

# TOWN OF BRUNSWICK, MAINE

INCORPORATED 1739

# DEPARTMENT OF PLANNING AND DEVELOPMENT 28 FEDERAL STREET BRUNSWICK, ME 04011

THEO. H.B.M. HOLTWIJK, DIRECTOR

PHONE: 207-725-6660

FAX: 207-725-6663

#### MEMORANDUM

Date:

June 8, 2005

To:

Gary Fish, Maine Board of Pesticides Control, 28 State House Station, Augusta,

ME 04333-0028

From:

Theo Holtwijk, Director of Planning & Development

Thes

Re:

**Adopted Amendments to Aquifer Protection Zone** 

In accordance with MRSA Title 22 Chapter 258-A § 1471-U section 3, we are filing with your office, on behalf of the Town Clerk, chapter 210 of the Brunswick Zoning Ordinance which contains amendments to the aquifer protection zone adopted by the Brunswick Town Council on June 6, 2005.

We appreciate the comments you have provided us during this process.

We are also sending you this information in a digital form for your use.

Thank you.

cc. Don Gerrish, Town Manager Fran Smith, Town Clerk Geoff Hole, Town Attorney Norm Cyr, Brunswick and Topsham Water District

#### II. OVERLAY ZONES

Overlay districts supplement or supersede the provisions of the underlying zone. Where an inconsistency exists, the provisions of the overlay zone shall prevail. They do not change density, use or dimensional requirements of the underlying zone unless specifically stated.

#### **ENVIRONMENTAL PROTECTION OVERLAY ZONES**

#### 210 AQUIFER PROTECTION ZONES (APZ)

#### 210.1 PURPOSE

The purpose of the Aquifer Protection Zones is to protect the quality and quantity of Brunswick's present and future ground water resources by regulating activities and land use practices which are likely to affect those resources. The protection of ground water is critical to promoting the health, safety and general welfare of the residents of Brunswick.

#### 210.2 **DEFINITION OF ZONES**

The APZ consist of sand and gravel aquifers and aquifer recharge areas. The Aquifer Protection Zones shall overlay the underlying zoning district. APZ regulations shall supplement or supersede any other applicable zoning restrictions.

#### 210.3 CONFLICTS BETWEEN ORDINANCE SECTIONS AND OTHER LAWS

If a conflict is found between section 210 and other sections of the zoning ordinance, section 210 shall prevail. Nothing in this Ordinance shall be interpreted to supercede the provisions of any other local, state or federal ordinance, law, rule or regulation.

#### 210.4 DELINEATION OF ZONES

The Aquifer Protection Zones are delineated on the Town's tax maps and are entitled "Aquifer Protection Zones" (APZ). These maps are prepared based upon:

- "Hydrogeology of the Jackson, Taylor and Williams Stations Aquifer in Topsham and Brunswick, Maine" report, dated February 25, 1994, by Caswell, Eichler and Hill; and
- "Hydrogeology of the Jordan Avenue Station Aquifer in Brunswick, Maine" report, dated March 22, 1994, by Caswell, Eichler and Hill.

The APZ maps are an amendment to the Brunswick Zoning Map, last revised March 16, 1998.

#### 210.5 CLASSIFICATION OF ZONES

The Aquifer Protection Zones, as delineated on the Aquifer Protection Zone maps, are comprised of the following three zones:

- A. Zone 1 is the area within which leachable materials disposed of or applied into or onto land or waterbodies can travel to the public water supply wells within 200 days.
- **B. Zone 1A** is the area outside of the Zone 1 boundary drained by streams which flow directly into the sand and gravel aquifer. The streams in zone 1A are important as they have eroded through the silt/clay cap leaving exposed a "window" to the underlying aquifer.
- C. Zone 2 is the area within which leachable materials disposed of or applied into or onto land or waterbodies can travel to the public water supply wells in more than 200 days.

#### 210.6 REVISION OF ZONE DELINEATIONS

The delineation of aquifers, aquifer recharge areas, and Zones 1, 1A, and 2 may be revised by amendment to this ordinance in accordance with Section 108 of this ordinance. The Town shall notify the Brunswick and Topsham Water District of any hearing to amend section 210 of the ordinance at least 14 days prior to the date of the hearing.

#### 210.7 APPEALS

Appeals shall be taken to the Zoning Board of Appeals under Section 703 of this Ordinance.

In a case where any Zone 1, 1A, or 2 boundary determination is appealed, the applicant shall show where the bounds should properly be located with a report submitted and accepted from a hydrogeologist licensed in the State of Maine. The Brunswick and Topsham Water District may hire a hydrogeologist to review all information submitted by the appellant. At the request of the appellant, the Water District may engage a licensed hydrogeologist to determine more accurately the location and extent of aquifers, aquifer recharge areas, and Zones 1, 1A, and 2, and may charge the appellant for the cost of the investigation.

#### 210.8 USE PROVISIONS

The following use provisions are applicable in the Aquifer Protection Zones:

#### 210.8.A Zone 1

All uses are prohibited with exception of the following:

1. Conservation of soil, water, plants and wildlife.

- 2. Outdoor recreation, including fishing, nature study, and hunting where otherwise legally permitted.
- 3. Pedestrian, bicycle and horse paths and bridges.
- 4. Operation, maintenance, and expansion of public water supply facilities.
- 5. Timber harvesting.
- 6. Natural gas or propane storage and transmission facilities. (Amended 9/21/68 R)

Motorized vehicles may be used in conjunction with the uses stated in item 1, 4 and 5 listed above. The use of motorized vehicles for recreational purposes is prohibited. The permitted uses shall meet the performance standards of section 210.10.

#### 210.8.B Zone 1A

All uses are prohibited, except those uses allowed in zones 1 and 2 provided that they meet the requirements of the underlying zoning district and the following conditions:

- 1. All parts of all types of subsurface wastewater disposal systems shall be set back a minimum horizontal distance of 150 linear feet from the normal high water line of any stream. The Local Plumbing Inspector may consider a request concerning the setback of a replacement subsurface wastewater disposal system, if a report, prepared by a soils scientist or site evaluator registered in the State of Maine, is submitted and accepted stating that the existing system is failing and that the proposed location is the only suitable location on the applicant's property.
- 2. All home heating fuel tanks, except propane gas tanks, shall be enclosed and located within an impervious secondary containment unit.
- 3. Application of pesticides, nitrogen fertilizer or manure within a minimum horizontal distance of 150 linear feet from the normal high water line of any stream is prohibited. This setback requirement cannot be reduced. (Amended 1/20/04 R)
- 4. The storage of no more than two unregistered automobiles.

The permitted uses shall meet the performance standards of section 210.10.

#### 210.8.C Zone 2

Prohibited uses and management practices are: (Amended 6/6/05 E)

- 1. The disposal of solid waste other than brush or stumps.
- 2. The disposal or storage of hazardous matters, as defined in Section 111, with the exception of the above ground 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 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 which shall require a permit in accordance with section 210.10.J. (Amended 6/6/05 E)
- 7. The disposal of any unregistered automobiles or the storage of more than two unregistered automobiles.
- 8. Use or storage of pesticides, other than for households or agriculture and those products that are permitted by the Organic Materials Review Institute (OMRI). (Amended 6/6/05 E)
- 9. Use or storage of fertilizer, compost, or manure, other than: (Amended 6/6/05 E)
  - a. slow-release organic fertilizer,
  - b. products used for households and agriculture, and (Amended 6/6/05 E)
  - c. natural organic compost that is: (Amended 6/6/05 E)
    - i. in keeping, but not limited to compost approved by USDA National Organic Program, or which (Amended 6/6/05 E)
    - ii. in keeping with, but not limited to, products that can be used on Maine Organic Farmers and Gardeners Association (MOFGA) Certified Farms, or which (Amended 6/6/05 E)
    - 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. (Amended 6/6/05 E)
- 10. Aerial spraying of pesticides from aircraft, except for applications for public health reasons performed under the auspices of the Town of Brunswick or State of Maine. (Amended 6/6/05 E)
- 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.
- 17. Mining operations.
- 18. Sand and gravel extraction.

Other uses or management practices, not listed above but permitted in the underlying zones, may be permitted in Zone 2 provided that they will not have an unreasonable adverse effect on the water supply and meet the performance standards of section 210.10. (Amended 6/6/05 E)

#### 210.8.D Pesticide Exemption

The Codes Enforcement Officer may, upon written request, approve an exception to Section 210.8.C.8 for pesticides to be used:

- to control or destroy a health hazard, i.e. a pest which has or is likely to have an adverse effect on the health of any person;
- to control or destroy pests which have caused infestation to property, i.e. where the presence of pests in numbers or under conditions which involve an immediate or potential risk of substantial loss or damage; or
- to control or destroy bees nests or poison ivy.

The Brunswick and Topsham Water District shall be notified of any such requests and approvals.

(Amended 6/6/05 E)

#### 210.9 NON-CONFORMITY

The non-conforming use of land, building or structure existing on the effective date of this ordinance is governed by section 304 of this ordinance, subject to the provision that expansion of non-conforming uses will not adversely affect the water supply and meets the performance standards of section 210.10.

#### 210.10 PERFORMANCE STANDARDS AND PERMITS

All uses or management practices not specifically prohibited in Section 200 or elsewhere in this Ordinance or legally non-conforming shall meet the following performance standards and require the following permits, as applicable. (Amended 6/6/05 E)

Household uses are exempt from the permitting process. (Amended 6/6/05 E)

The "reviewing authority" shall be the Planning Board, Staff Review Committee or Codes Enforcement Officer as determined by the scope and nature of a particular project in accordance with section 402, 403, and 704 of this ordinance.

(Amended 6/6/05 E)

# 210.10.A General Standards for Uses and Practices Requiring Permits (Amended 6/6/05 E)

210.10.A.1 The stormwater run-off of 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.

210.10.A.2

The calculated or actual levels of any contaminants in the groundwater at the property line of the specific lot associated with the use, expansion of the use, or management practices shall not exceed 50% of the allowable Primary Public Drinking Water Standards as defined by the Federal Safe Drinking Water Act, as amended. (Amended 6/6/05 E)

210.10.A.3

The use, expansion of the use, or management practices shall not cause the cumulative, calculated or actual levels of any contaminants in the groundwater at the Brunswick and Topsham Water District property line to exceed 50% of the allowable Primary Public Drinking Water Standards as defined by the Federal Safe Drinking Water act, as amended. (Amended 6/6/05 E)

#### 210.10.B Timber Harvesting

Timber harvesting shall conform with the provisions of section 211.2.I of the zoning ordinance. (Amended 1/20/04 R)

# 210.10.C Application of Fertilizers and Manure

Application of nitrogen fertilizer and manure is allowed subject to permit approval from the reviewing authority. Permit applications shall include application materials and rates and rates and shall conform to section 210.10.A.

- All manure spreading shall be accomplished in conformance with the Maine Guidelines for Manure and Manure Sludge Disposal on Land, published by the University of Maine Soil and Conservation Commission in July 1972, or the latest revision thereof.
- 210.10.C.2 Provisions shall be made to control runoff from areas where manure or fertilizer is being applied to the land.
- 210.10.C.3 Application of manure or fertilizer to sand, or bare soil where the topsoil has been removed, is prohibited.
- 210.10.C.4 Lawn maintenance and home garden care is allowed without permit approval.

# 210.10.D Manure Storage

Agricultural operations which generate or utilize manure must provide containment facilities for manure storage. Manure containment facilities must be adequate to hold 1 year's production and must be covered.

### 210.10.E Animal Husbandry

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

#### 210.10.F Use of Pesticides

Land application of pesticides is allowed. Provisions shall be made for control of surface runoff and erosion in areas where pesticides are being applied. Lawn maintenance and home garden care is allowed without a permit. Applications of pesticides for agriculture are allowed subject to permit approval from the reviewing authority. Permit applications shall include copies of the pesticide labels and materials safety data sheets and the proposed rate of application and shall conform to section 210.10.A. (Amended 1/20/04 R)

# 210.10.G Subsurface Waste Disposal Systems

- Disposal of hazardous materials to subsurface waste disposal systems, including organic solvents designed for cleaning septic systems, is prohibited.
- Subsurface waste disposal systems in Zones 1 and 1A shall be pumped out at least once every 3 years and maintained. A waiver regarding the frequency of pumping and maintenance may be approved by the Local Plumbing Inspector when evidence of significant underusage of the disposal system is presented and accepted.
- 210.10.G.3 Homeowners shall retain receipts when their tank is pumped to demonstrate compliance to the Codes Enforcement Officer during an inspection. To establish an accurate pumping record for each existing tank, homeowners shall submit receipts to the Codes Enforcement Officer within 60 days of the effective date of this amendment.

#### 210.10.H STORAGE TANKS

All underground tanks in place prior to the effective date of this amendment shall be non-conforming. All existing underground storage tanks and piping systems which are single wall and double wall tanks without an interstitial space monitoring system shall be precision-tested annually. Double wall 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. When it becomes necessary to replace an underground tank and/or its piping systems it shall be replaced with a double wall tank and/or piping system with an interstitial space monitoring system, or better. (Amended 11/2/98 R)

- 210.10.H.2
- All aboveground storage tanks located within Zones 1 and 1A in place prior to the effective date of this amendment and which are not enclosed and located within an impervious secondary containment unit shall be non-conforming. When it becomes necessary to replace these tanks, the replacement tanks shall be enclosed and located within a secondary containment unit. (Amended 11/2/98 R)
- 210.10.H.3

This Section does not apply to propane gas or natural gas storage tanks. (Amended 11/2/98 R)

#### 210.10.I Sand and Gravel Extraction

210.10.I.1

Excavation shall not be allowed below 5 feet above the average seasonal high water table.

Artificial lowering of the water table is prohibited.

- 210.10.I.2
- Access roads into and around the pit shall not be oiled, salted, or paved.
- 210.10.I.3

The excavation area shall not be used for disposal of solid or hazardous wastes at any time including the period following closure of the pit.

- 210.10.J Permit Application for Compost and Sludge Products, and Organic Fertilizer (Amended 6/6/05 E)
- 210.10.J.1

An initial permit for land application of compost or sludge products and/or organic fertilizer shall be submitted and shall include data listed in section 210.12, as applicable, land application materials and rates, as well as an Integrated Pest Management Plan. Land application materials are limited to those specified in 210.8.C. (Amended 6/6/05 E)

- No annual submission of this permit application is required. Any amendment to a permit application does require resubmission and reapproval prior to land application. (Amended 6/6/05 E)

  Records of past land applications shall be kept and included with any
- permit application. (Amended 6/6/05 E)
- 210.10.J.4 Homeowner and agricultural use is exempt from permit approval. (Amended 6/6/05 E)

#### 210.11 ADMINISTRATION AND ENFORCEMENT

- No activity or land use may be conducted in Zone 1, 1A, or 2 except in accordance with these provisions.
- 210.11.B If any portions of a lot are located in Zone 1, 1A, or 2, all land located in Zone 1 shall be governed by the regulations for Zone 1, all land located in Zone 1A shall be governed by the regulations for Zone 1A, all land located in Zone 2 shall be governed by the regulations for Zone 2.
- 210.11.C Monitoring wells may be required for a use known by the Codes Enforcement Officer to be an actual or potential source of pollution. A licensed hydrogeologist chosen or approved by the Town shall determine the number, location, and depth of monitoring wells. Monitoring wells shall be installed and sampled in accordance with "Guidelines for Monitoring Well Installation and Sampling" (Tolman, Maine Geologic Survey, 1983). Monitoring wells shall be installed on the property at the expense of the owner. The Codes Enforcement Officer shall determine, in consultation with the Brunswick and Topsham Water District and/or a licensed hydrogeologist, when monitoring wells shall be sampled. Results from monitoring well samples shall be submitted to the Department of Planning and Development and the Brunswick and Topsham Water District.

#### 210.12 DEVELOPMENT REVIEW SUBMISSION DATA

In addition to the requirements of Chapters 4 and 5, all submittals for Development Review approval for uses in the Aquifer Protection Zone shall include the following as applicable:

- A. A site plan showing the following:
  - 1. The Aquifer Protection Zone boundaries, labeled, if they cross the parcel.
  - 2. The location of all storage tanks.

#### 210.13.B

The Brunswick and Topsham Water District shall promptly inform the Town Council, Codes Enforcement Officer, Planning Board and Zoning Board of Appeals, and no development review approval(s) and/or waivers will be allowed, when the calculated or actual levels of any contaminants in the groundwater exceeds 50% of the allowable Primary Public Drinking Water Standards for contaminants as measured at the Brunswick and Topsham Water District monitoring wells.

#### 210.14 WATER DISTRICT REVIEW

Before the reviewing authority takes final action on any applications within the Aquifer Protection Zones, the Brunswick and Topsham Water District shall be offered an opportunity to provide its review and comments regarding water quality issues pertaining to the application.

(Section 210 was amended in its entirety 8/3/98R)

28 Federal Street, Ste. 2, Brunswick, Maine 04011-1583 Town Clerk's Bepartment



207-725-6658 207-725-6663 FAX

December 8, 2006

Dear Mr. Fish,

Please see the enclosed Brunswick Community Health and Land Care Ordinance we are filing pursuant to state law.

Sincerely,

Fran Smith Town Clerk

28 Federal Street

Brunswick, ME 04011



# **Brunswick Community Health and Land Care Ordinance**

I. <u>Purpose</u>. The purpose of this ordinance is to safeguard the health and welfare of the residents of the Town of Brunswick and to conserve and protect the Town's ground water and other natural resources, while ensuring preservation and enhancement of Town-owned lands.

WHEREAS, the U.S. Environmental Protection Agency states: "All pesticides are toxic to some degree, and the commonplace, widespread use of pesticides is both a major environmental problem and a public health issue.";

WHEREAS, the National Research Council reports that there is uncertainty about the potential for adverse human health effects from exposure to treated sewage sludge;

WHEREAS, the protection of ground water is critical to promoting the health, safety and general welfare of the residents of Brunswick;

WHEREAS, viable alternatives to potentially harmful land care practices and products are available;

THEREFORE, the Town of Brunswick adopts land management principles and practices for the care of Town-owned land that minimize risk, to the greatest extent possible, to human health and the environment.

II. <u>Provisions</u>. The following provisions shall be applicable to all turf, landscape and outdoor pest management activities on Town-owned land.

#### Permitted:

- Use or application of natural, organic land care protocols.
- All control products and soil amendments, including fertilizer and compost, used under the terms of this ordinance shall be in keeping with, but not limited to, products that can be used on Maine Organic Farmers and Gardeners Association Certified Farms, and/or products permitted by the Organic Materials Review Institute or the USDA National Organic Program.

#### Prohibited:

- Use or application of chemical pesticides, other than pesticides classified by the US Environmental Protection Agency as exempt materials under 40 CFR 152.25, and those products permitted by the Organic Materials Review Institute.
- Use or application of sludge or sludge-derived products.
- III. <u>Definitions</u>. "Natural, organic land care" shall mean an extension of the principles and practices of organic agriculture to the care of turf and landscape. References by way of guide may be made to the Organic Land Care Program of Connecticut and Massachusetts, the Organic Pest Management Policy of the Town of Marblehead, Massachusetts and the USDA National Organic Program.

"Pesticide" means any substance or mixture of substances intended for preventing, destroying, repelling or mitigating any pest; any substance or mixture of substances intended for use as a plant regulator, defoliant or desiccant; and any nitrogen stabilizer. It does not include multicellular biological controls such as mites, nematodes, parasitic wasps, snails or other biological agents not regulated as pesticides by the U.S. Environmental Protection Agency. Herbicides, fungicides, insecticides and rodenticides are considered pesticides.

"Sludge" and "sludge-derived products" shall include, without limitation, any product that contains a solid, semi-solid, or liquid waste generated by a municipal, commercial or industrial wastewater treatment plant or companies that use sludge in a product used as a soil additive, including composted class A residuals and residuals that may contain human pathogens.

"Town-owned land" means all land owned or leased by the Town of Brunswick and managed by the Town of Brunswick Parks and Recreation Department, including outdoor grounds such as parks, playing fields, conservation and open space.

"Pest" shall include any undesirable insect, plant, fungi, bacteria, virus or micro-organism.

- IV. <u>Exemptions</u>. The following processes are exempt: Drinking water and wastewater treatment; Indoor pesticide use; Contained baits or traps for rodent control; Use of pesticides classified by the US Environmental Protection Agency as exempt materials under 40 CFR 152.25 or pesticides permitted by the Organic Materials Review Institute; Management of Town-owned land not used or used infrequently by the public (roadway medians, for example).
- V. <u>Emergency Waiver</u>. If an emergency situation warrants the use of non-exempt pesticides, the Codes Enforcement Officer may, upon written request, grant a 30 day temporary waiver. The waiver may be extended to a six month total period. Waiver approval shall be subject to the use of the least toxic material available to address the given emergency. The presence of weeds or common fungal diseases in the usual course of turf maintenance shall not constitute an emergency.

Waiver determination shall be based on the following criteria:

- 1. The pest situation presents a) an immediate threat to human health or environmental quality, or b) an immediate threat of substantial property damage or loss; and
- 2. Viable alternatives consistent with this ordinance do not exist.
- VI. <u>Enforcement and Permits</u>. This ordinance shall be enforced by the Code Enforcement Officer, according to the policies governing enforcement of municipal ordinances of the Town of Brunswick.
- VII. <u>Advisory Committee</u>. The Brunswick Town Council may create an Advisory Committee to oversee implementation and enforcement of this ordinance and to study expanding this ordinance to include school property. At least two residents of Brunswick with an interest or expertise in public health or natural, organic land care shall be appointed to this committee.
- VIII. <u>Conflict and Invalidity</u>. If a conflict or inconsistency is found between this ordinance and other sections of the zoning ordinance or town charter, the terms of the stricter provisions shall prevail. The invalidity of a provision of this ordinance shall not invalidate any other provision of this ordinance.
- IX. <u>Authority</u>. Pursuant to 30-A M.R.S.A. Section 3001, municipalities may enact ordinances to protect the welfare of their inhabitants. Pursuant to 22 M.R.S.A. Section 1471-U, Maine municipalities may enact ordinances that apply to pesticide storage, distribution, or use.

Proposed changes to this ordinance must be approved by a majority vote of registered voters of the Town of Brunswick.

X. <u>Effective Date</u>. This ordinance shall be adopted on a regular basis and shall take effect immediately upon approval by the majority of the voters of the Town of Brunswick. Upon adoption, a copy of this ordinance shall be sent to the Board of Pesticides Control.

This ordinance was enacted by the Voters of the Town of Brunswick at the Election held on November 7, 2006. The Town Charter says such ordinance passed by a majority of voters becomes effective 10 days after the Election.

Attested: \_\_\_\_\_\_\_(Town Clerk)