

## Proposed Revisions to the Aquifer Protection Overlay Zone Language

### § 225-12. Rules Governing Zone Boundaries.

- A. Where uncertainty exists as to the boundaries of zones as shown on the Official Zoning Map the following rules shall apply:
  - (1) Boundaries indicated as approximately following the center lines of streets, highways, alleys, railroad rights-of-way, rivers or streams shall be construed to follow such center lines.
  - (2) Boundaries indicated as approximately following platted lot lines shall be construed as following such lot lines.
  - (3) Boundaries indicated as approximately following Town limits shall be construed as following Town limits.
  - (4) Boundaries indicated as following shorelines shall be construed to follow such shorelines, and in the event of change in the shoreline shall be construed as moving with the actual shore lines.
- B. Sources for the exact delineation of the special flood hazard areas shall be the Topsham Flood Hazard Boundary Map and the Brunswick Flood Insurance Study.
- C. Sources for the exact delineation of the Aquifer Protection Zone shall be Zones 1 and 2 as delineated in the February 25, 1994 report entitled “Hydrogeology of the Jackson, Taylor and Williams Stations Aquifer in Topsham and Brunswick, Maine” prepared by Caswell, Eichler, and Hill, Inc.
- D. Boundaries indicated as parallel to or extensions of features indicated in subsection A(1) through (4) above shall be so construed. Distances not specifically indicated on the Official Zoning Map shall be determined by the scale of the map.
- E. Where physical or cultural features existing on the ground are at variance with those shown on the Official Zoning Map, or other circumstances not covered by Subsections A through D above, the Board of Appeals shall interpret the zone boundaries.

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### § 225-20. Aquifer Protection Overlay District.

#### A. Purpose.

The purpose of the Aquifer Protection Overlay (AP) district is to protect the quality and quantity of Topsham’s present and future public groundwater resources by regulating activities and land use practices that are likely to affect those resources. The protection of groundwater is critical to promoting the health, safety, and general welfare of the residents of Topsham.

#### B. Establishment of district.

The Aquifer Protection Overlay district consists of sand and gravel aquifers and aquifer recharge areas. The boundary of the AP district is delineated on the Official Zoning Map, and is based on the “Hydrogeology of the Jackson, Taylor and Williams Stations Aquifer in Topsham and Brunswick, Maine” report, dated February 25, 1994, by Caswell, Eichler and Hill. The mapped area is the area indicated as both Zones 1 and 2 in the report.

#### C. Land Use Restrictions.

The following uses and development activities are prohibited:

1. The disposal of solid waste other than brush or stumps;
2. The disposal or storage of hazardous materials, with the exception of above-ground natural gas or propane gas tanks;
3. The disposal or storage of leachable materials, except subsurface wastewater disposal systems and water from residential swimming pools;
4. The bulk or commercial disposal or storage of road salt or other de-icing agents;
5. The storage of petroleum products in containers with a total volume in excess of ten (10) gallons, except those stored for heating use by that property owner or his designee only;
6. The disposal, storage, or application of sludge or other sludge-containing products, except for the application of Class A composted residuals that are licensed for unrestrained distribution by the Maine Department of Environmental Protection;
7. The disposal of any unregistered automobiles or the storage of more than two (2) unregistered automobiles;
8. Use or storage of pesticides or herbicides, other than for households or agriculture and those products that are permitted by the Organic Materials Review Institute (OMRI);
  - a. The Codes Enforcement Officer may, upon written request, approve an exception to this prohibition to allow pesticides or herbicides to be used to:
    - i. Control or destroy a health hazard (i.e., a pest that has or is likely to have an adverse effect on the health of any person);
    - ii. Control or destroy pests which have caused infestation to property (i.e., where the presence of pests in numbers or under conditions that involve an immediate or potential risk of substantial loss or damage); or
    - iii. Control or destroy wasps' nests or poison ivy.
  - b. The Brunswick and Topsham Water District shall be notified of any such requests and approvals.
9. Use or storage of fertilizer, compost, or manure, other than:
  - a. Slow-release organic fertilizer;
  - b. Products used for households and agriculture; and
  - c. Natural organic compost that:
    - i. Is in keeping with, but not limited to, compost approved by USDA National Organic Program; or
    - ii. Is in keeping with, but not limited to, products that can be used on Maine Organic Farmers and Gardeners Association (MOFGA) Certified Farms; or
    - iii. Meets the standards and test requirements to qualify for unrestrained distribution under Chapter 419 of the Maine Department of Environmental Protection regulations, titled "Agronomic Utilization of Residuals," as amended.
10. Aerial spraying of pesticides from aircraft, except for applications for public health reasons performed under the auspices of the Town of Topsham or State of Maine;
11. Pipelines for transmission of petroleum products or hazardous materials, except natural gas or propane storage and transmission facilities;
12. Commercial boat, internal combustion engine, and motor vehicle sales, service and repair;
13. Metal plating operations;
14. Dry cleaning operations;
15. Truck terminals;
16. Furniture stripping, painting, and wood preserving operations; and
17. Extractive industries, including sand and gravel extraction.

Uses or management practices not listed above may be permitted in the AP District provided that they are allowed in the underlying zoning district, will not have an

unreasonable adverse effect on the water supply, and meet the performance standards in Subsection 225-20.d (Performance Standards).

D. Performance Standards.

All uses or activities within the AP District shall meet the following performance standards. Nonconforming uses existing on the effective date of this ordinance shall also comply with standards set forth in Subsection 225-14.

1. General Standards for Uses and Activities Subject to Site Plan Review

a. Management of Stormwater Runoff

The stormwater runoff from the use or expansion of the use shall be either retained on the specific property or allowed to infiltrate or transported off-site through a subsurface stormwater system to the Town's collection system and shall incorporate stormwater management techniques to minimize runoff volume and rate, as well as pollution and nutrient loadings, from the site in accordance with §225-34.

b. Groundwater Contaminants

A. Monitoring wells may be required for a use known by the Code Enforcement Officer, in consultation with the Brunswick and Topsham Water District, to be an actual or potential source of groundwater pollution.

- a. A licensed hydrogeologist chosen or approved by the Town shall determine the number, location, and depth of monitoring wells.
- b. Monitoring wells shall be installed and sampled in accordance with "Guidelines for Monitoring Well Installation and Sampling" (Tolman, Maine Geologic Survey, 1983).
- c. Monitoring wells shall be installed on the property at the expense of the owner.
- d. The Code Enforcement Officer shall determine, in consultation with the Brunswick and Topsham Water District and/or a licensed hydrogeologist, when monitoring wells shall be sampled.
- e. Results from monitoring well samples shall be submitted to the Department and the Brunswick and Topsham Water District.

B. The Brunswick and Topsham Water District shall promptly inform the Board of Selectmen, Code Enforcement Officer, Planning Board, and Zoning Board of Appeals when the calculated or actual levels of contaminants in the groundwater reach ten (10) percent of the Maximum Contaminant Levels (MCLs) listed within the National Primary Public Drinking Water Regulations for contaminants as measured at the Brunswick and Topsham Water

District monitoring wells and recommend remedial actions.

- C. No Site Plan approval shall be granted for a use, expansion of a use, or activity that would cause the cumulative, calculated, or actual levels of contaminants in the groundwater at the Brunswick and Topsham Water District property line to exceed 50 percent of the Maximum Contaminant Levels (MCLs) listed within the National Primary Public Drinking Water Regulations.
- D. No Site Plan approval shall be granted for a use, expansion of a use, or activity that would cause the calculated or actual levels of contaminants in the groundwater at the property line of the specific lot associated with the use, expansion of the use, or activity to exceed 50 percent of the Maximum Contaminant Levels (MCLs) listed within the National Primary Public Drinking Water Regulations.

## 2. Application of Fertilizers and Manure

- A. Application of nitrogen fertilizer and manure is permitted subject to the approval from the Code Enforcement Officer. Permit applications shall identify materials, and application rates.
- B. All manure spreading shall be accomplished in conformance with the Maine Manure Utilization Guidelines, published by the Maine Department of Agriculture, Conservation and Forestry, as amended.
- C. Runoff from areas where manure or fertilizer is being applied to the land shall be controlled.
- D. Application of manure or fertilizer to sand, or bare soil where the topsoil has been removed, is prohibited.

## 3. Manure Storage

Agricultural operations that generate or utilize manure shall provide containment facilities for manure storage. Such facilities shall be adequate to hold one (1) year's production, and shall be covered.

## 4. Animal Husbandry

The landowner shall minimize potential impact on groundwater quality when managing manure generated on-site through the utilization of effective collection and storage measures.

## 5. Use of Pesticides

Land application of pesticides is permitted subject to the approval from the Codes Enforcement Officer, provided that surface runoff and erosion in areas where pesticides are being applied is contained. Permit applications shall include copies of the pesticide labels, rate of application and materials safety information.

## 6. Subsurface Waste Disposal Systems

Disposal of hazardous materials to subsurface waste disposal

systems, including organic solvents designed for cleaning septic systems is prohibited.

## 7. Storage Tanks

All underground oil (petroleum products) storage tanks (other than propane gas or natural gas storage tanks) that are in place prior to the effective date of this ordinance shall be nonconforming. All existing oil underground storage tanks and piping systems that are single-walled and double-walled tanks without an interstitial space monitoring system shall be precision tested annually. Double-walled tanks and piping systems with an interstitial space monitoring system are exempt from annual precision testing. Tanks failing to pass the precision test shall be excavated and examined for leaks. If found to be leaking, the tank and any material discharged from the tank shall be removed at the expense of the owner in accordance with the requirements of the Maine Department of Environmental Protection (MDEP). When it becomes necessary to replace an underground tank and or its piping systems it shall be replaced with a double-walled tank and/or piping system with an interstitial space monitoring system, or better.