

**Sec. 8A. Wellhead Protection**

A. Definitions: As used in this Section, the following terms are defined as follows:

1. Aquifer: Any formation of soil, sand, rock, gravel, limestone, sandstone or other material, or any crevice from which underground water is or may be produced.
2. Best Management Practices: A conservation or pollution control practice that manages wastes, agricultural chemicals, or hazardous materials so as to minimize movement into surface or ground waters of the State.
3. Containment device: A device that is designed to contain an unauthorized release, retain it for cleanup, and prevent release materials from penetrating into the ground.
4. EPA: Refers to the United States Environmental Protection Agency.
5. EPA Stormwater NPDES Permit: A permit meeting the requirement of the National Pollutant Discharge Elimination System Permit Application Regulations for Stormwater Discharges issued by EPA on November 16, 1990.
6. Hazardous Material: Any substance that:
  - a. Conveys toxic, lethal, or other injurious effects or which sub lethal alterations to plant, animal or aquatic life; or
  - a. May be injurious to human beings.

Hazardous materials include any matter identified as a "hazardous waste" by the Environmental Protection Agency or a "controlled hazardous substance" by the Maryland Department of the Environment.

7. MDE: Refers to the Maryland Department of the Environment.
8. Nutrient/Manure Management Plan: A plan prepared by a certified management consultant to manage the amount, placement, timing and application of animal waste, fertilizer, sewage sludge, and other plant nutrients in order to prevent pollution and to maintain productivity of the soil.
9. On-Site Floor Drains: Drains which are not connected to municipal sewer or stormwater systems and discharge directly to the ground or a septic system.
10. Owner: A property owner or his duly authorized agent or attorney, a purchaser, devisee, fiduciary, and any other person having vested or contingent interest in the property in question.
11. Person: Any natural person, individual, public or private corporation, firm, association, joint venture, partnership, municipality, government agency, political subdivision, public officer, owner, lessee, tenant, or any other entity whatsoever or any combination of such, jointly or severally.
12. Pesticide/Defoliant: Any substance intended for:
  - a. Preventing, destroying, repelling, or mitigating any pest;
  - b. Use as a plant regulator, defoliant, or desiccant; or
  - c. Use as a spray adjuvant such as a wetting agent or adhesive.
13. Rules and regulations of MDE: Official publications of MDE including but not limited to COMAR regulations, with standards and requirements for protection of groundwater resources.
14. Special Exception Use: A use, which involves any of the following as a principal activity:

- a. The manufacture, storage, use, transport, or disposal of hazardous materials;
  - b. Use of hazardous materials in quantities greater than those associated with normal household use;
  - b. Open burning or dumping of waste materials;
  - c. Garage/Service station;
  - d. Storage facilities;
  - e. Manure piles, animal waste pits, and private sewage sludge storage facilities;
  - f. Bulk storage and mixing of pesticides and fertilizers;
  - g. Underground injection wells
15. Underground Injection Well: An underground storage tank including but not limited to, all connected piping, underground ancillary equipment, and containment system, if any.
16. Wellhead Protection District: All the land within the boundaries of the Town of Poolesville and that land overlying the aquifer, which contributes water to a public water supply well under the permitted withdrawal rate (average annual) and average annual recharge conditions that can be anticipated based on historical data. It is bounded and may be influenced by the groundwater divides, which result from pumping the well, and by contact of the aquifer with less permeable geologic boundaries. In all cases, the Wellhead Protection District shall extend up gradient to its point of intersection with prevailing hydro geological boundaries (a groundwater flow divide, a contact with geologic formations, or a recharge boundary), or be limited by time of travel. The Wellhead Protection District has been reviewed and approved by MDE.

The Wellhead Protection Zone is based on a one-year time of travel, fixed radius or other assessment of an area most closely connected to the water supply.

B. Applicability

1. This Ordinance applies to all land uses and activities within the area delineated as the Wellhead Protection District (WPD) in Town. The WPD consists of a single zone and shall be an "overlay zone of district" to the Zoning Districts established within the Town. MDE has indicated its approval of this area under Sec. 1428 of the Safe Drinking Water Act.
2. This Ordinance is supplementary to other laws and regulations. Where this Ordinance or any portion thereof imposes a greater restriction than is imposed by other regulations or provisions of the Zoning Ordinance or the Code of the Town, as may be amended from time to time, the provisions of this Ordinance shall control and take precedence.

C. Permitted Uses Within the WPD. All uses permitted in the underlying zoning districts, provided they can meet the Performance Standards as outlined for the Wellhead Protection District.

D. Special Exceptions. All special exceptions allowed in underlying zoning districts may be approved by the Board of Zoning Appeals, provided they meet the performance standards outlined for the Wellhead Protection District.

Activities that are defined as special exceptions in Section 8.A will not be allowed within the WPD unless the property owner can show that the use will not harm the groundwater and is able to meet the conditions described in this Chapter.

1. The landowner or representative shall submit to the Board of Zoning Appeals an application for a special exception use. The application shall include, where applicable:

- a. A list of hazardous materials, which are to be stored, handled, used or produced in the activity being proposed.
- b. A description of the quantities and containers for the storage, handling use, or production of hazardous materials by the proposed activity.
- c. A site plan illustrating the location of all points of potential discharge to ground water including dry wells, infiltration ponds, septic tanks and drain fields.
- d. Documentation of approval by MDE of any waste treatment or disposal system or any wastewater treatment system over 5,000 gallons per day (gpd) capacity.
- e. A description and estimate for the average and maximum number of poultry, livestock or domestic animals that will be yarded or housed within the WPD. Evidence that a nutrient management plan for nitrogen has been completed for all animal wastes to be generated by this activity. This plan must incorporate adequate waste holding facilities and show any application sites within the WPD.
- f. Plans showing secondary containment for all underground and above ground tanks and lines containing hazardous material.
- g. A description of the best management practices, which will be followed during the construction of the facility to ensure that hazardous materials are not released to the ground water.
- h. An emergency plan indicating the procedures which will be followed in the event of a hazardous material spill to control and collect the spilled material to prevent any substance from reaching the ground water.

- h. The Board of Zoning Appeals or the Planning Commission may require that the applicant perform a hydrologic assessment of the site to determine if the net ground water recharge after site development is not less than the amount recharged prior to site development.
  
- 2. The Board of Zoning Appeals shall obtain advise from all appropriate local agencies and Town staff and/or contractors to assess whether the WPD will be protected from contaminants which pose an adverse effect on the health effects on the ground water. In making its determination, the Board of Zoning Appeals shall give consideration to the simplicity, reliability, and feasibility of the control measures proposed and the degree of threat to drinking water quality which would result if the control measures failed. The Board of Zoning Appeals shall then issue a written decision, which shall include findings of fact, conclusions and orders, if any. In order for the area to be approved, it must be shown that the use:
  - a. Will protect the water supply from contaminants used on the property, which pose an adverse effect on the health or comfort of persons;
  - b. Will not cause the ground water quality on the property to violate drinking water standards promulgated by MDE and the EPA; and
  - c. Will maintain recharge of water to the aquifer consistent with rates prior to development.

A request may not be approved until all comments provided by local agencies have been addressed by the application to the satisfaction of the Board of Zoning Appeals.

- 3. The Board of Zoning Appeals may deny the Special Exception if it is determined that the use would not meet the requirements outlined above. The Board of

Zoning Appeals' decision shall be provided to the applicant and all other interested parties.

E. Special Exception Performance Standards

All activities that are designated in 8.A as Special Exceptions within the WPD shall meet the following design and operation guidelines.

1. Containment of hazardous materials. Leak-proof trays under containers, floor curbing, or other contaminant systems to provide secondary liquid containment shall be installed. The containment shall be of adequate size to handle all spills, leaks, overflows, and precipitation until appropriate action can be taken. The specific design and selection of materials shall be sufficient to contain any hazardous material at the location and prevent escape to the environment. These requirements shall apply to all areas, and to aboveground and underground storage areas. Because State and Federal Governments already regulate hazardous materials, nothing in this Ordinance shall be applied in a way to allow a person to avoid complying with State and Federal requirements.

2. All underground storage tanks (UST's) and UST systems, as defined in COMAR 26.10.02.04, shall comply with all applicable COMAR requirements. In addition, underground fuel storage tanks and fuel storage tank systems shall meet the following requirements for high risk groundwater use areas:

a. Definitions.

In this subsection, the following terms have the meanings indicated.

(1) "Existing Fuel UST systems means an UST system installed before (effective date of the ordinance), 2010:

(2) " Fuel UST system" means one or a combination of tanks, including underground pipes connected to the tanks:

(a) The volume of which, including the volume of underground pipes connected to it, is ten

percent or more beneath the surface of the ground;

(b) Used to store fuels; and

(c) Having a storage capacity greater than 1,000 gallons or used for commercial purposes or part of a multiple tank system.

(3) "High risk groundwater use area" means all areas within the Town's wellhead protection district as defined in Subsection A of this Section.

(4) "Levels of concern" means:

(a) Benzene at (≥) 5 parts per billion;

(b) Toluene at (≥) 1,000 parts per billion;

(c) Ethylbenzene at (≥) 700 parts per billion;

(d) Xylenes at (≥) 10,000 parts per billion; and

(e) Methyl tertiary Butyl Ether (MtBE) at (≥) 20 parts per billion.

(5) "Local government means a county, municipal corporation, or sanitary district.

(6) "New fuel UST system" means a fuel UST system, including a replacement UST system, installed after (effective date of the ordinance), 2010.

(7) "Well" means a hole made in the ground to obtain or monitor ground water.

b. Fuel UST System.

An owner of a fuel UST system in a high risk groundwater use area shall:

(1) Comply with the requirements of this subsection in addition to all other applicable requirements of COMAR 26.10.02–26.10.11; or

(2) Submit the following data to the Town, for its consideration, to demonstrate that the construction, operation, and location of the UST system is not a threat to the groundwater:

(a) A survey of groundwater use within a 1/2 mile radius of the UST site;

- (b) A description of the construction materials used for the UST system;
- (c) A description of the release detection methods used to protect the groundwater;
- and
- (d) A description of operation and testing methods used to protect the groundwater.

c. New Fuel UST System.

The owner of a new fuel UST system in a high risk groundwater use area shall:

(1) Install all piping, including Stage II vapor recovery piping, in accordance with COMAR 26.10.03.02;

(2) Install and utilize, on the piping, an interstitial release detector system approved by the National Work Group on Leak Detection Evaluations;

(3) For fuel USTs with a capacity of greater than 1,000 gallons or for commercial use or for multiple tanks in a shared tank excavation:

(a) Install four monitoring pipes in accordance with the specifications in COMAR 26.10.03.04B, so that one monitoring pipe is located in each corner of the tank excavation area; and

(b) In conjunction with the monitoring pipes, install a piping system that is designed to allow for active ventilation of the tank excavation area;

(4) Before placing the UST system in service, test the system for leaks using a helium pressure test, or other test approved by the Town, in accordance with procedures prescribed by the Town;

(5) Implement the following:

(a) Install a minimum of four groundwater monitoring wells outside the UST excavation area in locations that will determine groundwater flow and detect a release from the UST system in accordance with COMAR 26.04.04 and Town specifications;

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1 CODIFIER'S NOTE: Additional regulations governing underground storage tanks are contained in the Code of Maryland Agency Regulations (COMAR) Chapter 26.10.02.

(6) In addition to requirements for release detection in COMAR 26.10.05:

(a) Test all spill catchment basins and containment sumps in accordance with COMAR 26.10.03.03;

(b) Within 30 days of the new fuel UST system installation:

(i) Sample each site supply well and monitoring well using a method approved by the Town; and

(ii) Test each such sample in accordance with COMAR 26.10.02.03-3;

(c) Annually thereafter:

(i) Test the UST system in accordance with COMAR 26.10.02.03-4 B(1); and

(ii) Sample and test as required in COMAR 26.10.02.03-2 F(2)a-b; and

(d) Test the UST system after any repairs are completed in accordance with COMAR 26.10.02.03-4 B(1).

d. Existing Fuel UST System.

The owner of an existing fuel UST system in a high risk groundwater use area shall:

(1) Use a method approved by the Town to:

(a) Test all spill catchment basins and containment sumps in accordance with COMAR 26.10.03.03;

(b) Sample each site supply well, and any existing monitoring wells within 180 days of (effective date of the ordinance), 2010;

(c) Install, in accordance with COMAR 26.04.04 and sample a minimum of four groundwater monitoring wells outside the UST excavation area in locations that will determine groundwater flow and detect a release from the UST system within 180 days of (effective date of the ordinance), 2010;

(d) Test water samples obtained pursuant to (b) and (c), above, in accordance with COMAR 26.10.02.03-3 of this chapter; and

(e) Sample and test annually thereafter, as required in (b),(c) and(d), above; and

(2) Within 1 year of (effective date of the ordinance), 2010, and every 2 years thereafter:

(a) Test all primary piping that does not contain liquid fuel, including tank top fittings, Stage II piping, riser pipes, and vent piping using a

helium pressure test, or other test approved by the Town, in accordance with procedures prescribed by the Town; and  
(b) Repair any leaks or deficiencies found during the testing required by this Chapter and retest in accordance with this subsection to insure the system does not leak.  
(c) Submit all repair reports and sample analysis to the Town for review.

e. Testing and Reporting.

1. All tests shall be performed between March 1 and April 30 of each year. All reports and sample analysis shall be submitted to the Town by July 1 of each year.

2. If the concentrations of fuel constituents in site groundwater sampling and testing required by this subsection are equal to or greater than the levels of concern as defined in this sub-section, the owner shall:

(a) Report the concentrations to the Town within 24 hours;

(b) Initiate an investigation within 48 hours to determine the impacts to groundwater, both on-site and off-site, in accordance with subparagraph e.2. of this sub-section and COMAR 26.10.08.02-.04; and;

(c) Develop a Corrective Action Plan, as directed by the Town and in accordance with COMAR 26.10.09.07.

f. Record Keeping.

1. Owners and operators shall maintain and make available to the Town upon request, records of all testing required by this chapter for 1 year at the UST facility and for 5 years at a location designated by the owner.

2. A person may not make any false statement, representation, omission or certification on any record, report, plan, or other document filed or required to be maintained by this sub-section.

g. Enforcement

1. Violations of this Subsection 8A.E.2 are declared to be misdemeanors, punishable by a fine of not more than one thousand dollars (\$1000.00) or confinement in jail for not more than ninety (90) days, or both.

2. Violations may also be charged as municipal infractions. The fine for an initial municipal infraction violation is \$500.00, and for a repeated municipal infraction violation occurring within one year the fine is \$1,000.00.

3. Each day a violation continues after due notice of the violation has been effectively served shall constitute a separate offense. In addition to criminal and civil penalties, the Town may seek any other remedies available by law, including injunctive relief and other court orders.

3. Dry cleaning establishments shall not discharge to the ground or subsurface any wastewater that was in contact with the organic solvents used in the dry cleaning process. As specified above, secondary containment is required for areas where dry cleaning solvent is stored, used and transferred.
4. Infiltration of stormwater runoff that has come in contact with the pavement surfaces shall not be permitted at gasoline service stations. Waste from service stations' work areas is not permitted to be discharged to the ground or subsurface.

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5. All sewage sludge and animal waste holding facilities shall be constructed so as to not allow waste material to leach into the ground water. All in ground facilities shall use low permeability liners constructed to meet one of the standards specified below:
  - a. One foot clay with a permeability less than  $10^{-7}$ cm/sec, or
  - b. Two feet of clay with a permeability less than  $10^{-6}$  cm/sec or
  - c. Two feet of compacted soil with permeability less than  $10^{-5}$  cm/sec, and/or a manmade line, 30 ml thick, and permeability less than  $10^{-7}$  cm/sec.

6. Agricultural operations with yarding areas shall follow nutrient management plans for nitrogen. Waste application rates for all sites within the WPD are to be designed not to exceed crop requirements and therefore minimize nitrate management plans.
7. All de-icing chemicals (salt, cinders, or sand mixes) must be stored under roof and protected from precipitation by a permanent cover. Runoff from mixing and loading areas may not be discharged to the subsurface.
8. All facilities with bulk storage of pesticides must show evidence of compliance with Maryland Department of Agriculture requirements.
9. All tanks storing fertilizers must have a secondary containment of at least 110% of the largest tank within the contained area. All dry fertilizer storage must be under a permanent cover and protected from rainfall.
10. All underground pipelines carrying hazardous material shall be equipped with operable secondary release detection equipment and be protected against corrosion.

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11. All excess hazardous materials from the construction of any facility shall not be released into the environment and shall be removed from the property, unless such materials are incorporated into a contained hazardous materials storage area.
12. All facilities practicing stormwater management shall obtain a Montgomery County permit and follow specifications for quantity and quality control.
13. The facility owner and/or operator shall report any spill of a hazardous material by telephone to the Town, with two (2) hours of discovery of the spill. Clean up shall commence immediately upon discovery of the spill. A written report detailing the steps taken to contain and clean up the spill and preventing a recurrence

shall be submitted to the Town within five (5) working days of the spill.

14. The Commissioners, Planning Commission, or the Board of Zoning Appeals may require that ground monitoring wells be installed at the expense of the facility owner and/or operator in accordance with an approved ground monitoring plan. The permittee shall be responsible for developing an approved ground water monitoring system. A State-Certified Laboratory shall analyze samples and the results reported to the Town.
15. The Board of Zoning Appeals shall be notified in writing prior to the expansion, alteration, or modification of any activity that is subject to a Special Exception. Approval by the Board of Zoning Appeals is required before the activity subject to a Special Exception can begin. The owner and/or operator shall submit an explanation of the change in activity and the information as required by this Ordinance.

F. Exemptions

The following activities and land uses are exempt from the provisions of Section 8A of this Ordinance provided that they meet the criteria for exemptions set out below:

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1. Transit: The transportation of any hazardous or toxic materials through the WPD provided that the transportation meets all Federal, State and other local regulations.
2. Building Permits: All residential building permits that do not involve a change of an existing use.
3. Application of Pesticides: The application of liquid fertilizer, herbicides, and/or pesticides in residential, recreation, agriculture, pest control and aquatic weed control activities provided that:
  - a. The application is in strict conformity with the use requirement as set forth in the substance's EPA registries; and

- b. Chemicals are used according to their labeling and according to pertinent Federal and State laws; and
- c. When applied by an applicator required to be certified by the Maryland Department of Agriculture, the application of liquid fertilizer, herbicides and/or pesticides shall be noted in the records of the applicator. These records shall include but are not limited to the date and amount of these substances applied at each location and said records shall be available for inspection by the Town and/or its representatives.
- d. Construction Activities: Construction activities for road and utility maintenance and/or repair that follow the Best Management Practices.
- e. Underground Oil Storage: The underground storage of oil(s) used for heating fuel shall be exempt from the provisions of this Ordinance if the tank used for storage is located within an enclosed structure (i.e., secondary containment or any currently approvable containment technology) sufficient to contain leakage of oil from the underground storage tank and to provide routine access for visual inspection (e.g. cement-floored

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basement) and sheltered to prevent the intrusion of precipitation. ~~Where Any use involving tank used for~~ underground storage of oil ~~that~~ is out of service for more than one year, such oil shall be removed. Liquid residue shall be removed and all connecting pipes securely capped or plugged.

- f. Aboveground Oil Storage: The aboveground storage of oil(s) used for heating fuel shall be exempt from the provisions of this Ordinance provided that the tank used for storage is:
  - (1) Located on an impervious pad or container of sufficient volume to capture and contain spills and leakage of oil from entering the environment;

- (2) Sheltered to prevent the intrusion of precipitation and;
- (3) Located in a manner that allows for routine visual inspection.

Aboveground storage of oil shall be located as far away from the public water supply wells as is reasonably possible.

G. Non-conforming Uses: Any land uses, structures, and/or activities lawfully in existence within the WPD prior to the effective date of Section 8A of this Ordinance, may continue to exist on the land upon which it is located subject to meeting existing Federal, State and local regulations, and also providing that there is no expansion or change of the use or structures. All pre-existing uses shall nevertheless be required to obtain a special exception and shall be subject to all the requirements of such special exception and Section 8A of this ordinance. Changes in the title or right to possession shall not affect continuation of an existing use as long as the use is not suspended or abandoned for a period of six (6) months or more. In the event that a non-conforming use poses, or may pose, a direct hazard to the public water supply, the Commissioners and/or Town Manager may take lawful action to abate the hazard.

H. Variances: Variances to the provisions of this Ordinance may be granted by the Board of Zoning Appeals, following a public

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hearing with no less than thirty (30) days notice, provided that a strict interpretation of the Ordinance creates a hardship and/or deprives such property enjoyed by other similarly situated property within the WPD. Applications for variances must be submitted to the Board of Zoning Appeals.

I. Administration and Enforcement:

- 1. Subdivision and Land Development Review: All subdivision proposals and other proposed new development plans within the WPD shall be reviewed by

the Planning Commission for compliance with the provisions of this Ordinance. It shall be the responsibility of the Planning Commission to approve, disapprove, or approve with modifications the proposed subdivision or development plan.

2. Notice of Violation: Whenever it is determined that there is a violation of this Ordinance, a Notice of Violation may be issued. The Notice of Violation shall:
  - a. Specify the violation or violating in writing.
  - b. Specify the length of time to correct the violation.
  - c. Clearly state any penalties associated with the subject violation.
  - d. Provide a description of any rights of appeal.
3. Penalties: All costs incurred by the Commissioners of Poolesville, including engineering and attorney's fees for enforcing this Ordinance shall be paid by the owner and/or operator who violated the provisions of this Ordinance. In addition, a penalty of up to \$1,000 may be levied for any violation of this Ordinance by a Municipal Infraction Citation. Each day that a violation is found shall be a separate offense. Nothing herein shall prevent the Commissioners from exercising any other legal remedy available.

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4. Stop Work Orders: The Town Manager and/or Code Enforcement Officer of the designee of either is authorized to issue cease and deist orders whenever it becomes aware of violations of this Ordinance. Where circumstances require, he may request enforcement by Court Order. (Ord. 165, 12-11-06)



