

ARTICLE XIV

2.14 Control of Toxic and Hazardous Material

2.14.1 Authority

This Bylaw is adopted by the Town under its home rule powers, its police powers to protect the public health and welfare, and its authorization under Mass. General Laws Chapter 40, S 21.

2.14.2 Purpose

The purpose of this Bylaw is to protect, preserve and maintain the existing and potential groundwater recharge areas and surface water within the Town from contamination with toxic and hazardous materials. In addition, the intent of this Bylaw is to minimize community exposure to toxic and hazardous materials and provide easily accessible information to the public, emergency response personnel, fire department and Town officials concerning such materials which are being used, stored or managed by the local business community.

2.14.6 Definitions

"Abnormal gain of water" inside any underground storage tank shall be a gain in the water level of more than one inch in a 24 hour period.

"Abnormal loss of product or waste" from any underground storage tank or combination of tanks, not explainable by spillage, temperature variations or other causes, shall mean either:

- (a) a loss in excess of 0.5% of the volume of product dispensed over a period of a calendar month; or
- (b) a difference in the measured height of the stored liquid, product or waste of greater than one-half inch when using a dipstick and allowing a minimum time interval of 24 hours between measurements while the tank has been removed from service.

"Container" means any bag, barrel, bottle, box, can, cylinder, drum, reaction vessel, storage tank, or the like that contains a toxic or hazardous material.

"CAS" shall mean the identification number assigned by the Chemical Abstract Service to chemical substances.

"Chemical" means any element, chemical compound or mixture of elements and/or compounds.

"Chemical name" means the scientific designation of a substance in accordance with the nomenclature system by the International Union of Pure and Applied Chemistry, or the system developed by the Chemical Abstract Service.

"Common name" means any designation or identification such as a code name, code number, trade name, or brand name used to identify a substance other than by its chemical name.

"De minimus amount" shall mean a container size equal to or less than either one liter (33.8 fl. oz.) or one kilogram (2.20 lb.).

"Double-walled tank" means a container with two complete shells which provide both primary and secondary containment. The container shall have continuous 360 degrees interstitial space between the primary and secondary shells. The interstitial space shall be designed so that an approved interstitial space monitor is able to continuously monitor this space. All double-walled tanks shall be UL-listed.

"Fuel oil" means oil of grades 1, 2, 4, 5 and 6 in accordance with M.G.L. C.94, S.249H.

"Hazard warning" means any words, pictures, symbols or combination thereof appearing on a label or other appropriate form or warning which convey the hazard(s) of the chemical(s) or waste(s) in the container.

"Health hazard" means any chemical for which there is a statistically significant evidence based on at least one study conducted in accordance with established scientific principles that acute or chronic health effects may occur to exposed employees. The term "health hazard" includes chemicals which are carcinogens, mutagens, toxic and highly toxic agents, reproductive toxins, irritants, corrosives, sensitizers, hepato-toxins, nephrotoxins, neurotoxins, agents which act on the hematopoietic system, and agents which damage the lungs, skin, eyes, or mucous membranes.

"Identity" means any chemical or common name which is indicated on the material safety data sheet (MSDS) for the chemical.

"Label" means any written, printed, or graphic material displayed or affixed to containers of toxic or hazardous material.

"MSDS" means written or printed material concerning a hazardous chemical which is prepared in accordance with 29 CFR 1910.1200(g).

"Maximum daily amount" shall mean the greatest amount of a toxic or hazardous material at a given commercial or industrial establishment on any single day during the reporting period.

"Owner" shall mean any person who has effective control or legal ownership of a site, facility, or activity; owner does not include persons who hold bare legal title for the purpose of providing security for a financing agreement.

"Operator" shall mean the lessee or person(s) in control of and having responsibility for the daily operation of a facility for the storage and dispensing of toxic and hazardous materials.

"Physical hazard" means a chemical for which there is scientifically valid evidence that it is a combustible liquid, a compressed gas, explosive, flammable, an organic peroxide, an oxidizer,

pyrophoric, unstable (reactive) or water-reactive.

"Release" means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing of any toxic or hazardous material into the environment.

"Substance" means any element, chemical, compound, combination, or any mixture thereof, whether organic or inorganic.

"Toxic and hazardous material" means any substance, including but not limited to, any material, in whatever form, which because of its quantity, concentration, chemical, corrosive, fire, reactive, toxic, infectious, and radioactive characteristics either separately or in combination with any substance or substances, constitutes a potential threat to human health, safety, welfare or to the environment, when improperly stored, handled, treated, transported, disposed of, used or otherwise managed. This definition includes any substance which is designated by its manufacturer, distributor or importer as possessing any health or physical hazard(s) pursuant to 29 CFR 1910.1200 as well as any substance which is determined to be a hazardous waste according to 310 CMR 30.100.

"Underground storage tank" means a storage tank where 10% or more of the tank volume and piping is buried below the ground surface, but which shall not include storage in a free standing container within a building.

"Underground storage tank leakage or leak" means any uncontrolled movement, measurable by a precision test which can accurately detect a leak of 0.10 gallons per hour with a probability of detection of 0.99, and the probability of false alarm of 0.01.

"Work area" means any area within a workplace, whether outdoors or inside a structure, where substances are stored, used, or manufactured, (and includes, but is not limited to, areas where substances are handled, mixed, processed, packaged, or repackaged); and where employees, licensees, invitees, or other persons may be present.

"Workplace" means an establishment, job site, or project, at one geographical location containing one or more work areas.

"Service Company" - any individual, company, firm or other enterprises which supplies, delivers, services, maintain or repairs any hazardous material or toxic waste containers of the substances stored therein.

2.14.4 Report of Leaks or Spills

2.14.4.1 Any person with knowledge of a release or abnormal loss or gain of a toxic or hazardous material shall forthwith report the spill, loss or gain, to the Chief of the Fire Department and the Board of Health. Notification is not required for any release which is legally permitted and does not exceed allowable or acceptable discharge

limits.

- 2.14.4.2 The owner or operator of a leaking tank system shall immediately:
- (a) remove the system from service and, if testing has confirmed that the source of the leak is a tank(s), the owner or operator shall within 24 hours cause the tank(s) to be emptied of all product or waste;
 - (b) notify the Chief of the Fire Department, the Office of Incident Response of the Department of Environmental Protection, and the Board of Health.
- 2.14.4.3 Service companies shall report to tank owners and the Board of Health any significant increase in heating fuel consumption which may indicate a leak.
- 2.14.4.4 All spills and releases which trigger the reporting requirements of the Commonwealth of Massachusetts as defined in the Massachusetts Contingency Plan 310 CMR 40.0000 must be reported to the Board of Health. In addition, a copy of all documentation including but not limited to environmental assessments including Phase I and Phase II assessments, tier classifications, remedial action plans including Immediate Response Action Plans and Release Abatement Plans, risk assessments, and closure documentation prepared in accordance to the Massachusetts Contingency Plan during the investigation of these releases must be submitted to the Board of Health concurrent with its submittal to the Massachusetts Department of Environmental Protection.

Note: Amended Art. 14 TM 1/11/99. App. A.G. 2/24/99. Adv. Daily Times 3/4/99, 3/11/99.

2.14.5 Registration and Inventory Requirements

- 2.14.5.1 Every owner or operator of a commercial or industrial establishment, (including home occupations and agricultural and horticultural operations) storing toxic or hazardous materials in quantities totaling 100 kilograms, or 220 pounds or more, shall register and submit toxic and hazardous material inventory information with the Board of Health. All products or wastes in container sizes greater than either one liter (33.8 fl. oz.) or one kilogram (2.20 lb.) should be added in combination to determine if the 100 kilogram threshold is met.

The inventory information requirements for toxic and hazardous materials shall include, but not be limited to, the material's common or product name, chemical name, C.A.S. (if applicable), storage location and maximum daily amount, for substances which are classified as hazardous wastes, the hazardous waste number and waste identification will substitute for the product and chemical names.

Those materials stored in containers not exceeding the deminimus amount need not be reported.

2.14.5.2 Retail commercial enterprises selling hazardous and toxic materials in containers of less than 30 gallons liquid weight and 25 pounds dry weight are exempt from the registration and inventory requirements of Section 2.14.5.1.

2.14.5.3 In addition to the registration requirements listed in Section 2.14.5.1, all underground storage systems and tanks maintained on commercial property which contain hazardous materials or wastes must be registered with the Board of Health and the Fire Department. The following information must be provided: the size, type, age and location of each tank, and the name of the material stored in each tank.

Note: Amended Art. 14 TM 1/11/99. App. A.G. 2/24/99. Adv. Daily Times 3/4/99, 3/11/99.

Evidence of date of purchase and installation, including Fire Department permit, if any, shall be included along with a sketch map showing the location of such tanks on the property. Owners of tanks for which evidence of installation date is not available shall, at the order of the Board of Health, have such tanks system tested. If either the Board of Health or the Fire Chief determines that the tank is not product tight it shall be neutralized or disposed of under the direction of the Fire Chief and the Board of Health.

2.14.5.4 The Board of Health shall create a standard form which will be known as an "Hazardous Material Registration Form" (HMRF) to be used by local commercial and industrial establishments for the purpose of registering and reporting inventory information of toxic and hazardous materials.

The board shall maintain and update annually each HMRF which has been submitted and make this information readily available to the public, emergency response personnel, Fire Department and Town officials.

Every commercial and industrial establishment which submits an HMRF as required by section 2.14.5.1 will retain a copy which will be made readily available upon request, by the Board of Health or Fire Department. MSDSs for substances used in the workplace will be maintained and organized so that they are readily available upon request by the Board of Health and Fire Department.

2.14.6 Spill Control and Countermeasure Plans

Every owner or operator of a commercial or industrial establishment (including home occupations and agricultural and horticultural operations) using, manufacturing, storing, transporting, disposing or

discharging toxic and hazardous materials must develop a spill control and countermeasure plan. Plans must be readily available for inspection by the Board of Health and Fire Department and accessible during an emergency incident. These plans shall be periodically reviewed and updated as needed.

The written plan shall include, but not be limited to, the following information:

- (a) the names and telephone number(s) of the emergency coordinator(s) and a waste disposal and cleanup contractor;
- (b) the telephone numbers of the following agencies; Fire Department, Office of Incident Response of DEP, CHEMTREC, National Response Centers, local hospitals, and Board of Health;
- (c) a floor plan indicating locations of the fire extinguishers and spill control materials, and if present, the fire alarms. Evacuation routes shall be clearly shown when applicable.
- (d) Description of potential spill pathways unique to the facility, spill control measures for preventing releases and cleanup procedures. Reportable quantities (RQs) should also be noted and the agencies to be notified should an RQ release occur and enter the environment.

2.14.7 Above Ground Storage Requirements

- 2.14.7.1 All toxic or hazardous materials shall be stored according to practices and procedures which prevent the contamination of air, groundwater and surface water and which will minimize the possibility of an accidental release.

These materials will be stored in product tight containers on an impervious, chemical resistant surface compatible with the material being stored.

Outdoor storage areas shall be enclosed with a permanent dike of impermeable construction and roofed, or other equally secure secondary containment.

Any enclosed area containing free liquids shall have the capacity to contain either 10% of the total possible contained volume of the containers or 110% of the volume of the largest container of free liquid, whichever is greater. Drainage shall be separately collected for safe disposal.

Similar secondary containment for inside storage areas of free liquids shall be provided when a release could follow a potential pathway and enter the environment (i.e., floor drains and doorways).

Storage areas with containers of toxic or hazardous materials that are incompatible with other materials stored nearby in other containers shall be separated from these

materials or wastes by means of a dike, berm, wall or other suitable containment method.

- 2.14.7.2 Wastes containing toxic or hazardous materials shall be held on the premises in product-tight containers for removal by a licensed carrier and for disposal in accordance with the Massachusetts Hazardous Waste Management Act, Chapter 21C, General Laws. Waste storage areas shall also meet the requirements of 2.14.7.1.
- 2.14.7.3 All existing gasoline, fuel and diesel oil above ground storage containers shall be upgraded to meet the requirements of Section 2.14.7.1 by January 1, 2000. All other existing toxic and hazardous materials above ground storage containers shall be upgraded to meet the requirements of Section 2.14.7.1 by January 1, 1985.
- 2.14.7.4 All containers holding toxic or hazardous materials must be labeled in a legible and prominent manner as follows:
- (a) Containers holding materials which have been determined to possess health or physical hazard(s) according to 29CFR 1910.1200(d) shall be labeled, tagged, or marked to identify the material(s) contained therein and the appropriate hazard warning(s) or as allowed by 29CFR 1910.1200(f)(6) and (7).
- (b) Containers holding hazardous wastes as identified by 310 CMR 30.100 shall be labeled and marked in a manner which identifies, in words, the hazardous waste(s) being stored in the container, the hazard(s) associated with the waste and the accumulation date, if applicable. Each container of hazardous waste shall also be marked with the words "HAZARDOUS WASTE."

2.14.8 Transfer of Pumping Areas

- 2.14.8.1 All areas where hazardous and toxic materials are pumped or transferred must have provisions for spill containment.
- 2.14.8.2 Areas where hazardous and toxic materials are pumped or transferred must be constructed of a product tight impervious material. Closed drainage shall be provided from this area to a sump or trap. A roof should be constructed to prevent rainwater flow from entering the containment sump.

For petroleum products which are lighter than water and float on top of water, an appropriately sized separation trap, connected to the sanitary sewer may be employed. Spilled petroleum products must be removed from the top of the trap immediately after a spill occurs.

- 2.14.8.3 All underground piping from tanks to pumps must be placed in secondary containers constructed of product tight impervious materials with provisions for leak detection.
- 2.14.8.4 Domestic oil fills are exempt from this Bylaw. All existing gasoline fuel and diesel oil transfer and pumping areas shall be upgraded to meet the requirements of Section 2.14.8.2 and 2.14.8.3 by January 1, 2000. All other existing toxic and hazardous materials transfer and pumping areas shall be upgraded to meet the requirements of Section 2.14.8.2 and 2.14.8.3 by January 1, 1985.

2.14.9 Underground Storage Requirements

- 2.14.9.1 New or replacement underground storage tanks shall be designed and constructed to minimize the risk of corrosion and leakage. The following construction shall be utilized for all tanks:

(a) UL-listed double walled steel tanks with cathodic protection, having electrical isolation, UL-listed double walled fiberglass tanks, or UL-listed double walled composite tanks having electrical isolation. These tanks should be equipped with an approved standpipe, vacuum, or electrical monitoring system or an approved equivalent for the purpose of continuously monitoring the interstitial space. The material used in the construction of the UST vessel and associated piping shall be compatible with the product being stored in the tank.

(b) Any other "state-of-the-art" type of tank construction with an approved continuous interstitial space monitor and providing equal or better protection against leakage than the above mentioned tanks and approved by the State Fire Marshall.

(c) In addition, tanks shall be equipped with a spill containment manhole with a minimum capacity of three gallons capable of returning product or waste to the tank. An overfill prevention device shall be installed and designed so as not to preclude the ability to perform any required tightness test on the tank and piping.

All existing underground storage systems shall be upgraded to meet the requirements of this section by December 22, 1998, or sooner where required by 527 CMR 9.00, except, for fuel oil tanks used exclusively for consumptive use and waste oil and used fuel oil tanks which shall be upgraded by January 1, 2000.

- 2.14.9.2 All underground storage systems containing fuel oil used exclusively for consumptive use and having a capacity greater than 1,000 gallons shall have the tank and its piping leak tested 20 years after installation, and annually thereafter, using a leak testing method approved by the State Fire Marshall.

2.14.10 Air Emissions of Solvents

Volatile chlorinated hydrocarbons emitted to the air from dry cleaner and degreaser systems must, by January 1, 1985, either install a totally enclosed degreaser or dry cleaning system with a condenser which will return the solvent to the solvent pump, replace volatile chlorinated solvents with non-volatile cleaning solvents or take action which provides equivalent protection, subject to the approval of the Board of Health.

2.14.11 Proximity to Water Supplies

2.14.11.1 The installation of underground toxic or hazardous materials storage systems within 2,000 feet of a public water supply well is prohibited.

2.14.11.2 The Board of health may require the collection of soil samples or the installation of one or more groundwater monitoring wells at any site where toxic and hazardous materials or waste have been or are stored and used, or at any property where environmental contamination may exist. The Board of Health by a majority vote may order the collection and analysis of soil and/or groundwater samples for the purpose of reviewing and investigating the condition of the local aquifer and environment. Soil and water samples may be required by the Board of Health at any reasonable time, and shall be collected and analyzed at the expense of the property owner, by the order of the Board of Health.

Note: Amended Art. 14 TM 1/11/99. App. A.G. 2/24/99. Adv. Daily Times 3/4/99, 3/11/99.

2.14.12 Variance and Waiver

The Board of Health may vary the application of any provisions of this Bylaw or regulations adopted hereunder when in its opinion, the enforcement thereof would do manifest injustice and the applicant has demonstrated that the same degree of environmental protection required under this Bylaw will still be achieved. Requests for such variance shall be in writing. The applicant must notify all abutters by certified mail at his own expense at least 10 days before the Board of Health meeting at which the variance request will be considered. Notice of such variance granted shall be published in a local newspaper. All abutters and property owners within 300 feet shall be notified by registered mail at the expense of the applicant.

In granting a variance, the Board will consider the direction of groundwater flow, soil conditions, depth to groundwater, size, shape and slope of the lot, existing and known future water supplies. Said information to be supplied by the applicant in the form of a groundwater impact study.

A variance will require a 4/5 vote of a 5 member board.

2.14.13 Enforcement

- 2.14.13.1 Certification of conformance with the requirements of this Bylaw by the Board of Health shall be required prior to issuance of construction and occupancy permits for all uses.
- 2.14.13.2 The provisions of this Bylaw shall be enforced by the Board of Health. Any agent of the Board of Health may, according to the law, enter upon any premises at any reasonable time to inspect for compliance.
- 2.14.13.3 Upon request of an agent of the Board of Health, owner or operator shall furnish all information required to enforce and monitor compliance with this Bylaw, including a complete inventory of all chemicals, pesticides, fuels and other toxic or hazardous materials used or stored on the premises, a description of measures taken to protect storage containers from vandalism, corrosion and spillage, the spill control and countermeasure plan, the means of disposal of all toxic or hazardous wastes produced on the site, a sample of waste water disposed to on-site septic systems, dry wells or sewage treatment systems.
- 2.14.13.4 All records pertaining to storage, removal and disposal of toxic or hazardous materials shall be retained by the owner or operator for no less than three years, and shall be made available for review upon the request of an agent of the Board of Health.
- 2.14.13.5 This Bylaw may also be enforced pursuant to MGL Chapter 40:S21D by a Town police officer or other officer having police powers. Upon request of the Board of Health, the Board of Selectmen and Town Counsel shall take such legal action as may be required to enforce this Bylaw.

2.14.14 Violation

Written notice of any violation of this Bylaw shall be given to the Owner and Operator by an agent of the Board of Health, specifying the nature of the violation; any corrective measures that must be undertaken, including containment and cleanup of discharged materials; any preventive measure required to avoid future violations, and a schedule of compliance.

The cost of containment and cleanup shall be borne by the Owner and Operator of the involved premises.

The Board of Health may charge for expenses incurred in the enforcement or maintenance of this Bylaw.

2.14.15 Penalty

Any person who violates any provision of this Bylaw shall be punished by a fine of not more than \$200. Each day or portion thereof during which a violation continues shall constitute a separate offense; if more than one, each condition violated shall constitute a separate offense. This penalty is in addition to any costs or charges under Section 2.14.5 above and regulations adopted hereunder.

2.14.16 Fees

Any person registering storage of hazardous and toxic materials pursuant to this Bylaw shall pay to the Board of Health an annual Registration Fee for every gallon or pound or fraction thereof of storage capacity. Such fee shall be due on the same date as the annual registration. Failure to pay shall constitute a violation and shall subject the violator to the penalties of Section 2.14.15 of the Bylaw. The Board of Health shall adopt and publish a schedule of fees to be charged.

2.14.17 Exemptions

The provisions of this Bylaw shall not apply to tanks of 330 gallon capacity or less located on residential properties or to domestic fills or to other uses and activities exempted by Board of Health Regulations.

2.14.18 Regulations

The Board of Health shall adopt and enforce, and may from time to time amend regulations consistent with the intent and general provisions of this bylaw, including a schedule of registration fees and expenses charges.

2.14.19 Severability

Each provision of this Bylaw shall be construed as separate to the end that if any part of it shall be held invalid for any reason, the remainder shall continue in full force and effect.

Note: Amended (in whole) Art. 17, Jan. 14, 1991 T.M. App. A.G. 3/22/91. Adv. Burl. News 4/11 & 4/18/91.