

## AMENDMENT #7

### Aquifer Protection District Ordinance Amendments

~~Strikethrough~~ = Proposed Deletion

Underline = Proposed Addition

**Highlighting** = All Proposed Changes

#### Section 2.5 Aquifer Protection District Ordinance

(Adopted 1989)

##### 2.5.1 AUTHORITY AND PURPOSE

Pursuant to RSA 674:16-21, the Town of Hampton hereby adopts an Aquifer Protection District Ordinance and accompanying regulations in order to protect, preserve and maintain existing and potential groundwater supplies and related groundwater recharge areas within known aquifers.

In the interest of the public health, safety and general welfare of the citizens, the purpose of this Ordinance is to protect, preserve and maintain existing and potential groundwater supply and recharge areas within the known aquifer from adverse development, land use practices or depletions.

The future growth and development of the Town, in accordance with the Master Plan, must assure the future availability of unpolluted public and private water supplies and encourage safe uses that can be appropriately and safely located in aquifer recharge areas.

##### 2.5.2 DEFINITIONS

For the purpose of this Ordinance, the following terms shall have the meaning given herein:

**A. Animal Feedlot:** A commercial agricultural establishment consisting of confined feeding areas and related structures used for the raising of livestock for profit.

**B. Aquifer:** For the purpose of the Ordinance, aquifer means a geologic formation, group of formations, or part of a formation that is capable of yielding quantities of groundwater usable for municipal or private water supplies.

**C. Aquifer Protection District:** The direct recharge area of designated aquifers. The Aquifer Protection District is shown on an overlay to the official zoning map of the Town.

**D. Direct Recharge Area:** The land area immediately over lying the aquifer. The boundary of the direct recharge area is the contact between the stratified drift and adjacent till or bedrock.

**E. Engineer:** A person licensed by the State of New Hampshire in accordance with NH RSA Chapter 310-A, Sections 2 - 27, as amended.

**F. Groundwater:** Water in the subsurface zone at or below the water table in which all pore spaces are filled with water.

**G. Groundwater Recharge:** The infiltration of precipitation through surface soil materials into groundwater. Recharge may also occur from surface waters, including lakes, streams and wetlands.

**H. Induced Infiltration:** The process by which water in a stream or lake moves into an aquifer because of a hydraulic gradient from the surface water body toward a pumping well or wells.

**I. Leachable Wastes:** Waste materials, including solid wastes, sludge and agricultural wastes that are capable of releasing contaminants to the surrounding environment.

**J. Mining of Land:** The removal of geological materials such as topsoil, sand and gravel, metallic ores, or bedrock to be crushed or used as building stone.

**K. Saturated Zone:** The zone beneath the land surface in which all open spaces are filled with solid water.

**L. Sludge:** Residual materials produced by the sewage treatment process.

**M. Solid Waste:** Any discarded or abandoned materials including refuse, putrescible material, septage, or sludge, as defined by New Hampshire Solid Waste Rules He-P 1901.03. Solid waste includes solid, liquid, semi-solid or contain gaseous waste material resulting from residential, industrial, commercial, mining, and agricultural operations and from community activities.

**N. Stratified-Drift:** Unconsolidated, sorted sediment composed of layers of sand and gravel deposited by meltwater from glaciers.

**O. Stratified-Drift Aquifers:** Stratified-drift deposits that are capable of yielding usable amounts of water.

**P. Structure:** Anything constructed or erected, except a boundary wall or fence, the use of which requires location on the ground or attachment to something on the ground. For the purpose of this Ordinance, buildings are structures.

**Q. Toxic or Hazardous Materials:** Any substance or mixture of such physical, chemical, or infectious characteristics as to pose a significant, 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, volatile organic chemicals, petroleum products, heavy metals, radioactive or infectious wastes, acids and alkalies, and include products such as pesticides, herbicides, solvents and thinners, and such other substances as defined in New Hampshire Department of Environmental Services Ground Water Protection Rules Part Env-Ws 410.05; in New Hampshire Solid Waste Rules Env-Wm 100 to 300 and 2100 to 3700, and in the code of Federal Regulations 40 CFR 261, as amended. The more restrictive shall apply.

Wastes such as, but not limited to, toxic or poisonous types flammable, reactive solvents, oils, or corrosive oil generated by the following commercial activities are presumed to be toxic or hazardous, unless and except to the extent that anyone engaging in such an activity can demonstrate the contrary to the satisfaction of the Planning Board:

- Airplane, boat and motor vehicle service and repair;
- Chemical and bacteriological laboratory operation;
- Dry cleaning;
- Electronic circuit manufacturing;
- Metal plating, finishing and polishing;
- Motor and machinery service and assembly;
- Painting, wood preserving and furniture stripping;

- Pesticide and herbicide application;
- Photograph processing;
- Printing

**R. Unsaturated Zone:** The subsurface zone above the water table. In this zone, open spaces are only partially filled with water.

### 2.5.3 AQUIFER PROTECTION DISTRICT BOUNDARIES

**A. Locations:** The Aquifer Protection Districts are defined as the areas shown on the overlay map entitled, "Aquifer Protection District", and is hereby adopted as part of the official Zoning Map of the Town of Hampton.

The Aquifer Protection District includes the areas delineated as direct recharge areas by Leggette, Brashears & Graham, Inc., consulting groundwater geologists for Aquarion Water Company of New Hampshire (formerly Hampton Water Works Co.) through a test well/boring program conducted during a period of 1901 to 1987. These areas have been further substantiated by the following sources: "Availability of Groundwater in the Piscataqua and other Coastal River Basins, Southeastern New Hampshire", John E. Cotton, USGS 1977. "Southeastern New Hampshire Water Resources Study - Groundwater Assessment Main Report", U.S. Army Corps of Engineers, New England Division, March 1981.

The Aquifer Protection District is a zoning overlay district which imposes additional requirements and restrictions to those of the underlying, base district zoning. In all cases the more restrictive requirements shall apply.

**B. Recharge Areas:** The district recharge area for the identified aquifer is considered to be co-terminus with the aquifer.

**C. Incorrectly Designated Zones:** When the actual boundary of the Aquifer Protection District is in dispute by any land owner or abutter actually affected by said boundary, the Planning Board, at the land owner/abutter's expense and request, may engage a professional geologist or hydrologist to prepare a report determining the proper location and extent of the aquifer and recharge area relative to the property in question. This report shall include but not be limited to:

1. A two foot interval topographic layout of the lot prepared by a registered land surveyor.
2. A high intensity soils map of the lot prepared by a soils scientist qualified in hydrologic studies including a written report of his on-site field inspection and test boring data.
3. The aquifer boundary as shown on the Aquifer Protection District Map shall be overlaid on the plat and the newly proposed boundary location shall be indicated on the same plat by a broken line.
4. Any additional mapping, hydrogeologic reports or information which becomes available as a result of recent or on-going scientific investigation of the locations and extent of aquifers, performed by the U.S. Geological Survey, NH State agencies or boards, the Town of Hampton or the Hampton Water Works Co. or the agents of any of the above.

The Planning Board may, based upon the findings of Section 2.5.3C 1-4 above, adjust the boundary or area designation of the Aquifer Protection Districts or reduce or expand the area so designated so as to more correctly define the location and extent of the aquifer on a site-specific, case-by-case basis.

### 2.5.4 USE REGULATIONS

**A. Minimum Lot Size:** The minimum lot size and area per dwelling unit within the Aquifer Protection District shall be one third (1/3) greater than the minimum required for the underlying district by Article 4.1 and 4.1.1., up to a maximum of 40,000 square feet. Lots of record (see Article 1.6.19) as of the effective date of this Article shall not be nonconforming in terms of minimum lot size. (Amended 1991)

**B. Maximum Lot Coverage:** Within the Aquifer Protection District, no more than twenty-five percent (25%) of a lot used for residential purposes or sixty percent (60%) of a lot used for non-residential purposes, shall be rendered impervious to groundwater infiltration.

**C. Site Drainage:** All runoff from impervious surfaces shall be recharged on the site and diverted, to the extent possible, towards areas covered with vegetation for surface infiltration. This includes roof and foundation drains if present. Low Impact Development practices, which are designed to mimic natural hydrology by reducing impervious surfaces and stormwater runoff and increasing groundwater recharge and pollutant removal, shall be used to the extent practicable unless the applicant can document infeasibility to the satisfaction of the Planning Board. Runoff shall be pretreated prior to infiltration. Pretreatment to the extent practicable shall be in accordance with Best Management Practices as recommended by NHDES. French drain designs, with or without overflow to Town storm drains, must be reviewed by the Public Works Department and approved by the Planning Board.

**D. Use of Deicing Chemicals:** There shall be minimal use of deicing chemicals on all public and private roads, and parking lots within this District, and those compounds used shall be free of sodium and chloride to the extent possible.

**E. Prohibited Uses:** The following uses shall not be permitted in the Aquifer Protection District:

1. Disposal of solid waste other than brush.
2. All on site handling, disposal, storage, processing or recycling of hazardous or toxic materials. Bulk storage or toxic materials for resale or distribution is also prohibited.
3. Disposal of liquid or leachable wastes, except from residential subsurface disposal systems, or State approved commercial or industrial systems which discharge human wastes only.
4. ~~Subsurface storage of petroleum and other refined petroleum products except as regulated by the New Hampshire Department of Environmental Services Underground Storage Facilities Rule (Env Wm 1401). The placement of residential tanks underground for the storage of petroleum and other refined petroleum products shall not be allowed unless in conformance with NH State guidelines applicable to commercial uses.~~ All pre-existing, non-conforming subsurface storage of these products shall be registered with the Fire Department with proof of registration to be provided to the Building Department and the Conservation Commission. Where new residential storage tanks for petroleum or other refined petroleum products are permitted in basements, the tanks shall be lined. Additionally, interior floor drains shall not be connected unless such connection is permitted by the Town of Hampton with the lines extending to an approved drainage facility.
5. Industrial uses which discharge contact type process waters on site. Non-contact cooling water is permitted.
6. Outdoor unenclosed or uncovered storage of road salt and other deicing chemicals.
7. Dumping of snow containing deicing chemicals brought from outside the Aquifer Protection District.
8. Commercial animal feedlot where animals are kept.
9. Automotive service and repair shops, ~~junk and salvage yards~~ unless operated in accordance with NH State statutes, rules and regulations approving such use. Junk and salvage yards as defined in RSA 236:112 are prohibited.
10. Injection wells that dispose of waste in the ground.
11. Any activity located within a 400 foot radius of a public drinking water production well, unless authorized by the Aquarion Water Company or its successor in conformance with the requirements of the New Hampshire Code of Administrative Rules Part Env-Dw 302.06 regarding Sanitary Protective Area.

**F. Conditional Uses:** The following uses, if allowed in the underlying district, are permitted only after a Conditional Use Permit is granted by the Hampton Planning Board.

1. Industrial, manufacturing and commercial uses not otherwise prohibited in Section 2.5.4 E of this Article.
2. Multi-family residential development.
3. Residential subdivisions which create one or more additional building lots.
3. 4. Sand and gravel excavation and other mining is if not carried out within eight (8) vertical feet of the seasonal high water table and that if all activities are conducted in compliance with RSA 155-E.

The Planning Board may grant a Conditional Use Permit for those uses listed above only after written findings of fact are made that all of the following are true:

1. The proposed use will not detrimentally affect the quality of the groundwater contained in the aquifer by directly contributing to pollution or by increasing the long-term susceptibility of the aquifer to potential pollutants.
2. The proposed use will not cause a significant reduction in the long-term volume of water contained in the aquifer or in the storage capacity of the aquifer.
3. The proposed use will discharge no waste water on site other than that typically discharged by domestic waste water disposal systems and will not involve on-site storage or disposal of toxic or hazardous wastes as herein defined.
4. The proposed use complies with all other applicable sections of this article.
5. The proposed use may include The Planning Board may attach any reasonable conditions attached to such permit by the Planning Board to such permit regarding construction and operation.
6. Whenever a Conditional Use Permit is applied for under this section, the Planning Board shall notify the Aquarion Water Company of New Hampshire, or its successor of the public hearing in the same manner it notifies abutters.
6. 7. The proposed use The Planning Board may require that necessitate that the applicant provide the Planning Board with data or reports prepared by a professional engineer qualified to assess any potential damage to the aquifer that may result from the proposed use. The Planning Board shall engage such professional assistance as it requires to adequately evaluate such reports and to evaluate, in general, the proposed use in light of the above criteria. Costs for the above mentioned services shall be charged to the applicant.
7. 8. The proposed use may necessitate the installation of upgradient and downgradient monitoring wells under the direction of a New Hampshire certified professional hydrogeologist if the Planning Board, with the recommendation of Aquarion Water Company, or its successor, determines such installation is necessary for groundwater protection. Installation shall be performed at the expense of the applicant.

**G. Permitted Uses:** The following uses are permitted provided they are conducted in accordance with the purposes and intent of this Ordinance:

1. Uses permitted in the underlying district per Article III of the Hampton Zoning Ordinance, except for uses listed as conditional uses in Section 2.5.4 F and uses prohibited in Section 2.5.4 E.

## H. Non-Conforming Uses:

1. Any non-conforming use shall comply with Article 1.2 and 1.3 of the Hampton Zoning Ordinance, except that the time period for reestablishment after abandonment shall be limited to one year.
2. Any non-conforming lot of record existing before the effective date of this article may be used in accordance with Section 2.5.4 B - G of this Article.

### 2.5.5 DESIGN AND OPERATIONS GUIDELINES

Except for single and two-family dwellings, the following design and operation guidelines shall be observed within the Aquifer Protection Districts:

- A. Safeguards.** Provisions shall be made to protect against toxic or hazardous materials discharge or loss resulting from corrosion, accidental damage, spillage, or vandalism through measures such as spill control provisions in the vicinity of chemical or fuel delivery points; secured storage areas for toxic or hazardous materials; and indoor storage provisions for corrodible or dissolvable materials. For operations which allow the evaporation of toxic or hazardous materials into the interiors of any structures, a closed vapor recovery system shall be provided for each such structure to prevent discharge of contaminated condensate into the groundwater.
- B. Inspection.** All conditional use permits granted under Section 2.5.4 F of this Article shall be subject to twice-annual inspections by the Building Inspector or other agent designated by the Selectmen. The purpose of these inspections is to insure continued compliance with the conditions under which approvals were granted. A fee for inspection shall be charged to the owner according to a fee schedule determined by the Selectmen.
- C. Location.** Where the premises are partially outside of the Aquifer Protection District Overlay Zone, potential pollution sources such as on-site waste disposal systems shall be located outside the Zone to the extent feasible.

### 2.5.6 ADMINISTRATION

- A. General.** The provisions of the Aquifer Protection District shall be administered by the Planning Board. All development proposals, other than single or two-family residential construction not involving the subdivision of land, shall be subject to subdivision and/or site plan review and approval in accordance with Planning Board rules and regulations. Such review and approval shall precede the issuance of any building permit by the Town.
- B. Additional Notification.** The Planning Board shall notify the Aquarion Water Company of New Hampshire, or its successor of any application requiring a public hearing in the same manner as it notifies abutters.
- B. C. Enforcement.** The Board of Selectmen shall be responsible for the enforcement of the provisions and conditions of the Aquifer Protection District.

### 2.5.7 EFFECTIVE DATE

This article shall become effective upon the date of passage.