

## SECTION 15

### GROUNDWATER PROTECTION DISTRICT

#### 1. Purpose of District

- a. To promote the health, safety and general welfare of the community by ensuring an adequate quality and quantity of drinking water for the residents, institutions and businesses of the City of Woburn.
- b. To preserve and protect existing and potential sources of drinking water supplies.
- c. To conserve the natural resources of the city.
- d. To prevent temporary and permanent contamination of the environment.
- e. To protect the community from the detrimental use and development of land and water within the Ground Water Protection District.

#### 2. Scope of Authority

The Groundwater Protection District is an overlay district superimposed on the zoning districts. 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 Groundwater 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 Groundwater Protection District.

#### 3. Definitions

For the purpose of this section, the following words and phrases shall have the following meanings:

Aquifer: Geologic formation composed of rock, sand or gravel that contains significant amounts of potentially recoverable water.

Groundwater Protection District: The zoning district defined to overlay other zoning districts in the City of Woburn. The Groundwater Protection District may include specifically designated recharge areas.

Impervious Surface: Material or structure on, above or below the ground that does not allow precipitation or surface water to penetrate directly into the soil.

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

Recharge Area\*: Areas that collect precipitation or surface water and carry it to aquifers. Recharge areas may include areas designated as Zone I, Zone II or Zone III.

Toxic or Hazardous Material: Any substance or mixture of physical, chemical or infectious characteristics posing a significant, actual or potential hazard to water supplies or other hazards to human health if such substance or mixture were discharged to land or water of the City of Woburn. Toxic or hazardous materials include, without limitation, synthetic organic chemicals, petroleum products, heavy metals, radioactive or infectious wastes, acid and alkalis and all substances defined as Toxic or Hazardous under M.G.L. Chaps. 21C and 21E and 310 CMR 30.00, and also include such products as solvents and thinners in quantities greater than normal household use.

\*The Mass. Dept. of Environmental Protection defines specific types of recharge areas - Zone II and Zone III - to which certain regulations may apply (See Section 6B). If these zones are part of the District, the following definitions should be included:

Zone II: The area of an aquifer which contributes water to a well under the most severe pumping and recharge conditions that can be realistically anticipated (180 days of pumping at safe yield with no recharge from precipitation), as defined in 310 Code of MA Regulations (CMR) 22.00.

Zone III: The land area beyond the area of Zone II from which surface water and groundwater drain into Zone II, as defined in 310 CMR 11.00.

#### **4. Establishment and Delineation of Groundwater Protection District**

For the purposes of this district, there are hereby established within the city certain groundwater protection areas, consisting of aquifers or recharge area which are delineated on a map. This map is at a scale of 1 inch to 1,000 feet and is entitled, "Groundwater Protection District, City of Woburn", dated 6/20/95. This map is hereby made a part of the Woburn Zoning Ordinances of 1985 as amended and is on file in the Office of the City Clerk.

#### **5. District Boundary Disputes**

If the location of the District boundary in relation to a particular parcel is in doubt,

resolution of boundary disputes shall be through a Special Permit application to the Special Permit Granting Authority (SPGA). Any application for a Special Permit for this purpose shall be accompanied by adequate documentation.

The burden of proof shall be upon the owner(s) of the land in question to show where the bounds should properly be located. Professional civil engineer, hydrologist, geologist or soil scientist to determine more accurately the boundaries of the district with respect to individual parcels of land, and may charge the owner(s) for all or part of the cost of the investigation.

## **6. Use Regulations**

In the Groundwater Protection District the following regulations shall apply:

### **A. Permitted Uses**

The following uses are permitted within the Groundwater 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;
- 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 Section B (prohibited uses) and Section C (special permitted uses);
- vi. Residential development, subject to Section B (prohibited uses) and Section C (special permitted uses);
- vii. Farming, gardening, nursery, conservation, forestry, harvesting and grazing, subject to Section B (prohibited uses) and Section C (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.

### **B. Prohibited Uses**

1. The following uses are prohibited.

- i. Landfills and open dumps as defined in 310 CMR 19.006.

- ii. Storage of liquid petroleum products, except the following:
  - 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;
  - d. Treatment works approved under 314 CMR 5.00 for treatment of ground or surface waters.
- iii. Landfilling of sludge or septage as defined in 310 CMR 32.05;
- iv. Storage of sludge and septage, unless such storage is in compliance with 310 CMR 32.30 and 310 CMR 32.31;
- v. 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, provided that:
  - a. The replacement or repair of a system, which will not result in an increase in design capacity, or the design capacity of 310 CMR 15.00, which ever is greater, shall be exempted;
  - b. In cluster subdivisions the total sewage flow allowed shall be calculated based on the number of percable lots in the entire parcel.
- vi. Storage of deicing chemicals unless such storage, including loading areas, is within a structure designed to prevent the generation and escape of contaminated runoff or leachlate;
- vii. Storage of animal manure unless covered or contained in accordance with the specifications of the United States Soil Conservation Service;
- viii. Earth removal, consisting of the removal of soil, loam, sand, gravel or any other earth material (including mining activities) to within 6 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;
- ix. Facilities that generate, treat, store or dispose of hazardous waste subject to MGL 21C and 310 CMR 30.00, except the following:
  - a. Very small quantity generators as defined and events under 310 CMR 30.000;
  - b. Household hazardous waste centers and events under 310 CMR 30.390;
  - c. Waste oil retention facilities required by MGL Chapter 21 Section 52A;
  - d. Water remediation treatment works approved by DEP for the treatment of contaminated ground or surface waters.
- x. Automobile graveyards and junkyards, as defined in MGL Chapter 140B, Section 1;
- xi. Treatment works that are subject to 314 CMR 5.00 including privately owned sewage treatment facilities, except the following:
  - a. The replacement or repair of an existing treatment works that will not result in a design capacity greater than the design capacity of the existing treatment works;

- b. The replacement of existing sub-surface sewage disposal system(s) with wastewater treatment works that will not result in a design capacity greater than the design capacity of the existing system(s).
  - c. Treatment works approved by the Mass. DEP designed for the treatment of contaminated groundwater.
  - d. Sewage treatment facilities in those areas with existing water quality problems when it has been demonstrated to the DEP's and the Special Permit Granting Authority's satisfaction both that these problems are attributable to current septic problems and that there will be a net improvement in water quality.
- xii. Storage of hazardous materials, as defined in MGL Chapter 21E, unless in a free standing container within a building or aboveground with adequate secondary containment adequate to contain a spill the size of the container's total storage capacity;
  - xiii. Industrial and commercial uses which discharge process wastewater on-site;
  - xiv. Stockpiling and disposal of snow and ice containing deicing chemicals if brought in from outside the district;
  - xv. Storage of commercial fertilizers, as defined in MGL Chapter 128, Section 64, unless such storage is within a structure designated to prevent the generation and escape of contaminated runoff or leachate;
  - xvi. The use of septic system cleaners which contain toxic or hazardous chemicals.

### C. Uses and Activities Requiring a Special Permit

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:

- i. Enlargement or alteration of existing uses that do not conform to the Groundwater Protection District;
- ii. The application of pesticides, including herbicides, insecticides, fungicides and rodenticides, for non-domestic or non-agricultural uses in accordance with state and federal standards. The Special Permit shall be granted if such standards are met. If applicable, the applicant should 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.
- iii. The application of fertilizers for non-domestic or non-agricultural uses. Such applications shall be made in a manner so as to minimize adverse impacts on groundwater due to nutrient transport, deposition and sedimentation;

- iv. 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 Section B). Such activities shall require a Special Permit to prevent contamination of groundwater.
- v. The construction of dams or other water control devices, ponds, pools or other changes in waterbodies or courses, created for swimming, fishing or other recreational uses, agricultural uses or drainage improvements. Such activities shall not adversely affect water quality or quantity;
- vi. Any uses that will render impervious more than 15% or 2,500 square feet of any lot, whichever is greater. A system for groundwater recharge must be provided which does not degrade groundwater quality. For non-residential uses, recharge shall be by stormwater infiltration basins or similar system covered with natural vegetation, and dry wells shall be used only where other methods are unfeasible. For all non-residential uses, all such basins and wells shall be preceded by oil, grease and sediment traps to facilitate removal of contamination. Any and all recharge areas shall be permanently maintained in full working order by the owner.

## **7. Procedures for Issuance of Special Permit**

- A. The Special Permit Granting Authority (SPGA) under this ordinance shall be the City Council. Such Special Permit shall be granted if the SPGA determines, in conjunction with the Board of Health, the Conservation Commission, City Engineer, Dept. of Public Works and Planning Board that the intent of this bylaw, as well as its specific criteria, are met. The SPGA shall not grant a Special Permit under this section unless the petitioner's application materials include, in the SPGA's opinion, sufficiently detailed, definite and credible information to support positive findings in relation to the standards given in this section. The SPGA shall document the basis for any departures from the recommendations of the other city boards or agencies in its decision.
- B. Upon receipt of the Special Permit application, the City Clerk shall transmit one copy to the Planning Board, Board of Health, the Conservation Commission, City Engineer and Dept. of Public Works for their written recommendations. Failure to respond in writing within 35 days of receipt by the Board shall indicate approval or no desire to comment by said agency. The necessary number of copies of the application shall be furnished by the applicant.
- C. The SPGA may grant the required Special Permit only upon finding that the proposed use meets the following standards, those specified in Section 6 of

this ordinance, and any regulations or guidelines adopted by the SPGA. The proposed use must:

1. In no way, during construction or thereafter, adversely affect the existing or potential quality or quantity of water that is available in the Groundwater Protection District, and;
2. Be designed to avoid substantial disturbance of the soils, topography, drainage, vegetation and other water-related natural characteristics of the site to be developed.

D. The SPGA may adopt regulations to govern design features of projects. Such regulations shall be consistent with subdivision regulations adopted by the municipality.

E. The applicant shall file seven copies of a site plan and attachments. The site plan shall be drawn at a proper scale as determined by the SPGA and be stamped by a professional engineer. All additional submittals shall be prepared by qualified professionals. The site plan and its attachments shall at a minimum include the following information where pertinent:

1. A complete list of chemicals, pesticides, herbicides, fertilizers, fuels and other potentially hazardous materials to be used or stored on the premises in quantities greater than those associated with normal household use;
2. For those activities using or storing such hazardous materials, a hazardous materials management plan shall be prepared and filed with the Hazardous Materials Coordinator, Fire Chief and Board of Health. The plan shall include:
  - a. Provisions to protect against the discharge of hazardous materials or wastes to the environment due to spillage, accidental damage, corrosion, leakage or vandalism, including spill containment and clean-up procedures;
  - b. Provisions for indoor, secured storage of hazardous materials and wastes with impervious floor surfaces;
  - c. Evidence of compliance with the Regulations of the Mass. Hazardous Waste Management Act 310 CMR 30, including obtaining an EPA identification number from the DEP.
3. Proposed down-gradient location(s) for groundwater monitoring well(s), should the SPGA deem the activity a potential groundwater threat.

F. The SPGA shall hold a hearing, in conformity with the provision of MGL Chapter 40A, Section 9, within 65 days after the filing of the application and after the review by the City Boards, Departments and Commissions. Notice of the public hearing shall be given by publication and posting and by first-class

mailing to "parties in interest" as defined in MGL Chapter 40A, Section 11. The decision of the SPGA and any extension, modification or renewal thereof shall be filed with the SPGA and City Clerk within 90 days following the closing of the public hearing. Failure of the SPGA to act within 90 days shall be deemed as a granting of the permit. However, no work shall commence until a certification is recorded as required by said Section 11.

G. Written notice of any violations of this Ordinance shall be given by the Building Inspector to the responsible person as soon as possible after detection of a violation or a continuing violation. Notice to the assessed owner of the property shall be deemed notice to the responsible person. Such notice shall specify the requirement or restriction violated and the nature of the violation, and may also identify the actions necessary to remove and the nature of the violation, and may also identify the actions necessary to remove or remedy the violations and preventive measures required for avoiding future violations and a schedule of compliance. A copy of such notice shall be submitted to the Building Inspector, the Board of Health, Conservation Commission, City Engineer, Dept. of Public Works and Water Department. The cost of containment, clean-up, or other action of compliance shall be borne by the owner and operator of the premises. For situations that require remedial action to prevent adverse impact to the water resources within the Groundwater Protection District, the City of Woburn, the Building Inspector, the Board of Health, or any of their agents may order the owner or operator of the premises to remedy the violation. If said owner and/or operator does not comply with said order, the City of Woburn, the Building Inspector, the Board of Health, or any of their agents, is authorized to enter upon such premises under the terms of the Special Permit or otherwise, may act to remedy the violation. The remediation cost shall be the responsibility of the owner and operator of the premises.

**8. Severability**

A determination that any portion or provision of this overly protection district is invalid shall not invalidate any other portion or provision thereof, nor shall it invalidate any Special Permit previously issued thereunder.

(Added 11/21/95)

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