AN ORDINANCE TO AMEND APPENDIX A ("ZONING") OF THE TOWN CODE OF THE TOWN OF SMYRNA BY AMENDING SECTION 5 ("DISTRICT REGULATIONS") BY DELETING SUBSECTION 18 ("WELLHEAD PROTECTION OVERLAY DISTRICT (WPOD)") AND ADDING A NEW SUBSECTION 18 "SOURCE WATER PROTECTION AREA (SWPA)"

BE IT HEREBY ENACTED by the Town Council of the Town of Smyrna, a majority thereof concurring in Council duly met, that the Town Code of the Town of Smyrna be and hereby is amended as follows:

Section 1. Amend Appendix A ("Zoning") of the Town Code of the Town of Smyrna, section 5 ("District Regulations"), by deleting in its entirety subsection 18 ("Wellhead protection overlay district (WPOD)") and inserting in its place thereof a new subsection 18 "Source Water Protection Area (SWPA)" as follows:

18. Source Water Protection Area (SWPA).

a. Purpose. The purpose of the Source Water Protection Area regulations is to ensure the protection of the public drinking water supply from contamination. The Town of Smyrna herein adopts the overlay maps delineating, as source water protection areas: wellhead protection and excellent ground-water recharge potential areas. To ensure the protection of these drinking water supplies, this ordinance establishes a zoning overlay to be known as the Source Water Protection Overlay. The purpose of the Source Water Protection Overlay is to protect public health and safety by minimizing contamination of aquifers, preserving, and protecting existing and potential sources of drinking water supplies. It is the intent to accomplish this through both public education and public cooperation, as well as by creating appropriate land use regulations that may be imposed in addition to those currently imposed by existing zoning districts or other state and county regulations.

The Source Water Protection Area Maps are superimposed on current zoning districts. It shall apply to all new construction, redevelopment, or expansion of existing buildings and new or expanded uses. Applicable activities/uses allowed in a portion of one of the underlying zoning districts that fall within the Source Water Protection Overlay must additionally comply with the requirements of this district. Uses prohibited in the underlying zoning districts shall not be permitted in the Source Water Protection Overlay District.

b. Definitions. This section defines words, terms, and phrases found in this subsection.

Aboveground Storage Tank (AST): An AST is a single containment vessel greater than 250 gallons as defined in the Delaware Regulations Governing Aboveground Storage Tanks, dated February 11, 2005. ASTs with a storage capacity greater than 12,499 gallons containing
petroleum or hazardous substances, and ASTs with a storage capacity greater than 39,999 gallons containing diesel, heating fuel or kerosene are subject to the design, construction, operation, and maintenance requirements of the Delaware AST regulations.

**Applicant:** A person, firm, or government agency that executes the necessary forms to obtain approval or a permit for any zoning, subdivision, land development, building, land disturbance, or other activity regulated.

**Aquifer:** A geological formation, group of formations or part of a formation composed of rock, sand, or gravel capable of storing and yielding groundwater to wells.

**CERCLA Hazardous Substances:** Those substances either specifically designated as hazardous under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), otherwise known as the Superfund law, or those substances identified under other laws. In all, the Superfund law includes references to four other laws to designate more than 800 substances as hazardous, and identify many more as potentially hazardous due to their characteristics and the circumstances of their release. See: http://www.epa.gov/superfund/programs/er/hazsubs/cersubs.htm

**Contamination:** Any physical, chemical, biological, or radiological substance that enters the hydrological cycle through human action and may cause a deleterious effect on groundwater resources; it shall include but is not limited to hazardous waste, limiting nutrients, and sanitary sewage.

**Delineation:** The process of defining and/or mapping a boundary that approximates the areas that contribute water to a particular water source used as a public water supply.

**Environmental Impact Assessment Report (ELAR):** A report required by this ordinance that assesses the environmental characteristics of a source water protection area and determines what effects or impacts will result if the area is altered or disturbed by a proposed action that would increase impervious cover beyond the recommended 20% threshold.

**Excellent Ground-Water Recharge Potential Area:** Those areas with high percentages of sand and gravel that have "excellent" potential for recharge as determined through a Stack Unit Mapping Analysis delineated by the Delaware Geological Survey and presented in the Report of Investigations No. 66, Ground-water Recharge Potential Mapping in Kent and Sussex Counties, Delaware, Geological Survey, 2004.

**Geologist:** An individual who is registered in the State of Delaware to practice the profession of geology.

**Good Ground-Water Recharge Potential Area:** Those areas with a significant percentage of sand and gravel that have a "good" potential for recharge as determined through a Stack Unit Mapping Analysis delineated by the Delaware Geological Survey and presented in the Report of Investigations No. 66, Ground-water Recharge Potential Mapping in Kent and Sussex Counties, Delaware, Geological Survey, 2004.
Ground Water: The water contained in interconnected pores located below the water table in an unconfined aquifer or located in a confined aquifer.

Hazardous Substance UST System: An underground storage tank system that contains a hazardous substance defined in 101(14) of the CERCLA (but not including any substance regulated as a hazardous waste under RCRA Subtitle C) or any mixture of such substances and petroleum, and which is not a petroleum UST system.

Hazardous Waste: A solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating illness, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or dispose of, or otherwise managed. Without limitation, included within this definition are those hazardous wastes described in Sections 261.31, 261.32, and 261.33 of the Delaware Regulations Governing Hazardous Waste.

Impervious Cover: Surfaces providing negligible infiltration such as pavement, buildings, recreation facilities (e.g. tennis courts, swimming pools, etc.), and covered driveways.

Non-Conforming Use: An existing use of a lot or a building that was legal at the time of its creation that is not permitted by this subsection in the district in which it is located.

Natural Condition: Open space that is essentially unimproved and set aside, dedicated, designated, or reserved for public or private use.

On-site Wastewater Treatment and Disposal System: Conventional or alternative wastewater treatment and disposal systems installed or proposed to be installed on land of the owner or on other land to which the owner has the legal right to install the system.

Passive Recreation: Recreation that involves existing natural resources and has a minimal impact because they do not require the alteration of existing topography. Such passive recreation shall include but not be limited to non-motorized vehicles, hiking, bicycling, picnicking, and bird-watching.

Public Water Supply Well: Any well from which the water is used to serve a community water system by section 22.146 (Public Water Systems) in the Delaware State Regulations Governing Public Drinking Water Systems.

Public Drinking Water System: A community, non-community, or non-transient noncommunity water system, which provides piped water to the public for human consumption. The system must have at least 15 service connections or regularly serve at least 25 individuals daily for at least 60 days.

Redevelopment: Any proposed expansion, addition, or major facade change to an existing building, structure, or parking facility.
Runoff: That portion of precipitation or snow melt that has not evaporated or infiltrated into the soil, but flows on land or impervious surfaces.

Sanitary Landfill: A land site at which solid waste is deposited on or into the land as fill for the purpose of permanent disposal, except that it will not include any facility that has been approved for the disposal of hazardous waste under the Delaware Regulations Governing Hazardous Waste.

Site plan approval: A process for the review and approval of a development plan prior to the issuance of a development.

Source Water: Any aquifer from which water is drawn either periodically or continuously by a public water system.

Source Water Assessment Area: The area delineated by DNREC Source Water Assessment and Protection Program that contributes water to public water supply system.

Source Water Assessment Plan: The October 1999 U.S. EPA approved plan for evaluating the sources of public drinking water in Delaware for their vulnerability and susceptibility to contamination.

Source Water Assessment Report (SWAP): The identification and evaluation of the sources of water within the state used by public water systems in an effort to determine the vulnerability and susceptibility to contamination.

Stormwater: The runoff of water from the surface of the land resulting from precipitation or snow or ice melts

Stormwater Management:

a) for water quantity control, a system of vegetative, structural, and other measures that may control the volume and rate of stormwater runoff which may be caused by land disturbing activities or activities upon the land; and

b) for water quality control, a system of vegetative, structural, and other measures that control adverse effects on water quality that may be caused by land disturbing activities or activities upon the land.

Source Water Protection Area: Wellhead Protection Areas, Good and Excellent Ground-Water Recharge Potential Areas

Vacant Property: Lands or buildings that are not actively used for any purpose as designated in the underlying zoning district/overlay for one year.

Underground Storage Tank (UST): An UST is one or a combination of Tanks including underground Pipes, the volume of which is 10% or more belowground, as defined in the
Delaware Regulations Governing Underground Storage Tank Systems, dated March 12, 1995. The following USTs are not subject to the design, construction, operation, and maintenance requirements of the Delaware UST Regulations: Residential Heating Fuel, Agricultural, and Residential Motor Fuel USTs less than 1,100 gallons and any UST less than 110 gallons.

_Wastewater:_ Water-carried waste from septic tanks, water closets, residences, building, industrial establishments, or other places, together with such groundwater infiltration, subsurface water, and mixtures of industrial wastes or other wastes as may be present.

_Water Quality:_ Those characteristics of stormwater runoff from an impervious surface or a land disturbing activity that relate to the chemical, physical, biological, or radiological integrity of water.

_Water Quantity:_

a) Those characteristics of stormwater runoff that relate to the volume of stormwater runoff to downstream-gradient areas resulting from land disturbing activities.

b) Those characteristics of stormwater that relate to the volume of stormwater that infiltrates the land surface and enters the underlying aquifer.

_Wellhead:_ The upper terminal of a well, including adapters, ports, seals, valves, and other attachments.

_Wellhead Protection Areas (WHPA):_ Surface and subsurface areas surrounding public water supply wells or well fields where the quantity or quality of ground water moving toward the wells or well fields may be adversely affected by land use activity.

_Wellhead Protection Plan:_ The March 1990 U.S. EPA approved plan for protecting the quality of drinking water derived from public water supply wells in Delaware.

_Wellhead Protection (WHP) Zone 1:_ The surface area extending to a minimum one hundred and fifty (150) foot radius around the wellhead.

_Wellhead Protection (WHP) Zone 2:_ The remaining surface area of the delineated wellhead protection area outside Zone 1.

_Wellhead Protection (WHP) Zone 3:_ Where a WHP Zone 2 area overlays an excellent groundwater recharge potential area.

**e. Source Water Protection Areas (SWPA).** Source Water Protection Areas are Wellhead Protection Areas and Excellent Ground Water Recharge Potential Areas. All such areas are as depicted on Source Water Protection Area maps located in Town Hall as adopted as part of the update and implementation of the 2010 Comprehensive Land Use Plan. These maps are also available in GIS overlays from Delaware Department of Natural Resources and
Environmental Control, Division of Water Resources, Source Water Assessment and Protection Program.

These areas shall be managed as required by the following sections to protect public drinking water resources from activities and substances that may harm water quality and subtract from overall water quantity.

**d. Prohibited Uses.** Activities shall be subject to the land use restrictions contained within this ordinance that will protect the quality and quantity of ground water supplies. All uses not permitted in the *underlying zone district* are prohibited.

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Well Head Protection Area</th>
<th>Ground-Water Recharge Potential Area</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ZONE 1</td>
<td>ZONE 2</td>
</tr>
<tr>
<td>Aboveground Storage Tanks</td>
<td>NO</td>
<td></td>
</tr>
<tr>
<td>Agricultural uses that are intensive, such as feedlots or chicken houses</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>Automobile body/repair shop</td>
<td>NO</td>
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<tr>
<td>Chemical processing/storage facility</td>
<td>NO</td>
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<td>Dry cleaner</td>
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<td>NO</td>
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<tr>
<td>Electrical/electronic manufacturing facility</td>
<td>NO</td>
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<tr>
<td>Equipment maintenance/fueling areas</td>
<td>NO</td>
<td></td>
</tr>
<tr>
<td>Fleet/trucking/bus terminal</td>
<td>NO</td>
<td></td>
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<tr>
<td>Gas station</td>
<td>NO</td>
<td></td>
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<tr>
<td>Hazardous Waste: Treatment, Storage, and Disposal Facilities</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td># Dry wells/sumps</td>
<td>NO</td>
<td></td>
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<tr>
<td># Injection wells</td>
<td>NO</td>
<td></td>
</tr>
<tr>
<td>Junk/scrap/salvage yard</td>
<td>NO</td>
<td></td>
</tr>
<tr>
<td>Land divisions resulting in high density (greater than 1 acre)</td>
<td>NO</td>
<td></td>
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<tr>
<td>Machine shop</td>
<td>NO</td>
<td></td>
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<tr>
<td>Manure Storage</td>
<td>NO</td>
<td></td>
</tr>
<tr>
<td>Metal plating/finishing/fabricating facility</td>
<td>NO</td>
<td></td>
</tr>
<tr>
<td>Mines/gravel pit</td>
<td>NO</td>
<td></td>
</tr>
</tbody>
</table>
On-Site Wastewater Treatment and Disposal Systems | NO | NO | NO | NO
---|---|---|---|---
Sanitary and Industrial Landfills | NO | NO | NO | NO
Underground storage tanks | NO | NO | NO | NO
Vessel Storage | NO | NO | NO | NO
Wood preserving/treating facility | NO | NO | NO | NO

**Conditional:**

(*) **Impervious Cover:** Wellhead Protection Areas within Zone 3 shall be preserved in a natural condition. Impervious cover shall not be permitted.

(#) **Dry wells/sumps, except for single-family residences directing gutter downspouts to a drywell.**

(##) **Injection wells other than those used in the remediation of ground water contamination that inject oxygen releasing compounds.**

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e. **Wellhead Protection Areas (WHPA).** The DNREC Source Water Assessment and Protection Program delineates wellhead protection areas to ensure the integrity of public drinking water. Deep wells drilled into confined aquifers and low volume wells in unconfined aquifers have at minimum a one hundred and fifty foot radius wellhead protection area. The wellhead protection area surrounding public supply wells in unconfined aquifers that pump more than 50,000 gallons per day are delineated using a thematical model. This type of well draws large quantities of water and can have much larger wellhead protection areas. Zone classifications have been created to manage land use within the wellhead protection area. They are defined as follows:

**Wellhead Protection (WHP) Zone 1** is the surface area extending in a one-hundred and fifty (150) foot radius around the wellhead.

**Wellhead Protection (WHP) Zone 2** is the remaining surface area of the wellhead protection area outside of Zone 1. Land use restrictions within Zone 2 are required to insure adequate protection of public drinking water supply.

**Wellhead Protection (WHP) Zone 3** exist where a WHP Zone 2 area overlays an excellent ground-water recharge potential area. Land use restrictions within Zone 3 are required to insure adequate protection of public drinking water supply.

(1) **WHP Zone 1 Requirements:**

(a) Parcels of land within a WHP Zone 1 wellhead protection area will be preserved in a natural condition with the exception of impervious surface limited to building and access associated with the well and distribution and treatment facilities and their maintenance.

(b) Aboveground storage tanks for materials used in the treatment facility operations are permitted.
(c) Underground storage tanks are prohibited.

(d) Stormwater runoff will be diverted away from the wellhead.

(e) Stormwater infiltration practices designed to handle runoff are prohibited.

(f) The minimum lot area for a proposed public water supply well and related facility drawing from a confined aquifer shall be 1/2 acres, and the minimum lot area for a public well drawing from an unconfined aquifer shall be 1/2 acres.

(g) On-site Wastewater and Disposal Systems shall not be permitted.

(2) WHP Zone 2 Requirements:

(a) Impervious Cover.

(1) Wellhead Protection Areas within Zone 2 shall not exceed 20% impervious cover (based on the total site area). New development and redevelopment in this Zone may exceed the 20% total site area impervious cover threshold within Wellhead Protection Areas but shall be no more than 50% impervious cover (based on total site area), provided the applicant submits and receives approval on an Environmental Impact Assessment Report.

(b) Stormwater.

(1) Stormwater shall be treated by an approved stormwater quality management practice in accordance with current requirements of the Delaware Sediment and Stormwater Regulations dated October 11, 2006 or as later revised.

(2) For all new construction, all new and redeveloped structures used for residential or business purposes shall be required to discharge roof run off to grassed areas or use a best management practice for water quality treatment prior to directing flow over impervious surfaces.

(c) Underground Storage Tanks.

(1) Underground storage tanks with a capacity greater than 100 gallons containing petroleum, and Residential and Agricultural USTs with a capacity greater than 1,100 gallons containing heating fuel or motor fuel shall be permitted in a designated wellhead area if the USTs are designed, constructed, maintained, and operated in accordance with the Delaware Regulations Governing Underground Storage Tank Systems, dated March 12, 1995 or as later revised. (NOTE: regulated USTs must be constructed with secondary containment of the tanks and piping and must have continuous monitoring for releases.)
(2) Underground storage tanks with a capacity greater than 110 gallons containing a hazardous substance as defined in CERCLA 101 (14) shall be permitted in a designated wellhead area if the USTs are designed, constructed, maintained and operated in accordance with the Delaware Regulations Governing Underground Storage Tank Systems, March 12, 1995 or as later revised. (NOTE: Regulated USTs must be constructed with secondary containment of the tanks and piping and must have continuous monitoring for releases.)

(d) Aboveground Storage Tanks.

(1) Aboveground storage tanks with a capacity greater than 12,499 gallons containing petroleum or hazardous substances, and ASTs with a storage capacity greater than 39,999 gallons containing diesel, heating fuel or kerosene shall be permitted in a delineated wellhead area if the ASTs are designed, constructed, operated and maintained with the applicable requirements in the Delaware Regulations Governing Aboveground Storage Tanks, dated February 11, 2005 or as later revised.

(e) Wastewater Treatment and Disposal Systems.

(1) On-site Wastewater Treatment and Disposal Systems shall not be permitted.

(3) WHP Zone 3 Requirements:

(a) Impervious Cover: Wellhead Protection Areas within Zone 3 shall be preserved in a natural condition. Impervious cover shall not be permitted.

(1) Permitted Uses: passive recreation.

f. Excellent Ground-Water Recharge Potential Areas.

(1) Impervious Cover. Wellhead Protection Areas within Zone 2 shall not exceed 20% impervious cover (based on the total site area). New development and redevelopment in this Zone may exceed the 20% total site area impervious cover threshold within Wellhead Protection Areas but shall be no more than 50% impervious cover (based on total site area), provided the applicant submits and receives approval on an Environmental Impact Assessment Report.

(2) Stormwater. Stormwater shall be treated by an approved stormwater quality management practice in accordance with current requirements of the Delaware Sediment and Stormwater Regulations dated October 11, 2006 or as later revised.

(3) New construction. All structures shall be required to discharge roof drains onto permeable surfaces.
(4) Underground storage tanks with a capacity greater than 110 gallons containing petroleum, and Residential and Agricultural USTs with a capacity greater than 1,100 gallons containing heating fuel or motor fuel shall be permitted in a excellent ground-water recharge potential area if the USTs are designed, constructed, maintained and operated in accordance with the Delaware Regulations Governing Underground Storage Tank Systems, dated March 12, 1995 or as later revised. (NOTE: Regulated USTs must be constructed with secondary containment of the tanks and piping and must have continuous monitoring for releases.)

(5) Underground storage tanks with a capacity greater than 110 gallons containing a hazardous substance as defined in CERCLA §101(14) shall be permitted in a delineated excellent ground-water recharge potential area if the USTs are designed, constructed, maintained and operated in accordance with the Delaware Regulations Governing Underground Storage Tank Systems, dated March 12, 1995 or as later revised. (NOTE: Regulated USTs must be constructed with secondary containment of the tanks and piping and must have continuous monitoring for releases.)

(6) Aboveground storage tanks with a capacity greater than 12,499 gallons containing petroleum or hazardous substances, and ASTs with a storage capacity greater than 39,999 gallons containing diesel, heating fuel or kerosene shall be permitted in a delineated excellent ground-water recharge potential area if the ASTs are designed, constructed, operated and maintained with the applicable requirements in of the Delaware Regulations Governing Aboveground Storage Tanks, dated February 11, 2005 or as later revised.

g. Boundary Determination for SWPA

(1) All subdivision and land development plans depicting development or land disturbance submitted for Town review shall be evaluated for the existence of source water protection areas. All such areas are as depicted on Source Water Protection Area maps located in Town Hall as adopted as part of the update and implementation of the most current update to the 2010 Comprehensive Land Use Plan. These maps are also available in GIS overlays. Maps/overlays are available from Delaware Department of Natural Resources and Environmental Control (DNREC), Division of Water Resources, Source Water Assessment and Protection Program (SWAPP). If a SWPA exists within a proposed development site, the boundaries of these areas shall be delineated on the plan by the applicant's State of Delaware Professional Engineer or Professional Geologist.

(2) DNREC SWAPP may, when based on sound science and information, revise and update the overlay maps of wellhead protection areas.

(3) The Delaware Geological Survey (DGS) may, when based on sound science and information, revise and update the overlay maps of excellent ground-water recharge potential areas.
(4) When there appears to be a conflict between the mapped boundary and actual site conditions, the applicant may engage the services of Professional Geologist to prepare a report intended to determine more accurately the precise boundary of the Source Water Protection Area. The Report shall include:

(a) A detailed topographic layout of the subdivision and/or area to be developed and prepared by a State-registered professional land surveyor or Professional Geologist;

(b) Evidence derived from a site-specific investigation that may include aquifer testing, test borings, test pits, observation wells, groundwater elevations, and topography surveys as appropriate for the type of source water protection area that clearly demonstrate that the area in question does not meet the definition of a source water protection area as defined.

(c) Any challenges to the delineations of the excellent ground-water recharge potential areas must follow the methods used in the Delaware Geological Survey publication: Report of Investigations No. 66, Ground-Water Recharge Potential Mapping in Kent and Sussex Counties, Delaware. The challenge must be approved by DGS and DNREC SWAPP.

(d) Notwithstanding any other section pertaining to source water protection areas, if an owner initiates a precise boundary delineation pursuant to this section, any and all time review limitations shall be stayed pending the submission of the complete report contemplated by this section. Following submission of the report and all supporting documents, the Department shall have ninety (90) days to finally approve or disapprove the exploratory sketch plan submission or such further time as deemed necessary by the Department, but not to exceed an additional ninety (90) days.

h. Redevelopment.

(1) Impervious Cover Restrictions.

(a) Site Modifications that require Site Plan Approval must create a 15% reduction in the total amount of impervious cover on the site when compared to pre-redevelopment conditions.

(b) If the 15% reduction in total existing impervious area would require a site to go below the 20% maximum impervious cover provisions of Source Water Protection Areas, then the maximum impervious surface cover for the site is 20% (based on existing total site area).

(c) Sites that do not meet the 20% impervious cover threshold must employ rooftop infiltration practices. Rooftop runoff shall be treated for quality using best management practices (BMP) in accordance with the current requirements of the
Delaware Sediment and Stormwater Regulations dated October 11, 2006 or as later revised. The minimum acceptable BMP for redevelopment is to provide sheet flow for rooftop runoff over a grassed area (minimum) 20 feet in length prior to flow over impervious areas. The slope of the grassed area for rooftop infiltration practices shall be 5% or less. An environmental impact assessment report will be required (see subsection j). If the grading of the property does not allow for overland flow by gravity or best management practice (prior to directing flow to impervious surfaces), a variance for a reduction in roof area requiring quality treatment can be requested.

(2) Abandoned or Vacant Property

(a) Impervious Cover Restrictions A, B, and C of this subsection h ("redevelopment") do not apply to vacant or abandoned property. These properties must comply with the source water protection area zoning district regulations.

i. Uniform Standards and Criteria.

(1) Hazardous Waste Treatment, Storage, and Disposal Facilities, as defined in 7 DE Admin. Code 1302, Delaware Regulations Governing Hazardous Waste, shall not be permitted in source water protection areas.

(2) Sanitary and Industrial Landfills, as defined in 7 DE Admin. Code 1301, Delaware Regulations Governing Solid Waste, shall not be permitted in source water protection areas.


New development in the Town of Smyrna may exceed the 20% total site impervious cover (prior to re-subdivision) threshold within Excellent Ground Water Recharge Potential Areas and WHP Zone 2, but be no more than 50% impervious (total site area prior to re-subdivision) provided the applicant submits an approved environmental assessment report including a climatic water budget and systems to augment recharge that assure water quality as well as water quantity. The environmental impact assessment must document that post development recharge will be no less than predevelopment recharge when computed on an annual basis.

Commonly, the applicant offsets the loss of recharge due to impervious cover by constructing recharge basins that convey pretreated rooftop runoff for infiltration to ground water. Refer to Supplement 1 entitled Ground-Water Recharge Design Methodology, dated May 2005 or later as revised for the details of how to design recharge facilities in Delaware source water protection areas.

(1) Delaware Registered Professional Engineer and/or Professional Geologist prepares an environmental assessment report, usually containing the following elements of planning, design, construction, and maintenance of ground-water recharge facilities:
(a) Site description of proposed development within the water resource protection area.

(b) Climatic water balance comparing predevelopment and post-development recharge potential.

(c) Subsurface exploration including borings, test pits, and infiltration tests.

(d) Design of ground-water recharge facilities that assure water quality as well as quantity.

(e) Construction and maintenance considerations.

(f) Recommended ground-water monitoring plan.

(g) Water management agreement between the applicant and the town, city, or county providing for monitoring and maintenance of the recharge system. The applicant will abide by the Ground Water Management Agreement as written in DNREC Supplement 1 to the Source Water Protection Guidance Manual for the Local Governments of Delaware: Ground-Water Recharge Design Methodology, dated May 2005 or as later revised.

k. Nonconforming Uses. Nonconforming uses may continue in wellhead protection areas and excellent ground-water recharge potential areas in the form in which they existed at the time of the adoption of this ordinance, unless they pose a direct hazard to the town's water supply, as determined by the water and waste water department upon advice from the Delaware Division of Public Health, or are causing some foreign substances (oil, salts, chemicals, or other substances) to be introduced into the town's water supply, as determined by the water and waste water department upon advice from DNREC's Division of Air and Waste Management and/or Division of Water Resources. In the latter case, the building department shall issue a mandatory cease and desist to stop the offending activity within the area. Nonconforming existing underground or above-ground storage of oil, petroleum, and petroleum products shall require secondary containment pursuant to the State of Delaware regulations governing underground storage tanks or for above-ground storage of petroleum products secondary containment facilities capable of capturing the material stored on the site, for existing facilities that are proposed either to be upgraded or replaced.

I. Replacement and New Wells

(1) The replacement of any existing public water supply well that was not required to meet this wellhead protection requirement at the date of its original installation and that has failed shall be exempt from meeting this wellhead protection requirement.

(2) All public water supply wells within a housing development, subdivision, or strip development recorded on or after the implementation of the Delaware Regulations
Governing the Construction and Use of Wells, dated April 6, 1997 or as later revised, shall be located at least one-hundred fifty (150) feet within the subdivision's or development's outermost property lines.

SYNOPSIS

This ordinance deletes in its entirety the former subsection 18 of the Zoning Code Section 5 “District Regulations” entitled “Wellhead protection overlay district (WPOD)” and adopts a new subsection 18 “Source water protection area (SWPA)” in place thereof. This ordinance adopts overlay maps, outlines wellhead protection zones and the prohibited uses in each zone, and specifies prohibited uses for excellent ground-water recharge potential areas. Specific regulations for each wellhead protection zone are outlined in this ordinance, as are regulations for excellent ground-water recharge potential areas. Procedures are included for identifying the boundaries of source water protection areas. Impervious cover restrictions for redevelopment are outlined, and this ordinance enacts regulations surrounding environmental impact assessment reports. This ordinance allows nonconforming uses to persist subject to certain conditions and governs the replacement of existing public wells and new public wells.

This will certify that this is a true and correct copy of the Ordinance duly adopted by the Town Council of the Town of Smyrna at its regular Council meeting on February 21, 2012.

ATTEST:

Regina J. Brown
Council Secretary

Patricia A. Stombaugh
Mayor

This shall certify that the title and synopsis of this Ordinance was published in “The Smyrna/Clayton Sun Times” on February 29, 2012 and posted at the Town Hall on February 29, 2012.

So Certifies:

Valerie L. Heritage
Town Clerk

This shall certify that the title, effective date and synopsis of this Ordinance was published in “The Smyrna/Clayton Sun Times” on February 29, 2012 and posted at the Town Hall on February 29, 2012.

So Certifies:

[Signature]
Town Manager