

Chapter 30 Water

Sec. 30-52. Purpose.

Because clean and safe water is a paramount requirement for public health, the City of Newark water supply must be preserved and protected. Therefore, it is the purpose of this article to promote the public health, safety, and general welfare of our community by protecting our drinking water supply from pollution that may be associated with inappropriate land uses.

(Ord. No. 91-16, Amend. No. 1, 4-22-91)

Sec. 30-53. General provisions.

(a) Wellhead resource protection areas.

- (1) Wellhead resource protection areas shall be those areas delineated by the Water Resources Agency for New Castle County, in conjunction with the City of Newark Water and Waste Water Department, and shown on the Water Resources Agency's Water Resource Protection Area map, dated April, 1995, and as such map may be amended from time to time thereafter.
- (2) Said map is incorporated by reference herein, and copies may be found in the City of Newark Water and Waste Water Department.
- (3) Wellhead resource protection areas means the surface and subsurface area surrounding a water well or wellfield supplying a public water system through which contaminants are likely to move toward and reach such well or wellfield. These areas are graphically depicted on the water resource protection area map, dated April, 1995, and as such map may be amended from time to time thereafter.
- (4) The wellhead resource protection areas may be modified from time to time based on the recommendation of the technical advisory committee established in subsection (d) of this article and the water resource protection area map shall be revised accordingly; substantial modifications in the water resource protection area map, based on the recommendation of the technical advisory committee, shall be made by city council by ordinance.

(b) Recharge protection areas.

- (1) Recharge protection areas shall be those areas delineated by the Water Resources Agency for New Castle County, in conjunction with the City of Newark Water and Waste Water Department, and shown on the Water Resources Agency's Water Resource Protection Area map, dated April, 1995, and as such map may be amended from time to time thereafter.
- (2) Said map is incorporated by reference herein and copies may be found in the City of Newark Water and Waste Water Department.
- (3) Recharge protection areas are those land areas consisting of highly permeable geological deposits including areas where surficial geologic deposits generally consist of coarse sand and gravel beds, silty gravels, coarse sand, or rock, coarse to medium sand, that have a hydraulic conductivity of 100 feet per day or greater.
- (4) The recharge protection area may be modified from time to time based on the recommendation of the technical advisory committee established in subsection (d) of this article and the water resource protection area map shall be revised accordingly; substantial changes in the water resources protection

area map, based on the recommendation of the technical advisory committee, shall be made by city council by ordinance.

(c) Surface water protection areas.

- (1) Surface water protection areas shall be those areas delineated by the Water Resources Agency for New Castle County, in conjunction with the City of Newark Water and Waste Water Department, and shown on the Water Resources Agency's Water Resource Protection Area map, dated April 1995, and as such map may be amended from time to time thereafter.
- (2) Said Water Resource Protection Areas map is incorporated by reference herein and copies may be found in the City of Newark Water and Waste Water Department.
- (3) Surface water protection areas are floodplains (a "floodplain" is the area along a natural watercourse which is periodically inundated by water and is further defined under City Zoning Code, Article XXVI, Special Provisions for Floodplains and Land Adjoining Floodplains) and erosion prone slopes (areas consisting of lands with soils that are easily eroded).
- (4) The surface water protection area may be modified from time to time based on the recommendation of the technical advisory committee established in subsection (e) of this article and the water resource protection area map shall be revised accordingly; substantial changes in the water resources protection area map, based on the recommendation of the technical advisory committee, shall be made by city council by ordinance.

(d) Interpretation of boundaries. Where interpretation is needed concerning the exact location of the wellhead resource protection and recharge protection areas, the water and waste water director shall make the necessary and final interpretation, with the assistance of the technical advisory committee established in subsection (e) of this article. Any person contesting the location of these areas shall have the burden of establishing that such land does not lie within the area as defined herein. To contest a location of a water resource protection area, the following information shall be submitted:

- (1) A detailed topographical survey of the location in question prepared by a registered professional land surveyor;
- (2) A revised surface soils map of the property prepared by a DNREC (Delaware Department of Natural Resources and Environmental Control) licensed soil scientist, including a written report of the on-site field inspection and test boring data;
- (3) Site specific geological and hydrogeological analyses shall be performed by a Delaware registered professional geologist and shall be based upon through site investigation and testing to be determined and established through regulations promulgated by the water and waste water department in consultation with the technical advisory committee; and
- (4) Evidence derived from a pumping test(s) or a sufficient number of test borings, test pits, observation wells, and groundwater elevations to clearly demonstrate that the area in question does or does not meet the definition of wellhead resources or recharge protection areas as defined in this article.

(e) Technical advisory committee. A committee shall be established to assist in the interpretation of and/or revision of boundaries established in this article, the review of development plans within wellhead resources and recharge protection areas, and other related matters that may arise in the administration of this article. The committee shall consist of representatives from the Newark Planning and Water and Waste Water Departments, the Delaware Geological Survey, the Delaware Department of Natural Resources and Environmental Control, the Soil Conservation Service, and the Water Resources Agency for New Castle County.

The committee shall be chaired by the Newark Director of Water and Waste Water and shall be convened by the director when, in the director's opinion, technical advice is necessary for the administration of this article as described herein. The committee shall be advisory only; all final determinations shall be made by the water and waste water director.

(Ord. No. 95-11, 6-12-95; Ord. No. 08-07, Amend. Nos. 1—3, 4-28-08; Ord. No. 09-05, Amend. No. 1, 1-26-09)

Sec. 30-54. Use regulations.

Notwithstanding the uses permitted and area requirements and zoning districts established in Chapter 32, Zoning, the following water resources protection use regulations shall apply:

(a) Wellhead resource protection areas.

- (1) In residential districts in Chapter 32, Zoning, the permitted uses shall be restricted to one family detached dwellings with a maximum number of dwellings per gross area not to exceed one dwelling per two acres, with a minimum total gross lot area of two acres, except for open space, parks, municipal facilities, street rights-of-way, private and public swimming pools, accessory uses and accessory buildings, public transit stops and related uses; and provided that any construction consisting of structures and/or paved areas shall be maintained at least 150 feet from the wellhead, with the impervious surface for any permitted use not to exceed 10% of the total lot area for the use; except that subject to the approval of the water and waste water director, one family detached dwellings with a maximum number of dwelling units per gross acre not to exceed two dwelling units per acre, with a minimum total lot area of one acre, with the impervious surface for any permitted use not to exceed 20 percent of the total area for the use, and with any construction consisting of structures and/or paved areas maintained at least 150 feet from the wellhead, subject to the submittal of on-site hydrogeological studies that show that such development shall be maintained at a minimum 60 day horizontal time of travel from any water well supplying a public water system, whichever is greater; and subject to hydrogeological studies that show that the volume and quantity of groundwater recharge shall be maintained at predevelopment levels.
- (2) In business, industrial, manufacturing office research, and university districts, in Chapter 32, Zoning, the impervious surface for any permitted use shall not exceed 50% of the total lot area for the use, and provided that any construction, consisting of structures and/or paved areas, shall be maintained at least 150 feet from the wellhead, subject to the submittal of on-site hydrogeological studies that show that such development shall be maintained at a minimum 60 day horizontal time of travel from any water well supplying a public water system, whichever is greater.
- (3) The use, storage, treatment, or disposal of hazardous substances as defined in CERCLA §101(14) shall be prohibited, except that, subject to the approval of the water and waste water director, the use, storage, treatment, or disposal of the substances described in this section may be permitted with appropriate safeguards based on applicable federal, state and local regulations which shall be implemented to prevent release and/or discharge into the environment of such substances.
- (4) The underground storage of oil, petroleum, and petroleum products shall be prohibited. The above ground storage of oil, petroleum, and petroleum products shall be permitted provided that secondary containment facilities based on applicable federal, state and local regulations capable of capturing the materials stored on the site are provided, subject to the approval of the water and waste water director.
- (5) The burial, dumping, or disposal of municipal, industrial, or agricultural waste, defined as any land use associated with the disposal, storage and treatment, or transfer of municipal solid waste, sewerage treatment plant sludge, or industrial residual waste, and other special solid waste, shall be prohibited.

(6) For any use permitted in this section, the volume and quality of groundwater recharge shall be maintained at predevelopment levels. In order to establish that this standard is met, landowners may be required by the water and waste water director to conduct appropriate hydrogeological studies.

(b) Recharge protection areas.

- (1) Appropriate safeguards based on applicable federal, state, and local regulations shall be required to be implemented to prevent release and/or discharge into the environment resulting from the use, storage, or treatment of hazardous substances, as defined in CERCLA §101(14).
- (2) Secondary containment pursuant to State of Delaware regulations governing underground storage tanks shall be required to be installed for the underground storage of oil, petroleum, and petroleum products.
- (3) The burial, dumping, or disposal of municipal, industrial, or agricultural waste, defined as any land use associated with the disposal, storage and treatment, or transfer of municipal solid waste, sewerage treatment plant sludge, or industrial residual waste, and other special solid waste, shall be prohibited.
- (4) The above ground storage of oil, petroleum, and petroleum products shall be permitted provided that secondary containment facilities based on applicable federal, state and local regulations capable of capturing the material stored on the site are provided, subject to the approval of the water and waste water department.
- (5) For any use permitted in this section, the volume and quality of groundwater recharge shall be maintained at predevelopment levels. In order to establish that this standard is met, landowners may be required by the water and waste water director to conduct appropriate hydrogeological studies.

(c) Surface water protection areas.

- (1) Floodplains are regulated under City Zoning Code, Article XXVI, Special Provisions for Floodplains and Land Adjoining Floodplains.
- (2) Erosion prone slopes are regulated under Chapter 27, Subdivisions.

(d) Nonconforming uses. Nonconforming uses may continue in wellhead resource protection and recharge protection areas in the form in which they existed at the time of the adoption of this article, unless they pose a direct hazard to the city'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 city's water supply, as determined by the water and waste water department upon advice from DNREC's Division of Air and Waste Management and Division of Water Resources. In the latter case, the building department shall issue an immediate cease and desist order to stop the offending activity within the area. Nonconforming existing underground or aboveground storage of oil, petroleum and petroleum products shall require secondary containment pursuant to 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 either proposed to be upgraded or replaced.

(Ord. No. 91-16, Amend. No. 1, 4-22-91; Ord. No. 09-05, Amend. Nos. 2—5, 1-26-09)

Sec. 30-55. Enforcement.

This article shall be enforced by the water and waste water director with the assistance of the planning and building directors. No building permit shall be issued for the construction of any building or structure, or for any use in violation of the provisions of these regulations.

(Ord. No. 91-16, Amend. No. 1, 4-22-91)

Sec. 30-56. Effective date.

This article shall become effective upon adoption by city council, except that subdivisions and/or building permits approved prior to this date shall be exempt from the provisions of this article, except as otherwise regulated herein.

(Ord. No. 91-16, Amend. No. 1, 4-22-91)