

HAZARDOUS MATERIALS GROUNDWATER PROTECTION BY-LAW

APPROVED: 4/30/99

Section 77-1: AUTHORITY

This By-Law is adopted by the Town of Stoughton under its home-rule powers, its police powers to protect the public health and welfare, and its authorization under Massachusetts General Laws, Chapter 40, Section 21.

Section 77-2: PURPOSE

This By-Law is intended to protect the public health, safety and welfare, by preserving and maintaining the existing and potential groundwater supply, groundwater recharge areas, including surface waters within the Town of Stoughton; to preserve and protect present and potential sources of water supply for the public health and safety; to conserve the natural resources of the town; and to prevent blight and the pollution of the environment from contamination with hazardous materials.

Section 77-3: DEFINITIONS

The following definitions shall apply in the interpretation and implementation of this By-Law.

Aquifer: Geological formation composed of rock or sand and gravel that contains significant amounts of potentially recoverable potable water.

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

Discharge means the disposal, deposit, injection, dumping, spilling, leaking, incineration, or placing of hazardous material into or on any land or water so that such hazardous waste or any constituent thereof may enter the environment.

Groundwater: All the water found beneath the surface of the ground.

Hazardous Materials: means a product or waste or combination of substances which because of quantity, concentration, or physical or chemical, or infectious or radioactive characteristics may reasonably pose, in the determination of the enforcing authority, a substantial present or potential hazard to human health, safety or welfare, or the environment when improperly treated, stored, transported, used or disposed of, or otherwise managed. Any substance which may create a special hazard in the event of a spill, leak, fire or exposure; and all substances deemed to be hazardous waste as defined in M.G.L. Chapter 21C, s.2 and the Hazardous Waste Regulations promulgated thereunder by Massachusetts Department of Environmental Protection ("D.E.P.") at 310 CMR 30.010 in amounts in excess of that normally used in household maintenance or other materials which are listed as toxic, hazardous or a priority pollutant by the United States Environmental Protection Agency under any of the following laws: (1) Toxic Substances Control Act 15 U.S.C. s.2601 et seq.; (2) Federal Insecticide, Fungicide and Rodenticide Act 7 U.S.C. s.136 et seq.; (3) Resource Conservation and Recovery Act of 1976 42 U.S.C. 36901 et seq.; (4) Comprehensive Environmental Response, Compensation and Liability Act of 1980 42 U.S.C. s.9601 et seq.; and (5) Federal Water Pollution Control Act 33 U.S.C. s.1251 et seq.

Impervious Surface: Material on the ground that does not allow surface water to penetrate into the soil.

Leachable Wastes: Waste materials including solid wastes, sewage and sludge that are capable of releasing waste-borne contaminants to the surrounding environment.

Materials Safety Data Sheet: means the form containing data on physical characteristics, flammability, explosivity, reactivity, and the health and safety hazards of specific chemicals, as well as information relative to procedures recommended for spills and leaks of specific chemicals and special protections and precautions to be taken in the handling of specific chemicals.

Mining of Land: The removal or relocation of geological materials such as topsoil, sand and gravel, metallic ores, or bedrock.

Recharge Areas: Areas composed of permeable stratified sand and gravel and certain wetlands that collect precipitation or surface water and carry it to aquifers.

Reportable Discharge: All discharges greater than three gallons liquid volume or five pounds dry weight, or any discharge which would potentially threaten the public health and safety or the environment by entering surface waters, groundwaters, or water recharge areas, or which, by emitting toxic fumes or gases into the air could pose a threat of contamination to groundwater. Discharges which are in compliance with all Federal, State and Local Regulations, or which are permitted by governing Federal, State or local Agencies are not considered reportable discharges.

Solid Wastes: Useless, unwanted, or discarded solid material with insufficient liquid content to be free flowing. This includes but is not limited to rubbish, garbage, scrap materials, junk, refuse, inert fill material and landscape refuse.

Use of Hazardous Materials: the handling, generation, transportation, storage or management of hazardous materials.

Section 77-4: SEVERABILITY

Each provision of this By-Law shall be construed as separate to the end, that if any provision, or sentence, clause or phrase thereof, shall be held invalid for any reason, the remainder of that section and all other sections shall continue in full force and effect.

Section 77-5: HAZARDOUS MATERIALS NOT SUBJECT TO REGULATION BY THIS BY-LAW

The following materials are not within the scope of authority of this By-Law, except for the disposal and storage requirements set forth in Section 9.

- (1) Domestic Sewage
- (2) Household Waste including garbage, trash, and septage from single and multiple residences, hotels and motels.
- (3) Wastes generated from the growing of agricultural crops and the raising of animals, including manure which are returned to the soil as fertilizer.

Section 77-6: ESTABLISHMENT AND DELINEATION OF AQUIFER PROTECTION AREA

For the purposes of this By-Law, there are hereby established within the town certain aquifer protection areas, consisting of aquifers and/or aquifer recharge areas including areas that through hydrogeological testing are considered for potential public water supply, which are delineated on a map entitled "Aquifer Protection Areas, Town of Stoughton; Scale: 1"=1200', March 1990" and as it may be amended from time to time by vote of Town Meeting based on information developed through hydrogeologic investigations. This map is a part of the general by-law on file with the Office of the Town Clerk.

Legend - ||||||| - Aquifer Protection Area

The Aquifer Protection Area is further described as follows:

The protective area delineated by a $\frac{1}{2}$ mile radius around municipal wellheads in use or proposed for use as public water supplies.

Section 77-7: ANNUAL REGISTRATION REQUIREMENTS - EXISTING USE OF HAZARDOUS MATERIALS WITHIN THE AQUIFER PROTECTION AREA

Every owner or operator of a commercial or industrial establishment (including municipal operations) located within the aquifer protection area which uses hazardous materials shall register with the Board of Health.

Registration includes the following:

- (1) Submission of a map or written description locating areas where hazardous materials are stored, handled, or in use, specifying

approximate average quantities of materials in each location and special handling required in a fire, leak, spill, or exposure. Area must also be identified which store emergency equipment including medical supplies, along with a brief description of the capabilities of the equipment.

This map or written description must also be posted in one of the following on site locations: (a) Guard Shack, (b) Fire Alarm box, (c) Sprinkler Riser, (d) other location acceptable to the head of the Fire Department. The location of this posting must be specified during registration.

- (2) Submission of names, addresses, and telephone numbers of all qualified "Emergency Coordinators" who are individuals identified by owners or operators of commercial or industrial establishments which must register in accordance with this By-Law. "Emergency Coordinators" must be knowledgeable in the types of hazardous materials used at the establishment, proper storage and handling of those materials, familiar with the establishment's emergency contingency plan, and authorized as on-site coordinator in the event of an emergency.
- (3) Keep on file at all times in an on-site location known and accessible to all Emergency Coordinators", Materials Safety Data Sheets on all hazardous materials manufactured, stored, or used at the establishment. These Materials Safety Data Sheets must be available to the Board of Health and the Head of the Fire Department during routine inspections, investigations and in the event of an emergency.
- (4) Keep on file at all times in an on-site location known and accessible to all "Emergency Coordinators" an Emergency Contingency Plan which identifies "Emergency Coordinators" and details the area where and ways in which an emergency could come about, the techniques and procedures to be used for prevention and

control of such emergencies, the emergency organizations who should be notified and/or may provide services in an emergency, evacuation plan for personnel, and an inventory of the types, approximate quantities, and method of storage, transportation, and disposal of all hazardous materials.

Subsection 7-1: EFFECTIVE DATE OF REGISTRATION

Registration required by Subsection 7. shall be initially submitted October 1, 1990 and annually thereafter. Records required by Section 7 to be kept on file at each establishment should be updated as frequently as necessary to insure proper handling of hazardous materials and adequate procedures to minimize emergencies and the damage which would result from such emergencies.

Subsection 7.2: UPDATING OF REGISTRATION INFORMATION

All information required under Section 7 of this By-Law must be kept current to reflect substantial changes in quantities or types of hazardous materials on-site.

Section 77-8: CERTIFICATES OF APPROVAL - NEW USES OF HAZARDOUS MATERIALS WITHIN THE AQUIFER PROTECTION AREA

A certificate of Approval of Registration shall be required and obtained from the Board of Health for all uses of hazardous materials requiring registration in accordance with Section 7.0, prior to the operation of said establishment, to determine that the provisions of this By-Law have been met. Thereafter annual registrations as required in Section 7 is required.

Section 77-9: AQUIFER PROTECTION AREA - ADDITIONAL REGULATIONS FOR THE PROTECTION OF PUBLIC WATER SUPPLIES

In order to protect and preserve existing and potential drinking water sources, the following Regulations apply within the Aquifer Protection Area:

A. The following activities are permitted within the Aquifer Protection Area provided that all necessary permits, orders, or approvals required by local, state or federal law are also obtained:

- (i) conservation of soil, water, plants and wildlife;
- (ii) outdoor recreation, nature study, boating, fishing, and hunting where otherwise legally permitted;
- (iii) foot, bicycle and/or horse paths and bridges;
- (iv) normal operation and maintenance of existing water bodies and dams, splash boards, and other water control, supply and conservation devices;
- (v) maintenance, repair and enlargement of any existing structure provided there is no increase in impermeable pavement;
- (vi) residential development, provided that on site recharge is required for all surfaces rendered impervious in excess of 15% of lot area.
- (vii) farming, gardening, nursery, conservation, forestry, harvesting and grazing provided that fertilizers, herbicides, pesticides and other leachable materials are not stored outdoors.

B. The following activities are prohibited within the Aquifer Protection Area:

- (i) disposal of solid wastes, other than brush and stumps;
- (ii) underground storage of hazardous materials except for the continued use of underground petroleum products storage vessels already constructed and in use as of the date of the vote to adopt this by

law which are operated in accordance with an approved management plan as specified in the following subsections C & D;

- (iii) commercial or industrial aboveground storage of petroleum products except within buildings which it will heat. Exempted storage must be designed to contain spills and prevent any flow of petroleum product to floor drains or exposed soils;
- (iv) the disposal of liquid or leachable wastes and individual sewage disposal systems that are designed in accordance with 310 CMR 15.00 to receive more than 110 gallons of sewage per quarter acre under one ownership per day, or 440 gallons of sewage on any one acre under one ownership per day, whichever is greater, except the replacement or repair of an existing system that will not result in an increase in design capacity above the original design;
- (v) the introduction of acids, enzymes degreasers, or bacterial additives into on site septic disposal systems;
- (vi) commercial or industrial activities which discharge process waste water onsite;
- (vii) storage of road salt or other deicing chemicals;
- (viii) dumping of snow containing deicing chemicals which is brought in from outside the area;
- (ix) mining of land except as necessary and incidental to a permitted activity;
- (x) discharge or disposal of hazardous wastes;
- (xi) use of chemicals for deicing unless deemed necessary for public safety.

- (xii) commercial or industrial activities which recharge stormwater to groundwater without passage through oil and grease traps and sediment traps constructed, operated, and maintained to minimize groundwater contamination, permitted and conducted in accordance with all applicable federal, state and local regulations.
- (xiii) landfilling of sludge or septage as defined in 310 CMR 32.05.
- (xiv) storage of sludge and septage, unless such storage is in compliance with 310 CMR 32.30 and 310 CMR 3231.
- (xv) commercial or industrial generation, treatment or storage of hazardous wastes subject to MGL 21C and 310 CMR 30.00 not already being lawfully conducted and registered in accordance with this by-law, with the exception of very small quantity generators as defined under 310 CMR 30.00; waste oil retention facilities required by MGL, c.21 s.52A; and water remediation treatment works approved under 310 CMR 5.00. Exempted activities may only commence after a Certificate of Approval has been issued by the Board of Health in accordance with Section 8.

C. The following activities are permitted within the Aquifer protection area if conducted in accordance with a management site plan approved by the Board of Health, in addition to the registration information required in Section 7; under such conditions as they may require:

- (i) the application of pesticides for non-domestic or non-agricultural activities provided that all necessary precautions shall be taken to prevent hazardous concentrations of pesticides in the water and on the land within the Aquifer Protection Area as a result of such application. Such precautions shall be detailed in an approved management and

site plan which will include, but not be limited to, erosion control techniques, the control of runoff water (or the use of pesticides having low solubility in water), the prevention of volatilization and redeposition of pesticides and the lateral displacement (i.e. wind drift) of pesticides;

(ii) the application of fertilizers for non-domestic or non-agricultural activities provided that such application shall be made strictly in accordance with an approved management and site plan, delineating at a minimum the manner in which the application is to be informed in order to minimize adverse impacts on surface and groundwater due to nutrient transport and deposition and sedimentation;

(iii) commercial and industrial development SHALL REQUIRE an approved management and site plan detailing measures to be taken to prevent compaction and siltation, loss of recharge IN EXCESS OF 15% LOT AREA. Exfiltration for sewer pipes and contamination by oil, chemicals, nutrients, etc.

(iv) the continued use of underground petroleum storage vessels already constructed and in use as of the date of the vote to adopt this by law provided that the storage is conducted in accordance with an approved management plan detailing a testing program sufficient to detect product loss. Other precautions taken to prevent and detect any loss of product to soils or groundwater and the resulting contamination must also be submitted detailing the age and construction of the vessels, and any monitoring equipment or observation wells on site.

(v) the continued operation of automobile services and repair shops already

constructed and in operation as of the date of the vote to adopt this by law provided that all activities are conducted in accordance with an approved management and site plan specifying storage, use and handling of all hazardous materials, as well as all precautions taken to minimize spills and prevent the release of contaminants to the soil and groundwater.

(vi) The continued operation of junk and salvage yards already in operation as of the date of the vote to adopt this by law provided that:

- (a) an assessment of the site is conducted in accordance with Massachusetts General Laws Chapter 21E to identify the existence, source, nature and extent of a release or threat of release of a hazardous material, as defined in this by law. A copy of the assessment to be provided to the Board of Health prior to or in conjunction with the submittal of a management plan.
- (b) that all activities on the site are conducted in accordance with an approved management plan and site plan specifying the response action to be taken on the site to address releases or threat of releases, including soil and/or groundwater monitoring, and specifying the storage, use and handling of all hazardous materials, as well as precautions taken to minimize spills and prevent the release of contaminants to the soil and groundwater.

D. Procedures for Submittal and Review of Management Plans in accordance with the requirements of Subsection C.

1. A management plan shall be filed with the Board of Health and shall be accompanied by six copies of a site plan prepared in accordance with Board of Health Rules and Regulations. Management plans for activities delineated in Section 9 Subsections C (iv), (v) and (vi) shall be submitted by October 1, 1990.
2. Said management plan and site plan shall be prepared in accordance with the data requirements of Subsection C above for the proposed development, (e.g. site plan review, erosion and sedimentation control plan etc.)
3. The Board of Health shall refer copies of the management plans and site plans to the Board of Selectmen, Conservation Commission, Town Engineer and the Department of Public Works, which shall review, either jointly or separately, the application and shall submit their recommendations to the Board of Health. Failure to make recommendations to the Board of Health within 35 days of the referral of the application shall be deemed lack of opposition.
4. The Board of Health shall hold a hearing within 65 days after the filing of the application. Notice of the public hearing shall be given by publication and posting and by first-class mailings to direct abutters at the expense of the applicant. The decision of the Board of Health and any extension, modification or renewal thereof, shall be made in writing. Failure of the Board of Health to issue written decision within 90 days of the filing date of the application shall be deemed as an approval of the plans.
5. After notice and public hearings, and after due consideration of the reports and recommendations of the boards/departments, the Board of Health may approve a management plan and site plan provided that it finds that the proposed activity:

- (a) is consistent with the purpose and intent of this By-Law;
- (b) is appropriate to the natural topography, soils, and other characteristics of the site to be developed;
- (c) will not, during construction or thereafter, have an adverse environmental impact on the aquifer or recharge area; and
- (d) will not threaten or adversely affect an existing or potential water supply.

Section 77-10: HAZARDOUS MATERIALS GENERALLY

All hazardous materials within the Town of Stoughton must be stored, handled, transported and used in such a way as to minimize discharges and to ensure maximum protection of the groundwater and the public health, safety, and welfare.

Subsection 10.1:

All commercial and industrial establishments (including municipal operations) must provide adequate employee training programs to ensure proper use, storage, transportation and handling of hazardous materials.

Subsection 10.2:

Owners and operators of establishments must keep sufficient records to provide best estimates of quantities of hazardous materials on-site.

Subsection 10.3:

All locations where hazardous materials are stored or generated in quantities that could cause a substantial hazard in the event of a spill, leak, fire, or exposure shall be designated with legible warning signs of bright yellow, or other equally conspicuous

color indicating the potential danger and how to overcome or avoid such danger.

Subsection 10.4:

All hazardous materials shall be held in product tight containers. All containers of hazardous materials which permit leaking or spillage shall be disposed of or repaired to its original product tight state.

Subsection 10.5:

Every owner of a commercial or industrial establishment (including municipal operations) shall comply with all Federal, State, and Municipal laws and regulations relative to Hazardous Materials.

Section 77-11: ABOVEGROUND STORAGE OF HAZARDOUS MATERIALS
GENERALLY

- (a) Aboveground containers of hazardous materials shall be kept in an orderly manner, shall be adequately marked to identify the hazard, and shall be stored on a surface impervious to the material being stored. The storage area shall be enclosed by a permanent dike of impermeable construction. The volume of the areas enclosed by the dike shall be equal to or greater than the capacity of the containers within the dike.
- (b) There shall be no storage of incompatible materials (those which react with one another to create a special hazard) in the same area.
- (c) Drainage and ventilation of storage areas containing hazardous materials shall be constructed and maintained so as to control spills and prevent the release of fumes; noxious gases and other discharges which may pose a threat of groundwater contamination.

Section 77-12: REPORTING REQUIREMENTS

Any person having knowledge of a reportable discharge of hazardous materials shall immediately report the discharge to the Board of Health, and if involving flammable or explosive materials, to the Head of the Fire Department.

Section 77-13: VARIANCES

The Board of Health may vary the application of any provision of this By-law with the exception of Section 9, unless otherwise required by law, in any case when, in its opinion, the applicant has demonstrated that an equivalent degree of environmental protection required under this By-law will still be achieved. The applicant at its own expense must notify all abutters by certified mail at least ten (10) days before the Board of Health Meeting at which the variance request will be considered. The notification shall state the variance sought and the reasons thereof. Any variance granted by the Board of Health shall be in writing. Any denial of a variance shall also be in writing and shall contain a brief statement of the reasons for denial. The Board of Health may, as an alternative to denial of a variance, impose such conditions as it deems necessary to contribute to the environmental protection required under this By-law.

Section 77-14: ENFORCEMENT

- A. The Board of Health or its agent(s) shall be the enforcing authority of the By-Law.
- B. The Board of Health or its agent(s) may enter upon privately owned property for the purpose of performing their duties under this By-law.

Section 77-15: PENALTY

Any person who violates any provision of this By-law shall be punished by a fine of not more than three hundred dollars (\$300.00). Each day or portion thereof during which a violation continues shall constitute a separate offense. This By-law may be enforced pursuant to Massachusetts General Laws, Chapter 40 Section 21D. When enforced pursuant to Massachusetts General Laws, Chapter 40 Section 21D, the penalty shall be \$100.00 per day.

Section 77-16: FEES

The fee for registering storage of hazardous materials pursuant to Section 7 shall be \$25, payable on the same date as the annual registration. The application fee for a Certificate of Approval pursuant to Section 8 shall be

\$50.00. The Applicant fee for review of a management and site plan in accordance with Section 9 Subsection C & D must be accompanied by a fee of \$50.00.