

ORDINANCE 56-2010

ORDINANCE OF THE BOROUGH OF MADISON AMENDING CHAPTER 195 OF THE REVISED GENERAL ORDINANCES OF THE BOROUGH OF MADISON AND ESTABLISHING STANDARDS TO PROTECT THE BOROUGH'S COMMUNITY PRODUCTION WELLS

WHEREAS, the groundwater contained within the area known as the Buried Valley Aquifer System of the Central Passaic River Basin (BVA) is a major water supply source, including drinking water. The BVA has been designated as a "sole source" aquifer under Section 1424(e) of the federal Safe Drinking Water Act of 1974; and

WHEREAS, the aquifer is integrally connected with and is recharged by the surface waters within the Well Head Protection Area first shown in the Phase 2 Municipal Stormwater Management Plan adopted May 2005 as Map Appendix 12. This area has been updated by the Well Head Protection Area Map for the Borough of Madison herein adopted and to be updated as soil, groundwater, geologic and parcel knowledge is refined; and

WHEREAS, Madison's five current production wells are a major source of existing and future drinking water supply for the Borough. These production wells are completed in and operate in the WHPA; and

WHEREAS, accidental spills and discharges of toxic and hazardous materials, as described in Chapter 195-37 of the Borough Code, may threaten the quality of this groundwater supply; and

WHEREAS, in the interest of safeguarding Madison's drinking water supply source, and in so doing protecting the health of the public and protecting the economic interest of the community in its drinking water supply, groundwater and surface water contamination should be prevented by regulating or prohibiting certain land uses or activities within the entirety of the WHPA; and

WHEREAS, the purpose of this ordinance is to protect public health, safety and welfare through the protection of the Borough's community production wells. To do this, the following measures have been implemented:

- Areas of land surrounding Madison’s production wells, known as Wellhead Protection Areas (WHPAs) from which contaminants may move through the ground to be withdrawn in water taken from the wells have been delineated and are identified as the Well Head Protection Area, as shown on the Well Head Protection Area Plan, as prepared by the Borough of Madison Department of Engineering, as amended from time to time.
- The refinement of an existing ordinance to regulate activities within the Well Head Protection Area. The purpose of the regulations contained within this ordinance is to regulate those certain land uses that inherently produce degraded stormwater runoff or have the potential for deleterious discharges to surface and groundwater.

NOW, THEREFORE, BE IT ORDAINED by the Borough Council of the Borough of Madison, in the County of Morris and State of New Jersey, as follows:

Section 1. Chapter 195 of the Revised General Ordinances of the Borough of Madison, Section 195-7 entitled "Definitions," shall be amended to include the following additional terms to be defined:

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

Best Management Practices (BMP): These are performance or design standards established to minimize the risk of contaminating groundwater 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 exceeding current Federal and State Maximum Contaminant Levels in the water supply. The NJDEP residential clean up standards shall apply to residential uses and the non-residential standards shall apply to non-residential uses.

De minimis Quantity Exemption: As defined by **INDUSTRIAL SITE RECOVERY ACT (ISRA)** N.J.S.A. 13:1D-1 et seq., 13:1K-6, 58:10B-1 et seq., and 58:10-23.11a et seq. (or most current) The total quantity of hazardous substances or hazardous wastes at an industrial establishment may be a combination the total quantity shall not exceed 500 pounds or 55 gallons.

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 of New Jersey Permit resulting in the releasing, spilling, pumping, pouring, emitting, emptying or dumping of a hazardous substance into the waters or lands of the State of New Jersey or into the waters or natural resources within the jurisdiction of the State of New Jersey. See also ‘Stormwater Management Measure’ 195.37

Groundwater: 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 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 Section 4 of the New Jersey Water Pollution Control Act N.J.S.A. 58:10 A-4). 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 CFR Part 261, the Solid Waste Management Act N.J.S.A. 13:1E et seq. or N.J.A.C. 7:26-8.

Major Discharges: Those discharges for which a NJPDES discharge to ground water permit is required. Examples include but are not limited to discharges of sanitary wastewater from housing developments, schools, businesses, factories; discharges of industrial wastewater; illicit connections as defined in 195.37; and some stormwater discharges. Sanitary landfills and hazardous waste facilities can also be considered potential major dischargers to ground water. These discharges often use injection wells (including subsurface disposal systems serving facilities with an aggregate design flow in excess of 2,000 gallons/day); infiltration/percolation lagoons; spray irrigation; overland flow systems; surface impoundments; dredge spoils; and residuals surface impoundments.

Sole Source Aquifer: Any drinking water aquifer upon which 50-percent of a population group depends and for which there is no practicable or affordable alternate water supply as certified by the United State Environmental Protection Agency as defined Section 1424(e) of the federal Safe Drinking Water Act (SDWA) of 1974.

Spill Prevention Control and Countermeasure Plan (SPCC): A written document that describe measures to be taken to prevent, contain and clean up oil spills or other regulated wastes prior to discharge to surface or groundwaters.

Wellhead Protection Area (WHPA): A land area described in plan view around a well from which groundwater flows to the well and groundwater pollution, if it occurs, may pose a significant threat to the quality water withdrawn from the well. A Wellhead Protection Area is a mapped area around a public water supply well that delineates the horizontal extent of ground water captured by a public water supply well pumping at a specific rate over a specific time. A WHPA has three tiers which serve to delineate priority areas for the protection of ground water quality. Tier 1 is a two-year time of travel, (i.e. the ground water within this tier flows to the well within a two-year time period). Tier 2 is equivalent to a five-year time of travel, while Tier 3 is equivalent to a twelve-year time of travel. For the purposes of this ordinance, the WHPA shall refer to the Well Head Protection Areas as shown on the Madison Well Head Protection Area Map, as amended from time to time.

Section 2. Chapter 195 of the Revised General Ordinances of the Borough of Madison, Section 195-30 entitled "Supplemental Regulations," is hereby amended to add the following new section:

§195-30.7 Development Standards in the Well Head Protection Area (WHPA) district.

- A. In the event that new public water supply wells are installed in locations outside the boundaries of the WHPA, a new wellhead protection area must be established for each new well. Subsequently, all of the regulations detailed in this ordinance are to be applied to the new wellhead protection area

- B. All Major Development, as defined in Chapter 195.37, within the WHPA must demonstrate conformance with the Borough's enhanced stormwater management requirements pertaining to groundwater recharge and runoff water quality, as described in 195-37.3.F & G of the Borough code, in order to eliminate the potential for degrading or contaminating the surface and groundwaters within the WHPA
- C. A detailed hydrogeologic investigation shall be required for any new Major Development or Redevelopment within the WHPA. The hydrogeological investigation should include site specific discussions including:
1. Introduction and Background information (description, relation to contaminated sites, etc)
 2. Water well records, if available
 3. Water supply needs
 4. General Geology/hydrogeology
 5. Groundwater flow directions and gradients
- D. The following High Risk Uses that are potential major sources of groundwater contamination are prohibited in both of the designated areas of the WHPA:
1. Building Materials and Contractor's Yards
 2. Cemeteries
 3. Commercial Fuel Oil Distributor
 4. Commercial Livestock Operations
 5. Dumps and Open Burning Sites/Pits
 6. Junk or Salvage Yards
 7. Land Application of Wastewater and/or Sludge
 8. Machine Shops
 9. Metal Plating Establishments
 10. Motor Vehicle Sales (New and Used)
 11. Motor Vehicle Service Stations
 12. Bulk Storage Operations Involving Liquids, Hazardous Substances or Wastes, or Petroleum Products (excluding residential/commercial heating oil storage) in excess of De minimis quantities as defined by N.J.S.A. 13:1D-1 et seq., 13:1K-6, 58:10B-1 et seq., and 58:10-23.11a et seq. (or most current) Industrial Site Recovery Act
 13. Recycling Center
 14. Sanitary Landfill or Solid Waste Transfer Facility
 15. Non-single family Sewage Treatment/Disposal Pond
 16. Radioactive Materials Operations or Disposal
 17. Quarries and Mining Operations
 18. Unenclosed Road Salt Stockpiles
 19. (Reserved)
- E. Any high-risk use located within the WHPA in existence prior to the date of enactment of this ordinance shall be exempted from compliance with the requirements of this ordinance.
- F. Any material change or expansion of an existing high-risk use or property that would, in the opinion of the Borough Engineer or other applicable Borough official, result in a Site Plan or Subdivision application to the Planning or Zoning Board, or otherwise meet the definition of a Major Development would require full compliance with the ordinance contents.

- G. The owner/operator of any new commercial and industrial uses within the WHPA shall submit their Spill Prevention Control and Countermeasure (SPCC) Plans and any other written emergency procedures to the Borough, upon request.
- H. The owner/operator of any new commercial and industrial uses within the WHPA shall submit to the Board of Health and Borough Engineer the following information and reports:
 - 1. Copies of all federal, state and county operational applications, approvals, and permits; and reports and monitoring results that are related to environmental, pollution control, hazardous substance, hazardous waste and drinking water rules and regulations at the time of submittal to the federal, state and county authorities.
 - 2. Copies of all notices, reports and documents that are filed with federal, state and county authorities in the event of any release of a hazardous substance or contamination, at the time of filing.
 - 3. Copies of all notices, orders, rules, decisions, recommendations, enforcement actions or similar documentation at the time of receipt by or on behalf of the owner/operator from any federal, state or county authorities in connection with enforcement of environmental, pollution control, hazardous substance, hazardous waste and drinking water rules and regulations.
- I. All garbage dumpsters for residential, commercial or industrial land uses within the Well Head Protection Area shall be operated in an environmentally safe manner, including but not limited to the use of watertight lids; covered, regularly emptied dumpsters; no outdoor storage of solid waste, etc.
- J. All new dumpster locations or relocations should be located as distant from stormwater collection facilities as practicable. In no case shall dumpster enclosures be located immediately upstream of any inlet, catch basin or vegetated swale.

Section 3. Article VI of the Revised General Ordinances of the Borough of Madison,

Chapter 195-37, "Stormwater, Wetland Protection, Steep Slopes, Flood Control and Riparian Buffer Zone," shall be amended as follows:

§195-37.3 Stormwater management requirements for major developments

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G. Stormwater runoff quality standards.

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(9) Enhanced Runoff Quality Standards in the (WHPA) district:

- (a) Within WHPA Tier 1, the TSS removal rate shall be 95%
- (b) Within WHPA Tier 2, the TSS removal rate shall be 90%
- (c) Within WHPA Tier 3, the TSS removal rate shall be 85%

Section 4., Article VI of the Revised General Ordinances of the Borough of Madison, Chapter 195-37 "Stormwater, Wetland Protection, Steep Slopes, Flood Control and Riparian Buffer Zone," section 195-37.3 entitled "Stormwater management requirements for major developments" shall be amended to add **195-37.3.F.(1)(b)[c]** entitled "Enhanced Groundwater Recharge Standards in the (WHPA) district:

as follows:

F. Erosion control, groundwater recharge and runoff quantity standards.

(1) This subsection contains minimum design and performance standards to control erosion, encourage and control infiltration and groundwater recharge, and control stormwater runoff quantity impacts of major development.

(a)

(b) The minimum design and performance standards for groundwater recharge are as follows:

[1] The design engineer shall, using the assumptions and factors for stormwater runoff and groundwater recharge calculations herein, either:

[a]

[b]

[c] Enhanced Groundwater Recharge Standards in the (WHPA) district.

[1] Within WHPA Tiers 1 and 2, the design engineer must demonstrate that the increase in runoff from pre-construction to post-construction for the entire 5 year storm is infiltrated.

[2] Within WHPA Tier 3, the design engineer must demonstrate that the increase in runoff from pre-construction to post-construction for the entire 10 year storm is infiltrated

Section 5. If any section or provision of this Ordinance shall be held invalid in any Court of competent jurisdiction, the same shall not affect the other sections or provisions of this Ordinance, except so far as the section or provision so declared invalid shall be inseparable from the remainder or any portion thereof.

Section 6. All Ordinances or parts of Ordinances which are inconsistent herewith are hereby repealed to the extent of such inconsistency.

Section 7. This Ordinance shall take effect immediately after final passage and publication in the manner provided by law.