhausted all rights of appeal;
    - b. rendered by the highest court which rendered a judgment and no appeal was made by the owner or operator to a higher court within the time allowed by applicable statute or rule; or
    - c. agreed to by the owner or operator. If so, the Claims Administrator shall instruct the surety company(ies) issuing the bond to pay either to the person making the claim or into the standby trust fund, or the Claims Administrator shall instruct the trustee of the standby trust fund to pay to the person who obtained the judgment, such amounts, not to exceed the amount of the judgment or the amount of the limits set forth in 310 CMR 30.908(1), whichever amount is less, as the Claims Administrator may specify in writing.
  - 6. The bond shall guarantee that the owner or operator shall:
    - a. Fund the standby trust fund in an amount equal to either the sum of the judgment described in 310 CMR 30.908(1)(c)5. and the costs of administering said fund, or the amount of the penal sum, whichever is less, within 15 days after the Department or a court of competent jurisdiction issues an order to that effect; or

- b. Provide alternate financial assurance as specified in 310 CMR 30.908, and obtain the Department's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and by the Department of a notice of cancellation of the surety bond from the surety.
- 7. Under the terms of the bond, the surety shall become liable on the bond obligation when the owner or operator does not perform as guaranteed by the bond (see 310 CMR 30.909(9)).
- 8. The penal sum of the bond shall be at least \$6,000,000, or such other amount as required by the Department pursuant to 310 CMR 30.908(4) or (5).
- 9. Under the terms of the bond, the surety may cancel the bond by sending written notice of cancellation by certified mail to the owner or operator, to the Claims Administrator, and to the Department. Cancellation may not take effect, however, until at least 120 days after the date of receipt of the notice of cancellation by the owner or operator, by the Claims Administrator, and by the Department, as shown by the latest return receipt.
- 10. No bond shall be cancelled without prior written consent of the Department. The Department may agree to cancellation of the bond when the Department is persuaded that the owner or operator has substituted alternate financial assurance as specified in 310 CMR 30.908(1), or when the Department certifies closure of the facility pursuant to 310 CMR 30.099(6) or 310 CMR 30.587(3).
- (d) An owner or operator may demonstrate the required coverage by obtaining an irrevocable letter of credit which conforms to 310 CMR 30.908(1)(d) and by submitting the letter to the Department within the applicable time period prescribed in 310 CMR 30.901(2) or (6).
  - 1. The institution issuing the letter of credit shall be an entity which has the authority to issue letters of credit and whose letter of credit operations are regulated and examined by the Massachusetts Commissioner of Banking, or the institution shall be a national bank.
  - 2. The wording of the letter of credit shall be identical to the wording specified in 310 CMR 30.909(10).
  - 3. An owner or operator who uses a letter of credit to satisfy the requirements of 310 CMR 30.908(1) shall also establish a standby trust fund. Under the terms of the letter of credit, all payments made thereunder shall, in accordance with instructions from the Claims Administrator or the Department, either be paid by the issuing institution directly to a person described in 310 CMR 30.908(1)(d)8. or deposited by the issuing institution directly into the standby trust fund. This standby trust fund shall meet the requirements in 310 CMR 30.908(1)(b), except that:
    - a. An originally signed duplicate of the trust agreement shall be submitted to the Department with the letter of credit; and
    - b. Until the standby trust fund is funded pursuant to the requirements of 310 CMR 30.908, the following are not required:
      - (i) payment into the trust fund as specified in 310 CMR 30.908(1)(b);
      - (ii) annual valuations as required by the trust agreement (see 310 CMR 30.909(8)(a)10.); and
      - (iii) notices of nonpayment as required by the trust agreement (see 310 CMR 30.909(8)(a)15.).
  - 4. The letter of credit shall be accompanied by a letter from the owner or operator which shall state:
    - a. The letter of credit number;
    - b. The name of the issuing institution;
    - c. The date of issuance of the letter of credit;
    - d. The EPA identification number(s) of the facility(ies);
    - e. The name(s) and address(es) of the facility(ies); and
    - f. The amount of funds assured by the letter of credit.

- 5. The letter of credit shall be irrevocable and shall be issued for a period of at least one year. The letter of credit shall provide that the expiration date will be automatically extended for a period of at least one year unless, no later than 120 days before the current expiration date pursuant to the terms of the letter of credit, the issuing institution notifies the owner or operator, the Claims Administrator, and the Department by certified mail of a decision not to extend the expiration date. Under the terms of the letter of credit, the 120 days shall not begin before the date when the owner or operator, the Claims Administrator, and the Department have received the notice, as shown by the latest return receipt.
- 6. The letter of credit shall be issued in an amount at least \$6,000,000, or such other amount as required by the Department pursuant to 310 CMR 30.908(4) or (5).
- 7. If an owner or operator substitutes other financial assurance as specified in 310 CMR 30.908(1) for all or part of the amount of the letter of credit, he may submit a written request to the Department for release of the amount in excess of the amount to be covered by the letter of credit.
- 8. Any person who obtains final judgment against the owner or operator for bodily injury and/or property damage caused by a sudden accidental occurrence or occurrences arising from the operation of the facility may request payment from the letter of credit in satisfaction of the judgment by submitting to the Claims Administrator a certified copy of the judgment and a statement, signed subject to 310 CMR 30.006 and 30.009, that the judgment was either (1) rendered by the highest court in the jurisdiction where the action was brought and the owner or operator exhausted all rights of appeal, or (2) rendered by the highest court which rendered a judgment and no appeal was made by the owner or operator to a higher court within the time allowed by applicable statute or rule, or (3) agreed to by the owner or operator.
- 9. After receiving the material described in 310 CMR 30.908(1)(d)8., the Claims Administrator shall determine whether the judgment was either (1) rendered by the highest court in the jurisdiction where the action was brought and the owner or operator exhausted all rights of appeal, or (2) rendered by the highest court which rendered a judgment and no appeal was made by the owner or operator to a higher court within the time allowed by applicable statute or rule, or (3) agreed to by the owner or operator. If so, the Claims Administrator shall instruct the institution issuing the letter of credit to pay either to the person making the claim or into the standby trust fund, or the Claims Administrator shall instruct the trustee of the standby trust fund to pay to the person who obtained the judgment, such amounts, not to exceed the amount of the judgment or the amount of the limits set forth in 310 CMR 30.908(1), whichever amount is less, as the Claims Administrator may specify in writing.
- 10. If the owner or operator does not establish alternate financial assurance as required by 310 CMR 30.908(1) and does not obtain written approval from the Department of any such alternate financial assurance within 90 days of receipt by the owner or operator, by the Claims Administrator, and by the Department of a notice that the issuing institution will not extend the letter of credit beyond the current expiration date, the Department shall draw on the letter of credit. The Department may delay drawing on the letter of credit if the issuing institution grants an extension of the term of the letter of credit. During the last 30 days of any such extension, the Department shall draw on the letter of credit if the owner or operator has failed to provide alternate financial assurance as specified in 310 CMR 30.908 or has failed to obtain written approval by the Department of such assurance.
- 11. No letter of credit shall be terminated without prior written consent of the Department. The Department may return the letter of credit to the issuing institution for termination when the Department is persuaded that the owner or operator has substituted alternate financial assurance as specified in 310 CMR 30.908(1), or when the Department certifies closure of the facility pursuant to 310 CMR 30.099(6) or 30.586(2).

- (e) Each contract between a Claims Administrator and an owner or operator shall conform to 310 CMR 30.908(1)(e).
  - 1. Each contract between a Claims Administrator and an owner or operator shall assure that each party to the contract is obligated by the contract to comply with all the requirements applicable to each party respectively, as set forth in 310 CMR 30.908(1).
  - 2. Prior to executing any contract with a Claims Administrator, the owner or operator shall furnish a copy of the contract to the Department. No contract between a Claims Administrator and an owner or operator shall be signed by either of them without the prior written approval of the Department. The Department may withhold such approval if the Department is not persuaded that (1) the Claims Administrator is a person who can and will properly carry out the responsibilities a Claims Administrator has pursuant to 310 CMR 30.000, or (2) the terms and wording of the contract between the Claims Administrator and the owner or operator are sufficient to protect the Department's interests. The Department shall not unreasonably withhold or delay such approval.
  - 3. The Department shall not be a party to the contract between the Claims Administrator and the owner or operator.
  - 4. Cancellation of any contract between a Claims Administrator and an owner or operator shall be effective only upon written notice and only after the expiration of at least 30 days after the date of receipt by the Department of such written notice, sent to the Department by certified mail.
  - 5. Except as provided in Section 9 of the trust agreement, the wording of which is specified in 310 CMR 30.909(8)(a), the Claims Administrator shall not receive, and shall not be eligible to receive, directly or indirectly, any money in any letter of credit or standby trust fund established pursuant to 310 CMR 30.900 and for each he is Claims Administrator.
  - 6. Nothing in 310 CMR 30.900 shall be construed to preclude the Trustee of any trust fund from also being the Contract Administrator for that trust fund.
  - 7. The Department shall have the right to direct the Claims Administrator to refuse to give instructions to pay any claim, and the Department and the Claims Administrator shall each have the right to obtain reimbursement of any claim already paid in whole or in part, if, in the opinion of the Department, the claim is fraudulent, inflated, or otherwise unlawful or unjustified.

- (2) Coverage for nonsudden accidental occurrences. An owner or operator of a hazardous waste treatment, storage, or disposal facility which is either described in 310 CMR 30.901(1)(b) or so required by the Department pursuant to 310 CMR 30.908(4), or a group of such facilities in Massachusetts, shall demonstrate assurance of financial responsibility for bodily injury and property damage to third parties caused by each nonsudden accidental occurrence arising from operation of the facility(ies). The owner or operator of each facility shall have and continuously maintain such coverage using either the options specified in 310 CMR 30.908(2)(a) through (d) or the options specified in 310 CMR 30.910. The options specified in 310 CMR 30.908(2)(a) through (d) may be used by the owner or operator of a facility, or a group of such facilities in Massachusetts, provided that the use of such options shall be subject to the provisions of 310 CMR 30.908(5), (6), and (7). The options specified in 310 CMR 30.910 may be used by the owner or operator of each facility, provided that the use of such options shall be subject to the provisions of 310 CMR 30.910. If the owner or operator of a facility, or a group of such facilities in Massachusetts, uses the options specified in 310 CMR 30.908(2)(a) through (d), said owner or operator, subject to the provisions of 310 CMR 30.908(3), (4), and (5), shall have and continuously maintain coverage for nonsudden accidental occurrences in the amount of at least \$5-million per each nonsudden accidental occurrence with an annual aggregate of at least \$10-million, exclusive of legal defense costs. If the owner or operator of a facility uses the options specified in 310 CMR 30.910, said owner or operator shall have and continuously maintain coverage for nonsudden accidental occurrences in the amount set forth in 310 CMR 30.910. Unless such assurance of financial responsibility is demonstrated entirely by liability insurance in compliance with 310 CMR 30.908(2)(a), the owner or operator shall also obtain and maintain in effect a contract with a Claims Administrator in compliance with 310 CMR 30.908(2)(e). As used in 310 CMR 30.908(2), the term "Claims Administrator" shall mean a person who shall be responsible for the processing and administration of all requests to make payments from a trust fund, standby trust fund, surety bond, or letter of credit pursuant to 310 CMR 30.908(2). The owner or operator of each facility shall give notice to both the Department and the Claims Administrator of every claim for bodily injury and/or property damage caused by a nonsudden accidental occurrence or occurrences arising from the operation of the facility(ies). The owner or operator of each facility shall give such notice to both the Department and the Claims Administrator as soon as possible and in any event no later than 30 days after learning of such claim. The owner or operator of each facility shall give notice to both the Department and the Claims Administrator of every judgment against the owner or operator for bodily injury and/or property damage caused by a nonsudden accidental occurrence or occurrences arising from the operation of the facility. The owner or operator of each facility shall give such notice to both the Department and the Claims Administrator as soon as possible and in any event no later than 30 days after learning of said judgment. The owner or operator of each facility shall submit to the Department a copy of every judgment against the owner or operator for bodily injury and/or property damage caused by a nonsudden accidental occurrence or occurrences arising from the operation of the facility. The owner or operator of each facility shall submit a copy of such judgment to the Department as soon as possible and in any event no later than 30 days after receiving a copy thereof.
  - (a) An owner or operator may demonstrate the required coverage by having liability insurance, as specified in 310 CMR 30.901(2) or (6), which conforms to 310 CMR 30.908(2)(a).
    - 1. Each liability insurance policy shall include a Hazardous Waste Facility Liability Endorsement (the "endorsement") and may be evidenced by a Certificate of Liability Insurance. The wording of the endorsement shall be identical to the wording specified in 310 CMR 30.909(6). The wording of the certificate of insurance shall be identical to the wording specified in 310 CMR 30.909(7). The owner or operator shall submit a signed duplicate original of the endorsement or the certificate of liability insurance to the Department. If requested by the Department, the owner or operator shall provide a signed duplicate original of the liability insurance policy. An owner or operator of a facility shall submit the signed duplicate original of the Hazardous Waste Facility Liability Endorsement or the Certificate of Liability Insurance to the Department within the applicable period prescribed in 310 CMR 30.901(2) or (6).

- 2. At a minimum, the insurer shall be licensed to transact the business of insurance in Massachusetts, or authorized to provide insurance as an excess or surplus lines insurer in Massachusetts, or a risk retention group lawfully providing insurance to its members in Massachusetts.
- (b) An owner or operator may demonstrate the required coverage by establishing a nonsudden accidental occurrence liability trust fund, as specified in 310 CMR 30.901(2) or (6), which conforms to 310 CMR 30.908(2)(b), and by sending an originally signed duplicate of the trust agreement to the Department within the applicable time period prescribed in 310 CMR 30.901(2) or (6).
  - 1. The trustee shall be a bank or other financial institution which has the authority to act as a trustee and whose trust operations are regulated and examined by the Massachusetts Commissioner of Banking, or the trustee shall be a national bank.
  - 2. The wording of the trust agreement shall be identical to the wording specified in 310 CMR 30.909(8)(a), and the trust agreement shall be accompanied by a formal certification of acknowledgement identical to the wording specified in 310 CMR 30.909(8)(b).
  - 3. On the date of the initial establishment of the nonsudden accidental occurrence liability trust fund, the value of the fund shall be at least \$10,000,000.00, or such other amount as required by the Department pursuant to 310 CMR 30.908(4) or (5).
  - 4. If an owner or operator substitutes other financial assurance as specified in 310 CMR 30.908(2) for all or part of the nonsudden accidental occurrence liability trust fund, he may submit a written request to the Department for release of the amount in excess of the amount to be covered by the nonsudden accidental occurrence liability trust fund.
  - 5. Any person who obtains final judgment against the owner or operator for bodily injury and/or property damage caused by a nonsudden accidental occurrence or occurrences arising from the operation of the facility may request payment from the nonsudden accidental occurrence liability trust fund in satisfaction of the judgment by submitting to the Claims Administrator a certified copy of the judgment and a statement, signed subject to 310 CMR 30.006 and 30.009, that the judgment was either (1) rendered by the highest court in the jurisdiction where the action was brought and the owner or operator exhausted all rights of appeal, or (2) rendered by the highest court which rendered a judgment and no appeal was made by the owner or operator to a higher court within the time allowed by applicable statute or rule, or (3) agreed to by the owner or operator.
  - 6. After receiving the material described in 310 CMR 30.908(2)(b)5., the Claims Administrator shall determine whether the judgment was either (1) rendered by the highest court in the jurisdiction where the action was brought and the owner or operator exhausted all rights of appeal, or (2) rendered by the highest court which rendered a judgment and no appeal was made by the owner or operator to a higher court within the time allowed by applicable statute or rule, or (3) agreed to by the owner or operator. If so, the Claims Administrator shall instruct the trustee to pay to the person who obtained the judgment such amounts, not to exceed the amount of the judgment or the amount of the limits set forth in 310 CMR 30.908(2), whichever amount is less, as the Claims Administrator may specify in writing.
  - 7. No trust shall be terminated without prior written consent of the Department. The Department may agree to termination of the trust when the Department is persuaded that the owner or operator has substituted alternate financial assurance as specified in 310 CMR 30.908(2), or when the Department certifies closure of the facility pursuant to 310 CMR 30.099(6) or 30.586(2).
- (c) An owner or operator may demonstrate the required coverage by obtaining a surety bond which conforms to 310 CMR 30.908(2)(c) and by submitting the surety bond to the Department within the applicable time period prescribed in 310 CMR 30.901(2) or (6).
  - 1. The surety company(ies) issuing the bond shall, at a minimum, be among those lawfully selling surety bonds in Massachusetts.
  - 2. The wording of the surety bond shall be identical to the wording specified in 310 CMR 30.909(9).

- 3. An owner or operator who uses a surety bond to satisfy the requirements of 310 CMR 30.908 shall also establish a standby trust fund. Under the terms of the surety bond, all payments made thereunder shall, in accordance with instructions from the Department, either be paid by the surety directly to a person described in 310 CMR 30.908(2)(c)5. or deposited by the surety directly into the standby trust fund. This standby trust fund shall meet the requirements in 310 CMR 30.908(2)(b), except that:
  - a. An originally signed duplicate of the trust agreement shall be submitted to the Department with the surety bond; and
  - b. Until the standby trust fund is funded pursuant to the requirements of 310 CMR 30.908, the following are not required:
    - (i) payment into the trust fund as specified in 310 CMR 30.908(2)(b);
    - (ii) annual valuations as required by the trust agreement (See 310 CMR 30.909(8)(a)10.); and
    - (iii) notices of nonpayment as required by the trust agreement (See 310 CMR 30.909(8)(a)15.).
- 4. Any person who obtains final judgment against the owner or operator for bodily injury and/or property damage caused by a nonsudden accidental occurrence or occurrences arising from the operation of the facility may request payment from the surety bond in satisfaction of the judgment by submitting to the Claims Administrator a certified copy of the judgment and a statement, signed subject to 310 CMR 30.006 and 30.009, that the judgment was either (1) rendered by the highest court in the jurisdiction where the action was brought and the owner or operator exhausted all rights of appeal, or (2) rendered by the highest court which rendered a judgment and no appeal was made by the owner or operator to a higher court within the time allowed by applicable statute or rule, or (3) agreed to by the owner or operator.
- 5. After receiving the material described in 310 CMR 30.908(2)(c)4., the Claims Administrator shall determine whether the judgment was either (1) rendered by the highest court in the jurisdiction where the action was brought and the owner or operator exhausted all rights of appeal, or (2) rendered by the highest court which rendered a judgment and no appeal was made by the owner or operator to a higher court within the time allowed by applicable statute or rule, or (3) agreed to by the owner or operator. If so, the Claims Administrator shall instruct the surety company(ies) issuing the bond to pay either to the person making the claim or into the standby trust fund, or the Claims Administrator shall instruct the trustee of the standby trust fund to pay to the person who obtained the judgment, such amounts, not to exceed the amount of the judgment or the amount of the limits set forth in 310 CMR 30.908(2), whichever amount is less, as the Claims Administrator may specify in writing.
- 6. The bond shall guarantee that the owner or operator shall:
  - a. Fund the standby trust fund in an amount equal to either the sum of the judgment described in 310 CMR 30.908(2)(c)5. and the costs of administering said fund, or the amount of the penal sum, whichever is less, within 15 days after the Department or a court of competent jurisdiction issues an order to that effect; or
  - b. Provide alternate financial assurance as specified in 310 CMR 30.908, and obtain the Department's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and by the Department of a notice of cancellation of the surety bond from the surety.
- 7. Under the terms of the bond (*See* 310 CMR 30.909(9)), the surety shall become liable on the bond obligation when the owner or operator does not perform as guaranteed by the bond (*See* 310 CMR 30.909(9)).
- 8. The penal sum of the bond shall be at least \$10,000,000.00, or such other amount as required by the Department pursuant to 310 CMR 30.908(4) or (5).
- 9. Under the terms of the bond, the surety may cancel the bond by sending written notice of cancellation by certified mail to the owner or operator, to the Claims Administrator, and to the Department. Cancellation may not take effect, however, until at least 120 days after the date of receipt of the notice of cancellation by the owner or operator, by the Claims Administrator, and by the Department, as shown by the latest return receipt.

- 10. No bond shall be cancelled without prior written consent of the Department. The Department may agree to cancellation of the bond when the Department is persuaded that the owner or operator has substituted alternate financial assurance as specified in 310 CMR 30.908(2), or when the Department certifies closure of the facility pursuant to 310 CMR 30.099(6) or 30.586(2).
- (d) An owner or operator may demonstrate the required coverage by obtaining an irrevocable letter of credit which conforms to 310 CMR 30.908(2)(d) and by submitting the letter to the Department within the applicable time period prescribed in 310 CMR 30.901(2) or (6).
  - 1. The institution issuing the letter of credit shall be an entity which has the authority to issue letters of credit and whose letter of credit operations are regulated and examined by the Massachusetts Commissioner of Banking, or the institution shall be a national bank.
  - 2. The wording of the letter of credit shall be identical to the wording specified in 310 CMR 30.909(10).
  - 3. An owner or operator who uses a letter of credit to satisfy the requirements of 310 CMR 30.908(2) shall also establish a standby trust fund. Under the terms of the letter of credit, all payments made thereunder shall, in accordance with instructions from the Claims Administrator or the Department, either be paid by the issuing institution directly to a person described in 310 CMR 30.908(2)(d)8. or deposited by the issuing institution directly into the standby trust fund. This standby trust fund shall meet the requirements in 310 CMR 30.908(2)(b), except that:
    - a. An originally signed duplicate of the trust agreement shall be submitted to the Department with the letter of credit; and
    - b. Until the standby trust fund is funded pursuant to the requirements of 310 CMR 30.908, the following are not required:
      - (i) payment into the trust fund as specified in 310 CMR 30.908(2)(b);
      - (ii) annual valuations as required by the trust agreement (See 310 CMR 30.909(8)(a)10.); and
      - (iii) notices of nonpayment as required by the trust agreement (See 310 CMR 30.909(8)(a)15.).
  - 4. The letter of credit shall be accompanied by a letter from the owner or operator which shall state:
    - a. The letter of credit number;
    - b. The name of the issuing institution;
    - c. The date of issuance of the letter of credit;
    - d. The EPA identification number(s) of the facility(ies);
    - e. The name(s) and address(es) of the facility(ies); and
    - f. The amount of funds assured by the letter of credit.
  - 5. The letter of credit shall be irrevocable and shall be issued for a period of at least one year. The letter of credit shall provide that the expiration date will be automatically extended for a period of at least one year unless, no later than 120 days before the current expiration date pursuant to the terms of the letter of credit, the issuing institution notifies the owner or operator, the Claims Administrator, and the Department by certified mail of a decision not to extend the expiration date. Under the terms of the letter of credit, the 120 days shall not begin before the date when the owner or operator, the Claims Administrator, and the Department have received the notice, as shown by the latest return receipt.
  - 6. The letter of credit shall be issued in an amount at least \$10,000,000.00, or such other amount as required by the Department pursuant to 310 CMR 30.908(4) or (5).
  - 7. If an owner or operator substitutes other financial assurance as specified in 310 CMR 30.908(2) for all or part of the amount of the letter of credit, he may submit a written request to the Department for release of the amount in excess of the amount to be covered by the letter of credit.

- 8. Any person who obtains final judgment against the owner or operator for bodily injury and/or property damage caused by a nonsudden accidental occurrence or occurrences arising from the operation of the facility may request payment from the letter of credit in satisfaction of the judgment by submitting to the Claims Administrator a certified copy of the judgment and a statement, signed subject to 310 CMR 30.006 and 30.009, that the judgment was either (1) rendered by the highest court in the jurisdiction where the action was brought and the owner or operator exhausted all rights of appeal, or (2) rendered by the highest court which rendered a judgment and no appeal was made by the owner or operator to a higher court within the time allowed by applicable statute or rule, or (3) agreed to by the owner or operator.
- 9. After receiving the material described in 310 CMR 30.908(2)(d)8., the Claims Administrator shall determine whether the judgment was either (1) rendered by the highest court in the jurisdiction where the action was brought and the owner or operator exhausted all rights of appeal, or (2) rendered by the highest court which rendered a judgment and no appeal was made by the owner or operator to a higher court within the time allowed by applicable statute or rule, or (3) agreed to by the owner or operator. If so, the Claims Administrator shall instruct the institution issuing the letter of credit to pay either to the person making the claim or into the standby trust fund, or the Claims Administrator shall instruct the trustee of the standby trust fund to pay to the person who obtained the judgment, such amounts, not to exceed the amount of the judgment or the amount of the limits set forth in 310 CMR 30.908(2), whichever amount is less, as the Claims Administrator may specify in writing.
- 10. If the owner or operator does not establish alternate financial assurance as required by 310 CMR 30.908(2) and does not obtain written approval from the Department of any such alternate financial assurance within 90 days of receipt by the owner or operator, by the Claims Administrator, and by the Department of a notice that the issuing institution will not extend the letter of credit beyond the current expiration date, the Department shall draw on the letter of credit. The Department may delay drawing on the letter of credit if the issuing institution grants an extension of the term of the letter of credit. During the last 30 days of any such extension, the Department shall draw on the letter of credit if the owner or operator has failed to provide alternate financial assurance as specified in 310 CMR 30.908 or has failed to obtain written approval by the Department of such assurance.
- 11. No letter of credit shall be terminated without prior written consent of the Department. The Department may return the letter of credit to the issuing institution for termination when the Department is persuaded that the owner or operator has substituted alternate financial assurance as specified in 310 CMR 30.908(2), or when the Department certifies closure of the facility pursuant to 310 CMR 30.099(6) or 30.586(2).
- (e) Each contract between a Claims Administrator and an owner or operator shall conform to 310 CMR 30.908(2)(e).
  - 1. Each contract between a Claims Administrator and an owner or operator shall assure that each party to the contract is obligated by the contract to comply with all the requirements applicable to each party respectively, as set forth in 310 CMR 30.908(2).
  - 2. Prior to executing any contract with a Claims Administrator, the owner or operator shall furnish a copy of the contract to the Department. No contract between a Claims Administrator and an owner or operator shall be signed by either of them without the prior written approval of the Department. The Department may withhold such approval if the Department is not persuaded that (1) the Claims Administrator is a person who can and will properly carry out the responsibilities a Claims Administrator has pursuant to 310 CMR 30.000, or (2) the terms and wording of the contract between the Claims Administrator and the owner or operator are sufficient to protect the Department's interests. The Department shall not unreasonably withhold or delay such approval.
  - 3. The Department shall not be a party to the contract between the Claims Administrator and the owner or operator.

- 4. Cancellation of any contract between a Claims Administrator and an owner or operator shall be effective only upon written notice and only after the expiration of at least 30 days after the date of receipt by the Department of such written notice, sent to the Department by certified mail.
- 5. Except as provided in Section 9 of the trust agreement, the wording of which is specified in 310 CMR 30.909(8)(a), the Claims Administrator shall not receive, and shall not be eligible to receive, directly or indirectly, any money in any letter of credit or standby trust fund established pursuant to 310 CMR 30.900 and for each he is Claims Administrator.
- 6. Nothing in 310 CMR 30.900 shall be construed to preclude the Trustee of any trust fund from also being the Contract Administrator for that trust fund.
- 7. The Department shall have the right to direct the Claims Administrator to refuse to give instructions to pay any claim, and the Department and the Claims Administrator shall each have the right to obtain reimbursement of any claim already paid in whole or in part, if, in the opinion of the Department, the claim is fraudulent, inflated, or otherwise unlawful or unjustified.
- (3) <u>Period of Coverage</u>. Each owner or operator shall continuously provide all required liability coverage for each facility until the Department certifies closure of the facility pursuant to 310 CMR 30.099(6) or 30.587(3).
- (4) Adjustments by the Department. If the Department determines that the amount of financial assurance required by 310 CMR 30.908(1) or (2) is not high enough to reflect the degree or duration of risk associated with treatment, storage, or disposal of hazardous waste at a particular facility, the Department may require that the amount of financial assurance be increased to reflect such risk. If the Department determines that there is a significant risk to human health or the environment from non-sudden accidental occurrences resulting from the operation of a facility that is not described in 310 CMR 30.901(1)(b), the Department may require that the owner or operator of such facility comply with 310 CMR 30.908(2). An owner or operator shall furnish to the Department, within a reasonable time, any information which the Department requests to determine whether cause exists for adjusting the amount or type of financial assurance. Any adjustment of the amount or type of financial assurance for a facility which has a license shall be treated as a license modification pursuant to 310 CMR 30.800. Any adjustment of the amount or type of financial assurance for a facility having interim status pursuant to RCRA which does not have a license shall be treated as if it were a license modification pursuant to 310 CMR 30.800.
- (5) <u>Use of Multiple Financial Mechanisms</u>. An owner or operator may satisfy the requirements of 310 CMR 30.908(1) and (2) by establishing more than one financial mechanism per Massachusetts facility. These mechanisms shall be limited to liability insurance, trust funds, surety bonds guaranteeing payment, and letters of credit. These mechanisms shall be in compliance with 310 CMR 30.908(1) and (2), except that it shall be a combination of mechanisms, rather than a single mechanism, which shall provide financial assurance for the amounts required pursuant to 310 CMR 30.908. If an owner or operator uses a trust fund in combination with any other mechanism, he shall use the trust fund as a standby trust fund for those mechanisms for which the establishment of a standby trust fund is required. A single standby trust fund may be used for two or more mechanisms. The Department may use any or all of the mechanisms to provide for financial assurance as required by 310 CMR 30.908.

# (6) <u>Use of a Financial Mechanism for Multiple Facilities</u>.

- (a) An owner or operator may use a financial assurance mechanism specified in 310 CMR 30.908 to meet the requirements of 310 CMR 30.908 for more than one Massachusetts facility.
- (b) Evidence of financial assurance submitted to the Department shall include a list showing, for each facility, the EPA identification number, name, address, and amount of funds assured by the mechanism.

30.908: continued

- (7) Use of a mechanism for assurance of financial responsibility for both sudden accidental occurrences and nonsudden accidental occurrences. An owner or operator may satisfy the requirements for assurance of financial responsibility for both sudden accidental occurrences and nonsudden accidental occurrences and for more than one facility by using liability insurance, a trust fund, a surety bond guaranteeing payment, or a letter of credit, or a combination thereof, which meets the specifications set forth in 310 CMR 30.908. The amount of funds available through the mechanism(s) shall be no less than the sum of funds that would be available if separate mechanism(s) were to be established and required to be maintained.
- (8) <u>Payment of claims and judgments by other means</u>. Nothing in 310 CMR 30.000 shall be construed to affect an owner's or operator's right or duty to use other financial mechanisms to satisfy or pay any claim or judgment for bodily injury and/or property damage caused by an accidental occurrence or occurrences arising from the operation of the facility.

# 30.909: Wording of the Instruments.

# (1) <u>Trust Instruments</u>.

(a) A trust agreement for a trust fund established purusant to 310 CMR 30.904(1), (2), (3), or (4), or pursuant to 310 CMR 30.906(1), (2), (3), or (4) shall be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted.

#### TRUST AGREEMENT

This Trust Agreement, hereafter referred to as the "Agreement", is entered into as of [date] by and between [name of the owner or operator], a [name of State] [insert "corporation", "partnership", "association", "trust", or "individual"], hereafter referred to as the "Grantor", and [name of corporate trustee], [insert "incorporated in the State of \_\_\_\_\_\_" or "a national bank"], hereafter referred to as the "Trustee".

Whereas the Department of Environmental Quality Engineering, hereafter referred to as the "Department", an agency of the Commonwealth of Massachusetts, has established certain regulations applicable to the Grantor, requiring that the Grantor shall provide assurance that funds will be available when needed for closure and/or post-closure care of the facility identified in Schedule A; and

Whereas, the Grantor has elected to establish a [insert either "trust fund" or "stand-by trust fund"] to provide all or part of such financial assurance for the facility identified in Schedule A; and

Whereas, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this Agreement, and the Trustee is willing to act as trustee.

Now, Therefore, the Grantor and the Trustee agree as follows:

### Section 1. Definitions.

- (a) The term "Grantor" means [name of the owner or operator].
- (b) The term "Trustee" means [name of corporate trustee], [insert "incorporated in the State of \_\_\_\_\_\_" or "a national bank"], and any successor thereof.
- (c) The terms "Department" and "Beneficiary" mean the Department of Environmental Quality Engineering, an agency of the Commonwealth of Massachusetts, and any successor of the said Department.

<u>Section 2.</u> <u>Identification of Facilities and Cost Estimates</u>. This Agreement pertains to the facilities and cost estimates identified on the attached Schedule A [on attached Schedule A list each facility, and for each facility list the EPA identification number, name, address, and the current closure and/or post-closure cost estimates, or portions thereof, for which financial assurance is demonstrated by this Agreement].

30.909: continued

Section 3. Establishment of Trust Fund. The Grantor and the Trustee hereby establish a trust fund (the "Fund") for the benefit of the Department. The Grantor and the Trustee intend that no third party have access to the Fund except as herein provided. The Fund is established initially as consisting of the property, which is acceptable to the Trustee, described in the attached Schedule B. Such property and any other property subsequently transferred to the Trustee is referred to as the Fund, together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement. The Fund shall be held by the Trustee, IN TRUST, as hereinafter provided. The Trustee shall not be responsible, nor shall it undertake any responsibility, for the amount or adequacy of, nor any duty to collect from the Grantor, any payments necessary to discharge any liabilities of the Grantor established by the Department.

Section 4. Payment for Closure and Post-Closure Care. The Trustee shall make payments from the Fund as directed by the Department in writing. Said payments shall provide for the costs of closure and/or post-closure care of the facility covered by this Agreement. For closure and post-closure expenses, the Trustee shall reimburse, from the Fund, the Grantor or other persons as specified in writing by the Department. Such reimbursement(s) shall be in such amount(s) as the Department directs in writing. In addition, the Trustee shall refund to the Grantor such amount(s) as the Department specifies in writing. Upon reimbursement or refund, such funds shall no longer constitute part of the Fund as defined herein.

<u>Section 5.</u> Payments Comprising the Fund. Payments made to the Trustee for the Fund shall consist of cash or securities acceptable to the Trustee.

Section 6. Trustee Management. The Trustee shall invest the principal and incone of the Fund and keep the Fund invested as a single fund, without distinction between principal and income, in accordance with general investment policies and guidelines which the Grantor may communicate in writing to the Trustee from time to time, subject, however, to the provisions of this Section. In investing, reinvesting, exchanging, selling, and managing the Fund, the Trustee shall discharge his duties with respect to the trust fund solely in the interest of the Beneficiary and with the care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; except that:

- (a) Securities or other obligations of the Grantor, or any affiliates of the Grantor, as defined in the Investment Company Act of 1940, as amended, 14 U.S.C. §§ 80a-2(a), shall not be acquired or held unless they are securities or other obligations of the Federal or a State government;
- (b) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the Federal or State government; and
- (c) The Trustee is authorized to hold cash awaiting investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon.

# <u>Section 7. Commingling and Investment.</u> The Trustee is expressly authorized in its discretion:

- (a) To transfer from time to time any or all of the assets of the Fund to any common, commingled, or collective trust fund created by the Trustee in which the Fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and
- (b) To purchase shares in any investment company registered under the Investment Company Act of 1940, 14 U.S.C. §§ 80a-1 *et seq.*, including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.

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<u>Section 8. Express Powers of Trustee.</u> Without in any way limiting the powers and discretions conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:

- (a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it by public or private sale;
- (b) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;
- (c) To register any securities held in the Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other Fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depository even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depository with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States Government or any agency or instrumentality thereof, with a Federal Reserve bank, but the books and records of the Trustee shall at all times show that all such securities are part of the Fund;
- (d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the Federal or State government; and
- (e) To compromise or otherwise adjust all claims in favor of or against the Fund.

Section 9. Taxes and Expenses. All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund. All other expenses incurred by the Trustee in connection with the administration of this Trust, including fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid directly by the Grantor, and all other proper charges and disbursements of the Trustee shall be paid from the Fund.

Section 10. Annual Valuation. The Trustee shall annually, at least 30 days prior to the anniversary date of establishment of the Fund, furnish to the Grantor and to the Department a statement confirming the value of the Trust. Any securities in the Fund shall be valued at market value as of no more than 60 days prior to the anniversary date of establishment of the Fund. The failure of the Grantor to object in writing to the Trustee within 90 days after the statement has been furnished to the Grantor and the Department shall constitute a conclusively binding assent by the Grantor, barring the Grantor from asserting any claim or liability against the Trustee with respect to matters disclosed in the statement.

<u>Section 11. Advice of Counsel</u>. The Trustee may, from time to time, consult with counsel, who may be counsel to the Grantor, with respect to any question arising as to the interpretation of this Agreement or any action to be taken hereunder. The Trustee shall be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

<u>Section 12</u>. Trustee Compensation. The Trustee shall be entitled to reasonable compensation for its services as agreed upon in writing from time to time with the Grantor.

Section 13. Successor Trustee. The Trustee may resign or the Grantor may replace the Trustee, but such resignation or replacement shall not be effective until the Grantor has appointed a successor trustee and this successor accepts the appointment. The successor trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor trustee's acceptance of the appointment, the Trustee shall assign, transfer, and pay over to the successor trustee the funds and properties then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the appointment of a successor trustee or for instructions. The successor trustee shall specify the date on which it assumes administration of the trust in a writing sent to the Grantor, the Department, and the present Trustee by certified mail at least ten days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this Section shall be paid as provided in Section 9.

Section 14. Instructions to the Trustee. All orders, requests, and instructions by the Grantor to the Trustee shall be in writing, signed by such persons as are designated in the attached Schedule C or such other designees as the Grantor may designate by amendment to Schedule C. The Trustee shall be fully protected in acting without inquiry in accordance with the Grantor's orders, requests, and instructions. All orders, requests, and instructions by the Department to the Trustee shall be in writing, signed by the Commissioner or his designee, and the Trustee shall act and shall be fully protected in acting in accordance with such orders, requests, and instructions. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the Grantor or Department hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instructions from the Grantor and/or Department except as provided for herein.

<u>Section 15. Notice of Nonpayment</u>. The Trustee shall notify the Grantor and the Department, by certified mail, within ten days following the expiration of the 30 day period after the anniversary of the establishment of the Trust, if no payment into the Fund is received from the Grantor during that period. After the pay-in period is completed, the Trustee shall not be required to send a notice of nonpayment.

<u>Section 16.</u> Amendment of Agreement. This Agreement may be amended by an instrument in writing executed by the Grantor, the Trustee, and the Department, or by the Trustee and the Department if the Grantor ceases to exist.

<u>Section 17. Irrevocability and Termination</u>. Subject to the right of the parties to amend this Agreement as provided in Section 16, this Trust shall be irrevocable and shall continue until terminated by the written agreement of the Grantor, the Trustee, and the Department, or by the Trustee and the Department if the Grantor ceases to exist. Upon termination of the Trust, all remaining trust property, less final trust administration expenses, shall be delivered to the Grantor.

Section 18. Immunity and Indemnification. The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of the Trust, or in carrying out any directions by the Grantor or by the Department issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by the Grantor or from the Trust Fund, or both, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event the Grantor fails to provide such defense.

<u>Section 19. Choice of Law.</u> This Agreement shall be administered, construed, and enforced according to the laws of the Commonwealth of Massachusetts.

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<u>Section 20. Interpretation.</u> As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each Section of this Agreement shall not affect the interpretation or the legal efficacy of this Agreement.

In Witness Whereof the parties have caused this Agreement to be executed by their respective officers duly authorized and their corporate seals to be hereunto affixed and attested as of the date first above written. The parties below certify that the wording of this Agreement is identical to the wording specified in 310 CMR 30.909(1)(a) as in effect on the date first above written.

[Signature of Grantor] [Title]
Attest: [Title] [Seal]
[Signature of Trustee]
Attest: [Title] [Seal]
(b) Each certification of acknowledgement which shall accompany a trust agreement for a trust fund as required by 310 CMR 30.900 shall be worded as follows, except that instructions in brackets shall be replaced with the relevant information and the brackets deleted.
State of [Name of State]
County of [Name of County]
On this [date], before me personally came [owner or operator] to me known, who being by me duly sworn, did depose and say that she/he [strike one] resides at [address], that she/he [strike one] is [title] of [corporation], the corporation described in and which executed the above instrument; that she/he [strike one] knows the seal of said corporation; that the seal affixed to such instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that she/he [strike one] signed her/his [strike one] name thereto by like order.
[Signature of Notary Public]
My Commission expires: [Date]
(2) A surety bond guaranteeing payment into a standby trust fund, as specified in 310 CMR 30.904(2) and 30.906(2), shall be worded as follows, except that the instructions in brackets shall be replaced with the relevant information and the brackets deleted:
FINANCIAL GUARANTEE BOND
Date bond executed: [Date]
Effective date:[Date]
Principal: [legal name and business address of owner or operator]
Type of organization: [insert "individual", "trust", "partnership", "corporation", or "association"]

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State of incorporation: Name of State
Surety(ies): [name(s) and business address(es)]
[EPA Identification Number, name, address, and closure and/or post-closure amount(s) for each facility guaranteed by this bond (indicate closure and post-closure amounts separately)]:
Total penal sum of bond: \$[Amount]
Surety's bond number: [Number]

Know All Persons By These Presents, That we, the Principal and Surety(ies) hereto, are firmly bound to the Department of Environmental Quality Engineering of the Commonwealth of Massachusetts, hereinafter called the Department, in the above penal sum, for the payment of which we bind ourselves, our heirs, executors, administrators, successors, and assigns jointly and severally; provided that, where the Surety(ies) are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sum "jointly and severally" only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sum only as is set forth opposite the name of such Surety, but if no limit of liability is indicated, the limit of liability shall be the full amount of the penal sum.

Whereas said Principal is required, pursuant to M.G.L. c. 21C and 310 CMR 30.000, to have a license or interim status in order to own or operate each facility identified above, and

Whereas said Principal is required to provide financial assurance for closure, or closure and post-closure care, as a condition of the license or interim status, and

Whereas, as a condition of the license or interim status, said Principal shall establish a standby trust fund as is required when a surety bond is used to provide such financial assurance;

Now, Therefore, the conditions of this obligation are such that if the Principal shall faithfully, before the beginning of final closure of each facility identified above, establish and fund the standby trust fund in the amount(s) identified above for the facility,

Or, if the Principal shall establish and fund the standby trust fund in such amount(s) within 15 days after the Department or a court of competent jurisdiction issues an order to begin closure,

Or, if the Principal shall provide alternate financial assurance, as specified in 310 CMR 30.904 or 30.906 as applicable, and obtain the Department's written approval of such assurance, within 90 days after receipt of notice of cancellation by both the Principal and the Department from the Surety(ies), then this obligation shall be null and void, otherwise it is to remain in full force and effect.

The Surety(ies) shall become liable on this bond obligation only when the Principal has failed to fulfill the conditions described above. Upon notification by the Department that the Principal has failed to perform as guaranteed by this bond, the Surety(ies) shall place funds in the amount guaranteed for the facility(ies) into the standby trust fund as directed by the Department.

The liability of the Surety(ies) shall not be discharged by any payment or succession of payments hereunder, unless and until such payment or payments shall amount in the aggregate to the penal sum of the bond, but in no event shall the obligation of the Surety(ies) hereunder exceed the amount of said penal sum.

The Surety(ies) may cancel the bond by sending notice of cancellation by certified mail to the Principal and to the Department, provided, however, that cancellation shall not take effect until at least 120 days after the date of receipt of the notice of cancellation by both the Principal and the Department, as shown by the later return receipt.

The Principal may terminate this bond by sending written notice to the Surety(ies), provided, however, that no such notice shall become effective until the Surety(ies) receive(s) written authorization by the Department for termination of the bond.

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[The following paragraph is an optional rider that may be included but is not required.]

The Principal and Surety(ies) hereby agree to adjust the penal sum of the bond yearly so that it guarantees a new closure and/or post-closure amount, provided that the penal sum does not increase by more than 20% in any one year, and no decrease in the penal sum takes place without the written approval of the Department.

In Witness Whereof, the Principal and Surety(ies) have executed this Financial Guarantee Bond and have affixed their seals on the date set forth above.

The individuals whose signatures appear below hereby certify that they are authorized to execute this surety bond on behalf of the Principal and Surety(ies) and that the wording of this surety bond is identical to the wording specified in 310 CMR 30.909(2) as in effect on the date this bond was executed.

Principal
[Signature(s)]
[Name(s)]
[Title(s)]
[Corporate seal]
Corporate Surety(ies)
[Name(s) and address(es)]
State of incorporation Name of State
Liability limit: \$ [Amount]
[Signature(s)] [Title(s)]
[Name(s)]
[Corporate seal]
[For every co-surety, provide signature(s), corporate seal, and other information in the same manner as for the Surety above.]
Bond premium: \$ [Amount]
(3) A surety bond guaranteeing performance of closure and/or post-closure care, as specified in 310 CMR 30.904(3) and 30.906(3), shall be worded as follows, except that the instructions in brackets shall be replaced with the relevant information and the brackets deleted:
PERFORMANCE BOND
Date bond executed: [Date]
Effective date: [Date]
Principal: [legal name and business address of owner or operator]
Type of organization: [insert "individual", "trust", "partnership", "corporation", or "association"]
State of incorporation: Name of State

0.909:	continued
	Surety(ies): [name(s) and business address(es)]
	[EPA Identification Number, name, address, and closure and/or post-closure amount(s) for each facility guaranteed by this bond (indicate closure and post-closure amounts separately)]
	Total penal sum of bond: \$ [Amount]
	Surety's bond number: [Number]

Know All Persons By These Presents, That we, the Principal and Surety(ies) hereto, are firmly bound to the Department of Environmental Quality Engineering, hereinafter called the Department, in the above penal sum, for the payment of which we bind ourselves, our heirs, executors, administrators, successors, and assigns jointly and severally; provided that, where the Surety(ies) are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sum "jointly and severally" only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sum only as is set forth opposite the name of such Surety, but if no limit of liability is indicated, the limit of liability shall be the full amount of the penal sum.

Whereas said Principal is required, pursuant to M.G.L. c. 21C and 310 CMR 30.000, to have a license or interim status in order to own or operate each facility identified above, and

Whereas said Principal is required to provide financial assurance for closure, or closure and post-closure care, as a condition of the license or interim status, and

Whereas, as a condition of the license or interim status, said Principal shall establish a standby trust fund as is required when a surety bond is used to provide such financial assurance;

Now, therefore, the conditions of this obligation are such that if the Principal shall faithfully perform closure, whenever required to do so, of each facility for which this bond guarantees closure, in accordance with the approved closure plan and all applicable requirements of the license or interim status, as such plan and license may be amended from time to time, and M.G.L. c. 21C and 310 CMR 30.000, as may be amended from time to time; and if the Principal shall faithfully perform post-closure care of each facility for which this bond guarantees post-closure care, in accordance with the approved post-closure plan and all applicable requirements of the license or interim status, as such plan and license may be amended, and pursuant to M.G.L. c. 21C and 310 CMR 30.000, as may be amended from time to time,

Or if the Principal shall provide alternate financial assurance, as specified in 310 CMR 30.904 or 30.906 as applicable, and obtain the Department's written approval of such assurance within 90 days after receipt of notice of cancellation by both the Principal and the Department from the Surety(ies), then this obligation shall be null and void, otherwise it is to remain in full force and effect.

The Surety(ies) shall become liable on this bond obligation only when the Principal has failed to fulfill the conditions described above. Upon notification by the Department that the Principal has failed to perform final closure in accordance with 310 CMR 30.580 through 30.586, or has failed to conduct post-closure care in accordance with 310 CMR 30.590 through 30.596, the surety shall become liable on the bond obligation to:

- 1. Perform final closure as guaranteed by the bond, and if applicable, perform post-closure care as guaranteed by the bond; or
- 2. Deposit the total penal sum of the bond into the standby trust fund as directed by the Department.

Upon notification by the Department that the Principal has failed to provide alternate financial assurance as specified in 310 CMR 30.904 or 30.906 as applicable and has failed to obtain the Department's written approval of such assurance within 90 days after receipt of notice of cancellation by both the Principal and the Department from the Surety(ies), the Surety(ies) shall place the total penal sum of the bond guaranteed for the facility(ies) into the standby trust fund as directed by the Department.

The Surety(ies) hereby waive(s) notification of amendments to closure plans, permits, applicable laws, statutes, rules, and regulations and agree(s) that no such amendment shall in any way alleviate its (their) obligation on this bond.

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The liability of the Surety(ies) shall not be discharged by any payment or succession of payments hereunder, unless and until such payment or payments shall amount in the aggregate to the penal sum of the bond, but in no event shall the obligation of the Surety(ies) hereunder exceed the amount of said penal sum.

The Surety(ies) may cancel the bond by sending notice of cancellation by certified mail to the Principal and to the Department, provided, however, that cancellation shall not take effect until at least 120 days after the date of receipt of the notice of cancellation by both the Principal and the Department, as shown by the later return receipt.

The Principal may terminate this bond by sending written notice to the Surety(ies), provided, however, that no such notice shall become effective until the Surety(ies) receive(s) written authorization by the Department for termination of the bond.

[The following paragraph is an *optional* rider that may be included but is not required.]

The Principal and Surety(ies) hereby agree to adjust the penal sum of the bond yearly so that it guarantees a new closure and/or post-closure amount, provided that the penal sum does not increase by more than 20% in any one year, and no decrease in the penal sum takes place without the written approval of the Department.

In Witness Whereof, The Principal and Surety(ies) have executed this Performance Bond and have affixed their seals on the date set forth above.

The individuals whose signatures appear below hereby certify that they are authorized to execute this surety bond on behalf of the Principal and Surety(ies) and that the wording of this surety bond is identical to the wording specified in 310 CMR 30.909(3) as in effect on the date this bond was executed.

(4) A letter of credit, as specified in 310 CMR 30.904(4) and 30.906(4), shall be worded as follows, except that instructions in brackets shall be replaced with the relevant information and the brackets deleted:

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#### IRREVOCABLE STANDBY LETTER OF CREDIT

Commissioner, Department of Environmental Quality Engineering Commonwealth of Massachusetts

Dear Sir or Madam:

We hereby establish our Irrevocable Standby Letter of Credit No. <a href="Number">[Number]</a> in your favor, at the request and for the account of [owner's or operator's name and address] up to the aggregate amount of [in words] U.S. dollars \$ [Amount], available upon presentation, by you or your designee, of

- (1) your or your designee's sight draft, bearing reference to this letter of credit No. [Number], and
- (2) your or your designee's signed statement reading as follows: "I certify that the amount of the draft is payable pursuant to regulations issued under authority of Massachusetts General Laws, Chapter 21C."

This letter of credit is effective as of [date] and shall expire on [date at least one year later], but such expiration date shall be automatically extended for a period of [at least one year] on [date] and on each successive expiration date, unless, at least 120 days before the current expiration date, we notify both you and [owner's or operator's name] by certified mail that we have decided not to extend this letter of credit beyond the current expiration date. In the event you are so notified, any unused portion of the credit shall be available upon presentation of your or your designee's sight draft within 120 days after the date of receipt of notification by both you and [owner's or operator's name], as shown on the later of the signed return receipts.

Whenever this letter of credit is drawn on, under, and in compliance with the terms of this credit, we shall duly honor such draft upon presentation to us, and we shall deposit the amount of the draft directly into the standby trust fund of [owner's or operator's name] in accordance with your or your designee's instructions.

We certify that the wording of this letter of credit is identical to the wording specified in 310 CMR 30.904(4) as in effect on the date shown immediately below.

[Signature(s) and title(s) of official(s) of issuing institution] [Date]

This credit is subject to [insert "the most recent edition of the Uniform Customs and Practice for Documentary Credits, published by the International Chamber of Commerce", or "the Uniform Commercial Code"].

(5) A certificate of insurance, as specified in 310 CMR 30.904(5) and 30.906(5), shall be worded as follows, except that instructions in brackets shall be replaced with the relevant information and the brackets deleted:

### CERTIFICATE OF INSURANCE FOR CLOSURE OR POST-CLOSURE CARE

Name and Address of Insurer		
(herein called the "Insurer"):	[Name and Address]	
Name and Address of Insured		
(herein called the "Insured"):	[Name and Address]	

Facilities Covered: [List for each facility: The EPA Identification Number, name, address, and amount of insurance for closure and/ or for post-closure care (these amounts for all facilities covered must total the face amount shown below)].

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Face Amount:	[Dollar Amount]	
Policy Number:	[Number]	
Effective Date:	[Date]	

The Insurer hereby certifies that it has issued to the Insured the policy of insurance identified above to provide financial assurance for [insert "closure" or "closure and post-closure care" or "post-closure care"] for the facilities identified above. The Insurer further warrants that such policy conforms in all respects with the requirements of 310 CMR 30.904(5), and 30.906(5), as applicable and as such regulations were in effect on the date shown immediately below. It is agreed that any provision of the policy inconsistent with such regulations is hereby amended to eliminate such inconsistency.

Whenever requested by the Department of Environmental Quality Engineering (hereinafter called the Department) of the Commonwealth of Massachusetts, the Insurer agrees to furnish to the Department a signed duplicate original of the policy listed above, including all endorsements thereon.

I hereby certify that the wording of this certificate is identical to the wording specified in 310 CMR 30.909(5) as in effect on the date shown immediately below.

[Authorized signature for Insurer]
[Name of person signing]
[Title of person signing]
Signature of witness or notary:
[Date]

(6) A hazardous waste facility liability endorsement, as specified in 310 CMR 30.908(1)(a), shall be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

# HAZARDOUS WASTE FACILITY LIABILITY ENDORSEMENT

- (1) This endorsement certifies that the policy to which this endorsement is attached provides liability insurance covering bodily injury and property damage in connection with the Insured's obligation to demonstrate financial responsibility pursuant to 310 CMR 30.908. The coverage applies at [list EPA Identification Number, name, and address for each facility] for [insert "sudden accidental occurrences", "nonsudden accidental occurrences", or "sudden and nonsudden accidental occurrences"; if coverage is for multiple facilities and the coverage is different for different facilities, indicate which facilities are insured for sudden accidental occurrences, which are insured for nonsudden accidental occurrences, and which are insured for both]. The limits of liability are [insert the dollar amount of the "each occurrence" and "annual aggregate" limits of the Insurers's liability]; exclusive of legal defense costs.
- (2) The insurance afforded with respect to such occurrences is subject to all of the terms and conditions of the policy; provided, however, that any provisions of the policy inconsistent with subsections (a) through (e) of this Paragraph 2 are hereby amended to conform with subsections (a) through (e):
  - (a) Bankruptcy or insolvency of the insured shall not relieve the Insurer of its obligations under the policy to which this endorsement is attached.
  - (b) The Insurer is liable for the payment of the amounts within any deductible applicable to the policy, with a right of reimbursement by the Insured for any such payment made by the Insurer.
  - (c) Whenever requested by the Department of Environmental Quality Engineering (hereinafter called the Department) of the Commonwealth of Massachusetts, the Insurer agrees to furnish to the Department a signed duplicate original of the policy and all endorsements thereon.

- (d) Cancellation of this endorsement, whether by the Insurer or the Insured, shall not take effect until at least 60 days after the date of receipt by the Department of written notice, sent to the Department by certified mail, of cancellation of this endorsement.
- (e) Any other termination of this endorsement shall be effective only upon written notice and only after the expiration of at least 30 days after the date of receipt by the Department of such written notice, sent to the Department by certified mail.

Attached to and forming part of policy no. <a href="Number">[Number]</a> issued by [name of Insurer], herein called the Insurer, of [address of Insurer] to [name of Insured] of [address], herein called the Insured, this <a href="Day">[Day]</a> day of <a href="Month">[Month]</a> 19 <a href="Year">[Year]</a>. The effective date of said policy is the <a href="Day">[Day]</a> day of <a href="Month">[Month]</a> 19 <a href="Year">[Year]</a>.

I hereby certify that the wording of this Hazardous Waste Facility Liability Endorsement is identical to the wording specified in 310 CMR 30.909(6) as in effect on the date first above written, and that the Insurer is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in the Commonwealth of Massachusetts.

[Authorized signature for Insurer]	
[Name of individual signing]	
[Title of individual signing]	
[Signature of witness or notary:	]
[Date]	
[Authorized signature for Insured]	
[Name of individual signing]	
[Title of individual signing]	
[Signature of witness or notary:]	
[Date]	

(7) A hazardous waste facility certificate of liability insurance, as specified in 310 CMR 30.908, shall be worded as follows, except that instructions in brackets shall be replaced with the relevant information and the brackets deleted:

# HAZARDOUS WASTE FACILITY CERTIFICATE OF LIABILITY INSURANCE

(1) [Name of Insurer], herinafter called the Insurer, of [address of Insurer], hereby certifies that it has issued to [name of Insured], hereinafter called the Insured, of [address of Insured], liability insurance covering bodily injury and property damage in connection with the Insured's obligation to demonstrate financial responsibility pursuant to 310 CMR 30.908. The coverage applies at [list EPA Identification Number, name, and address for each facility] for [insert "sudden accidental occurrences", "nonsudden accidental occurrences", or "sudden and nonsudden accidental occurrences"; if coverage is for multiple facilities and the coverage is different for different facilities, indicate which facilities are insured for sudden accidental occurrences, which are insured for nonsudden accidental occurrences, and which are insured for both]. The limits of liability are [insert the dollar amount of the "each occurrence" and "annual aggregate" limits of the Insurer's liability], exclusive of legal defense costs. The coverage is provided under policy number [Number], issued on [date]. The effective date of said policy is [date].

- (2) The Insurer further certifies the following with respect to the insurance described in Paragraph 1:
  - (a) Bankruptcy or insolvency of the Insured shall not relieve the Insurer of its obligations under the policy.
  - (b) The Insurer is liable for the payment of amounts within any deductible applicable to the policy, with a right of reimbursement by the Insured for any such payment made by the Insurer.
  - (c) Whenever requested by the Department, the Insurer agrees to furnish to the Department a signed duplicate original of the policy and all endorsements.
  - (d) Cancellation of the insurance, whether by the Insurer or the Insured, will be effective only upon written notice by certified mail and only after the expiration of 60 days after a copy of such written notice is received by the Department, as shown by the return receipt.
  - (e) Any other termination of the insurance will be effective only upon written notice by certified mail and only after the expiration of 30 days after a copy of such written notice is received by the Department, as shown by the return receipt.

I hereby certify that the wording of this instrument is identical to the wording specified in 310 CMR 30.909(7) as in effect on the date first above written, and that the Insurer is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in the Commonwealth of Massachusetts.

[Signature of authorized representative of Insurer]

[Type name]

[Title, Authorized Representative of (name of Insurer)]

[Address of authorized representative of Insurer]

- (8) Trust Instruments for Financial Assurance for Accidental Occurrences.
  - (a) A trust agreement for a trust fund established pursuant to 310 CMR 30.908(1)(b), (c), or (d), or pursuant to 310 CMR 30.908(2)(b), (c), or (d), shall be worded as follows, except that instructions in brackets shall be replaced with the relevant information and the brackets deleted.

### TRUST AGREEMENT

This Trust Agreement, hereafter referred to as the "Agreement", is entered into as of [date] by and between [name of the owner of operator], a [name of State] [insert "corporation", "partnership", "association", "trust", or "individual"], hereafter referred to as the "Grantor", and [name of corporate trustee], [insert "incorporated in the State of \_\_\_\_\_\_" or "a national bank"], hereafter referred to as the "Trustee".

Whereas the Department of Environmental Quality Engineering, hereafter referred to as the "Department", an agency of the Commonwealth of Massachusetts, has established certain regulations applicable to the Grantor, requiring that the Grantor shall demonstrate financial responsibility for bodily injury and property damage to third parties caused by each sudden accidental occurrence and/or each nonsudden accidental occurrence arising from operation of the facility identified in Schedule A; and

Whereas, the Grantor has elected to establish a [insert either "trust fund" or "stand-by trust fund"] to demonstrate all or part of such financial responsibility for the facility identified in Schedule A; and

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Whereas, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this Agreement, and the Trustee is willing to act as trustee.

Now, Therefore, the Grantor and the Trustee agree as follows:

### Section 1. Definitions.

- (a) The term "Grantor" means [name of the owner or operator].
- (b) The term "Trustee" means [name of corporate trustee], [insert "incorporated in the State of "or "a national bank"], and any successor thereof.
- (c) The terms "Department" and "Beneficiary" mean the Department of Environmental Quality Engineering, an agency of the Commonwealth of Massachusetts, and any successor of the said Department.
- (d) The term "Claim Administrator" means [name of the Claim Administrator], and any successor thereof, who is carrying out the responsibilities of the "Claim Administrator" as set forth in 310 CMR 30.900, as in effect as of the date first written above.

<u>Section 2</u>. <u>Identification of Facilities</u>. This Agreement pertains to the facilities identified on the attached Schedule A [on attached Schedule A list each facility, and for each facility list the EPA identification number, name, and address for which financial responsibility is demonstrated by this Agreement].

Section 3. Establishment of Trust Fund. The Grantor and the Trustee hereby establish a trust fund (the "Fund") for the benefit of the Department. The Grantor and the Trustee intend that no third party have access to the Fund except as herein provided. The Fund is established initially as consisting of the property, which is acceptable to the Trustee, described in the attached Schedule B. Such property and any other property subsequently transferred to the Trustee is referred to as the Fund, together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement. The Fund shall be held by the Trustee, IN TRUST, as hereinafter provided. The Trustee shall not be responsible, nor shall it undertake any responsibility, for the amount or adequacy of, nor any duty to collect from the Grantor, any payments necessary to discharge any liabilities of the Grantor established by the Department.

Section 4. Payment for Bodily Injury and Property Damage to Third Parties. The Trustee shall make payments from the Fund as directed by the Claims Administrator or by the Department in writing. Said payments shall provide for payments from the Fund to the Department or to other persons, as specified in writing by the Claims Administrator or by the Department, for bodily injury and property damage caused by each sudden accidental occurrence and/or each nonsudden accidental occurrence arising from operation of the facility covered by this Agreement. Such payment(s) shall be in such amount(s) as the Claims Administrator or the Department directs in writing. In addition, the Trustee shall refund to the Grantor such amount(s) as the Claims Administrator or the Department specifies in writing. Upon payment or refund, such funds shall no longer constitute part of the Fund as defined herein.

<u>Section 5. Payments Comprising the Fund</u>. Payments made to the Trustee for the Fund shall consist of cash, securities, or other assets acceptable to the Trustee.

Section 6. Trustee Management. The Trustee shall invest the principal and income of the Fund and keep the Fund invested as a single fund, without distinction between principal and income, in accordance with general investment policies and guidelines which the Grantor may communicate in writing to the Trustee from time to time, subject, however, to the provisions of this Section. In investing, reinvesting, exchanging, selling, and managing the principle and income of the Fund, the Trustee shall discharge his duties with respect to the trust fund solely in the interest of the Beneficiary and with the care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; except that:

- (a) Securities or other obligations of the Grantor, or any affiliates of the Grantor, as defined in the Investment Company Act of 1940, as amended, 14 U.S.C. §80a-2(a), shall not be acquired or held unless they are securities or other obligations of the Federal or a State government;
- (b) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the Federal or State government; and
- (c) The Trustee is authorized to hold cash awaiting investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon.

# Section 7. Commingling and Investment. The Trustee is expressly authorized in its discretion:

- (a) To transfer from time to time any or all of the assets of the Fund to any common, commingled, or collective trust fund created by the Trustee in which the Fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and
- (b) To purchase shares in any investment company registered under the Investment Company Act of 1940, 14 U.S.C. §§80a-1 *et seq.*, including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.

Section 8. Express Powers of Trustee. Without in any way limiting the powers and discretion conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:

- (a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it by public or private sale;
- (b) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;
- (c) To register any securities held in the Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other Fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depository even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depository with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States Government or any agency or instrumentality thereof, with a Federal Reserve bank, but the books and records of the Trustee shall at all times show that all such securities are part of the Fund.
- (d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the Federal or State government; and
- (e) To compromise or otherwise adjust all claims in favor of or against the Fund.

<u>Section 9. Taxes and Expenses</u>. All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund. All other expenses incurred by the Trustee in connection with the administration of this Trust, including fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid directly by the Grantor, and all other proper charges and disbursements of the Trustee shall be paid from the Fund.

Section 10. Annual Valuation. The Trustee shall annually, no later than June 1, furnish to the Grantor, to the Claims Administrator, and to the Department a statement confirming the value of the Trust. Any securities in the Fund shall be valued at market value as of no later than May 1. The failure of the Grantor to object in writing to the Trustee within 90 days after the statement has been furnished to the Grantor, the Claims Administrator, and the Department shall constitute a conclusively binding assent by the Grantor barring the Grantor from asserting any claim or liability against the Trustee with respect to matters disclosed in the statement.

<u>Section 11.</u> Advice of Counsel. The Trustee may, from time to time, consult with counsel, who may be counsel to the Grantor, with respect to any question arising as to the interpretation of this Agreement or any action to be taken hereunder. The Trustee shall be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

<u>Section 12. Trustee Compensation</u>. The Trustee shall be entitled to reasonable compensation for its services as agreed upon in writing from time to time with the Grantor.

Section 13. Successor Trustee. The Trustee may resign or the Grantor may replace the Trustee, but such resignation or replacement shall not be effective until the Grantor has appointed a successor trustee and this successor accepts the appointment. The successor trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor trustee's acceptance of the appointment, the Trustee shall assign, transfer, and pay over to the successor trustee the funds and properties then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the appointment of a successor trustee or for instructions. The successor trustee shall specify the date on which it assumes administration of the trust in a writing sent to the Grantor, the Department, the Claims Administrator, and the present Trustee by certified mail at least ten days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this Section shall be paid as provided in Section 9.

Section 14. Instructions to the Trustee. All orders, requests, and instructions by the Grantor to the Trustee shall be in writing, signed by such persons as are designated in the attached Schedule C or such other designees as the Grantor may designate by amendment to Schedule C. The Trustee shall be fully protected in acting without inquiry in accordance with the Grantor's orders, requests, and instructions. All orders, requests, and instructions by the Claims Administrator to the Trustee shall be in writing, signed by the Claims Administrator, and the Trustee shall act and shall be fully protected in acting in accordance with such orders, requests, and instructions. All orders, requests, and instructions by the Department to the Trustee shall be in writing, signed by the Commissioner or his designee, and the Trustee shall act and shall be fully protected in acting in accordance with such orders, requests, and instructions. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the Grantor, the Claims Administrator, or the Department hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instructions from the Grantor and/or the Claims Administrator and/or the Department except as provided for herein.

<u>Section 15.</u> Notice of Nonpayment. The Trustee shall notify the Grantor, the Claims Administrator, and the Department by certified mail by no later than August 10 if no payment into the Fund is received from the Grantor during the month of July.

<u>Section 16.</u> Amendment of Agreement. This Agreement may be amended by an instruction in writing executed by the Grantor, the Trustee, and the Department, or by the Trustee and the Department if the Grantor ceases to exist.

Section 17. Irrevocability and Termination. Subject to the right of the parties to amend this Agreement as provided in Section 16, this Trust shall be irrevocable and shall continue until terminated by the written agreement of the Grantor, the Trustee, and the Department, or by the Trustee and the Department if the Grantor ceases to exist. Upon termination of the Trust, all remaining trust property, less final trust administration expenses, shall be delivered to the Grantor.

30.909: continued

Section 18. Immunity and Indemnification. The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of the Trust, or in carrying out any directions by the Grantor, by the Claims Administrator, or by the Department issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by the Grantor or from the Trust Fund, or both, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event the Grantor fails to provide such defense.

<u>Section 19.</u> Choice of Law. This Agreement shall be administered, construed, and enforced according to the laws of the Commonwealth of Massachusetts.

<u>Section 20.</u> Interpretation. As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each Section of this Agreement shall not effect the interpretation or the legal efficacy of this Agreement.

In Witness whereof the parties have caused this Agreement to be executed by their respective officers duly authorized and their corporate seals to be hereunto affixed and attested as of the date first written above. The parties below certify that the wording of this Agreement is identical to the wording specified in 310 CMR 30.909(8)(a) as in effect on the date first written above.

	[Signature of Grantor] [Title]
Attest: [Title] [Seal]	
[Signature of Trustee]	
Attest: [Title]	

Each certification of acknowledgement which shall accompany a trust agreement for a trust fund as required by 310 CMR 30.908 and 30.909(8)(a) shall be worded as follows, except that instructions in brackets shall be replaced with the relevant information and the brackets deleted.

State of	[Name of State]	
County of	[Name of County]	

On this [date], before me personally came [owner or operator] to me known, who being by me duly sworn, did depose and say that she/he [strike one] resides at [address], that she/he [strike one] is [title] of [corporation], the corporation described in and which executed the above instrument; that she/he [strike one] knows the seal of said corporation; that the seal affixed to such instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that she/he [strike one] signed her/his [strike one] name thereto by like order.

[Signature of Notary Public]	
My Commission expires: [Date]	

(9) Surety Bonds for Financial Assurance for Accidental Occurrences. A surety bond guaranteeing payment as specified in 310 CMR 30.908(1)(c) and 310 CMR 30.908(2)(c) shall be worded as follows, except that instructions in brackets shall be replaced with the relevant information and the brackets deleted.

30.909: continued

Date bond executed: [Date]

#### FINANCIAL GUARANTEE BOND

Bute sond executed.
Effective date: [Date]
Principal: [legal name and business address of owner or operator]
Type of organization: [insert "individual", "trust", "partnership" "corpora- tion", or "association"]
State of incorporation: [Name of State]
Surety(ies): [name(s) and business address(es) (EPA Identification Number, name, address, and sudden accidental occurrence and/or nonsudden accidental occurrence amount(s) for each facility guaranteed by this bond (indicate sudden accidental occurrence and nonsudden accidental occurrence amounts separately)]:
Total penal sum of bond: \$ [Amount]
Surety's bond number: \$ [Number]

Know All Persons By These Presents, That we, the Principal and Surety(ies) hereto are firmly bound to the Department of Environmental Quality Engineering of the Commonwealth of Massachusetts, hereinafter called the Department, in the above penal sum, for the payment of which we bind ourselves, our heirs, executors, administrators, successors, and assigns jointly and severally; provided that, where the Surety(ies) are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sum "jointly and severally" only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sum only as is set forth opposite the name of such Surety, but if no limit of liability is indicated the limit of liability shall be the full amount of the penal sum.

Whereas said Principal is required, pursuant to M.G.L. c. 21C and 310 CMR 30.000, to have a license or interim status in order to own or operate each facility identified above, and

Whereas said Principal is required, pursuant to 310 CMR 30.908, to demonstrate financial responsibility for bodily injury and property damage to third parties caused by each sudden accidental occurrence, or each sudden accidental occurrence and each nonsudden accidental occurrence, as a condition of the license or interim status, and

Whereas the amount of such financial responsibility that must be demonstrated is \$3-million per each sudden accidental occurrence with an annual aggregate of at least \$6-million, exclusive of legal defense costs, and \$5-million per each nonsudden accidental occurrence with an annual aggregate of at least \$10-million, exclusive of legal defense costs.

Whereas said Principal is required, pursuant to 310 CMR 30.908, to retain a Claims Administrator to carry out the responsibilities of the "Claim Administrator" as set forth in 310 CMR 30.900, as in effect as of the date first written above.

NOW, THEREFORE, the condition of this obligation is such that if, while this bond is in effect, the Principal shall pay, up to the limits set forth above, for bodily injury and property damage caused by accidental occurrences arising from operation of any facility identified above, as set forth in 310 CMR 30.908, then this bond shall be null and void; otherwise it is to remain in full force and effect,

Or, if the Principal shall establish and fund the standby trust fund in such amount(s) within 15 days after the Department or a court of competent jurisdiction issues an order to do so,

Or, if the Principal shall provide alternate financial assurance, as specified in 310 CMR 30.908(1) or (2) as applicable, and obtain the Department's written approval of such assurance, within 90 days after receipt of notice of cancellation by both the Principal, the Claims Administrator, and the Department from the Surety(ies), then this obligation shall be null and void, otherwise it is to remain in full force and effect.

The Surety(ies) shall become liable on this bond obligation only when the Principal has failed to fulfill the conditions described above. Upon notification by the Claims Administrator or the Department that the Principal has failed to perform as guaranteed by this bond, the Surety(ies) shall fulfill this obligation. However, no liability shall attach to the Surety(ies) hereunder until the Principal, the Claims Administrator, or the Department notifies the Surety(ies) of a possible claim for bodily injury and/or property damage caused by accidental occurrences arising from operation of the facility(ies) identified above. Such notice shall automatically extend, for a period of six years, the obligation of the Surety(ies) to pay for bodily injury and property damage caused by such accidental occurrences prior to the date upon which this Surety Bond would otherwise have been terminated.

The Surety(ies) shall become liable on this bond obligation only when the Principal has failed to fulfill the conditions described above. Upon notification by the Claims Administrator or by the Department that the Principal has failed to perform as guaranteed by this bond, the Surety(ies) shall place funds in the amount guaranteed for the facility(ies) into the standby trust fund as directed by the Claims Administrator or the Department.

The Surety(ies) shall become liable on this bond obligation only for amounts for which it (they) has (have) been presented a final judgment against the Principal for bodily injury and/or property damage caused by an accidental occurrence or occurrences arising from the operation of the facility(ies) identified above. Said judgment shall have been either (1) rendered by the highest court in the jurisdiction where the action was brought and the Principal exhausted all rights of appeal, or (2) rendered by the highest court which rendered a judgment and no appeal was made by the Principal to a higher court within the time allowed by applicable statute or rule, or (3) agreed to by the Principal.

The liability of the Surety(ies) shall not be discharged by any payment or succession of payments hereunder, unless and until such payment or payments shall amount in the aggregate to the penal sum of the bond, but in no event shall the obligation of the Surety(ies) hereunder exceed the amount of said penal sum.

The Surety(ies) may cancel the bond by sending notice of cancellation by certified mail to the Principal, to the Claims Administrator, and to the Department, provided, however, that cancellation shall not take effect until at least 120 days after the date of receipt of the notice of cancellation by the Principal, the Claims Administrator, and the Department, as shown by the later return receipt, and provided further that such notice shall not discharge any obligations of the Surety(ies) hereunder which may have arisen prior to the receipt of such notice.

The Principal may terminate this bond by sending written notice to the Surety(ies), provided, however, that no such notice shall become effective until the Surety(ies) receive(s) written authorization by the Department for termination of the bond.

[The following paragraph is an *optional* rider that may be included but is not required].

The Principal and Surety(ies) hereby agree to adjust the penal sum of the bond yearly so that it guarantees a new amount of financial responsibility for bodily injury and property damage to third parties caused by accidental occurrences, provided that the penal sum does not increase by more than 20% in any one year, and no decrease in the penal sum takes place without the written approval of the Department.

In witness Whereof, the Principal and Surety(ies) have executed this Financial Guarantee Bond and have affixed their seals on the date set forth above.

The individuals whose signatures appear below hereby certify that they are authorized to execute this surety bond on behalf of the Principal and Surety(ies) and that the wording of this surety bond is identical to the wording specified in 310 CMR 30.909(9) as in effect on the date this bond was executed.

гинстрат
[Signature(s)]
[Name(s)]
[Title(s)]
[Corporate seal]

Duin aimal

30.909:	continued
	Corporate Surety(ies)
	[Name(s) and address(es)]
	State of incorporation [Name of State]
	Liability limit: \$ [Amount]
	[Signature(s)]
	[Corporate seal]
	[For every co-surety, provide signature(s), corporate seal, and other information in the sam manner as for the Surety above.]
	Bond premium: \$ [Amount]

(10) Letters of Credit for Financial Assurance for Accidental Occurrences. A letter of credit as specified in 310 CMR 30.908(1)(d) and 310 CMR 30.908(2)(d) shall be worded as follows, except that instructions in brackets shall be replaced with the relevant information and the brackets deleted.

#### IRREVOCABLE STANDBY LETTER OF CREDIT

Commissioner,

Department of Environmental Quality Engineering

Commonwealth of Massachusetts

[Insert here the name and address of the Claims Administrator]

Dear Sir or Madam:

We hereby establish our Irrevocable Standby Letter of Credit No. [Number] in favor of the Department of Environmental Quality Engineering, at the request and for the account of [owner's or operator's name and address] up to the aggregate amount of [in words] U.S. dollars (\$ [Amount]), available upon presentation, by the Commissioner, the Commissioner's designee, or [insert here the name of the Claims Administrator], of

- (1) A sight draft, signed by either the Commissioner, the Commissioner's designee, or [insert here the name of the Claims Administrator], bearing reference to this letter of credit No. [Number], and
- (2) A statement, signed by either the Commissioner, the Commissioner's designee, or [insert here the name of the Claims Administrator], and reading as follows: "I certify that the amount of the draft is payable pursuant to 310 CMR 30.908 and 30.909, regulations issued under authority of M.G.L. c. 21C."

This letter of credit is effective as of [date] and shall expire on [date at least one year later], but such expiration date shall be automatically extended for a period of [at least one year] on [date] and on each successive expiration date, unless, at least 120 days before the current expiration date, we notify the Commissioner, [insert here the name of the Claims Administrator], and [owner's or operator's name] by certified mail that we have decided not to extend this letter of credit beyond the current expiration date. In the event such notice has been received, any unused portion of the credit shall be available upon presentation of a sight draft, signed by either the Commissioner, the Commissioner's designee, or [insert here the name of the Claims Administrator], within 120 days after the date of receipt of notification by the Commissioner, [insert here the name of the Claims Administrator], and [owner's or operator's name], as shown on the latest signed return receipt.

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Whenever this letter of credit is drawn on, under, and in compliance with the terms of this credit, we shall duly honor such draft upon presentation to us, and we shall pay the amount of the draft in accordance with the instructions given us by the Commissioner, the Commissioner's designee, or [insert here the name of the Claims Administrator].

We certify that the wording of this letter of credit is identical to the wording specified in 310 CMR 30.909(10) as in effect on the date shown immediately below.

[Signature(s) and title(s) of official(s) of issuing institution]

[Date]

This credit is subject to [insert "the most recent edition of the Uniform Customs and Practice for Documentary Credits, published by the International Chamber of Commerce", or "the Uniform Commercial Code"]

## 30.910: Special Options for Facilities Relying on the Hazardous Waste Licensees Insolvency Fund

- (1) Coverage for sudden accidental occurrences. The owner or operator of a hazardous waste treatment, storage, or disposal facility may demonstrate assurance of financial responsibility for bodily injury and property damage to third parties caused by each sudden accidental occurrence arising from operation of the facility by using one of the options specified in 310 CMR 30.910 in lieu of the options specified in 310 CMR 30.908(1)(a) through (d), but only if the Hazardous Waste Licensees Involvency Fund actually exists, and the owner or operator meets the eligibility requirements set forth in 310 CMR 30.910(1)(a), the amount of coverage for sudden accidental occurrences is in compliance with 310 CMR 30.910(1)(b), the form of coverage is in compliance with 310 CMR 30.910, and the owner or operator obtains and maintains in effect a contract with a Claims Administrator in compliance with 310 CMR 30.910(1)(e); otherwise, the owner or operator shall use the options set forth in 310 CMR 30.908(1)(a) through (d). In all events, the provisions of the introductory paragraph of 310 CMR 30.908(1), and the provisions of 310 CMR 30.908(3) through (8), shall apply to 310 CMR 30.910. As used in 310 CMR 30.910(1), the term "Claims Administrator" shall mean a person who shall be responsible for the processing and administration of all requests to make payments from a trust fund, standby trust fund, or letter of credit pursuant to 310 CMR 30.910(1). The owner or operator of each facility shall give notice to both the Department and the Claims Administrator of every claim for bodily injury and/or property damage caused by a sudden accidental occurrence or occurrences arising from the operation of the facility(ies). The owner or operator of each facility shall give such notice to both the Department and the Claims Administrator as soon as possible and in any event no later than 30 days after learning of such claim. The owner or operator of each facility shall give notice to both the Department and the Claims Administrator of every judgment against the owner or operator for bodily injury and/or property damage caused by a sudden accidental occurrence or occurrences arising from the operation of the facility. The owner or operator of each facility shall give such notice to both the Department and the Claims Administrator as soon as possible and in any event no later than 30 days after learning of said judgment.
  - (a) <u>Eligibility</u>. An owner or operator may use the options set forth in 310 CMR 30.910 only if the owner or operator persuades the Department that, despite reasonable efforts, he could not obtain at all, or could not obtain at an annual cost equal to or less than the applicable amount set forth in 310 CMR 30.910(1)(b), liability coverage in compliance with 310 CMR 30.908(1)(a) for sudden accidental occurrences in the amount of at least \$3-million per each sudden accidental occurrence with an annual aggregate of at least \$6-million, exclusive of legal defense costs.

- (b) Required Amount. If the owner or operator is eligible to, and does, use the options set forth in 310 CMR 30.910, the minimum amount of coverage for sudden accidental occurrences shall be as set forth below, or such other amount as required by the Department pursuant to 310 CMR 30.908(4) or (5). The required amount shall be in the funding mechanism when the funding mechanism is first established, and an amount equal to said required amount shall be placed in either the same funding mechanism or a new funding mechanism on or before April 1 of each year thereafter for as long as 310 CMR 30.910 remains in effect. Except for payment of claims or any other payments made in compliance with 310 CMR 30.910 from a funding mechanism established pursuant to 310 CMR 30.910, and except as may be otherwise provided by law, these amounts shall accumulate and aggregate for at least as long as the Hazardous Waste Licensees Insolvency Fund exists. However, the Department may release all funds dedicated to a funding mechanism upon the showing by an owner or operator that the owner or operator no longer meets the eligibility requirements set forth in 310 CMR 30.910(1)(a), and has a valid claims-made policy which satisfies the requirements of 310 CMR 30.908(1)(a) through (d), and if applicable, 310 CMR 30.908(2)(a) through (d), provided that the policy retroactively covers any claim made on or after February 13, 1984, for as long as the facility remains subject to 310 CMR 30.900.
  - 1. If the facility is licensed only to store only waste oil, and does no more than this; or if the facility is a facility having interim status pursuant to RCRA and said facility is authorized only to store only waste oil, and does no more than this; the required amount shall be \$15,000 per year.
  - 2. If the facility is licensed only to store less than 50,000 gallons of any hazardous waste, other than waste oil, at any one time, and does no more than this; or if the facility is a facility having interim status pursuant to RCRA and said facility is authorized only to store less than 50,000 gallons of any hazardous waste, other than waste oil, at any one time, and does no more than this; the required amount shall be \$25,000 per year.
  - 3. If the facility is licensed only to store 50,000 gallons or more of any hazardous waste, other than waste oil, at any one time, and does no more than this; or if the facility is a facility having interim status pursuant to RCRA and said facility is authorized only to store 50,000 gallons or more of any hazardous waste, other than waste oil, at any one time, and does no more than this; the required amount shall be \$60,000 per year.
  - 4. For all other facilities, the required amount shall be \$75,000 per year.
- (c) <u>Trust Fund Requirements</u>. An owner or operator may demonstrate the required coverage by establishing a sudden accidental occurrence special trust fund, which shall be established and maintained in compliance with the following requirements:
  - 1. The owner or operator shall establish the trust fund, and shall send an originally signed duplicate of the trust agreement to the Department, within the applicable time period prescribed in 310 CMR 30.901(2) or (6).
  - 2. The trustee shall be a bank or other financial institution which has the authority to act as a trustee and whose trust operations are regulated and examined by the Massachusetts Commissioner of Banking, or the trustee shall be a national bank.
  - 3. The wording of the trust agreement shall be identical to the wording specified in 310 CMR 30.910(3)(a), and the trust agreement shall be accompanied by a formal certification of acknowledgement identical to the wording specified in 310 CMR 30.910(3)(b).
  - 4. On the date of the initial establishment of the sudden accidental occurrence special trust fund, the value of the trust fund shall be at least the amount required pursuant to 310 CMR 30.910(1)(b), or such other amount as required by the Department pursuant to 310 CMR 30.908(4) or (5).
  - 5. If an owner or operator substitutes other financial assurance, as specified in 310 CMR 30.908(1) or 30.910, for the sudden accidental occurrence special trust fund, he may submit a written request to the Department for release of the amount in the trust fund.
  - 6. Any person who obtains final judgment against the owner or operator for bodily injury and/or property damage caused by a sudden accidental occurrence or occurrences arising from the operation of the facility may request payment from the sudden accidental occurrence liability trust fund in satisfaction of the judgment by

submitting to the Claims Administrator a certified copy of the judgment and a statement, signed subject to 310 CMR 30.006 and 30.009, that the judgment was either (1) rendered by the highest court in the jurisdiction where the action was brought and the owner or operator exhausted all rights of appeal, or (2) rendered by the highest court which rendered a judgment and no appeal was made by the owner or operator to a higher court within the time allowed by applicable statute or rule, or (3) agreed to by the owner or operator.

- 7. After receiving the material described in 310 CMR 30.910(1)(c)6., the Claims Administrator shall determine whether the judgment was either (1) rendered by the highest court in the jurisdiction where the action was brought and the owner or operator exhausted all rights of appeal, or (2) rendered by the highest court which rendered a judgment and no appeal was made by the owner or operator to a higher court within the time allowed by applicable statute or rule, or (3) agreed to by the owner or operator. If so, the Claims Administrator shall instruct the trustee to pay to the person who obtained the judgment such amounts, not to exceed the amount of the judgment or the amount then in the sudden accidental occurrence special trust fund, whichever amount is less, as the Claims Administrator may specify in writing.
- 8. To the extent such action is authorized or required by law, the Claims Administrator or the Department may instruct the trustee to pay to the Hazardous Waste Licensees Insolvency Fund or to the Commonwealth of Massachusetts such amounts, not to exceed the amount then in the trust fund, as may be authorized or required by law.
- 9. No trust shall be terminated without prior written consent of the Department. The Department may agree to termination of the trust when the Department is persuaded that such action is consistent with 310 CMR 30.910(1)(c)5. and
  - a. the Department is persuaded that the owner or operator has substituted alternate financial assurance as specified in 310 CMR 30.908(1) or 30.910, or
  - b. when the Department certifies closure of the facility pursuant to 310 CMR 30.099(6) or 30.586(2); provided, however, that amounts may be paid to the facility only to the extent sufficient funds are available to pay outstanding claims and other obligations that are unpaid or unresolved, and that no amounts whatever shall be paid to the facility for as long as the Hazardous Waste Licensees Insolvency Fund exists except as may be otherwise provided by law. However, the Department may release all funds dedicated to the trust fund upon the showing by an owner or operator that the owner or operator no longer meets the eligibility requirements set forth in 310 CMR 30.910(1)(a), and has a valid claims-made policy which satisfies the requirements of 310 CMR 30.908(1)(a) through (d), and if applicable, 310 CMR 30.908(2)(a) through (d), provided that the policy retroactively covers any claim made on or after February 13, 1984, for as long as the facility remains subject to 310 CMR 30.900.
- (d) <u>Letter of Credit Requirements</u>. An owner or operator may demonstrate the required coverage by obtaining an irrevocable letter of credit which shall be obtained and maintained in compliance with the following requirements:
  - 1. The owner or operator shall obtain the letter of credit and submit it to the Department within the applicable time period prescribed in 310 CMR 30.901(2) or (6).
  - 2. The institution issuing the letter of credit shall be an entity which has the authority to issue letters of credit and whose letter of credit operations are regulated and examined by the Massachusetts Commissioner of Banking, or the institution shall be a national bank.
  - 3. The wording of the letter of credit shall be identical to the wording specified in 310 CMR 30.910(3)(c).
  - 4. The letter of credit shall be accompanied by a letter from the owner or operator which shall state:
    - a. The letter of credit number;
    - b. The name of the issuing institution;
    - c. The date of issuance of the letter of credit;
    - d. The EPA identification number(s) of the facility;
    - e. The name and address of the facility; and
    - f. The amount of funds assured by the letter of credit.

- 5. The letter of credit shall be irrevocable and shall be issued for a period of at least one year. The letter of credit shall provide that the expiration date will be automatically extended for a period of at least one year unless, no later than 120 days before the current expiration date pursuant to the terms of the letter of credit, the issuing institution notifies the owner or operator, the Claims Administrator, and the Department by certified mail of a decision not to extend the expiration date. Under the terms of the letter of credit, the 120 days shall not begin before the date when the owner or operator, the Claims Administrator, and the Department have received the notice, as shown by the latest return receipt.
- 6. If the owner or operator does not establish alternate financial assurance as required by 310 CMR 30.908(1) and does not obtain written approval from the Department of any such alternate financial assurance within 90 days of receipt by the owner or operator, by the Claims Administrator, and by the Department of a notice that the issuing institution will not extend the letter of credit beyond the current expiration date, the Department shall draw on the letter of credit. The Department may delay drawing on the letter of credit if the issuing institution grants an extension of the term of the letter of credit. During the last 30 days of any such extension, the Department shall draw on the letter of credit if the owner or operator has failed to provide alternate financial assurance as specified in 310 CMR 30.910 or has failed to obtain written approval by the Department of such assurance.
- 7. An owner or operator who uses a letter of credit to satisfy the requirements of 310 CMR 30.910 shall also establish a standby trust fund. Under the terms of the letter of credit, all payments made thereunder shall, in accordance with instructions from the Claims Administrator or the Department, either be paid by the issuing institution directly to a person described in 310 CMR 30.910(1)(d)9., or paid by the issuing institution directly to the Hazardous Waste Licensees Insolvency Fund or to the Commonwealth of Massachusetts in accordance with 310 CMR 30.910(1)(d)11., or deposited by the issuing institution directly into the standby trust fund. This standby trust fund shall meet the requirements in 310 CMR 30.910(1)(c), except that:
  - a. An originally signed duplicate of the trust agreement shall be submitted to the Department with the letter of credit; and
  - b. Until the standby trust fund is funded pursuant to the requirements of 310 CMR 30.910, the following are not required:
    - (i) payment into the trust fund as specified in 310 CMR 30.910(1)(c);
    - (ii) annual valuations as required by the trust agreement (See 310 CMR 30.910(3)(a)10.); and
    - (iii) notices of nonpayment as required by the trust agreement (See 310 CMR 30.910(3)(a)15.).
- 8. If an owner or operator substitutes other financial assurance as specified in 310 CMR 30.908(1) for all or part of the amount of the letter of credit, he may submit a written request to the Department for release of the amount in excess of the amount to be covered by the letter of credit.
- 9. Any person who obtains final judgment against the owner or operator for bodily injury and/or property damage caused by a sudden accidental occurrence or occurrences arising from the operation of the facility may request payment from the letter of credit in satisfaction of the judgment by submitting to the Claims Administrator a certified copy of the judgment and a statement, signed subject to 310 CMR 30.006 and 30.009, that the judgment was either (1) rendered by the highest court in the jurisdiction where the action was brought and the owner or operator exhausted all rights of appeal, or (2) rendered by the highest court which rendered a judgment and no appeal was made by the owner or operator to a higher court within the time allowed by applicable statute or rule, or (3) agreed to by the owner or operator.

- 10. After receiving the material described in 310 CMR 30.910(1)(d)9., the Claims Administrator shall determine whether the judgment was either (1) rendered by the highest court in the jurisdiction where the action was brought and the owner or operator exhausted all rights of appeal, or (2) rendered by the highest court which rendered a judgment and no appeal was made by the owner or operator to a higher court within the time allowed by applicable statute or rule, or (3) agreed to by the owner or operator. If so, the Claims Administrator shall instruct the institution issuing the letter of credit to pay either to the person making the claim or into the standby trust fund, or the Claims Administrator shall instruct the trustee of the standby trust fund to pay to the person who obtained the judgment, such amounts, not to exceed the amount of the judgment or the amount in the letter of credit, whichever amount is less, as the Claims Administrator may specify in writing.
- 11. To the extent such action is authorized or required by law, the Claims Administrator or the Department may instruct the institution issuing the letter of credit to pay to the Hazardous Waste Licensees Insolvency Fund or to the Commonwealth of Massachusetts such amounts, not to exceed the amount then in the letter of credit, as may be authorized or required by law.
- 12. No letter of credit shall be terminated without prior written consent of the Department. The Department may return the letter of credit to the issuing institution for termination when the Department is persuaded that such action is consistent with 310 CMR 30.910(1)(c)8. and
  - a. the Department is persuaded that the owner or operator has substituted alternate financial assurance as specified in 310 CMR 30.908(1) or 30.910, or
  - b. when the Department certifies closure of the facility pursuant to 310 CMR 30.099(6) or 30.586(2); provided, however, that amounts may be paid to the facility only to the extent sufficient funds are available to pay outstanding claims and other obligations that are unpaid or unresolved, and that no amounts whatever shall be paid to the facility for as long as the Hazardous Waste Licensees Insolvency Fund exists except as may be otherwise provided by law. However, the Department may release all funds dedicated to a letter of credit upon the showing by an owner or operator that the owner or operator no longer meets the eligibility requirements set forth in 310 CMR 30.910(1)(a), and has a valid claims-made policy which satisfies the requirements of 310 CMR 30.908(1)(a) through (d), and if applicable, 310 CMR 30.908(2)(a) through (d), provided that the policy retroactively covers any claim made on or after February 13, 1984, for as long as the facility remains subject to 310 CMR 30.900.
- (e) Requirements for a Contract with a Claims Administrator. Each contract between a Claims Administrator and an owner or operator shall conform to 310 CMR 30.910(1)(e).
  - 1. Each contract between a Claims Administrator and an owner or operator shall assure that each party to the contract is obligated by the contract to comply with all the requirements applicable to each party respectively, as set forth in 310 CMR 30.910(1).
  - 2. Prior to executing any contract with a Claims Administrator, the owner or operator shall furnish a copy of the contract to the Department. No contract between a Claims Administrator and an owner or operator shall be signed by either of them without the prior written approval of the Department. The Department may withhold such approval if the Department is not persuaded that (1) the Claims Administrator is a person who can and will properly carry out the responsibilities a Claims Administrator has pursuant to 310 CMR 30.000, or (2) the terms and wording of the contract between the Claims Administrator and the owner or operator are sufficient to protect the Department's interests. The Department shall not unreasonably withhold or delay such approval.
  - 3. The Department shall not be a party to the contract between the Claims Administrator and the owner or operator.
  - 4. Cancellation of any contract between a Claims Administrator and an owner or operator shall be effective only upon written notice and only after the expiration of a least 30 days after the date of receipt by the Department of such written notice, sent to the Department by certified mail.

- 5. Except as provided in Section 9 of the trust agreement, the wording of which is specified in 310 CMR 30.910(3)(a), the Claims Administrator shall not receive, and shall not be eligible to receive, directly or indirectly, any money in any letter of credit or standby trust fund established pursuant to 310 CMR 30.900 and for each he is Claims Administrator.
- 6. Nothing in 310 CMR 30.900 shall be construed to preclude the Trustee of any trust fund from also being the Contract Administrator for that trust fund.
- 7. The Department shall have the right to direct the Claims Administrator to refuse to give instructions to pay any claim, and the Department and the Claims Administrator shall each have the right to obtain reimbursement of any claim already paid in whole or in part, if, in the opinion of the Department the claim is fraudulent, inflated, or otherwise unlawful or unjustified.
- (2) Coverage for nonsudden accidental occurrences. An owner or operator of a hazardous waste treatment, storage, or disposal facility which is subject to 310 CMR 30.908(2) may demonstrate assurance of financial responsibility for bodily injury and property damage to third parties caused by each nonsudden accidental occurrence arising from operation of the facility by using one of the options specified in 310 CMR 30.910 in lieu of the options specified in 310 CMR 30.908(2)(a) through (d), but only if the owner or operator meets the eligibility requirements set forth in 310 CMR 30.910(2)(a), the amount of coverage for nonsudden accidental occurrences is in compliance with 310 CMR 30.910(2)(b), the form of coverage is in compliance with 310 CMR 30.910, and the owner or operator obtains and maintains in effect a contract with a Claims Administrator in compliance with 310 CMR 30.910(2)(e); otherwise, the owner or operator shall use the options set forth in 310 CMR 30.908(2)(a) through (d). In all events, the provisions of the introductory paragraph of 310 CMR 30.908(2), and the provisions of 310 CMR 30.908(3) through (8), shall apply to 310 CMR 30.910. As used in 310 CMR 30.910(2), the term "Claims Administrator" shall mean a person who shall be responsible for the processing and administration of all requests to make payments from a trust fund, standby trust fund, or letter of credit pursuant to 310 CMR 30.910(2). The owner or operator of each facility shall give notice to both the Department and the Claims Administrator of every claim for bodily injury and/or property damage caused by a nonsudden accidental occurrence or occurrences arising from the operation of the facility(ies). The owner or operator of each facility shall give such notice to both the Department and the Claims Administrator as soon as possible and in any event no later than 30 days after learning of such claim. The owner or operator of each facility shall give notice to both the Department and the Claims Administrator of every judgment against the owner or operator for bodily injury and/or property damage caused by a nonsudden accidental occurrence or occurrences arising from the operation of the facility. The owner or operator of each facility shall give such notice to both the Department and the Claims Administrator as soon as possible and in any event no later than 30 days after learning of said judgment.
  - (a) Eligibility. An owner or operator may use the options set forth in 310 CMR 30.910 only if the owner or operator persuades the Department that, despite reasonable efforts, he could not obtain at all, or could not obtain at an annual cost equal to or less than the applicable amount set forth in 310 CMR 30.910(2)(b), liability coverage in compliance with 310 CMR 30.908(2)(a) for nonsudden accidental occurrences in the amount of at least \$5-million per each nonsudden accidental occurrence with an annual aggregate of at least \$10-million, exclusive of legal defense costs.
  - (b) Required Amount. If the owner or operator is eligible to, and does, use the options set forth in 310 CMR 30.910, the minimum amount of coverage for nonsudden accidental occurrences shall be as set forth below, or such other amount as required by the Department pursuant to 310 CMR 30.908(4) or (5). The required amount shall be in the funding mechanism when the funding mechanism is first established, and an amount equal to said required amount shall be placed in either the same funding mechanism or a new funding mechanism on or before April 1 of each year thereafter for as long as 310 CMR 30.910 remains in effect. Except for payment of claims or any other payments made in compliance with 310 CMR 30.910 from a funding mechanism established pursuant to 310 CMR 30.910, and except as may be otherwise provided by law, these amounts shall accumulate and aggregate for at least as long as the Hazardous Waste Licensees Insolven-

cy Fund exists. However, the Department may release all funds dedicated to a funding mechanism upon the showing by an owner or operator that the owner or operator no longer meets the eligibility requirements set forth in 310 CMR 30.910(1)(a), and has a valid claims-made policy which satisfies the requirements of 310 CMR 30.908(1)(a) through (d), and if applicable, 310 CMR 30.908(2)(a) through (d), provided that the policy retroactively covers any claim made on or after February 13, 1984, for as long as the facility remains subject to 310 CMR 30.900.

- 1. If the facility is licensed only to store only waste oil, and does no more than this; or if the facility is a facility having interim status pursuant to RCRA and said facility is authorized only to store only waste oil, and does no more than this; the required amount shall be \$15,000 per year.
- 2. If the facility is licensed only to store less than 50,000 gallons of any hazardous waste, other than waste oil, at any one time, and does no more than this; or if the facility is a facility having interim status pursuant to RCRA and said facility is authorized only to store less than 50,000 gallons of any hazardous waste, other than waste oil, at any one time, and does no more than this; the required amount shall be \$25,000 per year.
- 3. If the facility is licensed only to store 50,000 gallons or more of any hazardous waste, other than waste oil, at any one time, and does no more than this; or if the facility is a facility having interim status pursuant to RCRA and said facility is authorized only to store 50,000 gallons or more of any hazardous waste, other than waste oil, at any one time, and does no more than this; the required amount shall be \$60,000 per year.
- 4. For all other facilities, the required amount shall be \$75,000 per year.
- (c) <u>Trust Fund Requirements</u>. An owner or operator may demonstrate the required coverage by establishing a nonsudden accidental occurrence special trust fund, which shall be established and maintained in compliance with the following requirements:
  - 1. The owner or operator shall establish the trust fund, and shall send an originally signed duplicate of the trust agreement to the Department, within the applicable time period prescribed in 310 CMR 30.901(2) or (6).
  - 2. The trustee shall be a bank or other financial institution which has the authority to act as a trustee and whose trust operations are regulated and examined by the Massachusetts Commissioner of Banking, or the trustee shall be a national bank.
  - 3. The wording of the trust agreement shall be identical to the wording specified in 310 CMR 30.910(3)(a), and the trust agreement shall be accompanied by a formal certification of acknowledgement identical to the wording specified in 310 CMR 30.910(3)(b).
  - 4. On the date of the initial establishment of the nonsudden accidental occurrence special trust fund, the value of the trust fund shall be at least the amount required pursuant to 310 CMR 30.910(2)(b), or such other amount as required by the Department pursuant to 310 CMR 30.908(4) or (5).
  - 5. If an owner or operator substitutes other financial assurance, as specified in 310 CMR 30.908(2) or 30.910, for the nonsudden accidental occurrence special trust fund, he may submit a written request to the Department for release of the amount in the trust fund.
  - 6. Any person who obtains final judgment against the owner or operator for bodily injury and/or property damage caused by a nonsudden accidental occurrence or occurrences arising from the operation of the facility may request payment from the nonsudden accidental occurrence liability trust fund in satisfaction of the judgment by submitting to the Claims Administrator a certified copy of the judgment and a statement, signed subject to 310 CMR 30.006 and 30.009, that the judgment was either (1) rendered by the highest court in the jurisdiction where the action was brought and the owner or operator exhausted all rights of appeal, or (2) rendered by the highest court which rendered a judgment and no appeal was made by the owner or operator to a higher court within the time allowed by applicable statute or rule, or (3) agreed to by the owner or operator.

- 7. After receiving the material described in 310 CMR 30.910(2)(c)6., the Claims Administrator shall determine whether the judgment was either (1) rendered by the highest court in the jurisdiction where the action was brought and the owner or operator exhausted all rights of appeal, or (2) rendered by the highest court which rendered a judgment and no appeal was made by the owner or operator to a higher court within the time allowed by applicable statute or rule, or (3) agreed to by the owner or operator. If so, the Claims Administrator shall instruct the trustee to pay to the person who obtained the judgment such amounts, not to exceed the amount of the judgment or the amount then in the nonsudden accidental occurrence special trust fund, whichever amount is less, as the Claims Administrator may specify in writing.
- 8. To the extent such action is authorized or required by law, the Claims Administrator or the Department may instruct the trustee to pay to the Hazardous Waste Licensees Insolvency Fund or to the Commonwealth of Massachusetts such amounts, not to exceed the amount then in the trust fund, as may be authorized or required by law.
- 9. No trust shall be terminated without prior written consent of the Department. The Department may agree to termination of the trust when the Department is persuaded that such action is consistent with 310 CMR 30.910(2)(c)5. and
  - a. the Department is persuaded that the owner or operator has substituted alternate financial assurance as specified in 310 CMR 30.908(2) or 30.910, or
  - b. when the Department certifies closure of the facility pursuant to 310 CMR 30.099(6) or 30.586(2); provided, however, that amounts may be paid to the facility only to the extent sufficient funds are available to pay outstanding claims and other obligations that are unpaid or unresolved, and that no amounts whatever shall be paid to the facility for as long as the Hazardous Waste Licensees Insolvency Fund exists except as may be otherwise provided by law. However, the Department may release all funds dedicated to the trust fund upon the showing by an owner or operator that the owner or operator no longer meets the eligibility requirements set forth in 310 CMR 30.910(1)(a), and has a valid claims-made policy which satisfies the requirements of 310 CMR 30.908(1)(a) through (d), and if applicable, 310 CMR 30.908(2)(a) through (d), provided that the policy retroactively covers any claim made on or after February 13, 1984, for as long as the facility remains subject to 310 CMR 30.900.
- (d) <u>Letter of Credit Requirements</u>. An owner or operator may demonstrate the required coverage by obtaining an irrevocable letter of credit which shall be obtained and maintained in compliance with the following requirements:
  - 1. The owner or operator shall obtain the letter of credit and submit it to the Department within the applicable time period prescribed in 310 CMR 30.901(2) or (6).
  - 2. The institution issuing the letter of credit shall be an entity which has the authority to issue letters of credit and whose letter of credit operations are regulated and examined by the Massachusetts Commissioner of Banking, or the institution shall be a national bank.
  - 3. The wording of the letter of credit shall be identical to the wording specified in 310 CMR 30.910(3)(c).
  - 4. The letter of credit shall be accompanied by a letter from the owner or operator which shall state:
    - a. The letter of credit number;
    - b. The name of the issuing institution;
    - c. The date of issuance of the letter of credit;
    - d. The EPA identification number(s) of the facility;
    - e. The name and address of the facility; and
    - f. The amount of funds assured by the letter of credit.
  - 5. The letter of credit shall be irrevocable and shall be issued for a period of at least one year. The letter of credit shall provide that the expiration date will be automatically extended for a period of at least one year unless, no later than 120 days before the current expiration date pursuant to the terms of the letter of credit, the issuing institution notifies the owner or operator, the Claims Administrator, and the Department by certified mail of a decision not to extend the expiration date. Under the terms of the letter of credit, the 120 days shall not begin before the date when the owner or operator, the Claims Administrator, and the Department have received the notice, as shown by the latest return receipt.

- 6. If the owner or operator does not establish alternate financial assurance as required by 310 CMR 30.908(2) and does not obtain written approval from the Department of any such alternate financial assurance within 90 days of receipt by the owner or operator, by the Claims Administrator, and by the Department of a notice that the issuing institution will not extend the letter of credit beyond the current expiration date, the Department shall draw on the letter of credit. The Department may delay drawing on the letter of credit if the issuing institution grants an extension of the term of the letter of credit. During the last 30 days of any such extension, the Department shall draw on the letter of credit if the owner or operator has failed to provide alternate financial assurance as specified in 310 CMR 30.910 or has failed to obtain written approval by the Department of such assurance.
- 7. An owner or operator who uses a letter of credit to satisfy the requirements of 310 CMR 30.910 shall also establish a standby trust fund. Under the terms of the letter of credit, all payments made thereunder shall, in accordance with instructions from the Claims Administrator or the Department, either be paid by the issuing institution directly to a person described in 310 CMR 30.910(2)(d)9., or paid by the issuing institution directly to the Hazardous Waste Licensees Insolvency Fund or to the Commonwealth of Massachusetts in accordance with 310 CMR 30.910(2)(d)11., or deposited by the issuing institution directly into the standby trust fund. This standby trust fund shall meet the requirements in 310 CMR 30.910(2)(c), except that:
  - a. An originally signed duplicate of the trust agreement shall be submitted to the Department with the letter of credit; and
  - b. Until the standby trust fund is funded pursuant to the requirements of 310 CMR 30.910, the following are not required:
    - (i) payment into the trust fund as specified in 310 CMR 30.910(2)(c);
    - (ii) annual valuations as required by the trust agreement (See 310 CMR 30.910(3)(a)10.); and
    - (iii) notices of nonpayment as required by the trust agreement (See 310 CMR 30.910(3)(a)15.).

NON-TEXT PAGE

- 8. If an owner or operator substitutes other financial assurance as specified in 310 CMR 30.908(2) for all or part of the amount of the letter of credit, he may submit a written request to the Department for release of the amount in excess of the amount to be covered by the letter of credit.
- 9. Any person who obtains final judgment against the owner or operator for bodily injury and/or property damage caused by a nonsudden accidental occurrence or occurrences arising from the operation of the facility may request payment from the letter of credit in satisfaction of the judgment by submitting to the Claims Administrator a certified copy of the judgment and a statement, signed subject to 310 CMR 30.006 and 30.009, that the judgment was either (1) rendered by the highest court in the jurisdiction where the action was brought and the owner or operator exhausted all rights of appeal, or (2) rendered by the highest court which rendered a judgment and no appeal was made by the owner or operator to a higher court within the time allowed by applicable statute or rule, or (3) agreed to by the owner or operator.
- 10. After receiving the material described in 310 CMR 30.910(2)(d)9, the Claims Administrator shall determine whether the judgment was either (1) rendered by the highest court in the jurisdiction where the action was brought and the owner or operator exhausted all rights of appeal, or (2) rendered by the highest court which rendered a judgment and no appeal was made by the owner or operator to a higher court within the time allowed by applicable statute or rule, or (3) agreed to by the owner or operator. If so, the Claims Administrator shall instruct the institution issuing the letter of credit to pay either to the person making the claim or into the standby trust fund, or the Claims Administrator shall instruct the trustee of the standby trust fund to pay to the person who obtained the judgment, such amounts, not to exceed the amount of the judgment or the amount in the letter of credit, whichever amount is less, as the Claims Administrator may specify in writing.
- 11. To the extent such action is authorized or required by law, the Claims Administrator or the Department may instruct the institution issuing the letter of credit to pay to the Hazardous Waste Licensees Insolvency Fund or to the Commonwealth of Massachusetts such amounts, not to exceed the amount then in the letter of credit, as may be authorized or required by law.
- 12. No letter of credit shall be terminated without prior written consent of the Department. The Department may return the letter of credit to the issuing institution for termination when the Department is persuaded that such action is consistent with 310 CMR 30.910(2)(c)8. and
  - a. the Department is persuaded that the owner or operator has substituted alternate financial assurance as specified in 310 CMR 30.908(2) or 30.910, or
  - b. when the Department certifies closure of the facility pursuant to 310 CMR 30.099(6) or 30.586(2); provided, however, that amounts may be paid to the facility only to the extent sufficient funds are available to pay outstanding claims and other obligations that are unpaid or unresolved, and that no amounts whatever shall be paid to the facility for as long as the Hazardous Waste Licensees Insolvency Fund exists except as may be otherwise provided by law. However, the Department may release all funds dedicated to a letter of credit upon the showing by an owner or operator that the owner or operator no longer meets the eligibility requirements set forth in 310 CMR 30.910(1)(a), and has a valid claims-made policy which satisfies the requirements of 310 CMR 30.908(1)(a) through (d), and if applicable, 310 CMR 30.908(2)(a) through (d), provided that the policy retroactively covers any claim made on or after February 13, 1984, for as long as the facility remains subject to 310 CMR 30.900.
- (e) <u>Requirements for a Contract with a Claims Administrator</u>. Each contract between a Claims Administrator and an owner or operator shall conform to 310 CMR 30.910(2)(e).
  - 1. Each contract between a Claims Administrator and an owner or operator shall assure that each party to the contract is obligated by the contract to comply with all the requirements applicable to each party respectively, as set forth in 310 CMR 30.910(2).

- 2. Prior to executing any contract with a Claims Administrator, the owner or operator shall furnish a copy of the contract to the Department. No contract between a Claims Administrator and an owner or operator shall be signed by either of them without the prior written approval of the Department. The Department may withhold such approval if the Department is not persuaded that (1) the Claims Administrator is a person who can and will properly carry out the responsibilities a Claims Administrator has pursuant to 310 CMR 30.000, or (2) the terms and wording of the contract between the Claims Administrator and the owner or operator are sufficient to protect the Department's interests. The Department shall not unreasonably withhold or delay such approval.
- 3. The Department shall not be a party to the contract between the Claims Administrator and the owner or operator.
- 4. Cancellation of any contract between a Claims Administrator and an owner or operator shall be effective only upon written notice and only after the expiration of at least 30 days after the date of receipt by the Department of such written notice, sent to the Department by certified mail.
- 5. Except as provided in Section 9 of the trust agreement, the wording of which is specified in 310 CMR 30.910(3)(a), the Claims Administrator shall not receive, and shall not be eligible to receive, directly or indirectly, any money in any letter of credit or standby trust fund established pursuant to 310 CMR 30.900 and for each he is Claims Administrator.
- 6. Nothing in 310 CMR 30.900 shall be construed to preclude the Trustee of any trust fund from also being the Contract Administrator for that trust fund.
- 7. The Department shall have the right to direct the Claims Administrator to refuse to give instructions to pay any claim, and the Department and the Claims Administrator shall each have the right to obtain reimbursement of any claim already paid in whole or in part, if, in the opinion of the Department the claim is fraudulent, inflated, or otherwise unlawful or unjustified.
- (3) Wording of Financial Instruments Used By Facilities Relying on the Hazardous Waste Licensees Insolvence Fund.
  - (a) A trust agreement for a trust fund established pursuant to 310 CMR 30.910(1)(c) or (d), or pursuant to 310 CMR 30.908(2)(c) or (d), shall be worded as follows, except that instructions in brackets shall be replaced with the relevant information and the brackets deleted.

## TRUST AGREEMENT

This Trust Agreement, hereafter referred to as the "Agreement", is entered into as of [date] by and between [name of the owner of operator], a [name of State] [insert "corporation", "partnership", "association", "trust", or "individual"], hereafter referred to as the "Grantor", and [name of corporate trustee], [insert "incorporated in the State of \_\_\_\_\_\_\_ " or "a national bank"], hereafter referred to as the "Trustee".

Whereas the Department of Environmental Quality Engineering, hereafter referred to as the "Department", an agency of the Commonwealth of Massachusetts, has established certain regulations applicable to the Grantor, requiring that the Grantor shall demonstrate financial responsibility for bodily injury and property damage to third parties caused by each sudden accidental occurrence and/or each nonsudden accidental occurrence arising from operation of the facility identified in Schedule A; and

Whereas, the Grantor has elected to establish a [insert either "trust fund" or "stand-by trust fund"] to demonstrate all or part of such financial responsibility for the facility identified in Schedule A; and

Whereas, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this Agreement, and the Trustee is willing to act as trustee.

Now, Therefore, the Grantor and the Trustee agree as follows:

30.910: continued

### Section 1. Definitions.

- (a) The term "Grantor" means [name of the owner or operator].
- (b) The term "Trustee" means [name of corporate trustee], [insert "incorporated in the State of \_\_\_\_\_\_" or "a national bank"], and any successor thereof.
- (c) The terms "Department" and "Beneficiary" mean the Department of Environmental Quality Engineering, an agency of the Commonwealth of Massachusetts, and any successor of the said Department.
- (d) The term "Claim Administrator" means [name of the Claim Administrator], and any successor thereof, who is carrying out the responsibilities of the "Claim Administrator" as set forth in 310 CMR 30.900, as in effect as of the date first written above.

<u>Section 2</u>. <u>Identification of Facilities</u>. This Agreement pertains to the facilities identified on the attached Schedule A [on attached Schedule A list each facility, and for each facility list the EPA identification number, name, and address for which financial responsibility is demonstrated by this Agreement].

Section 3. Establishment of Trust Fund. The Grantor and the Trustee hereby establish a trust fund (the "Fund") for the benefit of the Department. The Grantor and the Trustee intend that no third party have access to the Fund except as herein provided. The Fund is established initially as consisting of the property, which is acceptable to the Trustee, described in the attached Schedule B. Such property and any other property subsequently transferred to the Trustee is referred to as the Fund, together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement. The Fund shall be held by the Trustee, IN TRUST, as hereinafter provided. The Trustee shall not be responsible, nor shall it undertake any responsibility, for the amount or adequacy of, nor any duty to collect from the Grantor, any payments necessary to discharge any liabilities of the Grantor established by the Department.

Section 4. Payment for Bodily Injury and Property Damage to Third Parties. The Trustee shall make payments from the Fund as directed by the Claims Administrator or by the Department in writing. Said payments shall provide for payments from the Fund to the Department or to other persons, as specified in writing by the Claims Administrator or by the Department, for bodily injury and property damage caused by each sudden accidental occurrence and/or each nonsudden accidental occurrence arising from operation of the facility covered by this Agreement. Such payment(s) shall be in such amount(s) as the Claims Administrator or the Department directs in writing. In addition, the Trustee shall refund to the Grantor such amount(s) as the Claims Administrator or the Department specifies in writing. Upon payment or refund, such funds shall no longer constitute part of the Fund as defined herein.

<u>Section 5.</u> Payments Comprising the Fund. Payments made to the Trustee for the Fund shall consist of cash, securities, or other assets acceptable to the Trustee.

Section 6. Trustee Management. The Trustee shall invest the principal and income of the Fund and keep the Fund invested as a single fund, without distinction between principal and income, in accordance with general investment policies and guidelines which the Grantor may communicate in writing to the Trustee from time to time, subject, however, to the provisions of this Section. In investing, reinvesting, exchanging, selling, and managing the principle and income of the Fund, the Trustee shall discharge his duties with respect to the trust fund solely in the interest of the Beneficiary and with the care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; except that:

(a) Securities or other obligations of the Grantor, or any affiliates of the Grantor, as defined in the Investment Company Act of 1940, an amended, 14 U.S.C. §80a-2(a), shall not be acquired or held unless they are securities or other obligations of the Federal or a State government;

- (b) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the Federal or State government; and
- (c) The Trustee is authorized to hold cash awaiting investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon.

## <u>Section 7.</u> Commingling and Investment. The Trustee is expressly authorized in its discretion:

- (a) To transfer from time to time any or all of the assets of the Fund to any common, commingled, or collective trust fund created by the Trustee in which the Fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and
- (b) To purchase shares in any investment company registered under the Investment Company Act of 1940, 14 U.S.C. §§80a-1 *et seq.*, including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.

<u>Section 8. Express Powers of Trustee</u>. Without in any way limiting the powers and discretion conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:

- (a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it by public or private sale;
- (b) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;
- (c) To register any securities held in the Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other Fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depository even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depository with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States Government or any agency or instrumentality thereof, with a Federal Reserve bank, but the books and records of the Trustee shall at all times show that all such securities are part of the Fund.
- (d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the Federal or State government; and
- (e) To compromise or otherwise adjust all claims in favor of or against the Fund.

Section 9. Taxes and Expenses. All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund. All other expenses incurred by the Trustee in connection with the administration of this Trust, including fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid directly by the Grantor, and all other proper charges and disbursements of the Trustee shall be paid from the Fund.

Section 10. Annual Valuation. The Trustee shall annually, no later than December 1, furnish to the Grantor, to the Claims Administrator, and to the Department a statement confirming the value of the Trust. Any securities in the Fund shall be valued at market value as of no later than November 1. The failure of the Grantor to object in writing to the Trustee within 90 days after the statement has been furnished to the Grantor, the Claims Administrator, and the Department shall constitute a conclusively binding assent by the Grantor barring the Grantor from asserting any claim or liability against the Trustee with respect to matters disclosed in the statement.

<u>Section 11.</u> Advice of Counsel. The Trustee may, from time to time consult with counsel, who may be counsel to the Grantor, with respect to any question arising as to the interpretation of this Agreement of any action to be taken hereunder. The Trustee shall be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

<u>Section 12. Trustee Compensation</u>. The Trustee shall be entitled to reasonable compensation for its services as agreed upon in writing from time to time with the Grantor.

Section 13. Successor Trustee. The Trustee may resign or the Grantor may replace the Trustee, but such resignation or replacement shall not be effective until the Grantor has appointed a successor trustee and this successor accepts the appointment. The successor trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor trustee's acceptance of the appointment, the Trustee shall assign, transfer, and pay over to the successor trustee the funds and properties then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the appointment of a successor trustee or for instructions. The successor trustee shall specify the date on which it assumes administration of the trust in a writing sent to the Grantor, the Department, the Claims Administrator, and the present Trustee by certified mail at least ten days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this Section shall be paid as provided in Section 9.

Section 14. Instructions to the Trustee. All orders, requests, and instructions by the Grantor to the Trustee shall be in writing, signed by such persons as are designated in the attached Schedule C or such other designees as the Grantor may designate by amendment to Schedule C. The Trustee shall be fully protected in acting without inquiry in accordance with the Grantor's orders, requests, and instructions. All orders, requests, and instructions by the Claims Administrator to the Trustee shall be in writing, signed by the Claims Administrator, and the Trustee shall act and shall be fully protected in acting in accordance with such orders, requests, and instructions. All orders, requests, and instructions by the Department to the Trustee shall be in writing, signed by the Commissioner or his designee, and the Trustee shall act and shall be fully protected in acting in accordance with such orders, requests, and instructions. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the Grantor, the Claims Administrator, or the Department hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instructions from the Grantor and/or the Claims Administrator and/or the Department except as provided for herein.

<u>Section 15.</u> Notice of Nonpayment. The Trustee shall notify the Grantor, the Claims Administrator, and the Department by certified mail by no later than August 10 if no payment into the Fund is received from the Grantor during the month of July.

<u>Section 16.</u> Amendment of Agreement. This Agreement may be amended by an instruction in writing executed by the Grantor, the Trustee, and the Department, or by the Trustee and the Department if the Grantor ceases to exist.

Section 17. Irrevocability and Termination. Subject to the right of the parties to amend this Agreement as provided in Section 16, this Trust shall be irrevocable and shall continue until terminated by the written agreement of the Grantor, the Trustee, and the Department, or by the Trustee and the Department if the Grantor ceases to exist. Upon termination of the Trust, all remaining trust property, less final trust administration expenses, shall be delivered to the Grantor.

30.910: continued

Section 18. Immunity and Indemnification. The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of the Trust, or in carrying out any directions by the Grantor, by the Claims Administrator, or by the Department issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by the Grantor or from the Trust Fund, or both, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event the Grantor fails to provide such defense.

<u>Section 19.</u> Choice of Law. This Agreement shall be administered, construed, and enforced according to the laws of the Commonwealth of Massachusetts.

<u>Section 20.</u> Interpretation. As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each Section of this Agreement shall not effect the interpretation or the legal efficacy of this Agreement.

In Witness whereof the parties have caused this Agreement to be executed by their respective officers duly authorized and their corporate seals to be hereunto affixed and attested as of the date first written above. The parties below certify that the wording of this Agreement is identical to the wording specified in 310 CMR 30.910(3)(a) as in effect on the date first written above.

[Signature of Grantor]
[Title]

Attest: [Title] [Seal]	
[Signature of Trustee]	
Attest: [Title] [Seal]	

(a) Each certification of acknowledgement which shall accompany a trust agreement for a trust fund as required by 310 CMR 30.910 shall be worded as follows, except that instructions in brackets shall be replaced with the relevant information and the brackets deleted.

State of [N	lame of State			
County of	[Name of Co	unty]		

On this [date], before me personally came [owner or operator] to me known, who being by me duly sworn, did depose and say that she/he [strike one] resides at [address], that she/he [strike one] is [title] of [corporation], the corporation described in and which executed the above instrument; that she/he [strike one] knows the seal of said corporation; that the seal affixed to such instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that she/he [strike one] signed her/his [strike one] name thereto by like order.

[Signature of Notary Public]	
My Commission expires: [Date]	

(b) Letters of Credit for Financial Assurance for Accidental Occurrences. A letter of credit as specified in 310 CMR 30.910(1)(d) and 310 CMR 30.910(2)(d) shall be worded as follows, except that instructions in brackets shall be replaced with the relevant information and the brackets deleted.

30.910: continued

## IRREVOCABLE STANDBY LETTER OF CREDIT

Commissioner, Department of Environmental Quality Engineering Commonwealth of Massachusetts

[Insert here the name and address of the Claims Administrator]

Dear Sir or Madam:

We hereby establish our Irrevocable Standby Letter of Credit No. [Number] in favor of the Department of Environmental Quality Engineering, at the request and for the account of [owner's or operator's name and address] up to the aggregate amount of [in words] U.S. dollars (\$ [Amount]), available upon presentation, by the Commissioner, the Commissioner's designee, or [insert here the name of the Claims Administrator], of

- (a) A sight draft, signed by either the Commissioner, the Commissioner's designee, or [insert here the name of the Claims Administrator], bearing reference to this letter of credit No. [Number], and
- (b) A statement, signed by either the Commissioner, the Commissioner's designee, or [insert here the name of the Claims Administrator], and reading as follows: "I certify that the amount of the draft is payable pursuant to 310 CMR 30.910, regulations issued under authority of M.G.L., c. 21C."

This letter of credit is effective as of [date] and shall expire on [date at least one year later], but such expiration date shall be automatically extended for a period of [at least one year] on [date] and on each successive expiration date, unless, at least 120 days before the current expiration date, we notify the Commissioner, [insert here the name of the Claims Administrator], and [owner's or operator's name] by certified mail that we have decided not to extend this letter of credit beyond the current expiration date. In the event such notice has been received, any unused portion of the credit shall be available upon presentation of a sight draft, signed by either the Commissioner, the Commissioner's designee, or [insert here the name of the Claims Administrator], within 120 days after the date of receipt of notification by the Commissioner, [insert here the name of the Claims Administrator], and [owner's or operator's name], as shown on the latest signed return receipt.

Whenever this letter of credit is drawn on, under, and in compliance with the terms of this credit, we shall duly honor such draft upon presentation to us, and we shall pay the amount of the draft in accordance with the instructions given us by the Commissioner, the Commissioner's designee, or [insert here the name of the Claims Administrator].

We certify that the wording of this letter of credit is identical to the wording specified in 310 CMR 30.910(3)(c) as in effect on the date shown immediately below.

[Signature(s) and title(s) of official(s) of issuing institution]

[Date]

This credit is subject to [insert "the most recent edition of the Uniform Customs and Practice for Documentary Credits, published by the International Chamber of Commerce", or "the Uniform Commercial Code"]

# 30.1000: STANDARDS FOR UNIVERSAL WASTE MANAGEMENT

# 30.1001: Scope

- (1) The provisions of 310 CMR 30.1001 through 30.1099, cited collectively as 310 CMR 30.1000, establish requirements for managing universal wastes. 310 CMR 30.1000 establishes requirements for managing the following wastes as further described in 310 CMR 30.1020:
  - (a) Batteries;
  - (b) Pesticides;
  - (c) Thermostats;
  - (d) Mercury-containing devices; and
  - (e) Mercury-containing lamps.

## 30.1001: continued

- (2) The requirements of 310 CMR 30.1000 provide an alternative set of management standards in *lieu* of regulation under 310 CMR 30.200 through 30.900.
- (3) Universal wastes that are not handled in compliance with 310 CMR 30.1000 are hazardous wastes, and shall be accumulated, collected, transported, stored, treated, and disposed of in compliance with all the requirements of 310 CMR 30.000 other than 310 CMR 30.1000.

## 30.1010: Definitions

<u>Ampoule</u> means an airtight vial made of glass, plastic, metal, or any combination of these materials.

<u>Battery</u> means a device consisting of one or more electrically connected electrochemical cells which is designed to receive, store, and deliver electric energy. An electrochemical cell is a system consisting of an anode, cathode, and an electrolyte, plus such connections (electrical and mechanical) as may be needed to allow the cell to deliver or receive electrical energy. <u>Battery</u> also includes an intact unbroken battery from which the electrolyte has been removed.

<u>Destination Facility</u> means a facility that is authorized to receive and recycle, treat, or dispose of a particular category of universal waste, except those management activities described in 310 CMR 30.1034(1), (3), (4) and (5), as well as 310 CMR 30.1044(1), (3), (4) and (5). A facility at which a particular category of universal waste is only accumulated, is not a destination facility for purposes of managing that category of universal waste. If located in Massachusetts, these facilities shall be properly licensed in compliance with 310 CMR 30.800, or be properly permitted in compliance with 310 CMR 30.290.

FIFRA means the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136-136y).

<u>Large Quantity Handler of Universal Waste</u> means a universal waste handler who accumulates 5,000 kilograms or more total of universal waste at any time. This designation as a large quantity handler of universal waste is retained until such time as a change of status request is received by the Department in compliance with 310 CMR 30.1043, and through the end of the calendar year in which the change of status request was received.

Mercury-containing Device means any electrical product or component (excluding batteries, lamps and thermostats) which contains elemental mercury that is necessary for its operation and is housed within an outer metal, glass or plastic casing. Mercury-containing devices include, but are not limited to, thermocouples, thermometers, manometers, barometers, sphygmomanometers, electrical switches and relays, as well as certain gas flow regulators and water meters.

Mercury-containing Lamp means any bulb or tube portion of an electric lighting device specifically designed to produce radiant energy including, but not limited to, incandescent, fluorescent, high intensity discharge, high pressure sodium, mercury vapor, metal halide and neon lamps in which mercury is purposely introduced by the manufacturer for the operation of the lamp.

<u>Pesticide</u> means a substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, and any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant; provided that <u>Pesticide</u> shall not include any article that is a "new animal drug" within the meaning of section 201(w) of the Federal Food, Drug and Cosmetic Act, or that has been determined by the Secretary of the United States Department of Health, Education and Welfare not to be a new animal drug by a regulation establishing conditions of use for the article, or that is an animal feed within the meaning of section 201(x).

<u>Small Quantity Handler of Universal Waste</u> means a universal waste handler who accumulates less than 5,000 kilograms total of universal waste at any time.

<u>Thermostat</u> means a temperature control device that contains metallic mercury in an ampoule attached to a bimetal sensing element.

#### 30.1010: continued

<u>Universal Waste</u> means any of the following hazardous wastes, as further described in 310 CMR 30.1020, that are managed under the universal waste requirements of 310 CMR 30.1000:

- (a) Batteries;
- (b) Pesticides;
- (c) Thermostats;
- (d) Mercury-containing devices; and
- (e) Mercury-containing lamps.

[Note: Not all batteries, pesticides and lamps are hazardous wastes, and therefore, they do not all qualify as universal wastes; such wastes may instead be managed as nonhazardous solid wastes.]

## Universal Waste Handler.

- (a) Means:
  - 1. A generator of universal waste; or
  - 2. The owner or operator of a facility that receives universal waste from other universal waste handlers, accumulates universal waste, and sends universal waste to another universal waste handler, to a destination facility, or to a foreign destination.
- (b) Does not mean:
  - 1. A person who treats (except under the provisions of 310 CMR 30.1034(1), (3), (4) or (5), or 30.1044(1), (3), (4) or (5)), disposes of, or recycles universal waste; or
  - 2. A person engaged in the off-site transportation of universal waste by air, rail, highway, or water, including a universal waste transfer facility.

<u>Universal Waste Transfer Facility</u> means any transportation-related facility, including loading docks, parking areas, storage areas and other similar areas where shipments of universal waste batteries are held during the normal course of transportation for ten days or less.

<u>Universal Waste Transporter</u> means a person engaged in the off-site transportation of universal waste by air, rail, highway, or water.

<u>Waste Pesticide Collection Program</u> means a program for the collection of unused pesticide products that has been authorized by the Department of Food and Agriculture that sets forth standards regarding the scope of the materials to be collected as well accumulation, storage, packaging, labeling, training, notification and transport.

[NOTE: The collection of pesticides at a Household Hazardous Waste Collection Center or Event does not constitute a Waste Pesticide Collection Program, unless such collection is operated in compliance with Department of Food and Agriculture collection program requirements, as well as 310 CMR 30.390.]

# 30.1020: Applicability - Wastes Covered

# (1) <u>Batteries</u>.

- (a) <u>Batteries Covered under 310 CMR 30.1000</u>. The requirements of 310 CMR 30.1000 apply to batteries, except those listed in 310 CMR 30.1020(1)(b).
- (b) <u>Batteries not Covered under 310 CMR 30.1000</u>. The requirements of 310 CMR 30.1000 do not apply to the following batteries:
  - 1. Spent lead-acid batteries that are managed under 310 CMR 30.280.
  - 2. Batteries that are not subject to hazardous waste regulation. A battery is not subject to hazardous waste regulation if it meets any of the following:
    - a. It has been used but has not yet been discarded or sent for recycling;
    - b. It has not been used and the handler has not decided to discard or recycle it; and
    - c. It does not exhibit one or more of the characteristics identified in 310 CMR 30.120.

# (2) <u>Pesticides</u>.

(a) <u>Pesticides Covered under 310 CMR 30.1000</u>. The requirements of 310 CMR 30.1000 apply to the following pesticides, except for those described in 310 CMR 30.1020(2)(b):

- 1. Recalled pesticides that are:
  - a. Stocks of a suspended and cancelled pesticide that are part of a voluntary or mandatory recall under FIFRA Section 19(b) or the Massachusetts Pesticide Control Act and their implementing regulations including, but not limited to, those owned by the registrant responsible for conducting the recall; or
  - b. Stocks of a suspended or cancelled pesticide, or a pesticide that is not in compliance with FIFRA or the Massachusetts Pesticide Control Act and their implementing regulations, that are part of a voluntary recall by the registrant.
- 2. Stocks of other unused pesticide products that are collected and managed as part of a Waste Pesticide Collection Program.
- (b) <u>Pesticides Not Covered under 310 CMR 30.1000</u>. The requirements of 310 CMR 30.1000 do not apply to pesticides that are not subject to hazardous waste regulation.
  - 1. A recalled pesticide described in 310 CMR 30.1020(2)(a)1. is not subject to hazardous waste regulation if either:
    - a. it has not been used and:
      - i. the handler has not decided to discard or recycle it; and
      - ii. the handler has not discarded or recycled it; or
    - b. the pesticide is not listed and does not exhibit one or more of the characteristics identified in 310 CMR 30.120.
  - 2. An unused pesticide product described in 310 CMR 30.1020(2)(a)2. is not subject to hazardous waste regulation if either:
    - a. the handler has not decided to discard or recycle it; or
    - b. the pesticide is not listed and does not exhibit one or more of the characteristics identified in 310 CMR 30.120.

### (3) Mercury Thermostats.

- (a) Thermostats Covered under 310 CMR 30.1000. The requirements of 310 CMR 30.1000 apply to thermostats except those listed in 310 CMR 30.1020(3)(b).
- (b) Thermostats Not Covered under 310 CMR 30.1000. The requirements of 310 CMR 30.1000 do not apply to thermostats that are not subject to hazardous waste regulation. A thermostat is not subject to hazardous waste regulation if it meets any of the criteria at 310 CMR 30.1020(1)(b)2.a. through c., it is not identified as a listed waste in 310 CMR 30.130, or if the mercury-containing components have been removed and the remaining unit meets the requirements of 30.1034(3)(c)3.

# (4) Mercury-containing Devices.

- (a) Mercury-containing devices Covered under 310 CMR 30.1000. The requirements of 310 CMR 30.1000 apply to mercury-containing devices except those listed in 310 CMR 30.1020(4)(b).
- (b) Mercury-containing Devices Not Covered under 310 CMR 30.1000. The requirements of 310 CMR 30.1000 do not apply to mercury-containing devices that are not subject to hazardous waste regulation. A mercury-containing device is not subject to hazardous waste regulation if it meets any of the criteria listed in 310 CMR 30.1020(1)(b)2.a. through c., it is not identified as a listed waste in 310 CMR 30.130, or if the mercury-containing components have been removed and the remaining unit meets the requirements of 30.1034(4)(c)3.

## (5) Mercury-containing Lamps.

- (a) Mercury-containing Lamps Covered under 310 CMR 30.1000. The requirements of 310 CMR 30.1000 apply to mercury-containing lamps, except those listed in 310 CMR 30.1020(5)(b).
- (b) Mercury-containing Lamps Not Covered under 310 CMR 30.1000. The requirements of 310 CMR 30.1000 do not apply to mercury-containing lamps, that are not subject to hazardous waste regulation. A mercury-containing lamp is not subject to hazardous waste regulation if it meets any of the criteria listed in 310 CMR 30.1020(1)(b)2.a. through c.

# 30.1031: Applicability

The provisions of 310 CMR 30.1031 through 30.1039, cited collectively as 310 CMR 30.1030, apply to small quantity handlers of universal waste.

### 30.1032: Prohibitions

- (1) A small quantity handler of universal waste is:
  - (a) Prohibited from disposing of universal waste; and
  - (b) Prohibited from diluting, treating or recycling universal waste, except by responding to releases as provided in 310 CMR 30.1036; or by managing specific wastes as provided in 310 CMR 30.1034.

## 30.1033: Notification, Change of Status, and Closure

- (1) A small quantity handler of universal waste is not required to notify the Department of universal waste handling activities.
- (2) A small quantity handler who has not already notified the Department of its hazardous waste activities and anticipates accumulating 5,000 kilograms or more total of universal waste shall send written notification of universal waste management to the Department, and receive an EPA Identification Number, before meeting or exceeding the 5,000-kilogram limit. If the Department prescribes a form for such a notification, the handler submitting the notification shall use such form when making the notification. Such a notification, at a minimum, shall specify that the handler has become a large quantity handler and shall also specify that the handler is in compliance with 310 CMR 30.1040. Each notification shall be signed, certified and submitted in compliance with 310 CMR 30.006 and 30.009. The handler shall not thereafter change status except as provided in 30.1043.
- (3) A small quantity handler of all universal wastes except batteries, who has already notified the Department of its hazardous waste activities and anticipates accumulating 5,000 kilograms or more total of universal waste, excluding batteries, shall submit to the Department, in writing, a change of status request. If the Department prescribes a form for such change of status requests, the handler submitting the change of status request shall use such form. Such a request, at a minimum, shall specify that the handler has become a large quantity handler and shall also specify that the handler is in compliance with 310 CMR 30.1040. Each change of status request shall be signed, certified and submitted in compliance with 310 CMR 30.006 and 310 CMR 30.009. The handler shall not thereafter change status except as provided in 310 CMR 30.1043. A small quantity handler of universal wastes batteries, who has already notified the Department of its hazardous waste activities and anticipates accumulating 5,000 kilograms or more of universal waste batteries, is not required to submit a change of status request.
- (4) A small quantity handler of universal waste who ceases operations shall comply with 310 CMR 30.689.

## 30.1034: Waste Management

- (1) <u>Universal Waste Batteries</u>. A small quantity handler of universal waste shall manage universal waste batteries in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:
  - (a) A small quantity handler of universal waste shall contain any universal waste battery that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions in a container. The container shall be closed, structurally sound, compatible with the contents of the battery, and shall lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.
  - (b) A small quantity handler of universal waste may conduct any of the following activities as long as the casing of each individual battery cell is not breached and remains intact and closed (except that cells may be opened to remove electrolyte but must be immediately closed after removal):
    - 1. Sorting batteries by type;
    - 2. Mixing battery types in one container;

- 3. Discharging batteries so as to remove the electric charge;
- 4. Regenerating used batteries;
- 5. Disassembling batteries or battery packs into individual batteries or cells;
- 6. Removing batteries from consumer products; or
- 7. Removing electrolyte from batteries.
- (c) A small quantity handler of universal waste who removes electrolyte from batteries or who generates other waste (*e.g.*, battery pack materials, discarded consumer products) as a result of the activities listed above, shall determine whether the other waste exhibits a characteristic of hazardous waste identified in 310 CMR 30.120.
  - 1. If the electrolyte or other waste exhibits a characteristic of hazardous waste, it is subject to all applicable requirements of 310 CMR 30.001 through 30.900. The handler is considered the generator of the hazardous waste and is subject to 310 CMR 30.300.
  - 2. If the electrolyte or other waste is not hazardous, the handler may manage the waste in any way that is in compliance with applicable federal, state and local solid waste laws and regulations.
- (d) <u>Labeling/Marking of Batteries</u>. Universal waste batteries *(i.e.*, each battery), or a container in which the batteries are contained, shall be labeled or marked clearly with any one of the following phrases: "Universal Waste–Battery(ies)", or "Waste Battery(ies)", or "Used Battery(ies)".
- (e) <u>Accumulation Standards</u>. A small quantity handler of universal waste shall accumulate universal waste batteries in compliance with 310 CMR 30.1034(6).
- (2) <u>Universal Waste Pesticides</u>. A small quantity handler of universal waste shall manage universal waste pesticides in a way that prevents releases of any universal waste or component of a universal waste to the environment and in compliance with all provisions of any applicable recall plan or Waste Pesticide Collection Program standards.
  - (a) The universal waste pesticides shall be contained in one or more of the following:
    - 1. A container that remains closed, structurally sound, compatible with the pesticide, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions; or
    - 2. A container that does not meet the requirements of 310 CMR 30.1034(2)(a)1., provided that the unacceptable container is overpacked in a container that does meet the requirements of 310 CMR 30.1034(2)(a)1.; or
    - 3. An above ground tank that meets the requirements of 310 CMR 30.340(1)(a)2. and 30.340(1)(f), (g), (i), (j) and (k); or
    - 4. A transport vehicle or vessel that is closed, structurally sound, compatible with the pesticide, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.
  - (b) <u>Labeling/Marking of Recalled Pesticides</u>. A container, (or multiple container package unit), tank, transport vehicle or vessel in which recalled universal waste pesticides as described in 310 CMR 30.1020(2)(a)1. are contained shall be labeled or marked clearly with:
    - 1. The label that was on or accompanied the product as sold or distributed; and
    - 2. The words "Universal Waste–Pesticide(s)" or "Waste Pesticide(s)";
  - (c) <u>Labeling/Marking of Pesticides Managed under a Waste Pesticide Collection Program</u>. A container, tank, or transport vehicle or vessel in which unused pesticide products as described in 310 CMR 30.1020(2)(a)2. are contained shall be labeled or marked clearly with:
    - 1. The label that was on the product when purchased, if still legible; or if the use of such label is not feasible, the appropriate label as required under the Department of Transportation regulation 49 CFR part 172; or
    - 2. If using the labels described in 310 CMR 30.1034(2)(c)1. is not feasible, another label prescribed or designated by the Waste Pesticide Collection Program; and
    - 3. The words "Universal Waste-Pesticide(s)" or "Waste Pesticide(s)."
  - (d) <u>Accumulation Standards</u>. A small quantity handler of universal waste shall accumulate universal waste pesticides in compliance with 310 CMR 30.1034(6).
- (3) <u>Universal Waste Thermostats</u>. A small quantity handler of universal waste shall manage universal waste thermostats in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

- (a) A small quantity handler of universal waste shall contain any universal waste thermostat that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions in a container. The container shall be closed, vapor tight, structurally sound, compatible with the contents of the thermostat, and shall lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.
- (b) A small quantity handler of universal waste may remove mercury-containing ampoules from universal waste thermostats provided the handler:
  - 1. Removes the ampoules in a manner designed to prevent breakage of the ampoules;
  - 2. Removes ampoules only over or in a containment device (e.g., tray or pan sufficient to collect and contain any mercury released from an ampoule in case of breakage);
  - 3. Ensures that a mercury clean-up system is readily available to immediately transfer any mercury resulting from spills or leaks from broken ampoules, from the containment device to a container that meets the requirements of 310 CMR 30.342(1)(a) through (g);
  - 4. Immediately transfers any mercury resulting from spills or leaks from broken ampoules from the containment device to a container that meets the requirements of 310 CMR 30.342(1)(a) through (g);
  - 5. Ensures that the area in which ampoules are removed is well ventilated and monitored to ensure compliance with applicable OSHA exposure levels for mercury, as in effect on July 1, 2012;
  - 6. Ensures that employees removing ampoules are thoroughly familiar with proper waste mercury handling and emergency procedures, including transfer of mercury from containment devices to appropriate containers; and
  - 7. Manages removed ampoules as a hazardous waste or regulated recyclable material in compliance with all applicable provisions of 310 CMR 30.001 through 310 CMR 30.900 and packs containers holding removed ampoules with packing materials adequate to prevent breakage during storage, handling and transportation.
- (c) A small quantity handler of universal waste who removes mercury-containing ampoules from thermostats shall:
  - 1. Determine whether the following exhibit a characteristic of hazardous waste identified in 310 CMR 30.120:
    - a. Mercury or clean-up residues resulting from spills or leaks; and/or
    - b. Other waste generated as a result of the removal of mercury-containing ampoules (*e.g.*, remaining thermostat components).
  - 2. If the mercury, residues, and/or other waste exhibit a characteristic of hazardous waste, it shall be managed in compliance with all applicable requirements of 310 CMR 30.001 through 30.900. The handler is considered the generator of the mercury, residues, and/or other waste and shall manage it in compliance with 310 CMR 30.300.
  - 3. If the mercury, residues, and/or other waste is not hazardous, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste regulations.
- (d) <u>Labeling/marking of Thermostats</u>. Universal waste thermostats (*i.e.*, each thermostat), or a container in which the thermostats are contained, shall be labeled or marked clearly with any one of the following phrases: "Universal Waste—Mercury Thermostat(s)", or "Waste Mercury Thermostat(s)", or "Used Mercury Thermostat(s)". If universal waste thermostats and universal waste mercury-containing devices are placed within the same container, then the labeling/marking provisions of 310 CMR 30.1034(4) shall apply.
- (e) <u>Accumulation Standards</u>. A small quantity handler of universal waste shall accumulate universal waste thermostats in compliance with 310 CMR 30.1034(6).
- (4) <u>Mercury-containing Devices</u>. A small quantity handler of universal waste shall manage universal waste mercury-containing devices in a way that prevents releases of any universal waste or component of a universal waste to the environment as follows:
  - (a) A small quantity handler shall hold in a container any universal waste mercury-containing device that has non-contained elemental mercury or that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions. The container shall be closed, vapor tight, structurally sound, compatible with the contents of the mercury-containing device, and shall lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

- (b) A small quantity handler of universal waste may:
  - 1. Mix different types of universal waste mercury-containing devices, or universal waste mercury-containing devices and universal waste thermostats, in one container; or
  - 2. Remove mercury-containing ampoules from universal waste mercury-containing devices provided the handler complies with 310 CMR 30.1034(3)(b)1. through 7. and 30.1034(4)(c).
  - 3. Remove the open original housing holding the mercury from universal waste mercury-containing devices provided the handler:
    - a. immediately seals the original housing with an air-tight seal to prevent the release of any mercury to the environment; and
    - b. complies with 310 CMR 30.1034(3)(b)1. through 7., and 310 CMR 30.1034(4)(c).
- (c) Management of mercury and mercury-containing residues.
  - 1. A small quantity handler of universal waste who removes mercury-containing ampoules from mercury-containing devices or seals mercury from open original housing from mercury-containing devices shall determine whether the following exhibit a characteristic of hazardous waste identified in 310 CMR 30.120:
    - a. Mercury or clean-up residues resulting from spills or leaks; and/or
    - b. Other waste generated as a result of the removal of mercury-containing ampoules or open original housing (e.g., remaining mercury-containing device units).
  - 2. If the mercury, residues, and/or other waste exhibit a characteristic of hazardous waste, such wastes shall be managed in compliance with all applicable requirements of 310 CMR 30.001 through 30.900. The handler is considered the generator of the mercury, residues, and/or other waste and shall manage such wastes in compliance with 310 CMR 30.300.
  - 3. If the mercury, residues, and/or other solid waste is not hazardous, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste laws and regulations.
- (d) <u>Labeling/Marking of Mercury-containing Devices</u>. Universal waste mercury-containing devices (*i.e.*, each mercury-containing device), or a container in which the mercury-containing devices are contained, shall be labeled or marked clearly with any one of the following phrases: "Universal Waste–Mercury-containing Device(s)", or "Waste Mercury-containing Device(s)", or "Used Mercury-containing Device(s)".
- (e) <u>Accumulation Standards</u>. A small quantity handler of universal waste shall accumulate universal waste mercury-containing devices in compliance with 310 CMR 30.1034(6).
- (5) <u>Mercury-containing Lamps</u>. A small quantity handler of universal waste shall manage universal waste mercury-containing lamps in a way that prevents releases of any universal waste or component of a universal waste to the environment as follows:
  - (a) A small quantity handler of universal waste must contain any lamp in a container or package that is structurally sound, adequate to prevent breakage, and compatible with the contents of the lamps. Such containers and packages must remain closed and must be maintained to prevent leakage, spillage or damage that could cause leakage under reasonably foreseeable conditions.

A small quantity handler must immediately cleanup and shall hold in a container any broken mercury-containing lamps and any lamp that shows evidence of breakage, leakage or damage that could cause the release of mercury or other hazardous constituents to the environment. The container shall be closed, vapor tight, structurally sound, compatible with the contents of the mercury-containing lamp, and shall lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions. Incidental numbers of broken mercury-containing lamps, resulting from unintentional breakage during routine handling and transportation, and managed in accordance with 310 CMR 30.1034(5)(a), may be shipped off-site as a universal waste.

- (b) A small quantity handler of universal waste may remove mercury-containing ampoules from universal waste mercury-containing lamps (*i.e.*, High Intensity Discharge lamps) provided the handler complies with 310 CMR 30.1034(3)(b)1. through 7., and 30.1034(5)(c).
- (c) <u>Management of Mercury and Mercury-containing Residues.</u>
  - 1. A small quantity handler of universal waste who conducts activities in compliance with 310 CMR 30.1034(5)(b)1. shall determine whether the following exhibit a characteristic of hazardous waste identified in 310 CMR 30.120:

- a. Mercury or clean-up residues resulting from spills or leaks; and/or
- b. Other waste generated as a result of the removal of mercury-containing ampoules (e.g., remaining mercury-containing lamp), crushing or dismantling of mercury-containing lamps.
- 2. Mercury ampoules, residues, and/or other wastes exhibiting a characteristic of hazardous waste, shall be managed in compliance with all applicable requirements of 310 CMR 30.001 through 30.900. The handler is considered the generator of the mercury ampoules, residues, and/or other waste and shall manage it in compliance with 310 CMR 30.300.
- 3. If the mercury ampoules, residues, and/or other solid waste are not hazardous, the handler may manage the waste in any way that is in compliance with applicable federal, state or local solid waste laws and regulations.
- (d) <u>Labeling/Marking of Mercury-containing Lamps</u>. Universal waste mercury-containing lamps (*i.e.*, each mercury-containing lamp), or a container in which the mercury-containing lamps are contained, shall be labeled or marked clearly with any one of the following phrases: "Universal Waste–Mercury-containing Lamp(s)", or "Waste Mercury-containing Lamp(s)", or "Used Mercury-containing Lamp(s)".
- (e) <u>Accumulation Standards</u>. A small quantity handler of universal waste shall accumulate universal waste mercury-containing lamps in compliance with 310 CMR 30.1034(6).

## (6) Accumulation Time Limits.

- (a) Provided the small quantity handler of universal waste is not the sponsor of a household hazardous waste collection event, a small quantity handler of universal waste may accumulate universal waste for no longer than one year from the date the universal waste is generated, or received from another handler, unless the requirements of 310 CMR 30.1034(6)(b) are met. A small quantity handler of universal waste who is a sponsor of a household hazardous waste collection event shall comply with the accumulation limits of 310 CMR 30.392(2).
- (b) Provided the small quantity handler of universal waste is not a sponsor of a household hazardous waste collection event, a small quantity handler of universal waste may accumulate universal waste for longer than one year from the date the universal waste is generated, or received from another handler, if such activity is solely for the purpose of accumulation of such quantities of universal waste as necessary to facilitate proper recovery, treatment, or disposal. However, the handler bears the burden of proving that such activity is solely for the purpose of accumulation of such quantities of universal waste as necessary to facilitate proper recovery, treatment, or disposal.
- (c) A small quantity handler of universal waste who accumulates universal waste shall be able to demonstrate the length of time that the universal waste has been accumulated from the date it becomes a waste or is received. The handler shall make this demonstration by:
  - 1. Placing the universal waste in a container and marking or labeling the container with the earliest date that any universal waste in the container became a waste or was received;
  - 2. Marking or labeling each individual item of universal waste that is not in a container described in 310 CMR 30.1034(6)(c)1. with the date it became a waste or was received, excluding any mercury-containing lamps, mercury-containing devices with non-contained elemental mercury, and any item of universal waste which shows evidence of leakage, spillage or damage that could cause leakage under reasonably foreseeable conditions. Such items must be placed in a container pursuant to the applicable management requirements for universal waste handlers at 310 CMR 30.1034;
  - 3. Maintaining an inventory system on-site that identifies the date each universal waste became a waste or was received;
  - 4. Maintaining an inventory system on-site that identifies the earliest date that any universal waste in a group of universal waste items or a group of containers of universal waste became a waste or was received;
  - 5. Placing the universal waste in a specific accumulation area and identifying the earliest date that any universal waste in the area became a waste or was received; or
  - 6. Any other method which clearly demonstrates the length of time that the universal waste has been accumulated from the date it becomes a waste or is received.

## 30.1035: Employee Training

A small quantity handler of universal waste shall inform all employees who handle or have responsibility for managing universal waste of proper handling and emergency procedures appropriate to the type(s) of universal waste handled at the facility. For examples of topics that can be addressed in employee training, *see* 310 CMR 30.516(2).

### 30.1036: Response to Releases

- (1) A small quantity handler of universal waste shall immediately contain all releases of universal wastes and other residues from universal wastes.
- (2) A small quantity handler of universal waste shall determine whether any material resulting from the release is hazardous waste, and if so, shall manage the hazardous waste in compliance with all applicable requirements of 310 CMR 30.001 through 30.900. The handler is considered the generator of the material resulting from the release, and shall manage it in compliance with 310 CMR 30.300.

# 30.1037: Off-site Shipments

- (1) A small quantity handler of universal waste is prohibited from sending or taking universal waste to a place other than another universal waste handler, a destination facility, or a foreign destination.
- (2) If a small quantity handler of universal waste self-transports universal waste off-site, the handler becomes a universal waste transporter for those self-transportation activities and shall comply with the transporter requirements of 310 CMR 30.1050 while transporting the universal waste.
- (3) If a universal waste being offered for off-site transportation meets the definition of hazardous materials under 49 CFR parts 171 through 180, a small quantity handler of universal waste shall package, label, mark and placard the shipment, and prepare the proper shipping papers in compliance with the applicable Department of Transportation regulations under 49 CFR parts 172 through 180.
- (4) Prior to sending a shipment of universal waste to another universal waste handler, the originating handler shall ensure that the receiving handler agrees to receive the shipment.
- (5) If a small quantity handler of universal waste sends a shipment of universal waste to another handler or to a destination facility and the shipment is rejected by the receiving handler or destination facility, the originating handler shall either:
  - (a) Receive the waste back when notified that the shipment has been rejected; or
  - (b) Agree with the receiving handler on a destination facility to which the shipment will be sent.
- (6) A small quantity handler of universal waste may reject a shipment containing universal waste, or a portion of a shipment containing universal waste received from another handler. If a handler rejects a shipment or a portion of a shipment, that handler shall contact the originating handler to notify him of the rejection and to discuss reshipment of the load. The handler shall:
  - (a) Send the shipment back to the originating handler; or
  - (b) If agreed to by both the originating and receiving handler, send the shipment to a destination facility.
- (7) If a small quantity handler of universal waste receives a shipment containing hazardous waste that is not a universal waste, the handler shall immediately notify the Department of the shipment, and provide the name, address and phone number of the originating shipper, and the type and amount of waste shipped. The Department will provide instructions for managing the hazardous waste.

## 30.1038: Tracking Universal Waste Shipments

A small quantity handler of universal waste is not required to keep records of shipments of universal waste.

### 30.1039: Exports

A small quantity handler of universal waste who sends universal waste to a foreign destination shall:

- (1) Comply with the requirements applicable to a primary exporter in 40 CFR 262.53, 262.56(a)(1) through (4), 262.56(a)(6), 262.56(b) and 262.57, as incorporated by reference at 310 CMR 30.361(2)(a), and (b);
- (2) Export such universal waste only upon consent of the receiving country and in conformance with the EPA Acknowledgment of Consent; and
- (3) Provide a copy of the EPA Acknowledgment of Consent for the shipment to the transporter transporting the shipment for export.

# 30.1040: Standards for Large Quantity Handlers of Universal Waste

# 30.1041: Applicability

The provisions of 310 CMR 30.1041 through 30.1049, cited collectively as 310 CMR 30.1040, apply to large quantity handlers of universal waste.

## 30.1042: Prohibitions

A large quantity handler of universal waste is required to comply with the prohibitions stated at 310 CMR 30.1032.

# 30.1043: Notification

### (1) EPA Identification Number.

- (a) Except as provided in 310 CMR 30.1043(1)(b), a large quantity handler of universal waste shall have sent written notification of universal waste management to the Department, and received an EPA Identification Number, before meeting or exceeding the 5,000-kilogram accumulation limit.
- (b) A large quantity handler of any universal waste, except batteries, that has already notified the Department of its hazardous waste management activities and has received an EPA Identification Number is not required to obtain another EPA Identification Number, but shall notify the Department of its universal waste activity, excluding batteries. A large quantity handler of universal waste batteries that has already received an EPA Identification Number is not required to notify the Department of its universal waste battery activity.
- (2) This notification shall include:
  - (a) The universal waste handler's name and mailing address;
  - (b) The name and business telephone number of the person at the universal waste handler's site who should be contacted regarding universal waste management activities;
  - (c) The address or physical location of the universal waste management activities;
  - (d) A list of all of the types of universal waste managed by the handler; and
  - (e) A statement indicating that the handler is accumulating 5,000 kilograms or more of universal waste at one time.

#### 30.1043: continued

- (3) A large quantity handler of any universal waste, except batteries, who ceases to be a large quantity handler and seeks to become a small quantity handler of any universal waste, except batteries, may submit to the Department, in writing, a change of status request. If the Department prescribes a form for such a notification, the handler submitting the notification shall use such form when making the notification. Such a notification shall, at a minimum, specify that the handler has become a small quantity handler and shall also specify that the handler is in compliance with 310 CMR 30.1030. Each change of status notification shall be signed, certified and submitted in compliance with 310 CMR 30.006 and 310 CMR 30.009. No change of status shall take effect, unless and until a change of status request is submitted to the Department in compliance with this paragraph and the time limit imposed by 310 CMR 30.1043(4) has passed. A large quantity handler of universal waste batteries, who ceases to be a large quantity handler and seeks to become a small quantity handler of batteries, is not required to submit a change of status request.
- (4) Where a notification has been received by the Department in compliance with 310 CMR 30.1033(1) and (2) or a change of status request has been received by the Department in compliance with 310 CMR 30.1033(3), the designation of large quantity handler of universal waste shall be retained through the end of the calendar year in which the change of status request was received.
- (5) A large quantity handler of universal waste who ceases operations shall comply with 310 CMR 30.689. If such a handler wishes to cease having the status of a handler at that site, the handler may submit to the Department, in writing, a change of status request on a form prescribed by the Department, signed, certified and submitted in compliance with 310 CMR 30.006 and 310 CMR 30.009.

## 30.1044: Waste Management

- (1) <u>Universal Waste Batteries</u>. A large quantity handler of universal waste shall manage universal waste batteries in compliance with 310 CMR 30.1034(1)(a) through (e).
- (2) <u>Universal Waste Pesticides</u>. A large quantity handler of universal waste shall manage universal waste pesticides in compliance with 310 CMR 30.1034(2)(a) through (d).
- (3) <u>Universal Waste Thermostats</u>. A large quantity handler of universal waste shall manage universal waste thermostats in compliance with 310 CMR 30.1034(3)(a) through (e).
- (4) <u>Mercury-containing Devices</u>. A large quantity handler of universal waste shall manage universal waste mercury-containing devices in compliance with 310 CMR 30.1034(4)(a) through (e).
- (5) <u>Mercury-containing Lamps</u>. A large quantity handler of universal waste shall manage universal waste mercury-containing lamps in compliance with 310 CMR 30.1034(5)(a) through (e).

## 30.1045: Employee Training

A large quantity handler of universal waste shall ensure that all employees are thoroughly familiar with proper universal waste handling and emergency procedures, relative to their responsibilities during normal facility operations and emergencies. For examples of topics that can be addressed in employee training, *see* 310 CMR 30.516(2).

## 30.1046: Response to releases

A large quantity handler of universal waste shall comply with 310 CMR 30.1036.

## 30.1047: Off-site shipments

A large quantity handler of universal waste shall comply with 310 CMR 30.1037.

# 30.1048: Tracking universal waste shipments

- (1) Receipt of shipments. A large quantity handler of universal waste shall keep a record of each shipment of universal waste received. The record shall take the form of a log, invoice, manifest, bill of lading, or other shipping document. All record-keeping shall be in compliance with 310 CMR 30.007. The record for each shipment of universal waste received shall include the following information:
  - (a) The name and address of the originating universal waste handler or foreign shipper from whom the universal waste was sent;
  - (b) The quantity of each type of universal waste received;
  - (c) The date of receipt of the shipment of universal waste.
- (2) <u>Shipments off-site</u>. A large quantity handler of universal waste shall keep a record of each shipment of universal waste it sends off-site. The record shall take the form of a log, invoice, manifest, bill of lading or any other shipping document. The record for each shipment of universal waste sent shall include the following information:
  - (a) The name and address of the universal waste handler, destination facility, or foreign destination to whom the universal waste was sent;
  - (b) The quantity of each type of universal waste sent; and
  - (c) The date the shipment of universal waste left the site.

## (3) Record retention.

- (a) A large quantity handler of universal waste shall retain the records described in 310 CMR 30.1048(1) for at least three years from the date of receipt of a shipment of universal waste. This period shall be automatically extended for the duration of any enforcement action
- (b) A large quantity handler of universal waste shall retain the records described in 310 CMR 30.1048(2) for at least three years from the date a shipment of universal waste left the facility. This period shall be automatically extended for the duration of any enforcement action.

# 30.1049: Exports

A large quantity handler of universal waste who sends universal waste to a foreign destination shall comply with 310 CMR 30.1039.

# 30.1050: Standards for Universal Waste Transporters

## 30.1051: Applicability

The provisions of 310 CMR 30.1051 through 30.1059, cited collectively as 310 CMR 30.1050, apply to universal waste transporters.

## 30.1052: Prohibitions

- (1) A universal waste transporter is prohibited from:
  - (a) disposing of or recycling universal waste; and
  - (b) diluting or treating universal waste, except by responding to releases as provided in 310 CMR 30.1054.

## 30.1053: Waste Management

- (1) A universal waste transporter shall comply with all applicable U.S. Department of Transportation regulations in 49 CFR part 171 through 180 for transport of any universal waste<sup>1</sup> that meets the definition of hazardous material in 49 CFR 171.8.
- (2) Transporters shall comply with the following requirements regarding universal wastes in transit:
  - (a) A universal waste transporter may hold universal waste batteries at a universal waste transfer facility for ten days or less.
  - (b) If a universal waste transporter holds universal waste batteries for more than ten days, the transporter becomes a universal waste handler and must comply with the applicable requirements of 310 CMR 30.1030 or 30.1040 while holding the universal waste.
  - (c) For all universal wastes other than batteries managed in compliance with 310 CMR 30.1053(2)(a) or (b), a universal waste transporter shall comply with 310 CMR 30.408 regarding wastes in transit. [Note: five day limit and other restrictions apply under 310 CMR 30.408.]

### 30.1054: Response to Releases

- (1) A universal waste transporter shall immediately contain all releases of universal wastes and other residues from universal wastes.
- (2) A universal waste transporter shall determine whether any material resulting from the release is hazardous waste, and if so, it is subject to all applicable requirements of 310 CMR 30.001 through 30.900. If the waste is determined to be a hazardous waste, the transporter is subject to 310 CMR 30.300.

## 30.1055: Off-site Shipments

- (1) A universal waste transporter is prohibited from transporting the universal waste to a place other than a universal waste handler, a destination facility or a foreign destination.
- (2) If the universal waste being shipped off-site meets the Department of Transportation's definition of hazardous materials under 49 CFR 171.8, the shipment shall be properly described on a shipping paper in compliance with the applicable Department of Transportation regulations under 49 CFR part 172.

## 30.1056: Exports

A universal waste transporter transporting a shipment of universal waste to a foreign destination may not accept a shipment if the transporter knows the shipment does not conform to the EPA Acknowledgment of Consent. In addition the transporter shall ensure that:

- (1) A copy of the EPA Acknowledgment of Consent accompanies the shipment; and
- (2) The shipment is delivered to the facility designated by the person initiating the shipment.

## 30.1060: Standards for Destination Facilities

The provisions of 310 CMR 30.1061 through 30.1069, cited collectively as 310 CMR 30.1060, apply to destination facilities.

For purposes of the Department of Transportation regulations, a material is considered a hazardous waste if it is subject to the hazardous waste manifest requirements specified in 310 CMR 30.300. Because universal waste does not require a hazardous waste manifest, it is not considered hazardous waste under the Department of Transportation regulations.

# 30.1061: Applicability

The owner or operator of a destination facility is subject to all applicable requirements of 310 CMR 30.001 through 30.200 and 310 CMR 30.500 through 30.900.

# 30.1062: Shipments

- (1) The owner or operator of a destination facility is prohibited from sending or taking universal waste to a place other than another destination facility, or a foreign destination, except as provided in 310 CMR 30.1062(2)(a).
- (2) The owner or operator of a destination facility may reject a shipment containing universal waste, or a portion of a shipment containing universal waste. If the owner or operator of the destination facility rejects a shipment or a portion of a shipment, it shall contact the shipper to notify him of the rejection and to discuss reshipment of the load. The owner or operator of the destination facility shall:
  - (a) Send the shipment back to the original shipper, or
  - (b) If agreed to by both the shipper and the owner or operator of the destination facility, send the shipment to another destination facility.
- (3) If the owner or operator of a destination facility receives a shipment containing hazardous waste that is not a universal waste, the owner or operator of the destination facility shall immediately notify the Department in writing of the shipment, and provide the name, address, and phone number of the shipper and the type and amount of waste shipped. The facility owner or operator must manage the hazardous waste in compliance with 310 CMR 30.000.

## 30.1063: Tracking Universal Waste Shipments

- (1) The owner or operator of a destination facility shall keep a record of each shipment of universal waste received at the facility. The record shall take the form of a log, invoice, manifest, bill of lading, or other shipping document. The record for each shipment of universal waste received shall include the following information:
  - (a) The name and address of the universal waste handler, destination facility, or foreign shipper from whom the universal waste was received;
  - (b) The quantity of each type of universal waste received;
  - (c) The date of receipt of the shipment of universal waste.
- (2) The owner or operator of a destination facility shall retain the records described in 310 CMR 30.1063(1) for at least three years from the date of receipt of a shipment of universal waste. This period shall be automatically extended for the duration of any enforcement action. All record-keeping shall be in compliance with 310 CMR 30.007.

# 30.1070: Import Requirements

The provisions of 310 CMR 30.1071 through 30.1079, cited collectively as 310 CMR 30.1070, apply to universal wastes that are imported from a foreign country.

## 30.1071: Imports

Persons managing universal waste that is imported from a foreign country into Massachusetts are subject to the applicable requirements of 310 CMR 30.1000, immediately after the waste enters Massachusetts.

## 30.1080: Addition of Other Wastes Under 310 CMR 30.1000

## 30.1081: General

(1) The Department may add a hazardous waste or a category of hazardous waste to the universal waste regulations of 310 CMR 30.1000 either on its own initiative or in response to a written request.

#### 30.1081: continued

- (2) Each request to add a hazardous waste or a category of hazardous waste shall be submitted to the Department and include:
  - (a) The requester's name and address;
  - (b) A statement of the requester's interest in the addition of the waste to the universal waste rule;
  - (c) A description of the waste requested to be added to the universal waste rule and a description of the methods by which the waste is requested to be managed; and
  - (d) A statement of the need and justification for adding the new waste to the universal waste rule based upon the criteria contained within 310 CMR 30.1082, including any supporting tests, studies, or other information.
- (3) The Department will include additional wastestreams in the Universal Waste Rule only if it finds that regulation under 310 CMR 30.1000:
  - (a) is appropriate for the waste or category of waste;
  - (b) will improve management practices for the waste or category of waste; and
  - (c) will improve implementation of the hazardous waste program.
- (4) In making decisions to add hazardous waste or a category of hazardous waste to the Universal Waste Rule, the Department will consider the factors listed in 310 CMR 30.1082. The decision will be based on the weight of evidence showing that the standard established in 310 CMR 30.1081(3) has been satisfied.
- (5) During any stage of the evaluation, the Department may solicit additional information needed to evaluate the merits of adding a new waste to the universal waste rule.

## 30.1082: Factors for adding other wastes under 310 CMR 30.1000

- (1) The waste or category of waste, as generated by a wide variety of generators, is listed in 310 CMR 30.130, or (if not listed) a proportion of the waste stream exhibits one or more characteristics of hazardous waste identified in 310 CMR 30.120. (When a characteristic waste is added to the universal waste regulations of 310 CMR 30.1000 by using a generic name to identify the waste category (*e.g.*, batteries), the definition of universal waste in 310 CMR 30.1020 will be amended to include only the hazardous waste portion of the waste category (*e.g.*, hazardous waste batteries). Thus, only the portion of the waste stream that does exhibit one or more characteristics (*i.e.*, is hazardous waste) is subject to the universal waste regulations of 310 CMR 30.1000;
- (2) The waste or category of waste is not exclusive to a specific industry or group of industries, is commonly generated by a wide variety of types of establishments (including, for example, households, retail and commercial businesses, office complexes, very small quantity generators, small businesses, government organizations, as well as large industrial facilities);
- (3) The waste or category of waste is generated by a large number of generators (*e.g.*, more than 1,000 nationally) and is frequently generated in relatively small quantities by each generator;
- (4) Systems to be used for collecting the waste or category of waste (including packaging, marking, and labeling practices) would ensure close stewardship (i.e., proper care and control) of the waste;
- (5) The risk posed by the waste or category of waste during accumulation and transport is relatively low compared to other hazardous wastes. Any specific management standards proposed (*e.g.*, waste management requirements appropriate to be added to 310 CMR 30.1034, 30.1044, and 30.1053; and/or applicable Department of Transportation requirements) shall be protective of public health, safety, welfare and the environment during accumulation and transport;

#### 30.1082: continued

- (6) Regulation of the waste or category of waste under 310 CMR 30.1000 will increase the likelihood that the waste will be diverted from non-hazardous waste management systems (*e.g.*, the municipal waste stream, non-hazardous industrial or commercial waste stream, municipal sewer or stormwater systems) to recycling, treatment, or disposal in compliance with M.G.L. c. 21C and 310 CMR 30.000.
- (7) Regulation of the waste or category of waste under 310 CMR 30.1000 will improve implementation of and compliance with the hazardous waste regulatory program; and/or
- (8) Such other factors as may be deemed appropriate by the Department.

## 30.1100: Wastes and Activities Subject to Waiver

310 CMR 30.1100 through 30.1103, cited collectively as 310 CMR 30.1100, is promulgated pursuant to the authority set forth in M.G.L. c. 21C, § 4 and 310 CMR 30.001, and sets forth requirements for wastes and activities determined by the Department to be insignificant as a potential hazard to public health, safety, welfare or the environment, or the handling, treating, storing, use, processing, or disposal of which is adequately regulated by another governmental agency, consistent with regulations promulgated under the federal Resource Conservation and Recovery Act as administered by U.S. EPA.

## 30.1101: General Requirements for Wastes and Activities Subject to Waiver

- (1) Any person who engages in any activity subject to 310 CMR 30.1100 may do so without complying with the specific requirements expressly waived by 310 CMR 30.1100 or by any waiver determination from the Department, provided that such person complies with the applicable terms and conditions set forth in 310 CMR 30.1100 and in any waiver determination, and all other applicable requirements in 310 CMR 30.0000 that are not expressly waived. All provisions of 310 CMR 30.0000 that are not expressly waived in 310 CMR 30.1100 shall remain in effect for that activity.
- (2) If a person fails to comply with any term or condition of a waiver determination or any requirement set forth or referenced in 310 CMR 30.1100, or if the Department determines that a waste or activity is no longer insignificant as a potential hazard to public health, safety, welfare or the environment or is no longer adequately regulated by another governmental agency, when managed or conducted in compliance with the conditions of the waiver and the requirements set forth in 310 CMR 30.1100, the Department may:
  - (a) order the person to cease any further activity otherwise allowed under 310 CMR 30.1100 and to comply with all provisions of 310 CMR 30.0000 that apply in the absence of any waiver (including but not limited to obtaining a valid license from the Department),
  - (b) modify, suspend, or revoke any waiver determination, at the Department's discretion, and
  - (c) take any other action authorized by law.

# 30.1102: Case-by-case Waiver Determinations for Specific Hazardous Wastes and Activities

- (1) For wastes and activities that the Department determines are insignificant as a potential hazard to public health, safety, welfare or the environment or are adequately regulated by another government agency, consistent with regulations promulgated under the Resource Conservation and Recovery Act, the Department may grant a person a waiver from any or all of the requirements of 310 CMR 30.0000 that are more stringent than the minimum federal requirements promulgated under the Resource Conservation and Recovery Act.
- (2) All generators shall manage hazardous waste in accordance with all applicable provisions of 310 CMR 30.0000, provided however, if the Department issues a written positive waiver determination to a generator, such generator shall comply with all terms and conditions of such determination and all applicable requirements of 310 CMR 30.0000 not expressly waived in such determination.

- (3) Any person seeking a waiver of any requirement in 310 CMR 30.0000, not expressly waived by other provisions in 310 CMR 30.0000, shall submit a request for waiver on a form acceptable to the Department and shall include:
  - (a) The applicant's name, address, and EPA Identification Number or Massachusetts Identification Number;
  - (b) The name and telephone number of an individual responsible for supervising the waste and/or management activities addressed in the application;
  - (c) A detailed description of the waste and activity, and the basis for the person's assertion that it is insignificant as a potential hazard to public health, safety, welfare, or the environment, or that it is adequately regulated by another governmental agency consistent with regulations promulgated under the Resource Conservation and Recovery Act;
  - (d) A description of the proposed method of management, including a description of required equipment;
  - (e) A statement of each requirement for which a waiver is sought;
  - (f) A statement of the need and justification for a waiver of hazardous waste requirements, including any supporting tests, studies, or other information; including but not limited to information on the volume, quantity, toxicity, frequency and rate of generation of the waste;
  - (g) A demonstration that the waiver sought is from a requirement or requirements that are more stringent than the minimum federal requirements promulgated under the Resource Conservation and Recovery Act;
  - (h) Such other information as the Department may require to determine that the proposed waste management activity will be in compliance with 310 CMR 30.1100 and either will be insignificant as a potential hazard to public health, safety, welfare or the environment or is adequately regulated by another government agency, and that any waiver will not result in the Department's requirements applicable to the person becoming less stringent than the minimum federal requirements promulgated under the Resource Conservation and Recovery Act;
  - (i) A signature certified pursuant to 310 CMR 30.009; and
  - (j) If applicable, compliance with, and remittance of any fee established pursuant to, any applicable provision of 310 CMR 4.00.
- (4) The burden shall be on the applicant to persuade the Department that the waste or activity is insignificant as a potential hazard to public health, safety, welfare, or the environment or is adequately regulated by another governmental agency, and that the waiver being sought is from a requirement or requirements that are more stringent than and that the post-waiver requirements would not be less stringent than the minimum federal requirements promulgated under the Resource Conservation and Recovery Act.
- (5) The Department will notify the applicant of the Department's determination in writing. The Department will consider factors such as the volume, quantity, toxicity, or frequency and rate of generation, and such other criteria, as it deems appropriate for the waste or activity.
- (6) A determination pursuant to 310 CMR 30.1102 is only applicable to a person that has requested and obtained a positive waiver determination from the Department. No waiver may be assigned or transferred without the written approval of the Department.
- (7) A determination pursuant to 310 CMR 30.1102 shall apply only to the waste or activity specified in the determination.
- (8) The Department may grant a waiver, and may allow a waiver to remain in effect, but only to the extent, and only while, the Department is persuaded that such waste or activity is insignificant as a potential hazard to public health, safety, welfare, or the environment or is adequately regulated by another governmental agency and only if the waiver is from a requirement or requirements that are more stringent than the minimum federal requirements promulgated under the Resource Conservation and Recovery Act.

# 30.1103: Treatment of Corrosive Hazardous Waste in an Elementary Neutralization Unit

- (1) A generator of aqueous corrosive hazardous waste may conduct elementary neutralization of such waste in an elementary neutralization unit at the site of generation in *lieu* of the licensing requirements of 310 CMR 30.500 through 30.900 for treatment of corrosive hazardous waste, provided that the generator complies with all provisions in 310 CMR 30.1103 and all applicable generator provisions in 310 CMR 30.0000.
- (2) No person shall conduct elementary neutralization of any hazardous waste in an elementary neutralization unit without a license, except for corrosive hazardous waste that:
  - (a) prior to treatment is aqueous;
  - (b) is hazardous solely because it exhibits the corrosivity characteristic defined in 310 CMR 30.123(1)(a); and
  - (c) if the waste is listed in 310 CMR 30.131, is listed solely because it exhibits the corrosivity characteristic.
- (3) Any large or small quantity generator that conducts elementary neutralization of aqueous corrosive hazardous waste in an elementary neutralization unit pursuant to 310 CMR 30.1103 in *lieu* of obtaining a valid treatment license from the Department shall not neutralize corrosive waste in a manner that:
  - (a) presents a danger to public health, safety, welfare or the environment, including but not limited to generation of toxic vapors or fumes;
  - (b) generates extreme heat or pressure; or
  - (c) damages the structural integrity of the container or tank containing the waste.

## REGULATORY AUTHORITY

310 CMR 30.000: M.G.L. c. 21C, §§ 4 and 6; c. 21E, § 6.

NON-TEXT PAGE