

TOWNSHIP OF BERKELEY  
ORDINANCE NO. 2009-\_\_\_\_\_

AN ORDINANCE OF THE  
TOWNSHIP OF BERKELEY IN OCEAN COUNTY,  
AMENDING THE CODE OF  
THE TOWNSHIP OF BERKELEY  
BY ADDING A SECTION ENTITLED

**CHAPTER x-xx, WELL HEAD PROTECTION ORDINANCE**

**SECTION I. STATEMENT OF FINDINGS**

The governing body of Berkeley Township finds that:

- A. The ground water underlying this municipality is a major source of existing and future water supplies, including drinking water. The ground water underlying this municipality lies within the Buried Valley Aquifer Systems of the Central Passaic River Basin, which are designated as a "sole source" aquifer under Section 1424(e) of the federal Safe Drinking Water Act of 1974.
- B. The ground water aquifers are integrally connected with, are recharged by, and flow into the surface waters, lakes and streams, which also constitute a major source of water for drinking, commercial and industrial needs.
- C. Accidental spills and discharges of toxic and hazardous materials may threaten the quality of these ground water supplies and related water sources.
- D. Contaminated water from any source is a detriment to the health, welfare and comfort of the residents of this municipality, and other users of these water resources.
- E. Spills or discharges of hazardous substances or hazardous wastes may contaminate or pollute water. As a preventive measure, the proximity of such materials to sources of water supplies, such as public wells, should be restricted so that there will be sufficient time to find and clean up such spills or discharges before water supplies become contaminated.

**SECTION II. PURPOSE**

The purpose of this Ordinance is to protect the public health, safety and welfare through the protection of the ground water resources underlying the municipality to ensure a supply of safe and healthful drinking water for the present and future generations of local residents, employees and the general public in this municipality, as well as users of these water supplies outside this municipality. Areas of land surrounding each public community and nontransient noncommunity well, known as Well Head Protection Areas (WHPAs), from which contaminants may move through the ground to be withdrawn in water taken from the well, have been delineated. Through regulation of land use, physical facilities and other activities within these areas, the potential for ground water contamination can be reduced. The purpose of the regulations contained in this ordinance is to prevent the migration of potential pollutants from areas within a WHPA into ground water that is withdrawn from a public community well.

**SECTION III. STATUTORY AUTHORITY**

The municipality of Berkeley Township is empowered to regulate these activities under the provisions of the New Jersey Municipal Land Use Law, N.J.S.A 40:55D-1 et seq., which authorizes

each municipality to plan and regulate land use to secure a safe and adequate drinking water supply for its residents. Under provisions of the Underground Storage of Hazardous Substances Act, N.J.S.A. 13:1D *et seq.*, Berkeley Township may adopt, with state approval, a municipal ordinance that is more stringent than N.J.A.C. 7:14B but is obligated to ensure the provisions of the ordinance are not carried out in a manner that is inconsistent with N.J.A.C. 7:14B. The Board of Health of this municipality has autonomous power granted by the State Legislature to develop this Ordinance to protect public health, safety and welfare, as set forth in the New Jersey Local Boards of Health Law, N.J.S.A. 26:3-1 *et seq.*, and the New Jersey County Environmental Health Act, N.J.S.A. 26:3A2-21 *et seq.*

#### **SECTION IV. DEFINITIONS**

**Administrative Authority**– The Planning Board or Board of Adjustment and the Board of Health, acting jointly and in consultation, with all of the powers delegated, assigned, or assumed by them according to statute or ordinance.

**Applicant**– Person applying to the Board of Health, Planning Board, Board of Adjustment or the Construction Office and proposing to engage in an activity that is regulated by the provisions of this Ordinance, that would be located within a regulated Well Head Protection Area.

**Aquifer**– A formation, group of formations, or part of a formation that contains sufficient saturated permeable rock, sand, or gravel which is capable of storing and transmitting usable quantities of water to wells and springs.

**Best Management Practices (BMP)** – Performance or design standards established to minimize the risk of contaminating ground water or surface waters while managing the use, manufacture, handling or storage of hazardous substances or hazardous wastes.

**Contamination**– The presence of any harmful or deleterious substances in the water supply.

**Development**– The carrying out of any construction, reconstruction, alteration of surface or structure or change of land use or intensity of use.

**Discharge**– Any intentional or unintentional action or omission, unless pursuant to and in compliance with the conditions of a valid and effective Federal or State Permit, resulting in the releasing, spilling, pumping, pouring, emitting, emptying or dumping of a hazardous substance into the waters or lands of the State or into waters outside the jurisdiction of the State when damage may result to the lands, waters or natural resources within the jurisdiction of the State.

**Ground Water**– Water contained in interconnected pores of a saturated zone in the ground, also known as well water. A saturated zone is a volume of ground in which the voids in the rock or soil are filled with water at a pressure greater than atmospheric.

**Hazardous Substance**– Any substance designated under 40 CFR 116 pursuant to Section 311 of the Federal Water Pollution Control Act Amendments of 1972 [Clean Water Act] (Public Law 92-500; 33 U.S.C. 1251 *et seq.*), the Spill Compensation and Control Act, N.J.S.A. 58:10-23.11 *et seq.*, or “hazardous pollutant” as defined by the New Jersey Water Pollution Control Act (N.J.S.A. 58:10A-1 *et seq.*). Substances listed include petroleum, petroleum products, pesticides, solvents and other substances.

**Hazardous Waste**– Any solid waste that is defined or identified as a hazardous waste pursuant to the Solid Waste Management Act, N.J.S.A. 13:1E *et seq.*, N.J.A.C. 7:26-8, or 40 CFR Part 261.

**Maximum Contaminant Level (MCL)**– Maximum permissible level of a contaminant in water measured at the point of entry to the distribution system or at the free-flowing outlet of ultimate user of a public water system or other water system to which State primary drinking water regulations

apply. Any contaminant added to the water under circumstances controlled by the user, except a contaminant resulting from corrosion of piping and plumbing caused by water quality, is excluded from this definition. (New Jersey Safe Drinking Water Act N.J.A.C. 7:10)

**NJDEP**– New Jersey Department of Environmental Protection.

**Person**– Any individual, public or private corporation, company, partnership, firm, association, owner or operator, political subdivision of this State, and any state, Federal or interstate agency or an agent or employee thereof.

**Polluted Water**– Drinking water exceeding a Federal and/or State maximum contaminant level (MCL).

**Potential Pollutant Source (PPS)** – An activity or land use which may contribute to contamination to a source of drinking water. For the purposes of this ordinance Potential Pollutant Sources are defined in Section VII.

**Public Community Well**– A public water supply well which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents.

**Public Nontransient Noncommunity Well**– A public water supply well that is not a public community well and that regularly serves at least 25 of the same persons for more than six months in any given calendar year.

**Sole Source Aquifer**– Any drinking water aquifer upon which more than 50% of a population group depends and for which there is no practicable or affordable alternate water supply, as certified by the United States Environmental Protection Agency.

**Time of Travel (TOT)**– The average time that a volume of water will take to travel in the saturated zone from a given point to a pumping well.

**Tier 1 Well Head Protection Area**– That area of land within a WHPA from which ground water may enter the well within 2 years. (See maps referenced under Section V.)

**Tier 2 Well Head Protection Area**– That area of land within a WHPA from which ground water may enter the well within 5 years. (See maps referenced under Section V.)

**Tier 3 Well Head Protection Area**– That area of land within a WHPA from which ground water may enter the well within 12 years. (See maps referenced under Section V.)

**Well Head**– The well borehole and appurtenant equipment.

**Well Head Protection Area (WHPA)**– An area described in plan view around a well, from which ground water flows to the well and ground water pollution, if it occurs, may pose a significant threat to the quality of water withdrawn from the well.

## **SECTION V. ESTABLISHMENT OF WELL HEAD PROTECTION AREAS AND MAPS**

### **A. Well Head Protection Area Maps:**

- 1) The delineations of Well Head Protection Areas for public community wells and public nontransient noncommunity wells, which were published by the New Jersey Geological Survey of the New Jersey Department of Environmental Protection, are incorporated herein and made a part of this Ordinance. The Department of Environmental Protection will periodically update the WHPA maps and these maps, published by the New Jersey Geological Society, will be available at the web-site: <[www.state.nj.us/dep/njgs/geodata/](http://www.state.nj.us/dep/njgs/geodata/)>. The most recent WHPA maps available through the New Jersey Geological Survey should replace the maps used for reference in this ordinance. A map of the Well Head Protection Areas located within Berkeley Township is included as part of this Ordinance, is appended as Figure [?], and is adopted as of [date]. Maps of the municipality on which these delineations

have been overlain shall be on file and maintained by the offices of the Clerk of Berkeley Township, and of the Construction Office of Berkeley Township.

- 2) Well Head Protection Areas, as shown on the maps described in Section V.A(1), or as periodically updated and delineated by the Department of Environmental Protection and published by the New Jersey Geological Survey shall be considered to be superimposed over any other established zoning district. Land in a Well Head Protection Area may be used for any purpose permitted in the underlying district, subject to the additional restrictions presented herein.
- B. Assignment of Restrictions within Well Head Protection Areas:  
Properties located wholly or partially within a Well Head Protection Area shall be governed by the restrictions applicable to the most restrictive Well Head Protection Area Tier, if partially within one or more Tiers.
- C. Inclusion of Well Head Protection Area Zoning into Master Plan:  
The municipal Master Plan provides the legal basis for zoning and land use regulation at the local level. The technical foundation for local well head protection in this municipality should be incorporated into the Master Plan. A technical report on the need for well head protection in Berkeley Township may be adopted as part of the Master Plan [N.J.S.A 40:55D-28b(11)]. The technical report should include the following information:
- 1) A statement setting forth the rationale and need to protect the public water supply through a program of well head protection for public community wells and public nontransient noncommunity wells.
  - 2) Reference to the method used to delineate the Well Head Protection Areas according to the "tiered" level of protection for public community wells based upon the time of travel of ground water, as developed by the New Jersey Geological Survey.

## **SECTION VI. REGULATION OF WELL HEAD PROTECTION AREAS FOR PUBLIC WELLS**

- A. The Administrative Authority for administering the provisions of this Ordinance shall be the Planning Board or Board of Adjustment of Berkeley Township acting jointly and in consultation.
- B. Any applicant for a permit requesting a change in land use or activity, which is subject to review under the provisions of the Municipal Land Use Law and other pertinent regulations of Berkeley Township, [code references], and which is located within a delineated WHPA, as defined in Section V, that involves a Potential Pollutant Source, as defined in Section VII, shall comply with the requirements of this ordinance.
- C. Any applicant for a permit requesting a change in land use or activity, which is subject to the requirements of this ordinance, shall file an Operations and Contingency Plan, as required by Section IX, with the Administrative Authority. No permit that allows a change in land use or activity, which is subject to the requirements of this ordinance, shall be granted unless an Operations and Contingency Plan for the proposed change has been approved by the Administrative Authority. Any plan approved by the Administrative Authority shall be kept on file in the office of the Clerk of Berkeley Township, and shall be available to the public for inspection.
- D. Any change in land use or activity that introduces a Major or Minor Potential Pollutant Source, as defined in Section VII, shall be prohibited within a Tier 1 WHPA.
- E. Any change in land use or activity that introduces a Major PPS, as defined in Section VII, shall be prohibited within a Tier 2 WHPA.

- F. Any change in land use or activity that involves any Major or Minor PPS, as defined in Section VII, within any WHPA, that is not prohibited pursuant to Section VI.D. or VI.E., shall comply with the Best Management Practice Standards, as defined in Section IX.
- G. This Ordinance is supplementary to other laws and Ordinances in this municipality. Where this Ordinance or any portion thereof imposes a greater restriction than is imposed by other regulations, the provisions of this Ordinance shall supersede. These Rules and Regulations shall in no way affect the limitations or requirements applicable in the underlying municipal land use and zoning districts.
- H. The use limitations noted herein shall be considered as limitations stipulated in the permitted list of uses in each zone. The activities regulated herein shall be considered limitations accessory to permitted uses in each zone.

#### **SECTION VII. POTENTIAL POLLUTANT SOURCES LISTED**

The following are Major and Minor Potential Pollutant Sources subject to the requirements of this Ordinance. These listings are consistent with the New Jersey Safe Drinking Water Act regulations [N.J.A.C. 7:10-11.4(a)4]. The Administrative Authority of Berkeley Township may determine whether a proposed change in land use or activity is a Major or Minor Potential Pollutant Source.

- A. Major Potential Pollutant Sources may include the types of facilities and land uses listed in Appendix A.
- B. Minor Potential Pollutant Sources may include the types of facilities and land uses listed in Appendix B.
- C. Conditions:
  - 1) Sanitary sewer lines, industrial waste lines and storm water lines may be located no closer than 100 feet to a regulated well, and only if they are constructed of watertight construction (that is steel, reinforced concrete, cast iron, PVC or other suitable material).
  - 2) Manhole and/or connections to a sanitary sewer system are prohibited within 100 feet of a regulated well.
  - 3) Dry wells dedicated to roof runoff and serving residential properties or commercial or industrial properties not listed in Appendix A are permitted in any Tier but may be located no closer than 100 feet to a regulated well.
  - 4) Aboveground heating oil storage tanks, 2,000 gallons or less, shall be permitted in any tier subject to approval by the approving authority of containment provisions in accordance with Section VIII herein and shall be located no closer than 100 feet to a regulated well. The new aboveground tank and containment measures as specified herein shall be exempt from impervious coverage requirements for the zone. The aboveground containment measures shall be no larger than required to contain a spill of the contents of an aboveground tank. The aboveground tank is permitted within any side or rear yard but shall conform to the minimum setback requirement for accessory structures. The aboveground tank shall also include fencing or landscaping sufficient to provide a screen of the proposed aboveground tank and containment apparatus from adjacent properties.
  - 5) An aboveground fuel storage tank for emergency electrical generators with maximum fuel storage capacity of 2,000 gallons shall be permitted in any tier subject to approval by the approving authority of containment provisions in accordance with Section VIII herein and shall be located no closer than 100 feet to a public community or public nontransient noncommunity well.

## **SECTION VIII. BEST MANAGEMENT PRACTICE PERFORMANCE STANDARDS**

- A. Any applicant proposing any change in land use or activity that involves any Major or Minor PPS, as defined in Section VII, which would be located either wholly or partially within any WHPA shall demonstrate that they have applied for all required State permits or control documents. No final approvals under the authority of the Municipal Land Use Law shall be issued until all required State permits or control documents are issued final. Underground storage tanks regulated at N.J.A.C. 7:14B shall also be operated in a manner consistent with N.J.A.C. 7:14B.
- B. Any activity that involves any Major or Minor PPS, which would be located either wholly or partially within any WHPA, shall comply with and operate in a manner consistent with the following Best Management Practices:
- 1) All portions or areas of a facility in which hazardous substances or hazardous wastes are stored, processed, manufactured or transferred outdoors, shall be designed so that the discharges of hazardous substances will be prevented from overflowing, draining, or leaching into the ground water or surface waters.
  - 2) Outdoor storage, dispensing, loading, manufacturing or processing areas of hazardous substances or hazardous wastes must be protected from precipitation, stormwater flows or flooding.
  - 3) Wherever hazardous substances are stored, processed, manufactured or transferred outdoors, the design features shall include secondary containment and/or diversionary structures which may include but not be limited to:
    - a. Containers, dikes, berms or retaining walls sufficiently impermeable to contain spilled hazardous substances, for the duration of a spill event.
    - b. Curbing.
    - c. Gutter, culverts and other drainage systems.
    - d. Weirs, booms and other barriers.
    - e. Lined diversion ponds, lined lagoons and lined retention basins, holding tanks, sumps, slop tanks and other collecting systems.
    - f. Drip pans.
  - 4) Secondary containment and/or diversionary systems, structure or equipment must meet the following standards:
    - a. The system must block all routes by which spilled hazardous substances could be expected to flow, migrate, or escape into the ground water or surface waters.
    - b. The system must have sufficient capacity to contain or divert the largest probable single discharge that could occur within the containment area, plus an additional capacity to compensate for any anticipated normal accumulation of rainwater.
    - c. In order to prevent the discharge of hazardous substances into ground water, all components of the system shall be made of or lined with impermeable materials sufficient to contain the substance for the duration of a spill event. Such material or liner must be maintained in an impermeable condition.
    - d. No manufacturing area, processing area, transfer area, dike storage area, or other storage area, or secondary containment/diversion system appurtenant thereto shall drain into a watercourse, or into a ditch, sewer, pipe or storm drain that leads directly or indirectly into a surface or subsurface disposal area, unless provision has been made to intercept and

treat any spilled hazardous substances in an NJDEP approved industrial wastewater treatment or pre-treatment facility, or other NJDEP approved facility.

- e. Catchment basins, lagoons and other containment areas that may contain hazardous substances should not be located in a manner that would subject them to flooding by natural waterways.
- 5) Stormwater shall be managed so as to prevent contamination of ground water, and so as to be in accordance with applicable laws and regulations of the State of New Jersey, and of Berkeley Township.

#### **SECTION IX. OPERATIONS AND CONTINGENCY PLAN**

- A. Any applicant proposing any change in land use or activity that involves any PPS, as defined in Section VII that would be located either wholly or partially within any WHPA shall submit an Operations and Contingency Plan to the Administrative Authority. This Operations and Contingency Plan shall inform the Administrative Authority about the following aspects of the proposal:
- 1) Types of PPS proposed for the site;
  - 2) Types and quantities of hazardous substances or hazardous wastes that may be used or stored on site;
  - 3) Means to be employed to contain or restrict the spillage or migration of hazardous substances or hazardous wastes from the site into ground water;
  - 4) Means to be used to contain or remediate accidental spillage of such materials;
  - 5) Means to notify administrative authority about any accidental spillage of such materials;
  - 6) Demonstration that the proposed use and/or activity would employ, to the maximum extent possible, best management practices as set forth in Section VIII, to protect ground water quality in the WHPA and minimize the risk of potential ground water contamination.
- B. The Administrative Authority shall review, and shall approve or reject any Operations and Contingency Plan prior to approving or denying the application for a land use change or activity.
- C. Any Operations and Contingency Plan submitted shall be available for public review and comment.

#### **SECTION X. ENFORCEMENT**

A prompt investigation shall be made by the appropriate personnel of the Construction or Engineering Office of Berkeley Township, of any person or entity believed to be in violation hereof. If, upon inspection, a condition which is in violation of this Ordinance is discovered, a civil action in the Special Part of the Superior Court, or in the Superior Court, if the primary relief sought is injunctive or if penalties may exceed the jurisdictional limit of the Special Civil Part, by the filing and serving of appropriate process. Nothing in this Ordinance shall be construed to preclude a municipality's right, pursuant to N.J.S.A 26:3A-25, to initiate legal proceedings hereunder in Municipal Court. The violation of any section or subsection of this Ordinance shall constitute a separate and distinct offense independent of the violation of any other section or subsection, or of any order issued pursuant to this Ordinance. Each day a violation continues shall be considered a separate offense.

#### **SECTION XI. SEVERABILITY**

If any section, sentence, clause or phrase of this Ordinance is held to be invalid or unconstitutional by any court of competent jurisdiction, then said holdings shall in no way affect the validity of the remaining portions of this Ordinance.

**SECTION XII. EFFECTIVE DATE**

This Ordinance shall take effect upon final adoption and publication in accordance with the law on [date].

WHP-Ord-891, 9-22-08

## Appendix A

### Types of Facilities or Uses that are deemed to be Major Potential Pollutant Sources

- 1 Permanent storage or disposal of hazardous wastes, industrial or municipal sludge or radioactive materials, including solid waste landfills.
- 2 Collection and transfer facility for hazardous wastes, solid wastes that contain hazardous materials, and radioactive materials.
- 3 Any use or activity requiring the underground storage of a hazardous substance or waste in excess of an aggregate total of 50 gallons and regulated by NJDEP under provisions of the Underground Storage of Hazardous Substances Act (N.J.S.A. 58:10A-21 et seq.).
- 4 Above-ground storage or treatment facility for a hazardous substance or waste with a cumulative capacity greater than 2,000 gallons.
- 5 Any industrial treatment facility lagoon.
- 6 Farm or residential underground storage tanks of motor fuel for noncommercial purposes with a capacity greater than 1,100 gallons.
- 7 Underground heating oil storage for on-site consumption with a capacity greater than 2,000 gallons.
- 8 Unlined retention/detention pond that receives stormwater discharge from a highway
- 9 Industrial or sanitary wastewater treatment plant
- 10 Pipeline, except natural gas
- 11 Automotive service center (repair & maintenance), car or truck washing facility, truck, bus, or locomotive maintenance yard or terminal.
- 12 Road salt storage facility.
- 13 Site for storage and maintenance of heavy construction equipment and materials.
- 14 Junkyard, auto recycling, scrap metal, or scrap industry facility
- 15 Resource Conservation Recovery Act (RCRA) treatment, storage, and disposal facility
- 16 Toxic Catastrophe Prevention Act facility
- 17 Facility requiring Discharge Cleanup and Removal (DCR) Plans
- 18 Solid waste recovery facility (SWRRF), solid waste transfer facility (SWE), or Class B recycling facility
- 19 Compost facility excluding individual household compost units
- 20 Disinfecting & pest control service
- 21 Solvents recovery service
- 22 Industrial or commercial laundry, dry cleaner, or carpet/upholstery cleaner
- 23 Quarrying and/or mining facility.
- 24 Asphalt and/or concrete manufacturing facility.
- 25 Textile mill with finishing operations (dyeing, coating, etc.) or leather tanning & finishing
- 26 Manufacturing, repair or product processing facility using hazardous substances for wood preserving, reconstituting wood products, furniture, or fixtures with metal finishing
- 27 Manufacturing or processing facility for inorganic chemicals, alkalies, chlorine, industrial gases, inorganic pigments, plastic materials, synthetic resins, pharmaceuticals, soaps, detergents, paints, gum and wood chemicals, industrial organic chemicals, pesticides and agricultural chemicals, photographic chemicals, adhesives, sealants, rubber or plastic
- 28 Petroleum refinery, bulk station or terminal
- 29 Steel mill
- 30 Metal foundry, smelter, forging, fabricating, plating, coating, or finishing facility

- 31 Manufacturing, assembly, or packing of ordinance with explosive load
- 32 Manufacturing or processing facility for electronic equipment, carbon and graphite products, cathode ray tubes, printed circuit boards, semiconductors, electronic crystals, controlling instruments or batteries
- 33 Manufacturing or processing facility for transportation equipment or ship building
- 34 Repair shop with metal finishing
- 35 Pulp, paper, and paperboard mill
- 36 Printing & publishing facility
- 37 Weapons testing grounds
- 38 Military facility
- 39 Electrical power plant or substation
- 40 Hospital or medical laboratory
- 41 Research organization using hazardous substances
- 42 Cemetery or funeral home or such facilities with embalming facilities
- 43 Site for storage and maintenance of equipment and materials for landscaping.
- 44 Livestock operation.
- 45 Agricultural use that does not use DEP approved Best Management Practices for agricultural chemical bulk storage, mixing or loading, including crop dusting or spraying facilities.
- 46 Nursery that does not use DEP approved Best Management Practices
- 47 Golf course that does not use DEP approved Best Management Practices

## **Appendix B**

### **Types of Facilities or Uses that are deemed to be Minor Potential Pollutant Sources**

- 1 Underground storage of hazardous substance or waste of less than 50 gallons.
- 2 Underground heating oil storage tank for on-site consumption with a capacity of less than 2,000 gallons.
- 3 Sanitary sewer system, including sewer line, manhole, or pump station within 100 feet of a regulated well. (See conditions in Section VII.C.)
- 4 Industrial waste line. (See conditions in Section VII.C.)
- 5 Septic leaching field.
- 6 Facility requiring a ground water discharge permit issued by the NJDEP pursuant to N.J.A.C 7:14A *et seq.*, unless required for remediation of a contaminated site.
- 7 Stormwater retention-recharge basin.
- 8 Dry well. (See conditions in Section VII.C.)
- 9 Storm water line within 100 feet of a regulated well. (See conditions in Section VII.C.)
- 10 Above-ground storage of hazardous substance or waste in quantities of less than 2,000 gallons.
- 11 Any "industrial establishment" facility subject to the rules of the Industrial Site Remediation Act (N.J.A.C. 7:26B) and listed in Appendix A that is deemed by the administrative authority of Berkeley Township to be a Minor Potential Pollutant Source.