

345 CMR: LOW-LEVEL RADIOACTIVE WASTE MANAGEMENT BOARD

345 CMR 1.00: LOW-LEVEL RADIOACTIVE WASTE MANAGEMENT PLAN

Section

- 1.01: Purpose and Statutory Authority
- 1.02: Definitions
- 1.03: Board Representing the Public Interest
- 1.04: Management Plan Adoption, Review and Revision
- 1.05: Public Participation
- 1.06: Management Plan Consistency Review
- 1.07: Waivers and Severability
- 1.11: Classification System Requirements
- 1.12: Federal Classification of Radioactive Waste for Near-Surface Disposal
- 1.13: Massachusetts Total Hazard Classification System
- 1.21: Mixed Waste Management Practice
- 1.31: Waste Transportation
- 1.32: Re-Entry of Waste into the Commonwealth after Shipment Out of State for Treatment
- 1.41: Development of Interim and Emergency Storage Plans
- 1.42: Loss-of-Access Contingency Plan
- 1.43: Financial Responsibility for Repackaging
- 1.44: Monitoring the Storage Needs of Massachusetts Generators
- 1.61: Retrievable Disposal Technologies
- 1.63: Disposal Fees, Waste Acceptance Criteria and Surcharges
- 1.71: Implementation of Finding of Requirement for Additional Facility Capacity
- 1.72: Storage Facility
- 1.73: Treatment Facility (Reserved)
- 1.74: Disposal Facility
- 1.81: Requirements for Board Initiation of Siting
- 1.82: Voluntary Siting Activities
- 1.83: Statewide Mapping and Screening
- 1.84: Possible Locations
- 1.85: Candidate Sites
- 1.86: Detailed Site Characterization
- 1.87: Selection of Superior Site
- 1.88: Community Supervisory Committee Requirements
- 1.89: Property Value Guarantee
- 1.91: Insurance Plans Required

1.01: Purpose and Statutory Authority

(1) Purpose. 345 CMR 1.00 sets forth the regulatory components of or pertaining to the Low-Level Radioactive Waste Management Plan. 345 CMR shall be interpreted so as to ensure open and fair procedures and comprehensive planning, and to protect public health, safety, and the environment.

(2) Statutory Authority. 345 CMR 1.00 is promulgated pursuant to M.G.L. c. 111H, §§ 4, 11, and 12.

1.02: Definitions

For the purpose of 345 CMR 1.00 and 345 CMR 3.00, the following definitions shall apply unless the context or subject matter requires a different interpretation:

Activity, the rate of decay of radioactive material.

345 CMR: LOW-LEVEL RADIOACTIVE WASTE MANAGEMENT BOARD

1.02: continued

Affected Community, a community, other than a site community, which is identified in an environmental impact report prepared pursuant to M.G.L. c. 111H, § 30, and can be expected to experience significant impacts as a result of the location, development, operation, closure, post-closure observation and maintenance, or institutional control of a facility.

Board, the Low-Level Radioactive Waste Management Board established in M.G.L. c. 111H, § 2, which is responsible for planning and effecting the management of low-level radioactive waste in the Commonwealth.

Broker, a person engaged in the business of arranging for the collection, transportation, treatment, storage or disposal of low-level radioactive waste.

Candidate Site, a site, identified in accordance with the procedures established in M.G.L. c. 111H, § 20 which will be the subject of detailed site characterization as part of the process to select any superior site.

Candidate Site Community, a community in which is located all or any part of a candidate site.

Chelating Agent means certain organic compounds capable of forming (multiple) coordinate bonds with metals through two or more atoms of the organic compound, typically resulting in enhanced thermodynamic stability in solution and greatly altered behavior of the metal ions. Examples include amine polycarboxylic acids (e.g., EDTA, DTPA), and polycarboxylic acids (e.g., citric acid, carboxylic acid and glucinic acid).

Chief Elected Official, the mayor of any city, the chairman of the board of selectmen in any town.

Chief Executive Officer, the city manager in any city having a city manager, the mayor in any other city, the town manager in any town having a town manager, the chairman of the board of selectmen in any other town.

Closure, the permanent termination of low-level radioactive waste acceptance at a facility, including closure prior to the scheduled closing date, and the implementation of a closure plan.

Community, a city or town of the Commonwealth.

Community Compensation, any money, thing of value, or economic benefit conferred by an operator or the Board on any site or neighboring community under the terms and conditions specified in a comprehensive operating contract executed pursuant to M.G.L. c. 111H, § 33.

Community Supervisory Committee, a committee, established pursuant to M.G.L. c. 111H, § 21 to facilitate the participation of a community, in which a candidate site is located, in the activities established by 345 CMR 1.00.

Comprehensive Operating Contract, a contract entered into by an operator and the Board pursuant to M.G.L. c. 111H, § 33 which specifies the community compensation to be provided by the operator or the Board.

Container means the primary vessel, exclusive of other reusable shielding or other packaging materials, in which waste is placed and received for treatment, storage, or disposal; or the vessel into which waste is repackaged for storage or disposal and potential retrieval.

Contingent Liability Account, an account within the Low Level Radioactive Waste Trust Fund established pursuant to M.G.L. c. 111H, § 41 for the purpose of compensating for injuries to persons, land or property, pursuant to M.G.L. c. 111H, § 9, if no other funds, insurance, tort compensation or other means of satisfying a damage judgment or settlement are available.

345 CMR: LOW-LEVEL RADIOACTIVE WASTE MANAGEMENT BOARD

1.02: continued

Curie, a unit of activity which represents the quantity of any radionuclide that undergoes 37 billion disintegrations per second (3.7×10^{10} d/s).

Days, calendar days; provided that in computing time periods such periods shall exclude the day of the event which starts the period running, and further provided that if the last day of a period falls on a Sunday, legal holiday or declared state of emergency day, such period shall be extended to the close of business on the next business day.

Decommissioning, the safe removal from service of an activity involving radioactive materials or waste, and the reduction of residual radioactivity to a level that permits release of the property for unrestricted use and termination of the license.

DEP, the Department of Environmental Protection.

Detailed Site Characterization, the on-site investigatory and analytical step of site selection established in M.G.L. c. 111H, § 23, and conducted prior to the selection of any superior site.

Determinable Property Interest, an interest in property created with a special limitation that delimits the duration of the interest.

Development, all activities undertaken with respect to a low-level radioactive waste facility during the period commencing with the selection of any superior site pursuant to M.G.L. c. 111H, § 23 and continuing until the commencement of facility operation pursuant to M.G.L. c. 111H, § 39.

Disposal, the isolation of low-level radioactive waste from the biosphere inhabited by human beings and their food chains.

DPH, the Department of Public Health.

Environmental Monitoring Program, a monitoring program established by DPH, after consultation with DEP and the board of health of each site community, pursuant to M.G.L. c. 111H, § 36 for the purpose of collecting and analyzing environmental data prior to construction and throughout the construction, operation, closure, post-closure observation and maintenance, and institutional control of a facility.

Facility, a parcel of land, together with the structures, equipment and improvements thereon or appurtenant thereto, which, pursuant to M.G.L. c. 111H, is being developed, is used, or has been used for the treatment, storage or disposal of low-level radioactive waste. A "facility" does not include any property used for temporary storage of low-level radioactive waste in sealed containers by a broker.

Facility License, a license to operate a facility issued by DPH pursuant to M.G.L. c. 111H, § 31, or a license issued for a facility by the U.S. Nuclear Regulatory Commission.

Financial Risk Assessment, a comprehensive evaluation of the potential hazards associated with the operation, closure, post-closure observation and maintenance, and institutional control of a storage, treatment or disposal facility, the financial risks associated with these potential hazards and the financial mechanisms necessary to indemnify or insure against such risks.

Generator, a person, including a broker, who produces low level radioactive waste.

Half-Life, the time in which half the atoms of a particular radioactive substance disintegrate to another nuclear form.

Hazardous Waste, a waste, or combination of wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness or pose a substantial present or potential hazard to human health, safety, or welfare or to the environment when improperly

345 CMR: LOW-LEVEL RADIOACTIVE WASTE MANAGEMENT BOARD

treated, stored, transported, used or disposed

345 CMR: LOW-LEVEL RADIOACTIVE WASTE MANAGEMENT BOARD

1.02: continued

of, or otherwise managed, however, not to include solid or dissolved materials in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under section 402 of the Federal Water Pollution Control Act of 1967 as amended, or source, special nuclear, or by product materials as defined by the Atomic Energy Act of 1954.

High Volume, Low Activity Waste, soils or demolition rubble that have average concentrations of radioactive material less than or equal to the concentrations set forth in 345 CMR 1.13, Table 1.13B and that have been accepted for disposal at a licensed LLRW disposal facility.

Institutional Control, the continued observation, monitoring and care of a facility following transfer of the facility license from the operator to the Board.

Institutional Control Account, an account within the Low Level Radioactive Waste Trust Fund established in M.G.L. c. 111H, § 41 for the purpose of paying institutional control costs pursuant to M.G.L. c. 111H, §§ 9 and 47.

Interim Storage, storage of low-level radioactive waste for a period of five years or less, or as determined by the licensing agency.

Isotopes, nuclides with the same number of protons but differing numbers of neutrons in the nucleus.

Licensee, a person holding a license issued pursuant to Part C of 105 CMR 120.000 by DPH or a license issued by the U.S. Nuclear Regulatory Commission to transfer, acquire, own, possess or use quantities of, or devices or equipment utilizing, radioactive material.

Low-Level Radioactive Waste ('LLRW') or waste, radioactive material that (1) is neither high-level waste, nor spent nuclear fuel, nor byproduct material as defined in § 11(e)(2) of the Atomic Energy Act of 1954, as amended, 42 U.S.C. § 2014(e); and (2) is classified by the Federal Government as low-level radioactive waste, but not including waste which remains a Federal responsibility, as designated in § 3(b) of the Low-Level Radioactive Waste Policy Act, as amended, 42 U.S.C. § 2021c(b), as in effect as of December 8, 1987.

Low-Level Radioactive Waste Trust Fund, a trust fund established pursuant to M.G.L. c. 10, § 35H which shall consist of surcharges collected from users of the low-level radioactive waste facility in an amount determined by the Board on an annual basis, which shall be used to meet the obligations set forth in M.G.L. c. 111H, §§ 9 and 47.

Management, the storage, packaging, treatment, transportation, or disposal, where applicable, of low-level radioactive waste.

Management Plan, the Low-Level Radioactive Waste Management Plan adopted by the Board pursuant to M.G.L. c. 111H, § 12 to provide for the safe and efficient management of low-level radioactive waste.

Manifest, a detailed record of the characteristics and quantities of packaged waste as presented for transportation, treatment, storage, or disposal which usually accompanies waste transfers for these purposes.

Mixed Waste, low-level radioactive waste containing material that either

- (a) is listed in 310 CMR 30.131 through 30.136; or
- (b) causes the waste to exhibit any of the characteristics identified in 310 CMR 30.120.

Monitoring, observing and making measurements to provide data on a facility, its site, its surrounding environment, and its health and environmental impacts.

345 CMR: LOW-LEVEL RADIOACTIVE WASTE MANAGEMENT BOARD

1.02: continued

Neighboring Community, a community, other than a site community, which, according to the most recent decennial census conducted pursuant to M.G.L. c. 9, § 7, has at least 20% of its population residing within three miles of any superior site.

Nuclide, atoms characterized by their atomic number (number of protons) and their mass.

Operation, the control, supervision or implementation of the actual physical activities involved in the acceptance, storage, treatment, disposal or monitoring of low-level radioactive waste at a facility and the maintenance of the facility and any other responsibilities of the operation pertaining to the facility.

Operator, a person designated in accordance with the procedures established in M.G.L. c. 111H, §§ 22 and 27 to develop and operate a low-level radioactive waste facility.

Performance assessment, the process of analyzing the performance of a facility, usually using computer modeling, in order to evaluate its ability to meet the requirements of 105 CMR 120.811 through 120.816.

Person, any agency or political subdivision of the Federal Government or the Commonwealth, or of any state, any public or private corporation or authority, individual, firm, joint stock company, partnership, association, trust, estate, institution or other entity, and any officer, employee or agent of such person, and any group of such persons.

Possible Location, a location, identified in accordance with the procedures established in M.G.L. c. 111H, § 20, which will be the subject of preliminary characterization.

Post-closure Observation and Maintenance, the active monitoring and maintenance of a facility which has been closed in preparation for transfer of the facility's license from the operator to the Board.

Preliminary Characterization, the investigatory and analytical step established in M.G.L. c. 111H, § 20, and conducted prior to the identification of candidate sites.

Professional Training, the level of academic or on-the-job training generally recognized as adequate to qualify a person to be employed in a discipline.

Property Value Protection District, an area of land, identified by the Board, after consultation with the community supervisory committee, which includes all land within ½ mile of the waste management area of a facility and may include other land not more than one mile from the waste management area of the facility.

Public Interest, the common welfare, convenience, benefit, and necessity of the people of the Commonwealth, including public health, safety, and the environment.

Public Meeting, a public hearing, satisfying the requirements of M.G.L. c. 30A, § 2, in which an agency presents information, responds to inquiries, and hears testimony of interested persons.

Public Participation Coordinator, the person appointed pursuant to M.G.L. c. 111H, § 6 to encourage and facilitate the participation of interested persons in all of the processes established in or pursuant to M.G.L. c. 111H, and to carry out the other duties prescribed in M.G.L. c. 111H.

Radioactive Materials, any solid, liquid, or gas which emits radiation spontaneously.

Radioactivity, the transformation of unstable atomic nuclei by the emission of radiation.

1.02: continued

Radionuclide, an isotope that eventually undergoes spontaneous disintegration, with the emission of radiation.

Remediation, the planning, design, and implementation of appropriate means of assessment and solution of a contamination problem.

Retrievable, able to recover waste in an intact container without substantial destruction of the engineered barriers surrounding the waste containers.

Retrieval, the recovery of waste in an intact container.

Secretary, the Secretary of the Executive Office of Environmental Affairs.

Shallow Land Burial, a land disposal method that relies on the site's natural characteristics as the primary barrier for isolation of the waste.

Site, a parcel of land which, pursuant to M.G.L. c. 111H, is being considered, developed or used or has been used as a location for a facility.

Site Community, the community in which is located all or any part of any superior site.

Source Minimization, minimizing the volume or radioactivity of low-level radioactive waste prior to its generation by such methods as: (1) avoiding unnecessary contamination of items during the use of radioactive materials; (2) carefully segregating radioactive waste from non-radioactive trash; or (3) substituting non-radioactive isotopes or radioisotopes with shorter half-lives where practicable.

Storage, the holding of low-level radioactive waste for treatment or disposal.

Storage for Decay, a procedure in which low-level radioactive waste with a relatively short half-life is held for natural radioactive decay in compliance with applicable federal and state regulations.

Superior Site, any site selected by the Board, after detailed site characterization, pursuant to M.G.L. c. 111H, § 23.

Treatment, any method, technique, or process, including source minimization, volume minimization and storage for decay, designed to change the physical, radioactive, chemical or biological characteristics or composition of low-level radioactive waste in order to render such waste safer for management, amenable for recovery, convertible to another usable material or reduced in volume.

Volume Minimization, treatment of low-level radioactive waste after its generation in order to minimize the physical dimensions of the waste and the space required for storage or disposal.

Waste Form, those physical and chemical characteristics of LLRW of primary importance in influencing its stability in a storage or disposal environment.

1.03: Board Representing the Public Interest

(1) The Board shall be responsible for planning and effecting the management of low-level radioactive waste in the Commonwealth in accordance with M.G.L. c. 111H.

(2) The Board shall consist of members who, by reason of their office, experience, background and professional training, can act in the public interest.

345 CMR: LOW-LEVEL RADIOACTIVE WASTE MANAGEMENT BOARD

1.04: Management Plan Adoption, Review and Revision

- (1) The Low-Level Radioactive Waste Management Plan, as approved by vote of the Low-Level Radioactive Waste Management Board on December 22, 1993, is hereby adopted by regulation.
- (2) The Management Plan shall be reviewed annually by the Board and revised as necessary.
- (3) A public hearing satisfying the requirements of M.G.L. c. 30A, § 2 shall be required prior to the amendment or repeal of the Management Plan.

1.05: Public Participation

- (1) The Board shall develop and implement a Public Participation Plan which identifies citizen involvement policies and procedures. Such plan shall include, but not be limited to:
 - (a) a statement of goals; and
 - (b) procedures to accomplish the goals.
- (2) As required by M.G.L. c. 111H, §§ 11 and 19, the recommendations of the Public Participation Coordinator, made pursuant to M.G.L. c. 111H, § 6, shall be implemented to the extent feasible in order:
 - (a) to ensure appropriate public participation as the Management Plan and any regulations are developed pursuant to M.G.L. c. 111H;
 - (b) to ensure that adequate information concerning the Management Plan and any regulations adopted pursuant to M.G.L. c. 111H is available;
 - (c) to facilitate the conduct of public meetings and other opportunities for public review and comment; and
 - (d) to ensure that public concerns are identified and addressed throughout the implementation of the Management Plan and any regulations adopted pursuant to M.G.L. c. 111H.
- (3) Except as permitted by M.G.L. c. 66, § 10, no studies relevant to the implementation of the Management Plan shall be kept confidential by the Board.

1.06: Management Plan Consistency Review

Any person lawfully holding a license to accept waste for treatment, storage or disposal as of December 8, 1987, may apply to DPH for an amendment of the terms and conditions of such license if the application for such amendment has been determined by the Board to be consistent with the Management Plan.

1.07: Waivers and Severability

- (1) Waiver
 - (a) The Board shall not waive the application of the site selection criteria adopted by DEP pursuant to M.G.L. c. 111H, § 14(d).
 - (b) The Board may waive the application of any section of 345 CMR 1.00 if it finds that:
 1. public health, safety, and the environment will be protected;
 2. strict application of the section to be waived would undermine the public interest;
 3. specific substitute requirements can be adopted which will result in the substantial protection of the process established in M.G.L. c. 111H and the rights of persons affected by the action; and
 4. the action made possible by the waiver will not violate the provisions of M.G.L. c. 111H or any other state or federal law.
- (2) Severability. If any provision of 345 CMR 1.00 is held to be invalid, such invalidity shall not affect the provisions of the application thereof not specifically held invalid.

345 CMR: LOW-LEVEL RADIOACTIVE WASTE MANAGEMENT BOARD

1.11: Classification System Requirements

The Board's classification system for all LLRW generated, treated or disposed of in the Commonwealth shall be compatible with federal requirements, set forth in 345 CMR 1.12, but shall provide further for total hazard classification, as set forth in 345 CMR 1.13.

1.12: Federal Classification of Radioactive Waste for Near-Surface Disposal

All waste shall be classified in accordance with the federal classification system set forth in 105 CMR 120.299.

(PAGES 11 AND 12 ARE RESERVED FOR FUTURE USE.)

1.13: Massachusetts Total Hazard Classification System

- (1) The data to be derived from a total hazard classification system for Massachusetts shall be used in tracking waste generation and in the siting, design, performance assessment, licensing, closure, monitoring, and possible remediation of future facilities. They may also be used to make assessments and decisions on other waste management needs, such as the need for additional waste minimization and other waste treatment steps and for negotiation of agreements, contracts, or interstate compacts with other states.
- (2) The classification system shall consist of:
 - (a) A survey, or data acquisition tool, to allow detailed characterization of each waste stream;
 - (b) An inventory, or data compilation tool;
 - (c) A codification system to allow categorization, classification, and data sorting;
 - (d) A codification system to allow identification, management, and disposal consistent with other federal and state regulations (e.g., NRC, EPA, DEP);
 - (e) A data manipulation and analytic tool to process and compile data by any characteristics of interest and for any need; and
 - (f) A classification and tracking (manifest) system to allow operation, monitoring, and remediation, if necessary, at potential storage, treatment, or disposal facilities.
- (3) The Massachusetts LLRW disposal classification system shall be as set forth in Table 1.13A.

TABLE 1.13A

Classification for Licensed LLRW Disposal	
Disposal Class	Description
HVLA	High Volume, Low Activity Waste.
AU	Class A unstable LLRW.
AS	Class A stable LLRW.
B	Class B LLRW per NRC.
C	Class C LLRW per NRC.
GTCC	Greater-than-Class-C - not suited for near-surface disposal.*
AU-H	Class A unstable LLRW with treated RCRA/DEP hazardous waste components.
AS-H	Class A stable LLRW with treated RCRA/DEP hazardous waste components.
B-H	Class B LLRW with treated RCRA/DEP hazardous waste components.
C-H	Class C LLRW with treated RCRA/DEP hazardous waste components.
GTCC-H	Greater than Class C LLRW with treated RCRA/DEP hazardous waste components - not suitable for near-surface disposal.*
* GTCC waste is the responsibility of the federal government and is not LLRW. GTCC is classified here for tracking purposes only.	

1.13: continued

Table 1.13B

Maximum Average Concentrations in High Volume, Low Activity Waste			
Americium-241	2.3E02 pCi/g	Neptunium-237	2.0E03 pCi/g
Americium-243	1.7E03 pCi/g	Nickel-59	7.0E02 pCi/g
Antimony-124	7.9E02 pCi/g	Nickel-63	2.0E06 pCi/g
Antimony-125	5.3E03 pCi/g	Niobium-94	1.6E02 pCi/g
Barium-133	4.0E03 pCi/g	Plutonium-238	1.0E04 pCi/g
Beryllium-7	3.8E04 pCi/g	Plutonium-238	8.2E03 pCi/g*
Cadmium-109	4.6E04 pCi/g	Plutonium-239	9.9E03 pCi/g
Calcium-45	4.0E08 pCi/g	Plutonium-240	1.0E04 pCi/g
Carbon-14	4.0E05 pCi/g	Plutonium-241	3.5E05 pCi/g
Cerium-139	2.0E03 pCi/g	Plutonium-241	1.1E03 pCi/g*
Cerium-141	4.0E03 pCi/g	Plutonium-242	1.0E04 pCi/g
Cerium-144	4.0E03 pCi/g	Polonium-210	2.0E04 pCi/g
Cesium-134	1.2E03 pCi/g	Potassium-40	1.0E04 pCi/g
Cesium-135	5.0E02 pCi/g	Promethium-147	4.0E03 pCi/g*
Cesium-137	5.6E02 pCi/g	Radium-226	2.0E03 pCi/g*
Chromium-51	6.8E04 pCi/g	Radium-228	1.8E03 pCi/g
Cobalt-56	3.6E02 pCi/g	Radium-228 (1 yr)	1.2E03 pCi/g*
Cobalt-57	1.9E04 pCi/g	Radium-228 (5 yrs)	6.7E02 pCi/g*
Cobalt-58	1.6E03 pCi/g	Radium-228 (10 yrs)	5.6E02 pCi/g*
Cobalt-60	3.6E02 pCi/g	Rubidium-83	1.0E03 pCi/g
Copper-67	2.0E03 pCi/g	Ruthenium-106	1.9E04 pCi/g*
Curium-242	1.4E06 pCi/g	Scandium-46	4.0E02 pCi/g
Curium-242	8.1E03 pCi/g*	Selenium-75	1.0E03 pCi/g
Curium-243	1.5E03 pCi/g	Silver-108m	5.0E02 pCi/g
Curium-243	1.3E03 pCi/g*	Silver-110m	5.6E02 pCi/g
Curium-244	1.0E04 pCi/g	Sodium-22	7.8E02 pCi/g
Curium-244	7.4E03 pCi/g*	Strontium-85	5.0E02 pCi/g
Europium-152	1.7E03 pCi/g	Strontium-89	2.0E03 pCi/g
Europium-154	1.4E03 pCi/g	Strontium-90	2.0E04 pCi/g
Europium-155	1.7E03 pCi/g	Sulfur-35	4.0E03 pCi/g
Gadolinium-153	3.0E03 pCi/g	Technetium-99	1.0E05 pCi/g
Germanium-68	4.0E03 pCi/g*	Thorium-230	1.5E04 pCi/g
Gold-195	2.0E03 pCi/g	Thorium-232	6.8E02 pCi/g*
Hafnium-181	1.0E03 pCi/g	Tin-113	7.3E05 pCi/g
Hydrogen-3	2.0E07 pCi/g	Uranium-234	3.7E04 pCi/g

345 CMR: LOW-LEVEL RADIOACTIVE WASTE MANAGEMENT BOARD

1.13: continued

Maximum Average Concentrations in High Volume, Low Activity Waste			
Iodine-125	1.5E03 pCi/g	Uranium-235	7.7E02 pCi/g
Iodine-129	3.1E03 pCi/g	Uranium-236	3.6E04 pCi/g
Iridium-192	2.5E03 pCi/g	Uranium-238	2.8E04 pCi/g
Iron-55	1.8E06 pCi/g	Uranium-natural	1.8E04 pCi/g
Iron-59	4.0E02 pCi/g	Uranium-depleted	1.1E05 pCi/g
Lead-210	2.3E05 pCi/g*	Yttrium-91	2.0E03 pCi/g
Manganese-54	5.6E03 pCi/g	Zinc-65	1.1E04 pCi/g
Mercury-203	1.0E04 pCi/g	Zirconium-95	5.0E02 pCi/g*
* Daughters are assumed to be present at same concentrations in equilibrium.			

(4) The following parameters shall, where applicable to a given waste type, be collected and evaluated in the classification of LLRW:

- (a) generator identification;
- (b) location of waste generated - city/town;
- (c) waste type;
- (d) radioactivity - total activity, radioisotopic content of waste stream, specific activity, millicuries or millicuries/container for each radionuclide;
- (e) container radiation levels, if applicable - range of levels and typical level for the waste stream;
- (f) treatment performed on-site, volume and activity reduction achieved;
- (g) physical matrix, if applicable - solidification or sorption media;
- (h) EPA/DEP hazard code(s), if applicable - before and after treatment and EPA/DEP treatment employed;
- (i) chelating agents - type and amounts greater than 1%;
- (j) type of containers and number of each type used each year for storage or disposal - description, dimensions, full weight, disposal volume;
- (k) disposal class - Massachusetts/NRC compatible classification;
- (l) disposal site used;
- (m) storage site used;
- (n) total volume/year;
- (o) volume and activity shipped to broker or processor;
- (p) treatment used by broker or processor;
- (q) volume and activity delivered from broker or processor for storage or disposal;
- (r) broker and processor identification;
- (s) volume and activity held in storage for future disposal;
- (t) storage location - city/town;
- (u) treatment of stored waste planned prior to disposal;
- (v) expected volume, activity, and disposal class of stored waste after treatment;
- (w) expected shipment date of stored waste;
- (x) total volume and activity of waste stream held for decay to level not requiring licensed radioactive waste treatment or land disposal;
- (y) identification of disposal techniques used other than storage for decay or licensed off-site disposal - volume and activity so managed;and
- (z) termination of production of waste stream or decommissioning waste streams - date expected, type of waste, volume, activity, percent major radionuclides.

1.21: Mixed Waste Management Practice (Reserved)

1.31: Waste Transportation

- (1) All waste shipments shall be packaged and transported in a manner that ensures, to the extent reasonably achievable, that waste will arrive at its destination safely, in a manner acceptable to the destination entity, without health, safety, or environmental damage and without exposing the Commonwealth to contingent liabilities.
- (2) Waste shall be deemed to be available for shipment only when:
 - (a) Prior agreement has been reached with a destination entity licensed to receive the waste;
 - (b) All terms of the agreement, including any waste acceptance criteria or requirements for payment of a fee, have been complied with;
 - (c) All regulatory requirements governing the packaging, shipment or transportation of the waste have been complied with; and
 - (d) All measures appropriate to the LLRW shipment have been taken to ensure that the waste can be received safely at its destination.

1.32: Re-Entry of Waste into the Commonwealth after Shipment Out of State for Treatment

- (1) The Board shall provide assurances that waste shall be permitted to re-enter the Commonwealth to be returned to its generator for storage, upon the request of out-of-state processors, with respect to all shipments of waste for treatment that satisfy the following conditions:
 - (a) The Board has been given prior notification of the waste shipment to be returned, indicating the chemical composition, activity and volume of the waste, the shipping destination and carrier;
 - (b) The generator is authorized to, and has agreed to accept the waste back within the terms of its license;
 - (c) The generator has executed a contract for the treatment or processing of the waste; and
 - (d) The waste satisfies any and all waste acceptance criteria imposed pursuant to such contract.
- (2) The provision of such assurances shall not constitute agreement to permit re-entry of the waste for purposes other than its return to the generator.
- (3) Nothing in 345 CMR 1.32 or in the provision of assurances pursuant to 345 CMR 1.32 shall constitute agreement by the Board or the Commonwealth to accept possession of waste or otherwise to provide for its storage or disposal.
- (4) Nothing in 345 CMR 1.32 or in the provision of assurances pursuant to 345 CMR 1.32 shall be construed as acceptance by the Commonwealth of responsibility for any losses, claims, or costs incurred in connection with, or as a result of the re-entry of the waste.

1.41: Development of Interim and Emergency Storage Plans

- (1) Interim and emergency storage plans shall be developed and implemented by the Board whenever it appears that no facility is or will be available to accept waste produced in Massachusetts.
- (2) The Board shall determine whether an interim or emergency storage plan will fully utilize on-site storage by generators, or instead require an interim or emergency centralized storage facility. In the event that a centralized interim or emergency storage facility is determined to be needed, the Board shall identify a location for interim storage, after notice and an opportunity for hearing, and may apply for a facility license in accordance with the provisions of M.G.L. c. 111H, § 31, as permitted by M.G.L. c. 111H, § 12(b)(10), without satisfying the requirements of 345 CMR 1.82 through 1.88.

1.42: Loss-of-Access Contingency Plan

The Board shall develop, circulate for public and agency comment, and update as appropriate a contingency plan to ensure a coordinated state agency response to handle generators' loss of access to disposal sites.

1.43: Financial Responsibility for Repackaging

The repackaging for disposal of any waste in a storage facility developed pursuant to M.G.L. c. 111H shall be the financial responsibility of the generator.

1.44: Monitoring the Storage, Treatment and Disposal Needs of Massachusetts Generators

The Board shall monitor the storage, treatment and disposal needs of Massachusetts generators pursuant to M.G.L. c. 111H, § 7, to ensure the accuracy and completeness of the Management Plan or to determine compliance with M.G.L. c. 111H.

1.61: Retrievable Disposal Technologies

- (1) Any disposal method utilized at a facility shall permit retrieval and monitoring of the waste. Except as provided in 345 CMR 1.61(3), any disposal method that satisfies this criterion may be utilized at a facility if permitted by its license, whether or not such method is listed in 345 CMR 1.61(2).
- (2) Disposal methods that shall be presumed capable of satisfying the requirements of 345 CMR 1.61, under appropriate conditions, shall include:
 - (a) below-ground modular concrete canister disposal;
 - (b) below-ground vaults;
 - (c) mined cavity;
 - (d) borehole or augured holes;
 - (e) above-ground vaults;
 - (f) above-ground vaults with earthen cover;
 - (g) above-ground modular canisters;
 - (h) above-ground modular canisters with earthen cover;
 - (i) above ground vaults with modular canisters;
 - (j) a combination of these technologies.
- (3) No disposal facility in the Commonwealth shall utilize:
 - (a) shallow land burial;
 - (b) hydrofracture;
 - (c) intermediate depth disposal; or
 - (d) earth-mounded concrete bunker disposal.

1.63: Disposal Fees, Waste Acceptance Criteria and Surcharges

- (1) Upon the issuance of a facility license pursuant to M.G.L. c. 111H, § 31, and annually thereafter, until the facility license is transferred to the Board pursuant to M.G.L. c. 111H, § 46, the facility operator shall pay to the Commonwealth, prior to the commencement of the fiscal year, an amount determined by DPH pursuant to M.G.L. c. 111H, § 38(a).
- (2) The operator shall annually submit to the Board, for approval in accordance with 345 CMR 1.63, a proposed schedule of fees and criteria for acceptance of LLRW. The operator's proposed schedule of fees shall be accompanied by:
 - (a) a certified audit of gross operating receipts from fees and surcharges imposed for acceptance of LLRW at the facility during the current and prior fiscal years; and
 - (b) a verification under oath that:
 1. all compensation required to be paid by the operator to each site, neighboring and affected community by the comprehensive operating contract has been paid; and
 2. all surcharges collected for the Low-Level Radioactive Waste Trust Fund have been remitted to the state treasurer in accordance with the requirements of the comprehensive operating contract executed pursuant to M.G.L. c. 111H, § 33.
- (3) Schedule of Fees. The schedule of fees shall:
 - (a) be based on the classification system set forth in 345 CMR 1.11 through 1.13;
 - (b) be designed so as to promote source minimization, volume minimization, and storage for decay by generators;
 - (c) establish service charges for waste shipments found not to be in compliance with applicable regulations and conditions of the facility license;
 - (d) be adequate to reimburse the operator for:
 1. all reasonable expenses of facility development and operation, including the costs of premature facility closure and decommissioning;

1.63: continued

2. all reasonable community compensation guaranteed to site, neighboring, and affected communities in the comprehensive operating contract executed pursuant to M.G.L. c. 111H, § 33;
 3. DPH's required annual payment established pursuant to 345 CMR 1.63; and
 4. a reasonable profit from the operation of the facility.
- (4) Waste Acceptance Criteria:
- (a) The waste acceptance criteria shall:
 1. be consistent with the Management Plan and based on the classification system set forth in 345 CMR 1.11 through 1.13;
 2. be adequate to ensure proper and efficient operation of the facility;
 3. be designed so as to ensure source minimization, volume minimization and storage for decay by generators in compliance with 105 CMR 120.890;
 4. be designed to conserve facility resources; and
 5. specify that no LLRW shall be accepted from an electric-power-generating facility if such waste requires management more stringent than the most stringent management required for any LLRW which may be accepted at the facility from another generator.
 - (b) In reviewing the waste acceptance criteria for a disposal facility, the Board shall evaluate
 1. waste form;
 2. stability; and
 3. requirements for pre-treatment to enhance the ability of the facility to:
 - a. dispose of the waste so as to keep radiation exposures as low as reasonably achievable; and
 - b. be operated in a manner most protective of the public health, safety, and environment.
 4. the adequacy of requirements to ensure source minimization, volume minimization, and storage for decay by generators in compliance with 105 CMR 120.890.
- (5) All books and records of the operator shall be subject to audit pursuant to M.G.L. c. 11, § 12.
- (6) The Board, after notice and opportunity for hearing, shall:
- (a) approve, modify or reject the schedule of fees and waste acceptance criteria submitted by the operator; and
 - (b) establish annually a schedule of surcharges for the Low-Level Radioactive Waste Trust Fund established in M.G.L. c. 111H, § 41. Such surcharges shall be adequate to ensure that the contingent liability and institutional control accounts within the Low-Level Radioactive Waste Trust Fund will contain enough funds to:
 1. properly maintain the facility throughout the institutional control period; and
 2. provide for compensation for injuries to persons, land or property.
- (7) The fees, criteria and surcharges approved or established by the Board pursuant to 345 CMR 1.63 shall be imposed as conditions of acceptance of all LLRW at the facility until new or revised fees, criteria, or surcharges are approved by the Board.

1.71: Implementation of Finding of Requirement for Additional Facility Capacity

- (1) Any finding that there is a requirement for additional facility capacity to meet present needs or needs anticipated to arise within the next decade shall be included in the Management Plan adopted by the Board.
- (2) Any finding that there is a requirement for additional facility capacity to meet present needs or needs anticipated to arise within the next decade shall be made only after review of both out-of-state and in-state options for short-term and long-range waste management. Such options may include, but need not be limited to:
 - (a) the out-of-state disposal of LLRW;

1.71: continued

- (b) the on-site storage of LLRW on the premises where it is generated for five years or longer, if permitted by DPH or the NRC;
- (c) a centralized storage facility sited within the Commonwealth; and
- (d) a disposal facility sited within the Commonwealth.

1.72: Storage Facility

(1) The Board hereby finds that there is no requirement for additional storage facility capacity to meet present needs, but that there is a requirement for additional storage facility capacity to meet needs anticipated to arise within the next decade.

(2) No determination to proceed with centralized storage facility site selection pursuant to M.G.L. c. 111H, § 17 shall be made unless the Board finds that reliance on future on-site storage of LLRW is not a satisfactory management option due to anticipated expiration of licensee authorization for such storage. In any such determination to proceed with centralized storage facility site selection, the Board shall consider, at a minimum, the following storage facility siting options and choose among those considered:

- (a) Site a centralized short-term storage facility;
- (b) Site a centralized long-term storage facility;
- (c) Site a centralized interim or emergency storage facility.

1.73: Treatment Facility (Reserved)

1.74: Disposal Facility

(1) The Board hereby finds that there is a requirement for additional disposal facility capacity to meet present needs or needs anticipated to arise within the next decade.

(2) In any determination to proceed with disposal facility site selection pursuant to M.G.L. c. 111H, § 17, the Board shall consider, at a minimum, the following disposal facility siting options and choose among those considered:

- (a) Site a disposal facility for Massachusetts-only waste;
- (b) Site a small regional disposal facility that would handle waste from Massachusetts and one or more neighboring states;
- (c) Site a large regional disposal facility to accommodate waste from the New England states as well as other states searching for disposal options.

1.81: Requirements for Board Initiation of Siting

(1) The Board shall initiate the site selection process established in M.G.L. c. 111H, §§ 18 through 23, if it determines, by a 2/3 vote of its members, that it is necessary and appropriate to proceed with site selection. Such vote may be taken only if:

- (a) the Board has adopted a Low-Level Radioactive Waste Management Plan incorporating a finding that there is a requirement for additional facility capacity to meet present needs or needs anticipated to arise within the next decade;
- (b) DPH has adopted regulations, under M.G.L. c. 111H, § 13, necessary to implement a program for source minimization, volume minimization, and storage for decay by generators;
- (c) DEP has adopted regulations, under M.G.L. c. 111H, § 14, establishing criteria for the selection of any superior site for the development and operation of a facility, guidelines for their application, and procedures for implementing the site selection process;
- (d) the Board has adopted regulations, under M.G.L. c. 111H, § 15, for the selection of operators; and
- (e) DPH has adopted regulations, under M.G.L. c. 111H, § 16, for the licensing, development, operation, closure, post-closure observation and maintenance and institutional control of a facility.

1.81: continued

- (2) No less than 21 days prior to a vote to initiate site selection pursuant to M.G.L. c. 111H, § 17, the Board shall issue a notice, satisfying the requirements of M.G.L. c. 30A, § 2, of its intent to conduct such vote.
- (3) Upon the Board's vote to initiate site selection:
 - (a) The Board shall notify the Chief Executive Officer and Chief Elected Official of each community of the commencement of the site selection process, explaining in detail the site selection criteria, guidelines for their application and procedures for implementation of site selection, and offering the resources of the Board and the Public Participation Coordinator to assist communities in participating in the site selection process.
 - (b) The Board shall notify other states interested in negotiating the possibility of their generators' gaining access to a Massachusetts facility.
 - (c) The Board shall send press releases to pertinent newspapers, radio and television stations, and include an explanation of the public's role in waste management.
 - (d) The Public Participation Coordinator and other Board staff shall be available to attend meetings, conduct workshops, brief federal and state legislators and local officials, and generally to speak to interested groups about the siting process, to provide information, to answer questions, and to listen to concerns of the public.
- (4) Upon voting to initiate site selection, the Board, with the assistance of the Public Participation Coordinator, shall prepare a siting plan, identifying the major decision points in the state's siting process, and summarizing the roles of responsible state agencies and potential site communities.
- (5) The Board shall hire consultants, as necessary, to complete the site selection process.

1.82: Voluntary Siting Activities

- (1) As part of the notification made pursuant to 345 CMR 1.81(3), the Board shall inform Chief Executive Officers and Chief Elected Officials of the opportunity to participate in voluntary siting activities.
- (2) The Board shall give notice that grant funds will be available to communities that may be interested in volunteering a site or sites, after the issuance of the Report Identifying Possible Locations pursuant to 345 CMR 1.84(1). The Board shall provide such grants to enable communities to evaluate the potential economic impacts of an LLRW facility.

1.83: Statewide Mapping and Screening

- (1) The Board shall issue a Statewide Mapping and Screening Report prepared in accordance with any requirements of 310 CMR 41.44 through 41.45. Such Report shall identify, and exclude from further consideration in the site selection process, those areas of the Commonwealth that are obviously unable to satisfy the site selection criteria set forth in 310 CMR 41.00.
- (2) The Board shall conduct at least one public meeting on the Statewide Mapping and Screening Report at a time and location to be determined after consultation with the Public Participation Coordinator, and shall accept written comments thereon. The Board shall consider and evaluate all comments and statements made at a public meeting or submitted in writing.

1.84: Possible Locations

- (1) After the issuance of the Statewide Mapping and Screening Report, the Board shall issue a Report Identifying Possible Locations, which are likely to contain one or more Candidate Sites that will satisfy the criteria set forth in 310 CMR 41.41(1)(a) and (b). The Report shall describe the procedures used to identify such Possible Locations and establish that such procedures conform to any requirements of 310 CMR 41.50 through 41.51.

1.84: continued

(2) The Board shall provide a notice, satisfying the requirements of M.G.L. c. 111H, § 19 to the Chief Executive Officer and Chief Elected Official of each community in which is located a Possible Location identified in the Report. All communities in which a Possible Location is located shall also receive a second notice of the opportunity to participate in voluntary siting activities, together with information about grant funds available pursuant to 345 CMR 1.82.

(3) The Board shall conduct at least one public meeting on the Report in the vicinity of each Possible Location identified in the Report at times and locations to be determined after consultation with the Public Participation Coordinator, and shall accept written comments thereon. The Board shall consider and evaluate all comments and statements made at a public meeting or submitted in writing.

1.85: Candidate Sites

(1) The Board shall issue a draft Candidate Site Identification Report. Such Report shall identify at least two, but not more than five candidate sites that appear to satisfy the requirements of 310 CMR 41.41(1), and that the Board considers to be potentially licensable, capable of being developed, and otherwise appropriate for detailed site characterization pursuant to M.G.L. c. 111H, § 23. Such Report shall also include:

- (a) a report of the results of a preliminary characterization of the meteorology, surface and groundwater, geology, tectonics, geomechanics, air quality, ecology, land use, cultural resources and social and economic characteristics of each location considered as a possible candidate site;
- (b) a description of the procedures used to identify the candidate sites based on such preliminary characterization; and
- (c) draft plans for detailed site characterization of each candidate site.

(2) The preliminary characterization required pursuant to 345 CMR 1.85(1)(a) shall be conducted, to the extent feasible, so as not to interfere with the quiet enjoyment of private property; provided, however, that whenever the Board deems it necessary to make surveys, soundings, drillings or examinations to obtain information for, or to expedite the preliminary characterization, its authorized agents or employees may, after due notice by registered or certified mail, enter upon any lands, waters and premises, not including buildings, in the Commonwealth for the purposes of making surveys, soundings drillings and examinations as the Board may deem necessary or convenient, and such entry shall not be deemed a trespass. The Board shall make reimbursement for any injury or actual damage resulting to such lands, water and premises caused by any act of its authorized agents or employees, and the Board shall, so far as possible, restore such lands to the same condition as prior to the making of such surveys, soundings, drillings or examinations.

(3) Upon the issuance of the draft Candidate Site Identification Report, the Board shall transmit a copy of the draft Report to the Secretary of the Executive Office of Environmental Affairs; and widely publicize its availability for public review and comment; and the Board and the Commissioner of the Division of Capital Planning and Operation shall jointly provide a notice satisfying the requirements of M.G.L. c. 111H, § 19 and M.G.L. c. 7, § 40I to all persons entitled under M.G.L. c. 7, § 40I to receive such notices and to the Chief Executive Officer and Chief Elected Official of each community in which is located all or part of a Candidate Site identified in such draft Report.

(4) No person owning property identified in the draft Candidate Site Identification Report shall take any action or cause to have any action taken with respect to such property prior to the acceptance or amendment of such Report by the Board which has the effect of interfering with or rendering more difficult or expensive the conduct of Detailed Site Characterization of the property or the acquisition of a property interest therein.

1.85: continued

(5) The Board shall conduct at least one public meeting on the report in each community in which is located all or part of a Candidate Site identified in the draft Report, at times to be determined after consultation with the Public Participation Coordinator. Such public meeting shall be deemed to satisfy the public hearing requirements of M.G.L. c.7, s.40I. The Board shall accept written comments on the Report submitted within 60 days of the public notice of its availability. Prior to its acceptance of the draft Report, the Board shall consider and evaluate all comments and statements made at a public meeting or submitted in writing.

(6) Upon receipt of the draft Report, the Secretary shall implement the public review and comment procedures established pursuant to M.G.L. c. 30, § 62C; provided, however, that the review period established in such section shall not extend beyond the final date for acceptance of written comments by the Board pursuant to 345 CMR 1.85(5). Within 60 days of the issuance of the draft Report, the Secretary shall issue a statement evaluating its technical adequacy and conformance with 310 CMR 41.00. The Secretary shall transmit a copy of such statement to the Board.

(7) The Board shall conduct a vote to determine whether to accept the Report and to proceed with detailed site characterization of the candidate sites identified therein, or amend the Report and proceed with detailed site characterization of the candidate sites identified in the Report as amended. Such a vote shall be based on the technical adequacy of the Report and its conformance with any requirements of 310 CMR 41.60 through 41.63. If the Board fails to accept or amend the Report, the Report shall be set aside and the procedures established in 345 CMR 1.85 shall be repeated; provided, however, that the Board shall issue its revised draft Report within four months of the expiration of the time for it to accept or amend the previous Candidate Site Identification Report.

1.86: Detailed Site Characterization

(1) Upon the Board's vote to proceed with Detailed Site Characterization, the Commissioner of the Division of Capital Planning and Operations shall, on behalf of the Board, take appropriate action to acquire, by purchase or taking, pursuant to M.G.L. c. 79, a determinable property interest in each Candidate Site identified in the Candidate Site Identification Report as accepted or amended by the Board, or, in the case of real property of the Commonwealth, to transfer the control and use of such property to the Board. Acquisition or transfer of each such property interest shall be subject to the requirements of M.G.L. c. 7, §§ 40E through 40M; provided, however, that each Candidate Site shall be deemed to possess unique qualities for the purpose of M.G.L. c. 7, § 40H. Such property interest shall be adequate to permit the conduct of Detailed Site Characterization of the property, in accordance with any requirements of 310 CMR 41.70 through 41.72, and to restrict the right to develop the property until a facility license is issued, pursuant to M.G.L. c. 111H, § 31, to operate a facility at one of the Candidate Sites identified in the Candidate Site Identification Report as accepted or modified by the Board.

(2) The Board and the appropriate Community Supervisory Committee shall jointly conduct a public meeting in each Candidate Site Community to discuss the draft plan for the Detailed Site Characterization of the Candidate Site located within such community. Copies of the Report and draft plan shall be sent to all municipal libraries in such communities. The Detailed Site Characterization plan adopted by the Board shall include investigations and tests, both in the field and in the laboratory, which shall be conducted so as to demonstrate whether the site complies with the site selection criteria set forth in 310 CMR 41.00; to provide information necessary for licensing of any facility at the site pursuant to 105 CMR 120.800, including an evaluation of the ability of the site characteristics to contribute to isolation of waste, data necessary for the proposed design of such a facility, an identification of potential interactions between the site characteristics and any waste or waste containers located at the site to establish data collection points and baseline data suitable for use in an environmental monitoring program adopted pursuant to M.G.L. c. 111H, § 36; and to identify,

1.86: continued

for inclusion in any environmental impact report prepared pursuant to M.G.L. c. 111H, § 30, potential environmental impacts resulting from the development, operation, closure, postclosure observation and maintenance or institutional control of a facility at the site. Prior to its adoption of the final plan, the Board shall consider and evaluate all comments made at a public meeting or in writing.

(3) While Candidate Sites are undergoing Detailed Site Characterization, the Board shall develop estimates of the number of waste shipments necessary to each Candidate Site during a given time frame, and shall evaluate traffic controls that will minimize potential traffic problems.

(4) The Board shall issue a draft Report of the Detailed Site Characterization of each Candidate Site, and shall transmit a copy of such Report to the Secretary and the Community Supervisory Committee. The draft Report shall describe the procedures used to characterize each Candidate Site and establish that procedures fully conform to any requirements of 310 CMR 41.70 through 41.72.

(5) Upon issuance of the draft Detailed Site Characterization Report, the Board shall widely publicize its availability for public review and comment, and the Commissioner of the Division of Capital Planning and Operations shall issue a notice, satisfying the requirements of M.G.L. c. 7, § 40I, to all persons entitled thereby to review such notice. The Board shall conduct at least one public meeting on the Report, in each Candidate Site Community, at times to be determined after consultation with the Public Participation Coordinator. Such public meeting shall be deemed to satisfy the public hearing requirements of M.G.L. c. 7, § 40I. The Board shall accept written comments on the Report submitted by the Community Supervisory Committee or any other interested person within 60 days of the public notice of its availability.

(6) Upon receipt of the draft Detailed Site Characterization Report, the Secretary shall implement the public review and comment procedures established pursuant to M.G.L. c. 30, § 62C; provided, however, that the review period established in such section shall not extend beyond the final date for acceptance of written comments by the Board pursuant to 345 CMR 1.86. Within 75 days of the issuance of the Report, said Secretary shall issue a statement evaluating its technical adequacy and conformance with any requirements of 310 CMR 41.70 through 41.72. The Secretary shall transmit a copy of such statement to the Board and the Community Supervisory Committee.

(7) No sooner than 75 days and no later than 90 days after the issuance of the draft Detailed Site Characterization Report, the Board shall conduct a vote to determine whether to accept or amend the Report. Such a vote shall be based on the technical adequacy of the Report and its conformance with any requirements of 310 CMR 41.70 through 41.72. Prior to its acceptance of the Report, the Board shall consider and evaluate all comments made at a public meeting or submitted in writing. If the Board fails to accept or amend the Detailed Site Characterization Report, the Report shall be set aside, and the procedures established in 345 CMR 1.86 shall be repeated; provided, however, that the Board shall meet with each Community Supervisory Committee to discuss the draft plan for implementing the revised Detailed Site Characterization within 30 days of the expiration of the time for the Board to accept or modify the Detailed Site Characterization Report; and provided, further, that the Board shall issue its revised Detailed Site Characterization Report within one year and two months of the expiration date of the time for the Board to accept or amend the prior Detailed Site Characterization Report.

1.87: Selection of Superior Site

(1) Upon voting to accept or modify a Detailed Site Characterization Report, the Board may select any Superior Site by a $\frac{2}{3}$ vote of its members. Upon such vote, the Commissioner of the Division of Capital Planning and Operations shall, on behalf of the Board, take appropriate action to acquire, by purchase or taking, pursuant to M.G.L. c. 79, a fee simple interest in the Superior Site, together with such other land, easements, rights-of-way or other property interests necessary to construct and operate a facility thereon and to conduct an environmental monitoring program pursuant to M.G.L. c. 111H, § 36 or, in the case of real property of the Commonwealth, to transfer the control and use of such property to the Board. Such acquisition or transfer shall be subject to the requirements of M.G.L. c. 7, §§ 40E through 40M; provided, however, that the Superior Site shall be deemed to possess unique qualities for the purposes of M.G.L. c. 7, § 40H. Upon the acquisition of such interest, each site community, during the period prior to the issuance of a facility license, shall be entitled to receive an amount in lieu of local property taxes in accordance with M.G.L. c. 50, § 17. No facility developed at a Superior Site selected pursuant to 345 CMR 1.87 shall be subject to site assignment pursuant to M.G.L. c. 111, § 150B.

(2) Upon the selection of a Superior Site, additional members shall be appointed to the Board as follows:

(a) The Chief Executive Officer of each site community in which is located a facility that is in development, operation, closure, post-closure observation and maintenance or institutional control pursuant to M.G.L. c. 111H, shall appoint a community resident to serve as a member of the Board.

(b) If there is only one site community in the Commonwealth, the Chief Executive Officer of the neighboring community having the greatest population residing within three miles of the Superior Site, shall also appoint a community resident to serve as a member of the Board, but, if no community is eligible for such appointment, the Chief Executive Officer of the site community shall appoint a second site community resident to serve as a member of the Board.

(3) Within 60 days of the selection of any Superior Site or, if a petition for an adjudicatory proceeding has been filed pursuant to M.G.L. c. 111H, § 24, within 30 days of a final decision of the Commissioner of DEP approving the site selection, the Board shall establish a field office within a site community outside the boundaries of the Superior Site.

(4) Any person aggrieved by an action taken pursuant to M.G.L. c. 111H, § 19, 20 or 23 may petition the Commissioner of DEP, in accordance with M.G.L. c. 111H, § 24, for an adjudicatory proceeding.

1.88: Community Supervisory Committee Requirements

(1) The Board shall designate a committee to assume the responsibilities of the Community Supervisory Committee for each Candidate Site Community if the Chief Executive Officer of such community fails to take appropriate action to establish the Community Supervisory Committee within 45 days of the issuance of the draft Candidate Site Identification Report. The committee so designated shall assume such responsibilities until the Community Supervisory Committee is established.

(2) The Board shall provide technical assistance to each Community Supervisory Committee and sufficient funds to enable it to acquire administrative and clerical personnel and to retain consultants necessary to exercise its powers and duties. The Board shall inform Community Supervisory Committees about policies relating to compensation and benefits available to their communities, and about the availability of state resources for local economic assistance.

(3) Each Community Supervisory Committee shall assist the Board in developing a Detailed Site Characterization plan for a Candidate Site located within the community and participate throughout the implementation of such Detailed Site Characterization plan. Appropriate Board officials and consultants shall meet monthly with each Community Supervisory Committee.

1.88: continued

(4) The Board shall keep each Community Supervisory Committee informed of the progress of the Detailed Site Characterization; furnish the Community Supervisory Committee with copies of all data, reports, and memoranda pertaining to the Detailed Site Characterization including raw data, draft reports and memoranda; and give the Community Supervisory Committee reasonable opportunity to review and comment upon all work performed.

(5) Upon the expiration of 30 days after the selection of any Superior Site or, if a petition for an adjudicatory proceeding has been filed pursuant to M.G.L. c.111H, s.24, upon a final decision of the Commissioner of the DEP approving the site selection, the Board shall request the Chief Executive Officer of each neighboring community to appoint a representative to the Community Supervisory Committee of each site community. If the Chief Executive Officer of a neighboring community fails to take such action within 21 days of receiving such request, the Board shall make the appointment.

1.89: Property Value Guarantee

(1) Any person owning real property, any portion of which is located within the property value protection district identified by the Board, after consultation with the community supervisory committee, shall be entitled to a guarantee of the value of such property in accordance with the provisions of 345 CMR 1.89. Such guarantee shall be effective upon the Board's selection of a Superior Site for a facility pursuant to M.G.L. c. 111H, § 23(g).

(2) A seller seeking compensation for lost value of real property pursuant to 345 CMR 1.89 shall submit a request for compensation to the Board, together with:

- (a) a copy of a purchase and sale agreement for such property executed after the date of the Board's adoption of a Candidate Sites Identification Report, in which the site is identified as a Candidate Site, and containing a provision making the agreement subject to a right of first refusal satisfying the requirements of 345 CMR 1.89(2)(b), if applicable;
- (b) in the case of a purchase and sale agreement executed after the selection of a Superior Site pursuant to M.G.L. c. 111H, § 23(g), an agreement, executed by the parties to the agreement granting the Commonwealth a right of first refusal to purchase the property in accordance with the terms and conditions of the agreement;
- (c) an appraisal, made by a person qualified to make such an appraisal, of the actual value of the property as of the date of execution of the purchase and sale agreement;
- (d) an appraisal, made by a person qualified to make such an appraisal, of the value the property would have, as of the date of execution of the purchase and sale agreement, but for the facility or the possibility of the facility.

(3) The facility operator shall pay to a seller of real property who seeks compensation in accordance with 345 CMR 1.89 an amount equal to the difference in the value such property would have, as of the execution of the purchase and sale agreement submitted to the Board, but for the facility or the possibility of the facility, and any lesser actual value of such property as of the date of execution of the purchase and sale agreement. Such amount shall be determined by the Board, after notice to the facility operator, and an opportunity for the facility operator to review and comment upon the request and accompanying documentation. In making its determination, the Board may consider the actual purchase price paid for the property, and any appraisals it may obtain or be provided in addition to those submitted by the seller.

(4) No payment shall be required pursuant to 345 CMR 1.89:

- (a) unless the property is located within the property value protection district for a licensed facility;
- (b) prior to facility licensing pursuant to M.G.L. c. 111H, § 39;
- (c) until the seller provides the Board with a copy of the deed conveying title to such property to the Commonwealth or in accordance with the purchase and sale agreement, together with evidence that such deed has been recorded at the appropriate Registry of Deeds;

345 CMR: LOW-LEVEL RADIOACTIVE WASTE MANAGEMENT BOARD

1.89: continued

- (d) if a facility operator has previously made a payment pursuant to 345 CMR 1.89 with respect to the property; or
- (e) unless the property is conveyed no later than five years after facility licensing.

(5) Any person aggrieved by a decision of the Board made pursuant to 345 CMR 1.89 may request an adjudicatory hearing thereon. Such adjudicatory proceeding shall be conducted in accordance with 801 CMR 1.01 (Standard Adjudicatory Rules of Practice and Procedure, Formal Rules).

1.91: Insurance Plans Required

(1) A disposal facility operator shall purchase and maintain the following insurance plans at all times during facility operation, closure and post-closure observation and maintenance:

- (a) All-Risk Property Insurance, to insure the facility itself (including costs of replacement of the buildings and equipment) in an amount equal to the facility's replacement cost, or the maximum amount available, whichever is less.
- (b) Comprehensive General Liability Insurance, with minimum limits of \$25 million per occurrence and \$25 million in the aggregate.
- (c) Environmental Impairment Liability Insurance, with minimum limits of \$10 million, or such greater amounts, up to the maximum loss potential determined by a financial risk assessment acceptable to the Board, as may from time to time be commercially available.
- (d) Nuclear Energy Liability Insurance, with minimum limits equal to \$25 million or the maximum loss potential determined by a risk assessment acceptable to the Board. The facility operator shall use its reasonable best efforts to obtain such insurance at the required amount. Since such insurance is not currently available in amounts sufficient to satisfy the requirements of 345 CMR 1.91(1)(d), the facility operator shall, through a letter of credit or other acceptable means, establish an escrow arrangement equal to the difference between the available nuclear energy liability insurance policy limits and the required insurance amount.

(2) Any decision to site a treatment or storage facility pursuant to M.G.L. c.111H shall be followed by a financial risk assessment of such facility. The same types of insurance plans specified in 345 CMR 1.91(1) shall be required, but maximum limits will be determined after consideration of the specific storage and treatment activities anticipated.

(3) An insurance program conforming to the requirements of 345 CMR 1.91 may be deemed adequate by the Board for a disposal facility only if appropriate bond arrangements, acceptable to the Board, are made for on-site remedial action in amounts equal to the maximum loss potential determined by a financial risk assessment acceptable to the Board.

REGULATORY AUTHORITY

345 CMR 1.00: M.G.L. c. 111H, §§ 4, 11, and 12.

NON-TEXT PAGE