

CHAPTER 9

HAZARDOUS MATERIALS AND WASTES

BOARD OF HEALTH ROLE AT A GLANCE

- Boards of health are well advised to be cautious when they make regulatory decisions pertaining to these substances;
- to be alert to potential threats to health and the environment that may occur due to their misuse or spillage;
- and to keep informed about the state and federal agencies that can assist in cases of emergency or suspected contamination problems.
- Because of the technical complexities of hazardous material management, boards of health need to make sure that they are properly equipped to monitor or regulate hazardous materials use, handling and disposal.

Technological innovations in recent decades have brought large volumes and a wide range of new chemical compounds into the public marketplace. In the United States, demands for energy to make new products, to travel, to transport goods and to heat and cool living areas and other buildings have increased. Systems for regulating and controlling the use of hazardous substances and the disposal of by-products, of waste material, of spilled oil and toxic chemicals have had to evolve quickly to keep pace with the new hazards that these materials pose.

The sections below outline the current regulatory and monitoring systems for five groups of hazardous materials and wastes. Since new information and new legislative and administrative actions appear every day on these subjects, boards of health are advised to seek up-to-date sources of information on any topic of special concern, and to keep generally informed on all topics.

PART A: HAZARDOUS SUBSTANCES, LABELING AND USE

The term "hazardous substance" means "any substance or mixture of substances which is toxic, corrosive, an irritant, a strong sensitizer, flammable or which generates pressure through decomposition, heat, or other means, if such substance or mixture of substances may cause substantial personal injury or substantial illness during or as a proximate result of any customary or reasonably foreseeable handling or use, including reasonably foreseeable ingestion by children, or any toy or other article intended for use by children which presents an electrical, mechanical or thermal hazard." M.G.L. c. 94B, Sec. 1. See also the federal definitions at 29 C.F.R. Sec. 1910.1200.

Recommended Board of Health Activity

Although the *Hazardous Substances Labeling Law*, M.G.L. c. 94B, does not provide for local enforcement, local boards of health should be aware of the power of the Commissioner of Public

Health to declare substances to be "banned hazardous substances," and to enforce other provisions of the statute.

In addition, local boards of health should:

1. Utilize the Site Plan review process to collect and establish chemical inventories of local facilities;
2. Adopt a local bylaw or regulation to promote the development of a chemical database and creation of safe storage standards;
3. Utilize the Massachusetts *Right to Know* law, M.G.L. c. 111F, to collect chemical inventories from local businesses; and
4. Utilize the notifications required by the *Massachusetts Toxic Use Reduction Act*, M.G.L. c. 21I, and the federal *Emergency Planning and Community Right-to-Know Act of 1986*, 42 U.S.C. §11001 *et seq.*, to identify significant chemical users.

State Responsibilities (DPH)

Under M.G.L. c. 94B, the responsibilities of the Commissioner of Public Health include:

1. Declaring substances that meet the definition to be hazardous, through the promulgation of rules and regulations.
2. Establishing variations of additional labeling requirements as necessary for the protection of the public health and safety.
3. Declaring any hazardous substance intended or produced in a form suitable for use in the household or by children to be misbranded when it fails to bear the proper label.
4. Promulgate regulations exempting certain hazardous substances if it is deemed that full compliance is unnecessary or impracticable.
5. Declare an article to be a banned hazardous substance and require it to be removed from commerce if it is deemed that the article cannot be properly labeled to ensure public health and safety or if it presents an imminent danger.

DPH's regulations implementing this Chapter appear at 105 CMR 650.000. The regulations establish a mechanism for DPH to ban hazardous substances and to require their repurchase by manufacturers. They are designed to be consistent with federal regulations established pursuant to the *Federal Hazardous Substances Act*, 15 U.S.C. Sec. 1261 *et seq.*

Pursuant to Chapter 94B, DPH inspectors have the authority to inspect premises (Sec. 6), examine records (Sec. 7), and embargo articles suspected of being misbranded or known to be a banned hazardous substance (Sec. 5).

PART B: PESTICIDES

(Includes Herbicides, Fungicides and Rodenticides)

There is a great deal of concern over how pesticides affect both those who work with them occupationally and people residing in areas of use. While the hazards are not always precisely known, improper use of pesticides can be a significant public health problem.

Some of the suspected effects of pesticides are birth defects, genetic mutations, and spontaneous abortions. Cancer has been found to be a long-term effect resulting from ingestion of products containing pesticide residues.

People most affected by pesticide use are those who work directly in agriculture and in manufacturing of pesticide products. Symptoms such as headache, stomach pain, dizziness, nausea, double vision and sterility have been reported.

There also may be pesticide concerns with housing developments in former farmlands (e.g., apple orchards). Specifically, soils in these areas can have very high levels of lead and arsenic. Because these situations are exempted by law from regulation under the state's 21E regulations and the Massachusetts Contingency Plan, it is often only the boards of health that may be able to raise, investigate, and ameliorate this concern.

Recommended Board of Health Activity

The following situations are examples of when a board of health may become involved with a pesticide issue:

- a. A board of health, usually in conjunction with another local agency such as the housing authority, may be using pesticides itself, or contracting for someone else to apply the pesticides.
- b. A board of health may receive complaints from townspeople about improper disposal of pesticides, the drifting of sprayed pesticides away from their intended area of use, or any suspected poisoning or damage done by pesticides.
- c. Townspeople may call the board of health requesting information about proper pesticide use, or licensing and certification requirements.

In each of these situations, boards of health should be familiar with applicable state and federal laws and regulations, including licensing and certification requirements for dealers and users of pesticides. Within certain limits, a board may also adopt local regulations relevant to the use of pesticides within the municipality. Town of Wendell v. Attorney General, 394 Mass. 518, 529-30 (1985), the Supreme Judicial Court found, "A local board of health has authority to make reasonable health regulations. G.L. c. 111, §31. Such regulations, however, must be consistent with State law." In other words, local boards of health may adopt regulations related to pesticide use, but they may not adopt regulations that are more stringent than state law. For example, if contamination of public or private water supplies is considered a potential problem, due to drift or runoff, the board may find it useful to prepare a map of private wells and other water supplies, and to prepare local regulations providing for board monitoring of pesticide use at water supply locations. Similarly, the board could require that it be notified before pesticides are applied, even though it may not ban the application of pesticides that

are permitted under state law.

Other board of health activities could include:

1. Educate pesticide users and provide a program of alternatives to pesticide use;
2. Review and comment on state agency and utility company applications of pesticides to highways, utility easements, and near watersheds;
3. Review pesticides used in aquifer districts. Pursuant to M.G.L. c. 132B and 333 CMR 12.00 *et seq.*, the Massachusetts Department of Food and Agriculture annually issues a “ground water protection list” of pesticides that may not be applied within a primary drinking water recharge area;
4. Utilize local Special Permit plan review to govern the storage and use of pesticides; and
5. Become familiar with M.G.L. c. 132B, which requires licensing of pesticide applicators.

State Responsibilities (DFA)

Pursuant to the Massachusetts *Pesticide Control Act*, M.G.L. c. 32B, the Massachusetts Department of Food and Agriculture (DFA) regulates all aspects of pesticide use, including:

- a. registering pesticide products
- b. investigating misuse, complaints, accidents, and field problems
- c. licensing and certifying those who use or sell pesticides.

There are three distinct groups within the Department of Food and Agriculture involved in pesticide control:

- a. The Pesticide Board is a committee of 13 people who set policy on pesticide use. This group has the power to adopt pesticide regulations. The board is chaired by the commissioner of the Department of Food and Agriculture and consists of six governmental members and seven private citizens.
- b. The Sub-Committee on Registration, a subcommittee of the full Pesticide Board consisting of five members, has control over the registration of pesticide products. The subcommittee is chaired by the director of the Division of Food and Drugs of DPH.
- c. DFA staff carry out the actual work of testing, record keeping, and field investigation.

These are four types of credentials in Massachusetts:

Applicator licenses (for small commercial applicators who do not use restricted pesticides, or for employees in larger businesses who may use restricted pesticides when directly supervised by a certified person).

Dealer licenses to sell restricted pesticides.

Private certification cards (for anyone such as farmers, nurserymen, and greenhouse operators who produce any plant or animal product for sale and who use restricted pesticides).

Commercial certification cards (for anyone who uses or supervises the use of a restricted pesticide and who does not qualify for private applicator certification).

State Responsibilities (U. Mass. Extension Service)

The Extension Service of the University of Massachusetts in Amherst can be an important source of information to any board of health faced with a pesticide issue. The Extension Service:

- a. supports a specialist in the Department of Entomology who assists groups having problems concerning pest control
- b. acts as a source of technical information about pesticides
- c. advises on individual cases
- d. publishes a newsletter Pesticide News, eight times a year
- e. provides, upon request, fliers dealing with a variety of pesticide issues.

State Responsibilities (DEP)

The Department of Environmental Protection (DEP) has promulgated regulations concerning:

- a. restrictions on placement of materials in landfills. 310 CMR 19.1(16).
- b. licensing of transporters of hazardous wastes including hazardous waste pesticides. 310 CMR 30.00.

State Responsibilities (MDC)

The Metropolitan District Commission (MDC) has promulgated regulations concerning:

- a. the use of pesticides on watersheds of public water supplies 350 CMR 11.04.

Federal Responsibilities (EPA)

The U.S. Environmental Protection Agency (EPA) has principal responsibility nationwide for the consistent regulation of pesticide use. Among its other responsibilities, EPA:

- a. reviews all pesticide products and determines which are safe by today's standards.
- b. categorizes the products under either general or restricted use. General use refers to pesticides that may be sold to anyone. Restricted use applies to those pesticides that may not be used unless the user is certified.

c. identifies and reviews those chemicals that seem to have potential reasons for not being registered .

d. decides which uses, concentrations and formulations should be restricted.

In addition, EPA administers three other federal statutes that may affect pesticide use:

- The *Resource Recovery and Conservation Act* 42 U.S.C. Sec. 6901 *et seq.*, which regulates hazardous wastes including waste pesticides.
- The *Safe Drinking Water Act* 42 U.S.C. Sec. 300f *et seq.*, which sets standards for drinking water purity including standards for several pesticides.
- The *Toxic Substance Control Act* 15 U.S.C. Sec. 2601 *et seq.*, which regulates the use and manufacture of toxic chemicals including the raw materials used in formulating pesticides.

Federal Responsibilities (DOT)

The U.S. Department of Transportation regulates the shipping of certain toxic pesticides. See 49 CFR 71.5.

Available Resources

a. Questions about licensing, special state regulations, fees, examinations, or complaints about the misuse of pesticides should be addressed to:

Pesticide Section
Dept. Food and Agriculture
100 Cambridge Street
Boston, MA 02202
(617) 727-7712, or 2863

b. Questions about pesticide use, disposal, accidents, special problems, training materials, or other technical information should be addressed to:

Pesticide Specialist
Fernald Hall, Dept. of Entomology
University of Massachusetts
Amherst, MA. 01003
(413) 545-2283

PART C: RADIATION

Ionizing radiation comes from medical and dental x-ray machines, radiation therapy devices, nuclear reactors, and radioactive materials either naturally occurring (such as radium-226, used in medical therapy), or man-made (such as Cobalt-60, also used in medicine). Injury to living matter by ionizing radiation can be the result of the transfer of energy to individual molecules in the region through which the radiation passes.

Health effects caused by radiation are in general proportional to the amount of exposure (although a single intense dose may be more harmful than the same total exposure over a long period of time).

However, experts disagree as to whether this proportionality continues to hold for low levels of radiation exposure.

Intense doses (100 rems or more) may cause acute effects, including those symptoms referred to as radiation sickness, whereas lower level exposure may increase the risk of various diseases, primarily cancer and cataracts, which may not appear for five to 20 years after exposure.

People in the United States are exposed to about 100 millirems of ionizing radiation from natural, background sources each year. ("Rem" is a unit for measuring the biological effects on a person from a dose of radiation. One rem equals 1,000 millirems.) On the average, people in the U.S. are exposed to about the same amount (100 millirems per year) from man-made sources. About 90 per cent of the average exposure from man-made sources comes from medical and dental x-rays and radioactive materials used for diagnosis and treatment of disease (such as radioactive "tracers" and radiation therapy used to treat cancer), while 10 percent comes from such sources as nuclear-weapons testing, nuclear-powered electric plants, industrial uses and consumer products. Patients who get large numbers of x-rays or undergo radiation therapy and workers in such occupations as mining of uranium and phosphates, radiation research, nuclear-power generation and x-ray technology may be exposed to radiation levels considerably higher than the average.

Non-ionizing radiation includes microwaves, lasers, light and radio waves, and involves photons whose lower energy prevents ionization from occurring in the absorbent materials. The primary biologic effect of non-ionizing radiation is thermal--the absorbing material's temperature rises. (This is the principle of the microwave oven.) Other possible non-thermal effects of exposure to non-ionizing radiation are not well substantiated by tests or epidemiological data.

Radiation control programs seek to reduce both individual exposure to non-therapeutic radiation and overall exposure of the population, in order to minimize the risk of negative health effects. Equipment, facilities and materials used for research, therapy, industrial or military applications and power generation must be properly designed and properly used to minimize exposure of workers and hazardous leakage of radioactive materials to the environment. Radiation control programs also regulate safety mechanisms and emergency plans so that accidental exposure can be minimized and treated.

Recommended Board of Health Activity

In general, the regulation of radiation hazards is a federal or state responsibility, rather than a local one. M.G.L. c.111 Sec. 5B specifies:

The Department of Public Health shall approve, modify or disapprove all proposed rules and regulations of political subdivisions of the Commonwealth in so far as they pertain to the health aspects of ionizing radiation and no such rules and regulations which do not have the approval of the department shall be adopted.

Boards of health are well advised to contact the Radiation Control Program of the Department of Public Health whenever there is any question or problem concerning radiation. This includes ionizing radiation, such as that found in medical, dental, educational, and research facilities and nuclear power facilities, and non ionizing radiation such as microwaves, lasers, and radio waves.

In addition, Boards of Health may wish to be in touch with the Massachusetts Low-Level Radioactive Waste Management Board, which is charged with responsibility for planning and effecting the management of low-level radioactive waste. The Board serves as a clearinghouse for information concerning health effects of radiation, and can assist local boards in obtaining information pertaining to radioactive material use and materials disposal. In addition, the Board's process for siting a low-level radioactive waste disposal facility, should it decide to proceed with such an endeavor, offers numerous opportunities for Board of Health involvement in site selection.

Local officials should encourage health care providers and any local users of radioactive materials to comply with state and federal regulatory authorities and to be prepared to deal with accidents involving radioactive materials.

In conjunction with the local Planning Board, the Board of Health may wish to obtain from DPH a list of all licensed and registered users of radioactive materials. This information is important for emergency planning such as dealing with a fire involving radioactive materials. Also, waste generators may store waste materials on site at various times, and in various quantities. This is a safety issue, and, when waste disposal licenses come up for renewal, the local Board of Health may wish to comment on questions such as proper containment, location, mixed uses within the building, fire protection, monitoring and surveillance.

State Responsibilities (DPH)

Under M.G.L. c.111, Sec. 5B, the Department of Public Health (DPH) has the authority to make rules and regulations concerning the transportation, storage, packaging, sale, distribution, production, and disposal of radioactive materials and machines which emit ionizing radiation. DPH has regulatory authority over x-ray machines, and naturally occurring and accelerator produced radioactive materials. In addition, DPH's authority extends to controlling the use of non-ionizing radiation, especially microwaves and lasers (lasers must be registered with DPH). M.G.L. c.111, Sec. 51.) DPH also conduct environmental radiation surveillance studies, especially around nuclear power stations pursuant to the authority conferred by M.G.L. c.111, Sec. 5H.

State Responsibilities (LLRW Management Board)

The Low-Level Radioactive Waste (LLRW) Management Board is charged by M.G.L. c.111H with responsibility for planning and effecting the management of LLRW. Its responsibilities include the issuance of a LLRW Management Plan setting forth the basic regulations and planning framework for LLRW Management; the adoption of regulations governing the selection of an operator for any LLRW treatment, storage or disposal facility to be sited pursuant to Chapter 111H; to conduct the search for a superior site upon which such a facility may be developed; and to represent the Commonwealth in negotiations with other states and compact regions to provide for access by Massachusetts waste generators to waste facilities located outside the Commonwealth.

Federal Responsibilities (NRC)

The Nuclear Regulatory Commission (NRC) currently regulates the licensing and use of most

radioactive materials but, as noted, is concluding an Agreement with the Commonwealth of Massachusetts pursuant to which DPH will assume most of the NRC's regulatory authority, except in the area of nuclear power plants.

Federal Responsibilities (EPA)

The Environmental Protection Agency (EPA) sets standards for public exposure to radiation and regulates radionuclide emissions into the air. EPA and NRC have yet to come to an agreement concerning the limits of each of their respective jurisdictions, and thus occasionally appear to have conflicting or overlapping requirements.

Federal Responsibilities (HHS)

The Department of Health and Human Services (HHS) must establish and carry out an electronic product radiation control program designed to protect the public health and safety from electronic product radiation. 42 U.S.C. Sec. 263D.

Local officials should encourage health care providers and any local users of radioactive materials to comply with state and federal regulatory authorities and to be prepared to deal with accidents involving radioactive materials. Reducing unnecessary x-rays, ensuring that x-ray diagnostic and therapy equipment is in good condition, and having adequate safety and emergency provisions can be constructive local objectives.

Available Resources

Any questions or problems concerning radiation should be directed to the following:

Massachusetts Department of Public Health
Radiation Control Program
Room 770
600 Washington Street
Boston, MA 02111
(617)727-6214 or

Massachusetts Department of Public Health
Radiation Control Program
Western Mass. Public Health Center
University of Massachusetts
Amherst, MA 01003
(413) 545-2563 or 2564

Any questions or problems concerning the use of radioactive materials or the management of LLRW should be directed to the:

LLRW Management Board
Room 905
100 Cambridge Street
Boston, MA 02202
(617) 727-6018

PART D: HAZARDOUS WASTE MANAGEMENT AND DISPOSAL

Hazardous wastes are defined as those wastes that "because of their quantities, concentrations, or other characteristics may cause or significantly contribute to increased mortality or serious illness, or pose a hazard to human health, safety, and welfare or to the environment, when improperly treated, stored, transported, used, or disposed of." M.G.L. c.21c§2. Solid or dissolved material in domestic sewage, solid or dissolved materials in irrigation return flows, or industrial discharges that are point sources subject to permits under the *Federal Water Pollution Control Act of 1967*, and special nuclear or by-product material as defined by the *Atomic Energy Acts of 1954*, are exceptions in the statutory definition of hazardous wastes, because they are otherwise regulated.

Every year an estimated 57 million tons of hazardous wastes are generated in the United States, including 1 to 3 million tons in New England. The Massachusetts response to the perceived need to establish more facilities was the adoption of the *Hazardous Waste Facility Siting Act*, M.G.L. c. 21D. The Act was intended to provide both (1) rigorous requirements to ensure thorough treatment and adequate preparation for storage and disposal of hazardous wastes to minimize the risk of contamination from a facility, and (2) financial compensation to municipalities that become host communities for such facilities.

The Special Legislative Commission that proposed the new guidelines asserted that the combination of compensation to the host community by the developer of a facility, binding arbitration where necessary, and state insistence on the most sophisticated and appropriate technology in treating and disposing of hazardous wastes were essential components of a program to break through the impasse between public necessity for adequate disposal and public resistance to local assignment of disposal sites. However, in the 16 years since the Acts adoption, not one new hazardous waste treatment, storage or disposal facility has been developed in the Commonwealth.

At present, EOEA is charged with principal responsibility for facility siting, but has no staff dedicated to this work.

Recommended Board of Health Activity

Local Boards of health have an important role to play in monitoring the activities of those who generate, treat, store or dispose of hazardous waste within their jurisdictions. Under state law, MassDEP is obligated to give the local board of health a copy of each application for a permit for the collection, storage, treatment, or disposal of hazardous waste, and boards of health may wish to take an active role in commenting on such applications during the MassDEP licensing process.

Local boards of health, their agents/health officers, and their sanitarians and inspectors can assist in MassDEP's efforts to prevent contamination from hazardous wastes by :

- a. informing other municipal departments of current regulations;
- b. being an information and referral source for the public;
- c. observing whether transport vehicles are properly identified with tags or registration plates;

- reporting the movement of suspicious cargo to police;
- d. reporting to [Mass](#)DEP known or suspected illegal dump or storage sites;
 - e. adopting a local Hazardous and Toxic Materials bylaw or regulation;
 - f. utilizing the local Site Plan and Special Permit review process to provide aquifer protection and surveillance activities. An example would be to require businesses to perform dye testing of the plumbing system to ensure that all sanitary drains are properly connected to the sanitary sewer and not the storm drain system;
 - g. coordinating inservice inspections with the local Fire Department;
 - h. requiring a Hazardous Building Component Management Plan for demolition involving commercial buildings. The plan should detail the handling and disposal of hazardous materials such as asbestos, mercury switches, fuels, solvents, storage tanks, freon, dielectric fluids, and fluorescent light tubes;
 - i. coordinating a Household Hazardous Waste Collection program;
 - j. promoting or coordinating chemical disposal activities for small businesses and municipal departments in conjunction with the Household Hazardous Waste Collection program;
 - k. in conjunction with the local Plumbing Inspector, enforcing the Underground Injection Control Program (regarding use of floor drains);
 - l. investigating and taking appropriate action such as closure/upgrade of commercial and industrial septic systems;
 - m. acquiring state listings (M.G.L. c. 21C, §4) and federal listings (*Solid Waste Disposal Act*, 42 U.S.C. 6901 *et seq.*) of hazardous waste generators; and
 - n. utilizing assistance from state and federal agencies, provide outreach programs and educational forums for local businesses.

In addition, boards of health play a critical statutory role in the siting of new hazardous waste facilities. Pursuant to M.G.L. c.111, Sec. 150B, no place in any municipality may be established, maintained or operated as a hazardous waste facility (except by the state) unless it has been assigned as a hazardous waste facility site by the local board of health. Section 150 B applies to facilities that store, treat or dispose of hazardous waste, except for those facilities that were lawfully in existence on May 1, 1990, if they were properly licensed or exempt from licensing on that date. Section 150B does not apply to generators who store, treat, process or dispose of hazardous waste exclusively on site (except that it does apply to such generators who dispose of hazardous waste into or on the land).

The assignment of a site as a hazardous waste facility is subject to the limitation that the facility impose no significantly greater danger to the public health or safety than the dangers that currently exist in the conduct and operation of other Massachusetts industrial enterprises not engaged in treatment, processing, or disposal of hazardous waste, but utilizing processes that are comparable.

State Responsibilities (MassDEP)

The Massachusetts *Hazardous Waste Management Act*, Chapter 21C of the General Laws, provides for registration of hazardous waste generators, the licensing of hazardous waste transporters and hazardous waste storage, treatment or disposal facilities. MassDEP must:

- a. adopt standards and criteria at least as stringent as the federal regulations issued pursuant to the *Resource Conservation and Recovery Act* (RCRA), 42 U.S.C. Sec. 6901 *et seq.*, regarding the management of hazardous waste at the place of generation, while being transported, and while being managed at a storage, treatment or disposal facility. M.G.L. c. 21C, Sec. 7.
- b. issue licenses to construct, maintain and operate hazardous waste facilities subject to the terms, restrictions, conditions and requirements established by regulation. M.G.L. c. 21C, Sec. 7.
- c. conduct a state-wide survey and compile and publish a list of all sites in Massachusetts where hazardous waste has been deposited. M.G.L. c. 21C, Sec. 4.
- d. register persons who generate, and license those who transport, store, treat or dispose of hazardous wastes. M.G.L. c. 21C, Sec. 4 and 7.
- e. give the local board of health a copy of each application for a permit for the collection, storage, treatment, or disposal of hazardous waste. M.G.L. c. 21C, Sec. 4.
- f. furnish the local board of health with information (annually) identifying the types and quantities of hazardous waste generated, stored, treated, or disposed within the town or city. M.G.L. c. 21C, Sec. 4.

Federal Responsibilities (EPA)

The principal federal statute governing the management of hazardous waste is the *Resource Conservation and Recovery Act*, 42 U.S.C. Sec. 6901 *et seq.* Pursuant to this statute, the U.S. Environmental Protection Agency (EPA) is required to:

1. develop criteria for designation of wastes as hazardous, including toxicity, persistence or degradability in nature, potential for accumulation in tissue, flammability, and corrosiveness. 42 U.S.C. 6931.
2. list wastes that are hazardous. 42 U.S.C. 6921(b).
3. set standards for industries that are generators of hazardous wastes. 42 U.S.C. 6932.
4. set standards for transporters of hazardous wastes and owners and operators of hazardous waste treatment, storage, and disposal facilities. 42 U.S.C. 6933. 9634.
5. promulgate regulations requiring owners and operators of treatment, storage, or disposal of

hazardous waste facilities to have a permit issued by EPA or the state. In Massachusetts, the state is the permitting authority. 42 U.S.C. 6935.

Available Resources

To keep up with the activities of MassDEP's Hazardous Waste activities, go to the DEP website for the Bureau of Waste Prevention, Business Compliance Publications at:

<http://www.state.ma.us/dep/bwp/dhm/dhmpubs.htm>

Division of Hazardous Waste
Attention: Update
DEP, One Winter Street
Boston, MA 02108.

PART E: OIL AND HAZARDOUS MATERIAL SPILLS

The Massachusetts *Oil and Hazardous Release Prevention and Response Act*, M.G.L. c. 21E was enacted to provide the Commonwealth with "an immediate capability for responding to emergency situations involving spills and discharges of oil and hazardous materials." The Act was intended to apply broadly to hazardous materials of whatever type:

Hazardous material includes, but is not limited to, any material, including any discarded or waste material, in whatever form which, because of its quantity, concentration, chemical, corrosive, flammable, reactive, toxic, infectious or radioactive characteristics, either separately or in combination with any other substance or substances, constitutes a present or potential hazard to human health, safety or welfare, or to the environment, when improperly treated, stored, transported, disposed of, or otherwise managed.

The main provisions of Chapter 21E are:

- 1. Prompt Notification of Spills.** As soon as a spill or leakage has been detected, the owner or operator of the faulty vessel, vehicle, railroad car, container, or facility must promptly notify DEP. M.G.L. c. 21E, Sec. 7.
- 2. Immediate Cleanup.** Any spill, seepage, or discharge that threatens state water, including ground waters, must immediately be contained and removed by the best possible method. Chemicals are not to be used in the clean-up operation unless authorized by DEP. M.G.L. c. 21E, Sec. 4.
- 3. Liability.** All persons who caused the spill and owned/operated the hazardous material, transportation vehicle, or container will be liable for costs of investigating the spill and cleaning it up. M.G.L. c. 21E, Secs. 4 and 5.

Recommended Board of Health Activity

Local Boards of health have an important role to play in monitoring the clean-up of contaminated properties within their jurisdictions. Depending on the magnitude of the hazard involved, boards of health may wish to take an active role in the site remediation process. When funding is made available, MassDEP administers a competitive technical assistance grant program, at 310 CMR |

40.1450, to assist boards of health and citizens to understand and use the information that becomes the basis for cleanup decisions and to promote citizen involvement in planning response actions.

Local boards of health, their agents/health officers, and their sanitarians and inspectors can assist in hazardous waste site by:

- informing other municipal departments of current conditions at the site and of applicable state regulations;
- being an information and referral source for the public;
- observing whether clean-up is being conducted in accordance with MassDEP requirements;
- reporting to MassDEP known or suspected illegal remediation activities;
- assisting the Local Emergency Planning Committee with the design and implementation of contingency plans;
- monitoring spills, releases and *Massachusetts Contingency Plan* activity within the municipality;
- regulating well installation, use and maintenance;
- monitoring local underground storage tanks and permits for their use issued by the Fire Chief; and
- reviewing environmental studies and spill/release information as part of Site Plan review to prevent contaminant migration onto abutting properties. (This activity is especially important for local boards because the issue of contaminant migration is not evaluated by state or federal agencies.)

State Responsibilities (MassDEP)

The Massachusetts Contingency Plan, MassDEP's regulations governing hazardous waste site clean-ups 310 CMR 40.0001, are technically and administratively complex. They include provisions governing:

a. public involvement in connection with clean-up activities. 310 CMR 40.1400.

b. the level of clean-up required based on restrictions of the activity and use of the site.

MassDEP provides a 24-hour toll free number (888-304-1133) to report spills or chemical incidents. The toll free number is also MassDEP's 24/7 contact point for all after-hour agency matters that are time critical (e.g. sewage overflows, permission to dump snow near wetlands, etc.)