

## MA Wellhead Protection Regulations 310 CMR 22.21(2)<sup>1</sup>

[with selected excerpts from the Source Approval Regulations ]

### 310 CMR 22.21(1) Source Approval

(c) . No public water supply well or wellfield designed to pump 100,000 gallons per day or more shall be constructed, expanded or replaced unless the Department finds in writing that the proponent has drafted wellhead protection zoning or non-zoning controls that prohibit siting within the Zone II the land uses set forth in 310 CMR 22.21(2)(a) and 310 CMR 22.21(2)(b) unless designed in accordance with the performance standards specified therein.

**Requirement for drafting  
municipal wellhead protection  
controls**

(d) . No public water supply well or wellfield designed to pump 100,000 gallons per day or more shall be placed on-line unless the cities and towns in which any part of the *Zone II of the proposed well or wellfield is located have wellhead protection zoning or non-zoning controls in effect that prohibit siting within the Zone II the land uses set forth in 310 CMR 22.21(2)(a) and 310 CMR 22.21(2)(b)* unless designed in accordance with the performance standards specified therein. If the public water system is owned or controlled by an entity other than a municipality, the proponent must demonstrate to the Department's satisfaction that it has used its *best efforts* to have those cities and towns in which the Zone II is located establish such zoning or non-zoning controls.

**Best Effort Requirement for  
non-municipal public water  
systems**

(e) Notwithstanding 310 CMR 22.21(d)(2), no public water supply well or wellfield designed to pump 100,000 gallons per day or more that will be used in a public water system owned or operated by a municipality, and is located within that municipality, shall be placed on-line *unless the municipality has wellhead protection zoning or non-zoning controls in effect that prohibit siting within the Zone II the land uses set forth in 310 CMR 22.21(2)(a) and 310 CMR 22.21(2)(b)* unless designed in accordance with the performance standards specified therein. If the Zone II of a municipal public water system extends into another municipality, the water supplier must also demonstrate to the Department's satisfaction that it has used its *best efforts* to have all cities and towns into which the Zone II extends establish such zoning or non-zoning controls.

**Best Effort Requirement for  
Zone II located in another  
municipality**

### 310 CMR 22.21(2) Wellhead Protection

(a) Wellhead protection zoning and non-zoning controls submitted to the Department in accordance with 310 CMR 22.21(1), shall collectively prohibit the siting of the following land uses within the Zone II, or Zone III if the criteria of 310 CMR 22.21(1)(f) have been met, of the proposed well or wellfield, whichever is applicable:

**Prohibitions 310 CMR 22.21(2)(a)(1) through (b)(7), must be adopted prior to the operation of a new municipal well. For existing permitted wells, refer to the due date in your water withdrawal permit**

1. landfills and open dumps, as defined in 310 CMR 19.006;
2. landfills receiving only wastewater residuals and/or septage (wastewater residuals "monofills")
3. automobile graveyards and junkyards, as defined in MGL. c. 140B, §1;

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<sup>1</sup> as amended through 2001

4. stockpiling and disposal of snow or ice removed from highways and streets located outside of Zone II that contains sodium chloride, chemically treated abrasives or other chemicals used for snow and ice removal;
5. 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, not including liquefied petroleum gas. SIC Codes are established by the U.S Office of Management and Budget and may be determined by referring to the publication, Standard Industrial Classification Manual and any subsequent amendments thereto;
6. 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 Department designed for the treatment of contaminated ground or surface waters and operated in compliance with 314 CMR 5.05(3) or 5.05(13); and
  - c. publicly owned treatment works, or POTW;
7. facilities that generate, treat, store or dispose of hazardous waste that are subject to MGL. c. 21C and 310 CMR 30.000, except for the following:
  - a. very small quantity generators, as defined by 310 CMR 30.000;
  - b. household hazardous waste collection 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 the Department designed in accordance with 314 CMR 5.00 for the treatment of contaminated ground or surface waters

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VSQGs produce less than 220  
pounds and less than 27 gallons  
of hazardous waste per month  
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8. any floor drainage systems in existing facilities, in industrial or commercial hazardous material and/or hazardous waste process areas or storage areas, 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 10.00<sup>2</sup>), connect the drain to a municipal sewer system (with all appropriate permits and pre-treatment), or connect the drain to a holding tank meeting the requirements of all appropriate DEP regulations and policies.

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The floor drain prohibition must  
be a non-zoning control.  
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- (b) Wellhead protection zoning and non-zoning controls submitted to the Department in accordance with 310 CMR 22.21(1), shall collectively prohibit the siting of the following land uses within the Zone II, or Zone III if the criteria of 310 CMR 22.21(1)(f) have been met, of the proposed well or wellfield, whichever is applicable, unless designed in accordance with the specified performance standards:
  1. storage of sludge and septage, unless such storage is in compliance with 310 CMR 32.30 and 310 CMR 32.31;

<sup>2</sup> Formerly 248 CMR 2.00. Amended 2005.

2. storage of sodium chloride, chemically treated abrasives or other chemicals used for the removal of ice and snow on roads, unless such storage is within a structure designed to prevent the generation and escape of contaminated runoff or leachate;
3. storage of commercial fertilizers; unless such storage is within a structure designed to prevent the generation and escape of contaminated runoff or leachate;
4. storage of animal manures, unless such storage is within a structure designed to prevent the generation and escape of contaminated runoff or leachate.
5. storage of liquid hazardous materials and/or liquid petroleum products unless such storage is above ground level AND on an impervious surface in container(s) AND either;
  - (a). in above ground tank(s) within a building on an impervious surface 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;
6. the removal of soil, loam, sand, gravel or any other mineral substances within four feet of the historical high groundwater table elevation (as determined from monitoring wells and historical water table fluctuation data compiled by the United States Geological Survey), unless the substances removed are re-deposited within 45 days of removal on site to achieve a final grading greater than four feet above the historical high water mark, and except for excavations for the construction of building foundations or the installation of utility works;
7. land uses that result in the rendering impervious any lot or parcel more than **15% or 2500** square feet, whichever is greater, unless a system for artificial recharge of precipitation is provided that will not result in the degradation of groundwater quality.

For the complete MA Drinking Water Regulations 310 CMR 22.00, see  
[www.mass.gov/dep/brp/dws/regs.htm](http://www.mass.gov/dep/brp/dws/regs.htm)

Copies of these regulations are also available at the State House Bookstore; 617-727-2834 and 413-784-1376