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# Background Document and Proposed Amendments to

# 310 CMR 30.000
# Hazardous Waste

# and

# 310 CMR 16.00
# Site Assignment Regulations For Solid Waste Facilities

**January 11, 2019**

**REGULATORY AUTHORITY:**
**M.G.L. c. 21A, §§ 2 and 8, c. 21C, §§ 4 and 6, c. 21H, § 7, and c. 111, §§ 150A and 150A½**

## Table of Contents

# I. Introduction

The following set of proposed amendments to the hazardous waste regulations includes several key proposals, as well as a number of miscellaneous revisions. The key proposals relate to adoption of the federal rules for academic laboratories, the addition of multiple federal hazardous waste codes and their underlying hazardous waste constituents, clarification on the shipping requirements for wastes generated from on-site treatment of photographic processing wastewaters, restrictions on fluorescent lamp crushing by very small quantity generators (VSQGs) and universal waste handlers, cathode ray tubes (with companion changes to 310 CMR 16.00) and solvent-contaminated wipes (rags).

# II. Hazardous Waste Generated at Laboratories - Academic Laboratories Rule

The Department is proposing to adopt the federal hazardous waste generator regulations equivalent to 40 CFR Part 262, Subpart K at 310 CMR 30.354, as they appear in the federal regulations, with a few minor exceptions which are described below.

As proposed, these requirements would apply to Eligible Academic Entities, which are colleges, universities, teaching hospitals and non-profit research institutes that are either owned by or formally affiliated with a college or university, that choose to opt into the rule. This optional, alternative set of regulations allows Eligible Academic Entities the flexibility to make hazardous waste determinations in the laboratory, at an on-site central accumulation area, or at an on-site treatment, storage, or disposal facility (TSDF). This rule also provides incentives for Eligible Academic Entities to clean-out old and expired chemicals that may pose unnecessary risk, and requires a Laboratory Management Plan (LMP) which is intended to result in safer laboratory practices and increased awareness of hazardous waste management.

The University Laboratories XL Project at 310 CMR 30.354 (which applies only to UMASS Boston and Boston College) will be replaced by the Academic Laboratories Rule once the Department has completed adoption of these rules. Eligible Academic Entities that choose not to opt into the new rule remain subject to the existing hazardous waste generator requirements.

The Department is proposing to adopt Subpart K with two additional state-only requirements. The first proposed requirement would include greater specificity regarding where documentation proving status as an "academic lab" will be kept. 40 CFR 262.203(d)-(e) requires that teaching hospitals and non-profit research institutes not owned by a college or university must keep a copy of its formal written affiliation agreement with a college or university on file. The Department is proposing to add at 310 CMR 30.354(3)(d)-(e). a requirement that such teaching hospitals and non-profit research institutes participating in the Academic Labs rule specify in their notifications to the Department that a copy of the formal written affiliation agreement is retained "*with the Director of Laboratories (or similar title for the management person overseeing operation of the laboratories).*" Subpart K does not require schools to submit a copy

of the agreement to the regulatory agency, and the Department believes that this additional requirement will allow inspectors to know ahead of time where to find the agreement.

The second state-only requirement proposes greater specificity for container labeling. This provision at 310 CMR 30.354(6)(a)1.c through e. would require generators to physically "affix or attach" a description of the "hazard of the chemical", the beginning date of accumulation, and information sufficient to make a hazardous waste determination to its containers of unwanted material. While 310 CMR 30.354(6)(a)1.b. requires unwanted material to be labeled with 'sufficient information to alert emergency responders to the contents of the container,' the Department believes it is not sufficient for the information in 310 CMR 30.354(6)(a)1.c through e. to simply be "associated with" the container (e.g., keeping an on-line record of waste inventory). The Department is adding this requirement to address the statement on p. 72929 of the *Federal Register* of the final Academic Laboratories rule (See 73 *Federal Register* 72929, December 1, 2008) that "[a]ssociated with" can mean using an electronic spreadsheet, etc. to document this information. The Department believes this approach makes the information less readily accessible to inspectors and could lead to abuse, since accumulation start dates and other information could easily be manipulated on electronic records. [Note: the information required at 30.354(6)(a)2. may be put on a label or "be associated with" the container, meaning such information may be accessed from computer via barcode or it can be affixed to the container as a label.] The Department is requesting comment on these state-only requirements and the remainder of the Academic Laboratories Rule.

Except for hazardous wastes generated during a one-time per twelve month clean-out, all hazardous wastes generated by academic laboratories become subject to the applicable Massachusetts generator rules once a waste determination is made, including counting the wastes when determining generator status (LQG, SQG and VSQG). This includes adherence to any more stringent State definitions and State generator requirements.

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**The Table of Contents is hereby amended as follows:**

30.354: ~~University Laboratories XL Project - Laboratory Environmental Management Standard~~ Alternative Requirements for Hazardous Waste Determination and Accumulation of Unwanted Material for Laboratories Owned by Eligible Academic Entities – Academic Laboratories Rule

**310 CMR 30.010 is hereby amended by inserting the following definitions:**

Insert the following immediately after "Cathode Ray Tube (CRT)":

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.

Insert the following immediately after "Collect":

College or University 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.

Insert the following immediately after "Elementary Neutralization Unit":

Eligible Academic Entity 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.

Insert the following immediately after Food-chain Crop:

Formal written affiliation agreement means:

(a) for a non-profit 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.

Insert the following immediately after "Key Staff Individual":

Laboratory, 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.

Laboratory clean-out 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.

Laboratory worker 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.

Insert the following immediately after "Non-commodity CRT":

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

Insert the following immediately after "RCRA":

Reactive acutely hazardous unwanted material means an unwanted material that is one of the acutely hazardous commercial chemical products listed in 310 CMR 30.136 for reactivity.

Insert the following immediately after "Tank System":

Teaching hospital means a hospital that trains students to become physicians, nurses or other health or laboratory personnel.

Insert the following immediately after "Threat of Release":

Trained professional means a person who has completed the applicable training requirements of 310 CMR 30.341(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.

Insert the following immediately after "Unused Waste Oil":

Unwanted material 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.

Insert the following immediately after "White Oil":

Working container 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.

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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.
(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, ~~Massachusetts universities and the departments participating in the Laboratory XL project ("Universities") are identified in Table 1 of 40 CFR 262.10, as in effect on September 28, 1999, and which is hereby adopted and incorporated by reference. These Universities~~ that generates ~~laboratory~~unwanted material ~~wastes~~ (as defined in 310 CMR 30.010~~40 CFR 262.102, as adopted and amended at 310 CMR 30.354(2)~~), some of which will be hazardous wastes, and that~~. As long as the University~~ complies with all of the requirements of ~~40 CFR 262, Subpart J, as adopted and amended at~~ 310 CMR 30.354,~~(2),~~ ~~the Universities' laboratories that are participating in the XL project are~~ is not subject to the following generator provisions with respect to ~~laboratory waste~~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, ~~or~~ Small Quantity Generators or Very Small Quantity Generators.

~~[NOTE: Pursuant to the Final Project Agreement, each University shall have the right to change its respective Departments or the on-site location of its hazardous waste accumulation areas listed in Table 1 of 40 CFR 262.10 upon written notice to the Regional Administrator for EPA Region I and the Department. Such written notice shall be provided at least ten days prior to the effective date of any such changes.]~~

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30.350: Special Generator Requirements

30.351: Small Quantity Generators

30.351(2) For the purpose of determining the quantities in 310 CMR 30.351(1):
(a) a generator shall include:

…

(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)); ~~and~~
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 this provision, 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, …

30.353: Very Small Quantity Generators

30.353(2) For the purpose of determining the quantities in 310 CMR 30.353(1):

(a) a generator shall include:

…

(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));
~~and~~
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 30.120-30.125) 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 this provision, 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, …

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30.354: ~~University Laboratories XL Project – Laboratory Environmental Management Standard~~ Alternative Requirements for Hazardous Waste Determination and Accumulation of Unwanted Material for Laboratories Owned by Eligible Academic Entities: Academic Laboratories Rule. This section 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 this section. This section is optional.

(1) Applicability. The provisions of 310 CMR 30.354 apply to any ~~the Universities~~ laboratory, as defined in 310 CMR 30.010,~~described in 310 CMR 30.301(5) which~~ 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) ~~have laboratories that are~~ is covered by a ~~L~~laboratory ~~Environmental M~~management ~~P~~plan in accordance with 310 CMR 30.354(14)~~and where laboratory scale activities result in laboratory waste (*See*, 40 CFR 262.105 (2006) as adopted and amended at 310 CMR 30.354(2) fordefinitions of EnvironmentalManagement Plan, Laboratory, Laboratory Scale, and Laboratory Waste.)~~; and
(~~b~~c) operates in compliance with 310 CMR 30.354.
(2) Purpose. The purpose of 310 CMR 30.354 is to provide an alternative ~~framework for a new~~ management system for wastes that are generated in ~~U~~college and university laboratories. ~~as stated in greater detail at 40 CFR 262.101 (2006) which is hereby adopted and incorporated by~~

~~reference together with the requirements of 40 CFR 262.102 through 262.107 (2006) subject to the following additions, modifications and exceptions:~~
~~(a) All references to the University of Vermont as well as its departments, laboratories and accumulation areas are hereby eliminated;~~
~~(b) In 262.104, the phrase "facility permitted to handle the waste under 40 CFR part 270 or in interim status under 40 CFR parts 265 and 270 (or authorized to handle the waste by a state with a hazardous waste management program approved under 40 CFR party 271)" is hereby replaced with "facility described in 310 CMR 30.305";~~
~~(c) At 40 CFR 262.104(f), "federal" is hereby replaced with "federal or state";~~
~~(d) Federal citations appearing within Subpart J of 40 CFR 262 are hereby replaced with the corresponding state code provisions:~~
~~1. References to "this part" or "this Subpart J" are replaced with "310 CMR 30.354";~~
~~2. References to "40 CFR 261" are replaced with "310 CMR 30.100";~~
~~3. References to "[40 CFR] Sec. 262.10(j)" are replaced with "310 CMR 30.301(5)";~~
~~4. At 262.104(i), references to "40 CFR 263.10(a)" is replaced with "310 CMR 30.401(3)";~~
~~5. At 262.104(i), the reference to "40 CFR 263.30 and 263.31" is replaced with "310 CMR 30.413"; and~~
~~6. References to "[40 CFR] Sec. 262.11(a) through (d)" are replaced with "310 CMR 30.302"; and~~
~~7. At 40 CFR 262.107, references to "EPA" are substituted with "the Department".~~

**(3) How an eligible academic entity indicates it will be subject to the requirements of this section.**

(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 this section 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 this section 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 this section, and must submit the Site Identification Form to the Department before it begins operating under this section.

(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 (except for Very Small Quantity Generators).

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.

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 this section.

(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 this section.

(e) A non-profit 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 non-profit 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 this section.

**(4) How an eligible academic entity indicates it will withdraw from the requirements of this section.**

(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 this section 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 this section 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.

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 this section.**

An eligible academic entity that chooses to be subject to this section 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 this section 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 this section.

**(6) Labeling and management standards for containers of unwanted material in the laboratory.**

An eligible academic entity shall manage containers of unwanted material while in the laboratory in accordance with the requirements in this section.

(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, and

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,

c. A description of the manner in which the chemical was produced or processed, if applicable.

(b) Management of Containers in the Laboratory: 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, and

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, or

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.

i. For the proper operation of laboratory equipment, such as with in-line collection of unwanted materials from high performance liquid chromatographs, or

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 this section 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; or

2. Formal classroom training; or

3. Electronic/written training; or

4. On-the-job training; or

5. Written or oral exams.

(c) 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); or

2. Syllabus for training session; or

3. Certificate of training completion; or

4. Test results.

(d) A trained professional shall:

1. 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 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 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 10 calendar days of the date that 55 gallons was exceeded, or at the next regularly scheduled removal, whichever comes first.

2. 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 10 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.**

(a) 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:

1. In the laboratory before the unwanted material is removed from the laboratory, in accordance with 310 CMR 30.354(10);

2. Within 4 calendar days of arriving at an on-site central accumulation area, in accordance with 310 CMR 30.354(11); and

3. Within 4 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) Making the hazardous waste determination in the laboratory before the unwanted material is removed from the laboratory.**

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 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:

1. 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) Making the hazardous waste determination at an on-site central accumulation area.**

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, and

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, and

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) Making the hazardous waste determination at an on-site interim status or licensed treatment, storage or disposal facility.**

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, and

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, and

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.

**(13) Laboratory clean-outs.**

(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 this section, 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 10 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 this section, including, but not limited to:

1. The requirement to remove all unwanted materials from the laboratory within 10 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 30.353(2)(a).

**(14) 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 this section, 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)-(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 this section. 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 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 10 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)-(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; and

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; and

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) Unwanted material that is not hazardous waste.**

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) Non-laboratory hazardous waste generated at an eligible academic entity.**

An eligible academic entity that generates hazardous waste outside of a laboratory is not eligible to manage that hazardous waste under this section; 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.

## III. New Hazardous Waste Codes

The Department is amending 310 CMR 30.130 by adding the following federal hazardous waste codes for which Massachusetts is not currently authorized:

Wood Preserving Wastes (F032, F034, F035);

Coke By-Product Wastes (K141, K142, K143, K144, K145, K147 and K148);

Carbamate Wastes (K156, K157, K158, K159, K161, P127, P128, P185, P189, P190, P191, P192, P194, P196, P197, P198, P199, P201, P202, P203, P205, U271, U278, U279, U280, U364, U367, U372, U373, U387, U389, U394, U395, U404, U409, U410, and U411);

Petroleum Refining Wastes (K169, K170, K171 and K172);

Organic Chemicals (K174 and K175); and,

Inorganic Chemicals (K176, K177 and K178).

Once the Department adopts these new waste codes, it will have enforcement authority for these wastes along with EPA. In addition, 310 CMR 30.160 is being amended to list the underlying hazardous waste constituents present in the waste codes listed above.

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**310 CMR 30.131 is hereby amended by inserting the following waste codes immediately after the F028 wastecode:**

F032 . . . 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 waste (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)

F034 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)

F035 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)

**310 CMR 30.132 is hereby amended by inserting the following waste codes immediately after the K087 waste code:**

| | | |
|---|---|---|
| Coking: | | |
| K060 | Ammonia still lime sludge from coking operations | (T) |
| K087 | Decanter tank tar sludge from coking operations | (T) |
| K141 | 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) |
| K144 | 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) |

**310 CMR 30.132 is hereby amended by adding the following "K" wastes in alphanumeric order (by the first column) to the subgroup "Organic chemicals":**

Organic
Chemicals:

K156 Organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes. (T)

K157 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)

K161 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.).

K174 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 non-hazardous 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)

K175 Wastewater treatment sludges from the production of vinyl chloride monomer using mercuric chloride catalyst in an acetylene-based process (T)

**310 CMR 30.132 is further amended by adding the following "K" wastes in alphanumeric order (by the first column) to the subgroup "Inorganic Chemicals":**

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)

**310 CMR 30.136 is hereby amended by adding the following "P" wastes in alphabetic order (by the third column)**

| | | |
|---|---|---|
| P203 | 1646-88-4 | Aldicarb sulfone |
| P127 | 1563-66-2 | 7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate |
| P189 | 55285-14-8 | 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 | 5285-14-8 | Carbosulfan |
| P202 | 64-00-6 | m-Cumenyl methylcarbamate |
| P191 | 644-64-4 | Dimetilan |
| P185 | 26419-73-8 | 1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O-[(methylamino)-carbonyl]oxime |
| P194 | 23135-22-0 | Ethanimidothioc acid, 2-(dimethylamino)-N-[[(methylamino) carbonyl]oxy]-2-oxo-, methyl ester |
| P198 | 23422-53-9 | Formetanate hydrochloride |
| P197 | 17702-57-7 | Formparanate |
| P192 | 119-38-0 | Isolan |
| P202 | 64-00-6 | 3-Isopropylphenyl N-methylcarbamate |
| P196 | 15339-36-3 | Manganese, bis(dimethylcarbamodithioato-S,S')-, |
| P196 | 15339-36-3 | Manganese dimethyldithiocarbamate |
| 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]- |
| P199 | 2032-65-7 | Methiocarb |

| | | |
|---|---|---|
| P190 | 1129-41-5 | Metolcarb |
| P128 | 315-18-4 | Mexacarbate |
| P194 | 23135-22-0 | Oxamyl |
| 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 |
| P201 | 2631-37-0 | Promecarb |
| P203 | 1646-88-4 | Propanal, 2-methyl-2-(methyl-sulfonyl)-, O -[(methylamino)carbonyl] oxime |
| P185 | 26419-73-8 | Tirpate |
| P205 | 137-30-4 | Zinc, bis(dimethylcarbamodithioato-S,S')- |
| P205 | 137-30-4 | Ziram |

**310 CMR 30.133 is hereby amended by adding the following "U" wastes in alphabetic order (by the third column)**

| | | |
|---|---|---|
| U394 | 30558-43-1 | A2213 |
| U280 | 101-27-9 | Barban |
| U278 | 22781-23-3 | Bendiocarb |
| U364 | 22961-82-6 | Bendiocarb phenol |
| U271 | 17804-35-2 | Benomyl |
| 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- |
| U367 | 1563-38-8 | 7-Benzofuranol, 2,3-dihydro-2,2-dimethyl- |
| 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 |

| | | |
|---|---|---|
| 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 |
| 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 |
| U395 | 5952-26-1 | Diethylene glycol, dicarbamate |
| U404 | 121-44-8 | Ethanamine, N,N-diethyl |
| U410 | 59669-26-0 | Ethanimidothioic acid, N,N'-[thiobis[(methylimino)carbonyloxy]]bis-, dimethyl ester |
| U394 | 30558-43-1 | Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-, methyl ester |
| U395 | 5952-26-1 | Ethanol, 2,2'-oxybis-, dicarbamate |
| U279 | 63-25-2 | 1-Naphthalenol, methylcarbamate |
| U411 | 114-26-1 | Phenol, 2-(1-methylethoxy)-, methylcarbamate |
| U373 | 122-42-9 | Propham |
| U411 | 114-26-1 | Propoxur |
| U410 | 59669-26-0 | Thiodicarb |
| U409 | 23564-05-8 | Thiophanate-methyl |
| U389 | 2303-17-5 | Triallate |
| U404 | 121-44-8 | Triethylamine |

**310 CMR 30.132 is hereby amended by adding the following waste streams to subgroup "Petroleum Refining", in alphanumeric order:**

Petroleum Refining:

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). (I,T)
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)

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**310 CMR 30.160 is hereby amended to include the underlying hazardous waste constituents present in the waste codes listed above by inserting alphabetically the following entries:**

| 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 |
| * * * * * * * * | | | |
| Aldicarb sulfone | Propanal, 2-methyl-2 -(methylsulfonyl)-, O-[(methylamino) carbonyl] oxime | 1646-88-4 | P203 |
| * * * * * * * * | | | |
| Barban | Carbamic acid, (3-chlorophenyl)-, 4-chloro-2 butynyl ester | 101-27-9 | U280 |
| * * * * * * * * | | | |
| Bendiocarb | 1,3-Benzodioxol-4-ol, 2,2 -dimethyl-, methyl carbamate | 22781-23-3 | U278 |
| Bendiocarb phenol | 1,3-Benzodioxol-4-ol, 2,2 –dimethyl-, | 22961-82-6 | U364 |
| Benomyl | Carbamic acid, [1 [(butylamino) carbonyl]- 1H-benzimidazol 2 yl]- , methyl ester | 17804-35-2 | U271 |
| * * * * * * * * | | | |
| Benzo(k)fluoranthene | Same | 207-08-9 | |
| * * * * * * * * | | | |
| Carbaryl | 1-Naphthalenol, methylcarbamate | 63-25-2 | U279 |
| Carbendazim | Carbamic acid, 1H-benzimidazol-2-yl, methyl ester | 10605-21-7 | U372 |
| 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 |
| * * * * * * * * | | | |
| Carbosulfan | Carbamic acid, [(dibutylamino) thio] methyl-, 2,3-dihydro-2,2-dimethyl-7-benzofuranyl ester | 55285-14-8 | P189 |
| * * * * * * * * | | | |
| m-Cumenyl methylcarbamate | Phenol, 3-(methylethyl)-, methyl carbamate | 64-00-6 | P202 |
| * * * * * * * * | | | |
| Diethylene glycol, dicarbamate | Ethanol, 2,2'-oxybis-, dicarbamate | 5952-26-1 | U395 |
| * * * * * * * * | | | |
| Dimetilan | Carbamic acid, dimethyl-, 1-[(dimethylamino) carbonyl]-5-methyl-1H-pyrazol-3-yl ester | 644-64-4 | P191 |
| * * * * * * * * | | | |
| Formetanate hydrochloride | Methanimidamide, N,N-dimethyl-N'-[3-[[(methylamino) carbonyl]oxy]phenyl]-, monohydrochloride | 23422-53-9 | P198 |

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|---|---|---|---|
| * * * * * * * * | | | |
| Formparanate | Methanimidamide, N,N-dimethyl-N'-[2-methyl-4-[[(methylamino) carbonyl]oxy]phenyl]- | 17702-57-7 | P197 |
| * * * * * * * * | | | |
| Heptachlorodibenzofurans | | | |
| Heptachlorodibenzo-p-dioxins | | | |
| * * * * * * * * | | | |
| Isolan | Carbamic acid, dimethyl-, 3-methyl-1 (1-methylethyl)-1H pyrazol-5-yl ester | 119-38-0 | P192 |
| * * * * * * * * | | | |
| Manganese dimethyldithiocarbamate | Manganese, bis(dimethylcarbamodithioato-S,S')- | 15339-36-3 | P196 |
| * * * * * * * * | | | |
| Methiocarb | Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate | 2032-65-7 | P199 |
| * * * * * * * * | | | |
| Metolcarb | Carbamic acid, methyl-, 3-methylphenyl ester | 1129-41-5 | P190 |
| * * * * * * * * | | | |
| Mexacarbate | Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester) | 315-18-4 | P128 |
| Octachlorodibenzo-p-dioxin (OCDD). | 1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin | 3268-87-9 | |
| Octachlorodibenzofuran (OCDF). | 1,2,3,4,6,7,8,9-Octachlorodibenzofuran | 39001-02-0 | |
| * * * * * * * * | | | |
| Oxamyl | Ethanimidothioc acid, 2-(dimethylamino)-N-[[(methylamino) carbonyl]oxy]-2-oxo-, methyl ester | 23135-22-0 | P194 |
| * * * * * * * * | | | |
| 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 salicylate | Benzoic acid, 2-hydroxy-, compd. with (3aS-cis)-1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo [2,3-b]indol-5-yl methylcarbamate ester (1:1). | 57-64-7 | P188 |
| * * * * * * * * | | | |
| Promecarb | Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate | 2631-37-0 | P201 |
| * * * * * * * * | | | |
| Propham | Carbamic acid, phenyl-, 1-methylethyl ester | 122-42-9 | U373 |
| Propoxur | Phenol, 2-(1-methylethoxy)-, methylcarbamate | 114-26-1 | U411 |
| * * * * * * * * | | | |
| Prosulfocarb | Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester | 52888-80-9 | U387 |
| * * * * * * * * | | | |
| Thiodicarb | Ethanimidothioic acid, N,N'- [thiobis [(methylimino) carbonyloxy]] bis-, dimethyl ester. | 59669-26-0 | U410 |
| Thiophanate-methyl | Carbamic acid, [1,2-phyenylenebis (iminocarbonothioyl)] bis , dimethyl ester | 23564-05-8 | U409 |
| * * * * * * * * | | | |
| Tirpate | 1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O-[(methylamino) carbonyl] oxime. | 26419-73-8 | P185 |
| Triallate | Carbamothioic acid, bis(1-methylethyl)- , S-(2,3,3-trichloro-2-propenyl) ester | 2303-17-5 | U389 |
| * * * * * * * * | | | |
| Triethylamine | Ethanamine, N,N-diethyl- | 121-44-8 | U404 |
| * * * * * * * * | | | |
| Ziram | Zinc, bis(dimethylcarbamodithioato-S,S')-, (T-4)- | 137-30-4 | P205 |
| * * * * * * * * | | | |

**310 CMR 30.160 is hereby amended by correcting the following typographical error:**

Heptachlor epoxide (alpha, beta, & gamma i~~o~~so mers)

## IV. Silver Recovery Cartridges

The Department is proposing an amendment to the hazardous waste regulations that will clarify the shipping requirements for silver recovery cartridges that fail the Toxicity Characteristic for silver, provided that the silver recovery cartridge has been used for wastewater treatment and is being shipped for reclamation of its silver content.

Pursuant to the proposed regulatory revision, which is intended to clarify existing policy, silver recovery cartridges that have been utilized for wastewater treatment, with the D011 waste code, may be managed by a generator as a Class A regulated, recyclable material (RRM) pursuant to 310 CMR 30.212(5), as a sludge having the characteristic of a hazardous waste when being reclaimed. In order to be managed as a Class A RRM, 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.

Cartridges generated out-of-state may be shipped as an RRM to a Massachusetts (MA) hazardous waste treatment, storage and disposal facility (TSDF) on a bill-of-lading (BOL), provided the TSDF is authorized by the Department to receive this waste stream and the TSDF then transfers the cartridges to a recycler that reclaims the silver content. If the authorized MA TSDF receives the cartridges from out-of-state and ships them for disposal, then the cartridges are a characteristic hazardous waste and the shipment from the out-of-state generator and from the TSDF must be accompanied by a hazardous waste manifest.

If a MA generator ships its cartridges to an in-state or out-of-state TSDF that forwards the cartridges to a recycling facility for silver reclamation, a BOL may be used if the MA generator has the appropriate Class A recycling permit. If the generator is a Very Small Quantity Generator, a BOL can be used and a recycling permit is not required.

The TSDF is responsible for notifying all generators wanting to ship cartridges for silver recovery to the TSDF as to how the TSDF will manage the cartridges once received so that the generators can use the proper shipping form, BOL or hazardous waste manifest, depending upon whether the TSDF ships the cartridges to a silver reclamation facility or a disposal facility respectively. A cartridge that has been drained of free liquid and passes the Toxicity Characteristic Leaching Procedure (TCLP) for silver is not a hazardous waste. However, the generator has to make a hazardous waste determination on the drained liquid and handle it as a hazardous waste, as applicable. Also, if the cartridges are sent for reclamation by a Very Small Quantity Generator (VSQG) of RRM or an ERP photo processor operating in accordance with 310 CMR 70.00, the cartridges can be sent without a recycling permit to a reclaimer (see 310 CMR 30.221(3)(a)2. and 310 CMR 71.00).

While the Department views silver recovery cartridges that have been utilized for wastewater treatment as a characteristic sludge being reclaimed and a Class A RRM, spent fixer from photo processing is regulated differently because it is a spent material. Used silver bearing photo fixer that is hazardous waste is a spent material and if sent off site for reclamation, it must be managed as a Class B(4) RRM and shipped on a hazardous waste manifest by either a hazardous waste

transporter or a transporter with a Class B(4) recycling permit. See 310 CMR 30.270 for requirements governing Class B(4) RRMs.

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**310 CMR 30.213(4) is hereby amended as follows:**

(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~~(B)~~, 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.

## V. Fluorescent Lamp Crushing by Very Small Quantity Generators (VSQGs) and Recycling By Universal Waste Handlers

A fluorescent lamp (or tube) is a gas-discharge lamp that uses electricity to excite mercury vapor. The excited mercury atoms produce short-wave ultraviolet light that then causes a phosphor to fluoresce, producing visible light. Drum-top crushers, usually mounted on a 55-gallon drum, are devices designed to reduce the volume of fluorescent lamps that need to be disposed.

Under the Department's existing regulations, small and large quantity generators (SQGs and LQGs) cannot crush fluorescent lamps without obtaining a license to treat hazardous waste; very small quantity generators (VSQGs) may conduct various forms of treatment, including lamp crushing, without obtaining such a license. Under the Universal Waste regulations, 310 CMR 30.1034(5) and 30.1044(5), a handler of Universal Waste may crush or dismantle mercury-containing lamps if it first obtains a Class A recycling permit. However, a permit applicant must demonstrate that its recycling unit can fully separate the three components of the lamp: glass, phosphor powder and metal end-caps. Thus this provision does not allow the use of drum-top crushers if they are not capable of fully separating the components. The applicant must also obtain a second recycling permit in order to ship the mercury-containing phosphor powder off-site for recycling.

While drum-top crushers are designed to contain the mercury released from lamps when crushed, the potential for mercury emissions from these units remains a significant concern to the Department. Drum-top crushers are typically sealed and operated at negative pressure (generated by a vacuum pump), and air is exhausted through particle and granulated activated carbon (GAC) filters. Most emissions are contained by these pollution controls, but some mercury is inevitably released, either in trace amounts from well-designed and maintained units, or larger amounts from units that malfunction, are not properly operated and maintained or are being opened for emptying.

In support of the Department's efforts to reduce mercury in the environment, and in response to EPA's findings related to emissions described in its 2006 report on drum-top crushers[1], the Department is proposing to phase out allowing the use of drum-top crushers by VSQGs without a treatment license. The Department is also taking this action in part because it is currently the only New England member state in the Northeast Waste Management Officials' Association (NEWMOA) that allows the use of drum-top crushers without a permit.[2] Other states have adopted a range of policy responses to address the release of mercury by drum top crushers, and the approach for Massachusetts remains under active consideration. Comments on the proposed approach in the draft regulations are welcome. Under this proposal, VSQGs that do not own a drum-top crusher on the effective date of these proposed regulations will not be allowed to use drum-top crushers to manage fluorescent lamps without first obtaining a treatment license. For VSQGs that own a drum-top crusher on the effective date of these regulations, the Department is proposing that one year after that date, VSQGs that owned a drum-top crusher on the effective

[1] https://www.epa.gov/hw/epas-mercury-lamp-drum-top-crusher-dtc-study
[2] https://www.epa.gov/sites/production/files/2016-03/documents/newmoa.pdf

date of these regulations will have to obtain a license to continue operating their drum top crusher.

The Department is also proposing to delete the portion of 310 CMR 30.1034(5) that allows crushing and dismantling of fluorescent lamps by universal waste handlers under the authority of a hazardous waste recycling permit. Since adopting these Universal Waste regulations in 1997, the Department has not received a single permit application to crush or dismantle lamps under the provisions of 310 CMR 30.1034(5)(c). The Department believes this is because none of the drum-top crushing units on the market (for on-site use by generators) meet the conditions for this recycling exemption. The Department is therefore proposing to delete the recycling exemption at 310 CMR 30.1034(5)(c)1.-3., in part because a permit has never been issued under this category, but also because it is consistent with the Department's goal of eliminating exposure to mercury to the greatest extent possible. An immediate, outright ban is not being proposed for drum-top crushers that are already in use by VSQGs because the Department believes such a prohibition would be a financial hardship for many small businesses that have made this investment. The approach to be taken in Massachusetts is subject to further consideration, and ~~T~~the Department is specifically requesting comments on its proposal to prohibit all VSQGs from operating a drum-top crusher without a license to treat hazardous waste one year from the effective date of these regulations and on the following amendments to the regulations.

**310 CMR 30.010 is hereby amended by inserting the following immediately after the definition for "Drip Pad"**

Drum-top crusher means a crushing unit, and the container it is mounted to, that is designed to crush mercury-containing lamps.

**310 CMR 30.353(10) is hereby amended as follows.**

(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) ……
(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.
(f) On and after [effective date of these regulations], 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 [effective date of these regulations], a Very Small Quantity Generator that acquired a drum top crusher prior to [effective date of these regulations] may not continue to utilize the drum top crusher to crush mercury-containing lamps without obtaining a license to treat hazardous waste.

**310 CMR 30.1034(5) is hereby amended as follows:**

(5) Mercury-containing Lamps. 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.

1. 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~~in a container~~. 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)1, may be shipped off-site as a universal waste.

(b) A small quantity handler of universal waste may:

1. 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)(~~d~~c).~~; or~~

~~2. Dismantle or crush lamps provided the handler complies with 310 CMR 30.1034(5)(c) and (d).~~

~~(c) Dismantling or crushing of mercury-containing lamps.~~

~~1. A small quantity handler which intends to dismantle or crush mercury-containinglamps generated on-site may do so only if the following conditions are met:~~

~~a. The dismantling and/or crushing is done in such a manner that, after processing, components are separated into individual wastestreams (*i.e.* endcaps, glass, mercury/phosphor powder);~~

~~b. The separated components are recycled/reused, and the handler retains proof of their recycling/reuse, such as contractual agreements or other documentation showing that the materials are fully recycled and that there are known markets for the materials;~~

~~c. A Class A recycling permit is obtained pursuant to 310 CMR 30.212(10) for the crushing of the lamps and 310 CMR 30.212(6) for the off-site reclamation of the mercury/phosphor powder; and~~

~~d. If a small quantity handler intending to dismantle and/or crush mercury containing lamps does not comply with 30.1034(5)(c)1. or 2., as applicable, then such activity will be subject to licensing standards of 310 CMR 30.800.~~

~~2. A small quantity handler that intends to dismantle and/or crush mercury-containing lamps received from off the site of generation shall do so in compliance with 310 CMR 30.1034(5)(c)(1)a. and b., and in~~

~~addition shall have in its possession a Class C recycling permit issued pursuant to 310 CMR 30.290.~~

~~3. A small quantity handler that crushes or dismantles mercury-containing lamps shall also:~~

~~a. Ensure that a mercury clean-up system is available;~~

~~b. Immediately transfer any mercury resulting from spills or leaks from the containment device, as described in 310 CMR 30.1034(5)(a) to a container that meets the requirements of 310 CMR 30.34(1)(a)1.;~~

~~c. Ensure that the area in which the lamp crushing or dismantling occurs is monitored to ensure compliance with applicable OSHA exposure levels for mercury, as in effect on July 1, 1996;~~

~~d. Ensure that employees removing the mercury contaminated material are thoroughly familiar with the proper handling and emergency procedures, including equipment operation, transfer of mercury from containment devices to appropriate containers, filter replacement, and equipment decontamination; and~~

~~e. Comply with either 310 CMR 30.200, if the mercury contaminated material is a regulated recyclable material, or, the applicable provisions of 310 CMR 30.001 through 30.900, if the mercury contaminated material is a hazardous waste.~~

(~~d~~c) Management of mercury and mercury containing residues.

1. A small quantity handler of universal waste who conducts activities in compliance with 310 CMR 30.1034(5)(b)1. ~~or 30.1034(5)(b)2.~~ shall determine whether the following exhibit a characteristic of hazardous waste identified in310 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.

(~~e~~d) Labeling/marking of mercury-containing lamps. 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)".

(~~f~~e) Accumulation standards. A small quantity handler of universal waste shall accumulate universal waste mercury-containing lamps in compliance with 310 CMR 30.1034(6).

## VI. New Cathode Ray Tube (CRT) Regulations

As part of its ongoing effort to make the Department hazardous waste program more consistent with the federal RCRA hazardous waste program, the Department is proposing to adopt regulations equivalent to the federal CRT Rule (adopted in 2006) at 40 CFR 261.4(a)(22) and 261.39-.41, replacing the CRT regulations in 310 CMR 30.000 and 310 CMR 16.03(2)(b)7.-8. The federal CRT rule streamlines hazardous waste management requirements for the recycling of used CRTs and glass removed from CRTs if certain conditions are met. The rule is intended to encourage recycling and reuse of used CRTs and CRT glass. While the Department is adopting the federal CRT exemption, it is also proposing to require the storage of broken CRTs in containers, which is more protective than the federal option that allows broken CRTs to be stored within buildings without being in containers. See 310 CMR 30.104(3)(h). The Department is also adding a notification requirement for companies that conduct CRT Processing at 310 CMR 30.104(3)(h)2.b.iii.

**310 CMR 30.010 is hereby amended by deleting the following definitions:**

~~Cathode Ray Tube (CRT) means an intact glass tube used to provide the visual display in televisions, computer monitors and certain scientific instruments such as oscilloscopes. Monochrome (*i.e.*, black and white) CRTs are not regulated as hazardous waste. [For purposes of 310 CMR 30.10: Cathode Ray Tube (CRT), "intact" means a CRT (and notan electronic product as a whole) having no component destroyed or removed; this requirement does not prohibit the disassembly of an electronic product. Therefore, a crushed or ground-up CRT does not satisfy this definition. However, incidental numbers of CRTs broken unintentionally during routine handling and transportation, are considered "intact".]~~

~~1The implication is that all CRTs are recyclable once they are determined not to 1 be commodities as operable~~
~~CRTs, but is takes an affirmative determination for a CRT to convert from a commodity.~~
~~2 Monochrome CRTs do not fail TCLP, but remain subject to the waste ban in MA. Accordingly, monochrome~~
~~CRTs can only be disposed of as solid waster outside of MA.~~

~~Non-commodity CRT means a CRT that has been determined will not be returned to service as an operable CRT and has not been disposed1. CRTs that are disposed of intact, and CRTs that are crushed or ground up (excluding monochrome CRTs)2 are subject to 310 CMR 30.000.~~

**310 CMR 30.010 is further amended by inserting the following definitions:**

Insert the following immediately after the definition of "By-product":

*Cathode Ray Tube or CRT* 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.

Insert the following immediately after the definition of "Crime Involving Moral Turpitude":

*CRT collector* means a person who receives used, intact CRTs for recycling, repair, resale, or donation.

*CRT glass manufacturer* 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; and

(2) Intentionally breaking intact CRTs or further breaking or separating broken CRTs; and

(3) Sorting or otherwise managing glass removed from CRT monitors.

**310 CMR 30.104(2)(q) is hereby amended as follows:**

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) ……

(2) Wastes Otherwise Excluded from 310 CMR 30.000

(a) A waste pursuant….. ..

~~(q) Non-commodity CRTs. CRTs that are disposed of intact, and CRTs that are crushed or ground up (excluding monochrome CRTs) are subject to 310 CMR 30.000.~~

**30.104(3) is hereby amended by adding the following:**

(3) Wastes Subject to Conditional Exemptions

(a) Samples of waste collected…..…

(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 nonradioactive 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. Prior to processing: These materials are not hazardous wastes if they are destined for recycling and if they meet the following requirements:

a. Storage. 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. Labeling. 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. Transportation. The used, broken CRTs shall be transported in a container meeting the requirements of paragraphs 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 this section.

e. Exports. In addition to the applicable conditions specified in 310 CMR 30.104(3)(h)1.-2., exporters of used, broken CRTs shall comply with the EPA administered requirements at 40 CFR 261.39(a)(5).

2. Requirements for used CRT processing: Used, broken CRTs undergoing CRT processing as defined in 310 CMR 30.010 are not hazardous wastes if they meet the following requirements:

a. Storage. 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)-(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. Processed CRT glass sent to CRT glass making or lead smelting: 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. Use constituting disposal: 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 this section.

**310 CMR 30.202(5)(g) is hereby amended by adding the following:**

30.200: PROVISIONS FOR RECYCLABLE MATERIALS AND FOR WASTE OIL

…

(5) The following materials are not subject to 310 CMR 30.200, or any other provision of 310 CMR 30.000:

…

(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.

**310 CMR 16.00 is amended as follows:**

16.02

~~Cathode Ray Tube, CRT or Intact CRT means an intact glass tube used to provide the visual display in televisions, computer monitors, oscilloscopes and similar scientific equipment, but does not include the other components of an electronic product containing a CRT even if the product and the CRT are disassembled.~~

~~CRT Operation means an area or works other than a household that is used for the collection, storage, transfer, containment, or handling of Non-commodity CRTs. The CRT Operation is the place where the determination of whether a CRT is a Non-commodity CRT is made. An operation only handling commodity CRTs is not a CRT Operation. An organization that accepts CRTs for resale is not regulated if it doesn't make the determination that a CRT is not a commodity CRT, but rather leaves that determination to its transferees.~~

~~Non-commodity CRT means a CRT that has been determined will not be returned to service as an operable CRT, and has not been disposed.~~ [2] ~~CRTs that are disposed of intact, and CRTs that are crushed or ground up (excluding monochrome CRTs) are subject to 310 CMR 30.000: *Hazardous Waste*. All CRTs are recyclable once they are determined not to be commodities as operable CRTs.~~

**16.03(2)(a)1. hereby is amended as follows:**

(2) The activities listed in this subsection at 310 CMR 16.03(2)(a) through (c) do not require a site assignment, a facility permit pursuant to 310 CMR 19.000: *Solid Waste Management*, a general permit pursuant to 310 CMR 16.04, or a recycling, composting or conversion permit pursuant to 310 CMR 16.05, provided that the owner and operator incorporates best management practices in a manner that prevents an unpermitted discharge of pollutants to air, water or other natural resources of the Commonwealth, does not create a public nuisance, and does not present a significant threat to public health, safety or the environment.

(a) Handling Solid Waste.

1. Temporary Solid Waste Storage. Temporary storage of solid waste in dumpsters, roll-offs, or other temporary storage containers for the collection of solid waste generated on-site.

~~This storage exemption shall not apply to a CRT operation.~~

2. Temporary Storage by a Public Works Department. Dumpsters, roll-offs, or……..

**16.03(2)(b)7.-8. is hereby deleted as follows:**

~~7. Occasional Non-commodity CRT Vehicle Layover. Property owned or leased by a transporter of Non-commodity CRTs to hold Non-commodity CRTs prior to transportation to a CRT Operation, a CRT recycling facility, or a permitted hazardous waste treatment, storage or disposal facility, provided that Non-commodity CRTs are~~

held in a enclosed vehicle at the site for no longer than ten days.
8. CRT Operation. A CRT Operation, provided that the owner and operator of the CRT Operation complies with the following additional conditions:
a. The owner and operator of the CRT Operation collect, store, handle and transport CRTs in a manner that prevents and minimizes breakage, and immediately contain all releases resulting from inadvertent breakage of CRTs, clean up any broken material and safely package any broken material in containers resistant to puncture by glass pieces;
b. The owner and operator of the CRT Operation store and maintain CRTs segregated from any solid waste (in other words, do not put CRTs in a dumpster);
c. When shipping a Non-commodity CRT to foreign countries, the owner and operator of a CRT Operation meet the requirements at 310 CMR 30.1039: *Exports*;
d. The owner and operator of a CRT Operation transfer Non-commodity CRTs only to another CRT Operation, a CRT recycling facility, or a permitted hazardous waste treatment, storage and disposal facility (a CRT recycling facility includes out-of-state smelters and facilities that conduct glass-to-glass recycling.);
e. The owner and operator of a CRT Operation label Non-commodity CRTs as follows: "Non-commodity Cathode Ray Tubes" or "Non-commodity CRTs";
f. The owner and operator of a CRT Operation hold a CRT for no longer than one year from its date of receipt. A CRT stored for more than one year is presumed to be a Non-commodity CRT. Such presumption may be rebutted if the owner or operator has documentation demonstrating that the CRT is intended to be returned to service as an operable CRT. The owner and operator of a CRT Operation may store CRTs for longer than one year from the date of receipt solely for the purpose of accumulating such quantity of CRTs as is necessary to facilitate proper shipment (*e.g.* economically viable load), recovery, treatment or disposal. The owner and operator of a CRT Operation bear the burden of demonstrating the need for any such additional period of accumulation;
g. If the owner or operator of a CRT Operation accumulates more than 40 tons of Non-commodity CRTs on-site for more than 21 calendar days, then the owner or operator of the CRT Operation shall:
i. Notify the Department in writing of the activity within ten days of the first occurrence. Once the threshold is exceeded during a calendar year, a CRT Operation shall retain its regulated status under this provision for the remainder of the calendar year. The owner or operator of a CRT Operation that has not already notified the Department of its CRT activities and anticipates accumulating 40 tons or more of Non-commodity CRTs shall send written notification to the Department, before meeting or exceeding the 40 ton/21 day limit;
ii. Maintain records of incoming and outgoing CRTs, including from where each shipment was received and where each shipment was sent;
iii. Maintain a system that demonstrates the duration of CRT accumulation; and
iv. Maintain records for three years. This period shall extend automatically for the duration of any enforcement action;
h. The owner and operator of a CRT Operation allow DEP to enter the facility to conduct inspections;
i. An owner or operator of a CRT Operation that violates any of the conditions in 310 CMR 16.03(2)(b)8.g.i. through iv.may be subject to enforcement pursuant to

~~310 CMR 16.05; and~~
~~j. The owner or operator of a CRT Operation maintains accurate records and annually submits by February 15th to the Department a report on a form provided by the Department that includes, at a minimum, the amounts and types of materials recycled and the amount of residuals sent for disposal.~~

## VII. Conditional Hazardous Waste Exemption for Solvent-Contaminated Wipes

The Department is proposing to adopt regulations equivalent to the conditional exemption for solvent-contaminated wipes (i.e., rags, shop towels, swabs), which was promulgated by U.S. Environmental Protection Agency ("EPA") on July 31, 2013. See https://www.federalregister.gov/articles/2013/07/31/2013-18285/conditional-exclusions-from-solid-waste-and-hazardous-waste-for-solvent-contaminated-wipes#h-108 . Specifically, this proposed State rule conditionally excludes from regulation as a hazardous waste reusable solvent-contaminated wipes that are cleaned and reused as well as those that are disposed. The purpose of this final rule is to provide a consistent regulatory framework that is appropriate to the level of risk posed by solvent-contaminated wipes in a way that maintains protection of human health and the environment, while reducing overall compliance costs for industry, many of which are small businesses.

In 1994, EPA established federal policy with regard to solvent-contaminated wipes that deferred the determination of their regulatory status to the states and EPA regions. In response to this deferral, the Department issued its own policy (BWP-94-015, Policy for Industrial Wipers Contaminated with Solvents) for the management of solvent contaminated wipes. While the Department's solvent wipes policy is generally consistent with EPA's conditional exclusion for reusable wipes, some conditions required by EPA's final rule are more stringent. Examples of more stringent provisions under EPA's solvent wipes rule, which the Department is proposing to adopt, include the requirement that generators of solvent contaminated wipes sent for cleaning and reuse must maintain at their site the name and address of the laundry or dry cleaner receiving the wipes, documentation that the 180-day accumulation time limit is being met, and a description of the process the generator is using to ensure the wipes contain no free liquids at the point of being laundered or dry-cleaned. In addition, under EPA's rule, solvent contaminated wipes that are hazardous due to the presence of trichloroethylene may not be disposed of at a landfill or combustor as a non-hazardous waste. In order to maintain equivalency with the federal hazardous waste program, the Department is proposing to replace its Policy with the following requirements from EPA's final rule:

**310 CMR 30.000 is hereby amended as follows:**

310 CMR 30.010 is amended by adding in alphabetical order the definitions of "No free liquids," "Solvent-contaminated wipe," and "Wipe" to read as follows:

No free liquids, as used in 310 CMR 30.104(3)(i)-(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.

* * * * *

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 30.120-30.125 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)-(j).

* * * * *

Wipe means a woven or non-woven shop towel, rag, pad, or swab made of wood pulp, fabric, cotton, polyester blends, or other material.

* * * * *

**310 CMR 30.104(3) is hereby amended by adding paragraphs (3)(i) and (3)(j) as follows:**

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.

…

(3) Wastes Subject to Conditional Exemptions

…

(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;

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.

## VIII. Miscellaneous Revisions

### 310 CMR 30.010 – Adding definition of "Clean Water Act"

A definition of the term "Clean Water Act" is being added to 310 CMR 30.010 (Definitions section) to clarify that references to the "Clean Water Act" throughout 310 CMR 30.000 refer to the federal Clean Water Act.

**310 CMR 30.010 is hereby amended by inserting the following immediately after the definition for "Class A or Class SA Segment of a Surface Water Body" :**

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

**310 CMR 30.104(3)(c)1.** This revision clarifies that an approval from the Department to conduct treatability studies is site-specific and an applicant that has received Department approval must reapply if it wants to conduct treatability studies at another location.

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~~, or will be,~~ 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……

**310 CMR 30.133 and 30.160 - Removal of Saccharin from the Lists of Hazardous Constituents and Hazardous Wastes**

Saccharin, an artificial sweetener in the form of a white crystalline powder, is 300 times sweeter than sucrose or sugar. It is typically an ingredient in diet soft drinks, juices, sweets, and chewing gum. Saccharin can also be found in cosmetics and pharmaceuticals.

In December, 2010, EPA amended its regulations under the Resource Conservation and Recovery Act (RCRA) to remove saccharin and its salts from the lists of hazardous constituents and commercial chemical products which are hazardous wastes when discarded or intended to be discarded. In response to a petition submitted to EPA by the Calorie Control Council (CCC) to remove saccharin and its salts from RCRA and CERCLA, EPA no longer lists these substances as hazardous on the above mentioned lists. Massachusetts is hereby proposing to remove the waste code for saccharin and its salts (U202) from its hazardous waste regulations at 310 CMR 30.133, and Saccharin and Saccharin Salts from the list of hazardous waste constituents at 310 CMR 30.160.

EPA granted CCC's petition based on a review of the evaluations conducted by key public health agencies concerning the carcinogenic and other potential toxicological effects of saccharin and its salts. In addition, EPA assessed the waste generation and management information for saccharin and its salts, concluding that the wastes do not meet the criteria for hazardous waste regulations. The Department concurs with EPA's conclusion, and is therefore proposing to remove the two waste codes from its regulations.

**30.133 is hereby amended as follows:**

U201 108-46-3 Resorcinol
~~U202 81-07-2* Saccharin, & salts~~
U203 94-59-7 Safrole

---

**30.160 is hereby amended as follows:**

| 30.160 | | |
|---|---|---|
| Resorcinol | 1,3-Benzenediol 108-46-3 | U201 |
| ~~Saccharin~~ | ~~1,2-Benzisothiazol-3(2H)-one, 81-07-2 1,1-dioxide~~ | ~~U202~~ |
| ~~Saccharin salts~~ | ~~------ ------~~ | ~~U202~~ |
| Safrole | 1,3-Benzodioxole, 94-59-7 5-(2-propenyl)- | U203 |

**310 CMR 30.202(5)(f), 30.212(3) and 30.221 Table – Eliminate Permit Requirement to Ship Scrap Metal Off-Site for Recycling**

These sections of the recycling regulation are being revised to minimize the confusion on the differences between regulated and unregulated scrap metal. The revisions will eliminate the permit requirement to ship scrap metal off-site for recycling by expanding the exemption for Bulk Scrap Metal Being Recycled at 310 CMR 30.202(5)(f) to include all Scrap Metal, and eliminate the regulated recyclable material (RRM) permit category for Scrap Metal at 30.212(3). Similar materials (shredded circuit boards) are already exempted at 30.202(5(e).

**30.202(5)(f) is hereby amended as follows:**

(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)…….
(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) ~~Bulk~~ All scrap metal items being recycled.

**30.212(3) is hereby amended as follows:**

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…….
(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.~~Scrap metal not otherwise excluded at 310 CMR 30.202(5).~~
(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.
() 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.

**310 CMR 30.221(4) is hereby amended as follows:**

(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 Onsite | Generator sends off-site for recycling more than ….. | | Receiver more recyclable of regulated materials |
|---|---|---|---|---|---|
| 310 CMR 30.212 (1)(a) | Used or reused as an ingredient in a product without reclamation…… | PS | N | | N |
| (3) | Reserved~~Scrap metal that would be hazardous if disposed of.~~ | ~~PS~~-- | ~~N~~-- | | ~~P~~-- |
| (4) | Used oil fuel burned at the site of generation for energy recovery in a…… | PS | N/A | N/A | |

**310 CMR 30.205(12) – Annual Recycling Report**

This section of the recycling regulation at 30.205(12) is being revised to only require entities to "prepare and maintain on-site" the annual recycling report. This action is part of broader effort to reduce the amount of paperwork submitted to the Department. A facility will still be required to generate the annual report; however, it will be maintained at the facility under current recordkeeping conditions as set forth in the permit or license. Inspectors can then request to have a copy emailed to them in anticipation of an inspection (as a condition in the permit or license, the Department maintains the right to request the information).

**30.205(12) is hereby amended as follows:**

(12) Annual Reporting. All permittees shall ~~submit~~ 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 ~~submitted to the Department~~ no later than March 1st 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.

**310 CMR 30.221(3)(a)2 and 310 CMR 30.224(4)(b) – Off-Site Shipments of Regulated Recyclable Material by Very Small Quantity Generators (VSQGs)**

This section of the recycling regulation at 310 CMR 30.221(3)(a)2. is being revised to allow very small quantity generators (VSQGs) of Regulated Recyclable Material (RRM) to ship as much as 200 kilograms (equivalent of one 55-gallon drum) of RRM off-site in a calendar month without having to obtain a recycling permit. Currently, VSQGs of RRM can only ship 100 kilograms of RRM off-site per month without having to obtain a recycling permit.

**310 CMR 30.221(3)(a)2 is hereby amended as follows:**

(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 ~~100 kg~~ 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.

**Table 1 under 310 CMR 30.221 is hereby amended as follows:**

Table 1.
Approval Categories for Class A Recyclers

| Citation | Description | Generator Recycles onsite | Large or small quantity ~~G~~generator sends regulated recyclable material off-site for recycling ~~more than 100 kg/mo Class A regulated recyclable materials~~* | 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)….. | | | | |
| 10…… | | | | |

N/A -- Not Applicable
N -- 21 Day Presumptive Approval
P -- Written Permit
PS – Performance Standard

* ~~VSQG s~~Shipments of ~~1~~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).

**310 CMR 30.222(4)(b is hereby amended as follows:**

(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~~100~~ kilograms~~s~~ or less of Class A regulated recyclable material~~s~~ by aVery Small Quantity Generator~~s~~ 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……

**310 CMR 30.222(5), 30.223(4) and CMR 30.223**

This section of the recycling regulations is being revised to make it more clear that a transporter of Class A Regulated Recyclable Material (RRM) using the shipping paper required by 310 CMR 30.223(4)(b) must provide the generator of the RRM a copy of the shipping paper after being signed by the receiving facility pursuant to 30.223(4)(b)8. This clarification will help ensure that the generator has a record of delivery of its shipment. Currently, the requirement for a VSQG of Class A RRM to retain a copy of the shipping paper is found at 310 CMR 30.222(4)(b)1.b; the requirement for SQGs and LQGs of Class A RRM to retain a copy of the shipping paper, required by 30.223(4)(b), is found at 310 CMR 30.205(7)(a), as referenced by 310 CMR 30.222(5)(d)2. This requirement is being reinforced and clarified at 310 CMR 30.222(5)(k).

**310 CMR 30.222(5)(k) - new**

(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).

**310 CMR 30.223(4) is hereby amended as follows:**

(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, recyclable material 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 signatures 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 designee; and
9. for any specification used oil fuel being transported, the shipping paper shall identify the material as "specification used oil fuel".

**310 CMR 30.223(7) – new**

(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.

**310 CMR 30.252 – Correction is being made because unused waste oil cannot be "reused"**

30.252: General Provisions Governing Waste Oil that is not Used Oil Fuel
(1)…..
(3) Notwithstanding the provisions of 310 CMR 30.252(1), unused waste oil that is to be ~~re~~used for the original purpose for which it was produced with no other processing than separation from a non-hazardous 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.

**310 CMR 30.295(2)(b) – delete reference to 30.545, which no longer exists**

(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 30.5454, 30.560, 30.561, and 30.580 through 30.586; and

**310 CMR 30.341(1) - correction in emergency preparedness regulations for LQGs at 30.341(1)(e)5.a. The first citation in this sentence is missing a "(4)." 310 CMR 30.341(1)(e)5.a. is amended as follows:**

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).

**310 CMR 30.361 – Correction: This change is being made to eliminate a reference to "manifests of the destination state." As of September 5, 2006, states can no longer publish their own "state-only" manifest and must use the same standard uniform manifest.**

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] 262.21~~ | ~~310 CMR 30.312(7)~~ |
| 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 |

**30.407: Reporting – This section being revised to conform with format changes that have been made to the Department's Electronic Monthly Operation Report (EMORs) system and to more accurately reflect how the reporting system currently works.**

30.407: Reporting

(1) ~~Effective on and after January 1, 1991, a~~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, 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 ~~are delivered to the designated facility or the continuing transporter~~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 at which 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 ~~only~~ a ~~paper~~ monthly report stating that fact to the Department no later than the last day of the following month.

**310 CMR 30.408(2)** – These amendments clarify that in the event of an emergency or any of the other conditions described in 310 CMR 30.408(1)(a)-(f), a licensed hazardous waste transporter may hold hazardous waste at a hazardous waste facility for up to five days without being subject to the storage requirements of 310 CMR 30.000. Specifically, the Department is removing a restriction that this allowance is only for when a facility is itself authorized for all the hazardous waste codes in the vehicle. The Department believes this restriction is unintended since there is no such requirement for a "transportation-related area" – which is referenced, later in 30.408(2) and defined at 310 CMR 30.000 to mean any parking area where vehicles transporting commercial cargos may legally park on an interim basis during the normal course of transportation. This revision will make it easier for hazardous waste transporters to hold

hazardous waste at a secure, permitted hazardous waste facility in the event of an emergency, which the Department considers far more preferable than "any transportation-related area."

**30.408(2) is hereby amended as follows:**

(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 ~~that is authorized to store such wastes~~ or in a transportation-related area. The hazardous waste may be thus 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 thus 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.

**310 CMR 30.534 – correction**

30.534:
(3) Except as provided in 310 CMR 30.535, the provisions of 310 CMR 30.~~3~~534 shall not apply to hazardous waste generated and transported by a ~~v~~Very ~~s~~Small ~~q~~Quantity ~~g~~Generator in compliance with 310 CMR 30.353(1) through (11).

**310 CMR 30.908(1)(b)7. – Revise by replacing outdated regulatory citation with the correct citation:**

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 ~~30.586(2)~~30.587(3).

**310 CMR 30.908(1)(c)(10) - Amend by replacing outdated regulatory citation with the correct citation:**

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 ~~30.586(2)~~ 30.587(3).

**310 CMR 30.908(3) - amend by replacing an outdated regulatory citation with the correct citation:**

(3) Period of Coverage. 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 ~~30.586(2)~~ 30.587(3).

**30.1010 – Updated Universal Waste Definitions**

The following terms are being added and amended, respectively, to ensure consistency with the federal universal waste regulations at 40 CFR 273:

**310 CMR 30.1010 is hereby amended by inserting the following definition before the definition for Battery:**

Ampoule means an airtight vial made of glass, plastic, metal, or any combination of these materials.

**310 CMR 30.1010 is hereby amended by revising the following definition as follows:**

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.

**310 CMR 30.1020(3)(b) and 30.1020(4)(b) are hereby amended as follows:**

(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.

**310 CMR 30.1034(3)(b)3., 4., 5. and 7. are hereby amended as follows:**

(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 ~~30.340(1)(a)1.a. through f.~~ 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 ~~30.340(1)(a)1.a through f.~~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, ~~1996~~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;
7. Manages removed ampoules as a hazardous waste or regulated recyclable material in compliance with all applicable provisions of 310 CMR 30.001 through 30.900 and packs containers holding removed ampoules with packing materials adequate to prevent breakage during storage, handling and transportation.

**310 CMR 30.1034(4)(a),(b) and (c) are hereby amended 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~~any broken mercury-containing device in a container~~. 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 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)……

**310 CMR 30.1034(6)(c)2. is hereby amended as follows [to conform with proposed changes to 30.1034(4) and 30.1034(5)]:**

2. Marking or labeling each individual item of universal waste ~~(e.g., each battery, thermostat, mercury-containing device, or mercury-containing lamp),~~ ~~which~~ 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;

**310 CMR 30.1043(2)(e) is hereby amended as follows:**

(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 ~~and the types of universal waste the handler is accumulating above this quantity~~.

**310 CMR 30.1044(5) is hereby amended as follows:**

(5) Mercury-containing lamps. A large quantity handler of universal waste shall manage universal waste mercury-containing lamps in compliance with 310 CMR 30.1034(5)(a) through (~~f~~e).

## IX. Impacts of Proposed Regulations

Economic Impacts

MassDEP does not anticipate significant economic impacts from the proposed amendments. The amendment of 310 CMR 30.000 will result in more protective management of hazardous waste through better control of hazardous wastes generated in the state and increased recycling and reuse of regulated recyclable materials. Furthermore, the proposed amendments should provide entities that generate and manage hazardous wastes with streamlined requirements and greater regulatory certainty.

Impacts on Cities and Towns

Pursuant to Executive Order 145, state agencies must assess the fiscal impact of new regulations on the Commonwealth's municipalities. In general, the proposed amendments do not establish new requirements for municipalities.

Source Reduction

The implementation of source reduction is a MassDEP priority, and is defined as in-plant practices that reduce or eliminate the total mass of contaminants discharged into the environment. The proposed amendments support source reduction through better control of hazardous wastes generated in the state and increased recycling and reuse of regulated recyclable materials.

Massachusetts Environmental Policy Act (MEPA)

The proposed amendments are exempt from the "Regulations Governing the Preparation of Environmental Impact Reports," 301 CMR 11.00, in that no MEPA review threshold set forth in 301 CMR 11.03 is met or exceeded. In addition, these proposed amendments do not reduce standards for environmental protection, nor do they reduce opportunities for public participation in review processes or public access to information generated or provided in accordance with the regulations. [See MEPA review threshold pertaining to promulgation of regulations at 301 CMR 11.03(12)].

## X. Public Hearing and Comment

MassDEP will hold one public hearing in each of the four MassDEP regions and two hearings at MassDEP's Offices in Boston on the proposed amendments in accordance with M.G.L. Chapter 30A. The hearing notice and proposed amendments are available on MassDEP's website at www.mass.gov/eea/agencies/massdep/news/comment/. For further information about the proposed amendments, please contact James Patterson at 617-556-1096 or at james.paterson@state.ma.us.