

ARTICLE 16

Aquifer Protection District

[Amended 5-1-1989 STM by Art. 7; 5-7-1998 ATM by Art. 16; 5-5-1999 STM by Art. 11; 4-30-2001 ATM by Art. 22]

§ 198-1601. Purpose.

1601.1. The Town has determined that:

1601.1.1. The groundwater underlying the Town is the sole source of its drinking water supply.

1601.1.2. The groundwater aquifers are integrally connected with, and flow into, surface waters that constitute significant resources of the Town.

1601.1.3. Spills and discharges of petroleum products and other toxic and hazardous materials and discharges of sewage have repeatedly threatened the quality of groundwater and related water resources throughout Massachusetts and elsewhere, posing potential public health and safety hazards and threatening economic losses to the affected communities.

1601.2. Therefore, the Town has designated an Aquifer Protection District and enacted this Article 16 to:

1601.2.1. Preserve and maintain the existing and potential groundwater supplies, aquifers and recharge areas of the Town and to protect them from development or land use practices that would adversely affect their quality or quantity.

1601.2.2. Preserve and protect present and potential sources of drinking water supply for the public health and safety.

1601.2.3. Conserve the water resources of the Town.

1601.3. Scope of authority.

The Aquifer Protection District is an overlay district superimposed on the zoning districts. As described in § 198-302.1.4, the Aquifer Protection District is shown on a map on file with the Town Clerk entitled "Town of Wayland Zoning Overlay Districts," Survey Department, 41 Cochituate Road, Wayland, MA 01778, dated December 5, 2003, as amended. This overlay district shall apply to all new construction, reconstruction, or expansion of existing buildings and new or expanded uses. Applicable activities or uses in a portion of one of the underlying zoning districts which fall within the Aquifer Protection District must additionally comply with the requirements of this district. Uses that are prohibited in the underlying zoning districts shall not be permitted in the Aquifer Protection District. **[Amended 5-13-2010 ATM by Art. 28]**

§ 198-1602. Definitions.

1602.1. As used in this Article 16, the following terms shall have the meanings indicated:

AQUIFER — A geologic formation composed of rock, or sand and gravel that contains significant amounts of potentially recoverable potable water.

DEP — The Massachusetts Department of Environmental Protection.

DISCHARGE — The intentional or accidental introduction of a liquid, or a soluble or leachable solid material, upon or into land or water bodies. Discharge includes, without limitation, leakage of such materials from failed or discarded containers or storage systems and disposal of such materials into any wastewater disposal system, dry well, catch basin or landfill that has not received site assignment by the Board of Health.

DISTRICT — The Aquifer Protection District is the zoning district defined to overlay other zoning districts in the Town of Wayland. The Aquifer Protection District may include specifically designated recharge areas.

GROUNDWATER — The slowly moving subsurface water

IEP 1988 — The report prepared by IEP, Inc., described in § 198-302.1.5.²⁵

IMPERVIOUS SURFACE — Material placed by man, including buildings, that prevents the penetration of surface water into the soil.

MASSACHUSETTS GENERAL LAWS — Massachusetts General Laws.

MINING OF LAND — The removal of geologic materials, such as topsoil, sand, gravel or bedrock.

PERVIOUS UPLAND LOT AREA — The upland lot area less that portion thereof that is covered by impervious surface.

RECHARGE AREAS — Areas from which precipitation or surface water can migrate into an aquifer.

RESIDENTIAL LOT — A parcel of land or lot which is located in a residential zoning district. **[Added 4-29-2002 STM by Art. 3]**

SANITARY WASTE — Wastewaters arising from ordinary domestic water use, as from toilets, sinks, bathing facilities, etc., and containing such concentrations and types of pollutants as to be considered normal wastes. Where the quantity of sanitary waste is stated, it is to be understood that the quantity is the design quantity as specified by the State Environmental Code, 310 CMR 15.00, or, in the absence of a specification therein, as specified by the Board of Health.

SECTION — This Article 16.

25. Editor's Note: See now § 198-302.1.4.

SECURED OPEN SPACE — Land that is permanently dedicated as open space that will not be developed, used for disposal of sanitary waste or farmed. The method of dedication may include a conservation restriction under Massachusetts General Laws c. 184, §§ 26 through 33; Town ownership of land devoted to

conservation under Massachusetts General Laws c. 40, § 8C; Town ownership of park land under Massachusetts General Laws c. 45, § 3; or Town ownership of land devoted to protection of municipal wells and/or aquifers under Massachusetts General Laws c. 40, § 39B, or Chapter 80 of the Acts of 1878.

SOLID WASTE — Discarded solid material with insufficient liquid content to be free flowing. This definition includes, but is not limited to, rubbish, garbage, scrap materials, junk, refuse, inert fill material and landscape refuse.

SPGA — The special permit granting authority under this Article 16 (the Planning Board).

STRUCTURE — A combination of materials assembled at a fixed location to give support or shelter, such as a building, framework, retaining wall, tent, reviewing stand, platform, bin, fence, sign, flagpole, recreational tramway, mast for radio antenna or the like. The word "structure" shall be construed, where the context requires, as though followed by the words "or part or parts thereof."

TOXIC OR HAZARDOUS — Any substance or mixture of such physical, chemical or infectious characteristics as to pose an actual or potential hazard to water supplies or other hazard to human health, if such substance or mixture were discharged to land or waters of this Town. Toxic or hazardous materials include, without limitation, organic chemicals, petroleum products, heavy metals, radioactive or infectious wastes and acids and alkalies, and also include such products as pesticides, herbicides, solvents and thinners and all substances defined as toxic or hazardous under Massachusetts General Laws c. 21C and 21E and 310 CMR 30.00.

UPLAND LOT AREA — The total area of the parcel of land in question less the area of ponds, streams and wetlands as defined under Massachusetts General Laws c. 131, § 40, as amended.

§ 198-1603. Use restrictions applying to the Aquifer Protection District.

- 1603.1. Permitted uses. The following uses are permitted within the Aquifer Protection District, 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. Pervious surfaces are preferred.
 - 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, subject to §§ 198-1603.2 (Prohibited uses) and 198-1603.3 (Special permitted uses);

- vi. Residential development, subject to §§ 198-1603.2 (Prohibited uses) and 198-1603.3 (Special permitted uses);
 - vii. Farming, gardening, nursery, conservation, forestry, harvesting, and grazing, subject to §§ 198-1603.2 (Prohibited uses) and 198-1603.3 (Special permitted uses);
 - viii. Construction, maintenance, repair, and enlargement of drinking water supply related facilities such as, but not limited to, wells, pipelines, aqueducts, and tunnels. Underground storage tanks related to these activities are not categorically permitted.
 - ix. Any use permitted in the underlying zoning district, subject to §§ 198-1603.2 (Prohibited uses) and 198-1603.3 (Special permitted uses).
- 1603.2. Prohibited uses. The following uses are specifically prohibited within the Aquifer Protection District: **[Amended 4-29-2002 STM by Art. 3; 5-6-2004 ATM by Art. 22]**
- 1603.2.1. Sanitary landfills and open dumps as defined in 310 CMR 19.006; disposal or stockpiling of solid wastes, other than brush and stumps; and disposal of brush or stumps by burial with less than four feet of clearance above the maximum water table, as defined by the Board of Health. Landfills receiving only wastewater residuals and/or septage. Storage of sludge and septage, unless such storage is in compliance with 310 CMR 32.30 and 310 CMR 32.31.
 - 1603.2.2. Junkyards or motor vehicle salvage operations as defined in Massachusetts General Laws Chapter 140B, Section 1.
 - 1603.2.3. Storage of deicing chemicals, unless such storage and required loading areas are within a weatherproof structure having an impervious floor designed to prevent the generation and escape of contaminated runoff or leachate and only if all loading and unloading will be done within that shelter, with provisions for a separate closed drain system for safe disposal.
 - 1603.2.4. Stockpiling/disposal of snow transported into the district containing deicing chemicals.
 - 1603.2.5. Dry-cleaning establishments where cleaning is performed on the premises in open or non-self-contained units.
 - 1603.2.6. Commercial establishments for the plating, finishing, etching or polishing of metals or semiconductors.
 - 1603.2.7. Painting, wood preserving, wood finishing or stripping paint on a commercial scale or on a scale more than that which is required for maintenance of existing structures and facilities.

- 1603.2.8. Manufacture of semiconductors or other electronic components or electronic circuit assembly on a commercial scale where hazardous materials are used.
- 1603.2.9. Chemical or bacteriological laboratories on a commercial scale.
- 1603.2.10. Commercial establishments for printing, photocopying or photographic processing where the processing is performed in open or non-self-contained units.
- 1603.2.11. Storage of liquid petroleum products and liquid hazardous waste, except the following: **[Amended 5-13-2010 ATM by Art. 28]**
- a) Normal household use, outdoor maintenance, and heating of a structure;
 - b) Waste oil retention facilities required by statute, rule, or regulation;
 - c) Emergency generators required by statute, rule, or regulation; and
 - d) Treatment works approved under 314 CMR 5.00 for treatment of ground and surface waters; provided that such storage, listed in items a) through d) above, meets the requirements of § 198-1603.3.10.
- 1603.2.12. Earth removal, consisting of the removal of soil, loam, sand, gravel, or any other earth material (including mining activities) to within four feet of historical high groundwater as determined from monitoring wells and historical water table fluctuation data compiled by the United States Geological Survey, except for excavations for building foundations, roads or utility works.
- 1603.2.13. Hotels or motels.
- 1603.2.14. Any other use that includes the generation, the manufacture, use, transportation or disposal of toxic or hazardous waste, except for the following: **[Amended 5-13-2010 ATM by Art. 28]**
- a) Very small quantity generators as defined under 310 CMR 30.000;
 - b) Household hazardous waste centers or events operated pursuant to 310 CMR 30.390;
 - c) Waste oil retention facilities required by MGL c. 21, § 52A; and
 - d) Treatment works approved by DEP designed in accordance with 314 CMR 5.00 for the treatment of contaminated ground or surface waters.

- 1603.2.15. Any floor drainage system in existing facilities, in industrial or commercial process areas or hazardous material and/or hazardous waste storage area, which discharge to the ground without a DEP permit or authorization. Any existing facility with such a drainage system shall be required to either seal the floor drain (in accordance with the State Plumbing Code, 248 CMR 2.00) or connect the drain to a holding tank meeting the requirements of all appropriate DEP regulations and policies.
- 1603.2.16. Treatment or disposal works subject to 314 CMR 5.00 for wastewater other than sanitary sewage. This prohibition includes, but is not limited to, treatment or disposal works related to activities under the Standard Industrial Classification (SIC) Codes set forth in 310 CMR 15.004(6) (Title 5), except the following:
- a) The replacement or repair of an existing system(s) that will not result in a design capacity greater than the design capacity of the existing system(s);
 - b) Treatment works approved by the DEP designed for the treatment of contaminated ground or surface waters operated in compliance with 314 CMR 5.05(3) or 5.05(13); and
 - c) Publicly owned treatment works or POTW's.
- 1603.2.17. Petroleum, fuel oil, and heating oil bulk stations and terminals, including but not limited to those listed under Standard Industrial Classification (SIC) Codes 5171 and 5983. SIC Codes are established by the US Office of Management and Budget and may be determined by referring to the publication, Standard Industrial Classification Manual, and any other subsequent amendments.
- 1603.2.18. Storage of commercial fertilizers, as defined in Massachusetts General Laws Chapter 128, Section 64, unless stored within a structure designated to prevent the generation and escape of contaminated runoff or leachate.
- 1603.2.19. Storage of animal manure unless stored within a structure designated to prevent the generation and escape of contaminated runoff or leachate.
- 1603.3. Special permit uses. The following uses and activities are permitted only upon the issuance of a special permit by the special permit granting authority (SPGA) under such conditions as they may require: **[Amended 5-6-2004 ATM by Art. 22]**
- 1603.3.1. Golf courses, whether public or private.
 - 1603.3.2. Commercial cabinetry or furniture making. (Note that painting, wood preserving, wood finishing and stripping of paint are prohibited.)
 - 1603.3.3. Cluster developments, planned developments and other forms of flexible development that require special permits under other articles of this Zoning Bylaw.

- 1603.3.4. Any use with the exceptions of uses described in Subsections 1603.3.5 and 1603.3.6 below, where the design flow of sanitary waste exceeds a total of 10,000 gallons per day for the entire project.
- 1603.3.5. Municipal wastewater treatment facilities with on-site disposal of effluent from primary or secondary treatment. (See also § 198-1603.2.1 herein.)
- 1603.3.6. Individual on-site sewage disposal systems shall comply with Board of Health and DEP requirements for the installation of septic systems in DEP recognized Zone II areas.
- 1603.3.7. Those activities that involve the handling of toxic or hazardous materials in quantities greater than those associated with normal household use, permitted in the underlying zoning (except as prohibited under § 198-1603.2). Such activities shall require a special permit to prevent contamination of groundwater.
- 1603.3.8. Any other use that involves, as an accessory activity, the storage, use, transportation or disposal of toxic or hazardous materials, not including ordinary household storage or use.
- 1603.3.9. Nursing homes or hospitals.
- 1603.3.10. Storage of liquid hazardous materials as defined in MGL c. 21E and/or liquid petroleum products unless such storage is above ground and on an impervious surface and either:
- a. In container(s) or above-ground tank(s) within a building; or
 - b. Outdoors in covered container(s) or above-ground tank(s) in an area that has a containment system designed and operated to hold either 10% of the total possible storage capacity of all containers or 110% of the largest container's storage capacity, whichever is greater.

However these storage requirements shall not apply to the replacement of existing tanks or systems for the keeping, dispensing or storage of gasoline, provided that the replacement is performed in a manner consistent with state and local requirements.

- 1603.3.11. The application of pesticides, including herbicides, insecticides, fungicides and rodenticides for nondomestic or nonagricultural uses in accordance with state and federal standards. If applicable the applicant shall provide documentation of compliance with a yearly operating plan (YOP) for vegetation management operations under 333 CMR 11.00 or a Department of Food and Agriculture approved pesticide management plan or integrated pest management (IPM) program under 333 CMR 12.00.

- 1603.4. Site plan approval uses. The following uses and activities are permitted only upon the issuance of a site plan approval in accordance with Article 6. The Planning Board shall include the standards and criteria of this Article 16 in addition to those contained in Article 6. **[Amended 5-6-2004 ATM by Art. 22]**
- 1603.4.1. Commercial or municipal facilities for the washing, servicing or repair of boats or motor vehicles.
- 1603.4.2. Dry-cleaning establishments wherein the dry-cleaning materials are completely self-contained and all the disposal of such materials is off-site. The operation and maintenance of this use shall require periodic inspections in accordance with 1606.8.1.5.
- 1603.4.3. Commercial establishments for printing, photocopying or photographic processing; wherein the processing materials are completely self-contained and all the disposal of such materials is off-site. The operation and maintenance of this use shall require periodic inspections in accordance with 1606.8.1.5.
- 1603.4.4. Commercial laundries.

§ 198-1604. Density restrictions applying to the Aquifer Protection District. [Amended 4-29-2002 STM by Art. 3]

- 1604.1. For residential developments that do not require a special permit and in which the disposal of wastewater is by means of septic tank sewage systems, the density of dwelling units shall not exceed 1 1/2 units per upland acre of the parcel of land being developed.
- 1604.2. Any use that will render impervious more than 15% of the lot or 2,500 square feet, whichever is greater shall require site plan approval under this section. A system for ground water recharge for runoff from the impervious surface that does not degrade groundwater quality shall be provided. Under no circumstances shall the impervious surface of a residential lot exceed 30% of the upland area of the lot. **[Amended 11-16-2010 STM by Art. 16]**

For developments of five or more residential lots and for all nonresidential uses, stormwater management standards and best management practices (BMP) shall apply; BMPs should be designed to treat 1.0 inch of runoff times the total impervious surface of the post development site and remove 80% of total suspended solids where possible.

For nonresidential uses, recharge may be by groundwater infiltration basins or similar systems covered with natural vegetation and dry wells shall be used only where other methods are infeasible. Oil, grease and sediment traps to facilitate removal of contamination shall precede all such basins and wells. The owner shall permanently maintain any and all recharge area in full working order.

1604.3. Any change or alteration to an existing nonresidential lot(s) as of the adoption of this section that increases in area or is equivalent to the existing area or that proposes to