

Section 12-2. Wellhead Protection Areas

A Definition.

Wellhead protection areas are surface and subsurface areas surrounding public water supply wells or wellfields where the quality of groundwater moving toward such wells or wellfields may be adversely affected by land use activity. Such activity may result in an introduction of contaminants to groundwater used for public supply ("wellhead").

B Regulations Governing Development

1. Land use within one hundred and fifty feet (150) feet of the well shall be regulated as follows:
 - a. Underground storage tanks containing petroleum or any hazardous substances listed in 40 CFR 116 in an aggregate quantity equal to or greater than a reportable quantity as defined in 40 CFR 117 shall not be permitted in a designated wellhead area.
 - b. Hazardous Waste Storage, Treatment and Disposal Facilities, and sanitary, and Industrial Facilities as defined in *the Delaware Regulations Governing Hazardous Waste* shall not be permitted in wellhead areas.

Section 12-3. Source Water Areas

A Defined.

Areas that include groundwater particles and dissolved constituents which may be drawn to a public water well withdrawing water from an unconfined aquifer within a 5-year time period. Such areas are delineated by the Delaware Geological Survey or DNREC and published as Source Water Assessment reports.

B Regulations Governing Development.

1. Prohibited land uses within a Source Water Area:
 - a. Underground storage tanks containing petroleum or any hazardous substances listed in 40 CFR 116 in an aggregate quantity equal to or greater than a reportable quantity as defined in 40 CFR 117 shall not be permitted in a designated wellhead area.
 - b. Hazardous Waste Storage, Treatment and Disposal Facilities, and sanitary, and Industrial Facilities as defined in *the Delaware Regulations Governing Hazardous Waste* shall not be permitted in wellhead areas.
 - c. Stockpiles of raw or composted manure, fertilizer or other materials that are readily soluble for the purposes of fertilizing plants.
 - d. Stockpiles of salts or chemicals that are readily soluble for the purposes of de-icing or road maintenance.

Section 12-4. Excellent Recharge Areas (RESERVED)

- A Definition. A recharge area is a water resource protection area designated as having the best potential for groundwater recharge. Recharge Areas possess high percentages of sand and gravel that have "excellent" potential for recharge as determined through a Stack Unit Mapping Analysis performed originally by the Delaware Geological Survey. Recharge areas were delineated using methodology described in a report prepared by the Delaware Geological Survey entitled "Delineation of Ground-Water Recharge Resources Protection Areas in the Coastal Plain of New Castle County, Delaware," dated January 1993 ("recharge resource area").

Section 12-5. Drainage

A Natural Drainage System Utilized to Maximum Extent Feasible

1. To the extent practicable, all development shall conform to the natural contours of the land.
2. To the extent practicable, lot boundaries shall be made to coincide with the natural and preexisting man-made drainage ways within subdivisions to avoid the creation of lots that can be built upon only by altering such drainage ways.

B Proper Drainage Required

1. All developments, lots, and properties shall be provided with a drainage system that is adequate to prevent the undue retention of surface water on the site.
2. Surface water may not be channeled or directed into a sanitary sewer.
3. Whenever practicable, the drainage system of a development shall coordinate with and connect to the drainage systems or drainage ways on surrounding properties or streets.

C Permanent Stormwater Management

Requirement

Developments shall be constructed and maintained so that adjacent properties are not unreasonably burdened with surface waters as a result of such development.

1. All stormwater management systems shall be approved by the Kent Conservation District and constructed in accordance with Delaware state regulations.

2. No development or property may be constructed or maintained in a way that such development or property unreasonably hampers the natural flow of water from higher adjacent properties across the development or property thereby unreasonably causing substantial damage to the higher adjacent property.

3. No development or property may be constructed or maintained so that surface waters from such development or property are unreasonably collected and channeled onto lower adjacent properties at such locations at such volumes as to cause substantial damage to the lower properties.

D Design and Construction

1. Stormwater drainage systems shall be separate from and independent of sanitary sewage systems.

2. Stormwater drainage systems shall be designed and constructed in accordance with standards and specifications of the Kent Conservation District.

3. Off-Site Runoff.

b. Standards for assessing the adequacy of off-site drainage systems shall be those established by the Kent Conservation District or by the State Department of Transportation where it has jurisdiction.

a. Where subdivision and/or development results in increased quantities of stormwater runoff leaving the area to be developed, the subdivider shall demonstrate that off-site drainage improvements are adequate to handle the additional water and that all new or expanded swales, pipes or other off-site improvements are located in dedicated easements which permit efficient access for maintenance purposes.