

# UPPER BERN TOWNSHIP ORDINANCE NUMBER 92 - 2007

**An Ordinance of Upper Bern Township, Berks County, Pennsylvania, establishing certain rules, criteria, standards, specifications, procedures, permits, maintenance, inspections and other regulations pertaining to on-lot water supply systems or wells within Upper Bern Township. This Ordinance shall be hereinafter referred to as the Upper Bern Township On-Lot Water Supply Ordinance.**

Be it and it is hereby enacted and ordained by the Board of Supervisors of Upper Bern Township, Berks County, Pennsylvania, and it is hereby ordains and enacts the following provisions as the Upper Bern Township On-Lot Water Supply Ordinance:

## **Section 1: Purpose and Objective**

The purpose and objective of this Ordinance shall be as follows:

- (A) To implement the goals, objectives, policies and recommendations contained within the Upper Bern Township Act 537 Plan Addendum of 2005 and/or any other Official Sewage Facilities Plan that has been adopted by Upper Bern Township.
- (B) To implement the goals, objectives, policies and recommendations contained within the Joint Comprehensive Plan for Northern Berks County of 2005 and/or any other Comprehensive Plan that has been adopted by Upper Bern Township.
- (C) To establish regulations to protect the quality and suitability of domestic water supply and to secure and maintain the minimum required isolation distances between on-lot water supply systems and sewage disposal systems or other potential sources of contamination or influence.
- (D) To protect the public health, safety and welfare of the residents and land owners of Upper Bern Township through the development and implementation of plans and ordinances for water quality management.

## **Section 2: Definitions**

- (A) The following specific terms are hereby defined for this Ordinance:

**Act 537:** The Pennsylvania Sewage Facilities Act, also referenced as PA Act 537, as amended.

**Act 537 Plan:** The Upper Bern Township Act 537 Plan, as adopted by Upper Bern Township and approved by the Pennsylvania Department of Environmental Protection. The Act 537 Plan may also be referenced as the Official Sewage Facilities Plan.

**Adequate Water Supply:** Where obtainable, the yield of a well or the capacity of a pump and distribution system sufficient to meet the requirements which the user has stated are necessary for drinking, culinary and other purposes for which well water is intended to be used

**Applicant:** A landowner or developer, as hereinafter defined, who has filed an application for an on-lot water supply facility, including his heirs, successors and assigns.

**Board of Supervisors:** The Upper Bern Township Board of Supervisors, Berks County, Pennsylvania, which shall also be referred to as the Governing Body of Upper Bern Township.

**Building:** Any combination of materials forming any structure, which is erected on the ground and permanently affixed thereto, whereas the framed components or structural parts are designed for the complete enclosure (with walls and a roof) and support for individuals or other uses.

**Contamination:** Any matter which will render water unsafe for human consumption.

**Drawdown:** The extent of lowering of the water level within a well when water is pumped from the well or surrounding wells.

**Flushing:** The act of causing a rapid flow of water from a well by pumping, bailing or similar operation.

**Landowner:** The legal or beneficial owner or owners of land, including the holder of an option or contract to purchase (whether or not such option or contract is subject to any condition). A lessee under a written lease who has written authorization of the legal owner shall be deemed to be a landowner by this Ordinance.

**Lot:** A tract or parcel of land, regardless of size, held in single or joint ownership, not necessarily a lot or lots shown on a duly recorded map, which is occupied or capable of being occupied by buildings, structures and accessory buildings, including such open spaces as are arranged, designed or required. The term "lot" shall also mean parcel, plot, site or any similar term.

**On-Lot Sewage Disposal Facilities:** Any individual or community system for disposal of domestic sewage involving pretreatment and subsequent disposal of the clarified sewage into a subsurface soil absorption area or retaining tank; this term includes both individual sewage systems and community sewage systems.

**On-Lot Water Supply Facilities:** Any individual or community system providing groundwater or surface water as a source of potable water supply, which may include a dug well, a drilled well, an artesian well, stream intake, or other permitted water supply facility.

**PA DEP:** The Pennsylvania Department of Environmental Protection.

**Person:** An individual, corporation, partnership, organization, incorporator's association, trust, or other similar entity.

**Potable Water:** Water that is sufficiently free from contamination to be safe for human consumption.

**Pumping Water Level:** That elevation of the surface of the water in a well when water flows or is pumped from it at a given rate.

**Sanitary Condition:** When referring to a well, it means that the construction of the well, including the grouting and materials, including the installation of the pumping equipment, is such that the well is effectively protected against entrance of contaminating matter from outside the well. When referring to the surroundings of a well, it means that the location and surrounding area are free from debris, filth or barren ground and the well head is not subject to flooding.

**Sanitary Facilities:** The required plumbing fixtures within a permitted use including a sink, toilet, bathtub, shower, washing machine, dish washer and/or similar plumbing fixtures, which are functioning and compliant with the codes and provisions of Upper Bern Township.

**Sewage Enforcement Officer (SEO):** A person who has been certified by the PA DEP and appointed by Upper Bern Township Board of Supervisors to conduct all activities as may be provided for such person in the Pennsylvania Sewage Facilities Act and the PA Code Title 25, Chapters 71, 72 and 73; and to enforce the provisions of this Ordinance.

**Static Water Level:** That elevation of the surface of the groundwater within a well when no groundwater is being removed from the well.

**Township:** Upper Bern Township, Berks County, Pennsylvania.

**Use:** The specific purpose for which land, a structure, or a building is designed, arranged or intended, or for which it may be occupied or maintained, or any activity, occupation, business or operation, which may be carried on thereon or therein.

**Watertight Construction:** Implies cased and grouted construction through firm foundations like clay or rock. Through granular material like sand or gravel, it implies that the casing pipe is of approved quality and assembled watertight.

**Well:** A facility providing groundwater as a source for water supply, which may include a dug well, a drilled well and an artesian well.

**Well Seal:** An approved removable arrangement or device used to cap a well or to establish and maintain a junction between the casing or curbing of a well and the piping or equipment installed therein so as to prevent water from entering the well at the upper terminal.

**Well Vent:** An outlet at the upper end of the well casing to allow equalization of air pressure in the well.

**Yield:** The quantity of water per unit of time which may flow or be pumped from a well at a constant specified drawdown.

(B) Any word or term not defined herein shall be used with a meaning of standard usage.

### **Section 3: General Rules, Rights and Privileges**

(A) The Upper Bern Township Board of Supervisors is hereby authorized and empowered to undertake the control, operation and management of on-lot wells for water supply.

(B) The Upper Bern Township Sewage Enforcement Officer is hereby authorized and empowered to issue permits for on-lot water supply facilities in accordance with the provisions of this Ordinance and the rules and regulations of the Pennsylvania Department of Environmental Protection, and any other rules and regulations relative to water supply that have been adopted by the Upper Bern Township.

(C) The Board of Supervisors shall have the right and power to fix, alter, charge and collect fees, assessments and other charges in the area served by on-lot water supply facilities at reasonable and uniform rates as authorized by applicable law.

(D) The drilling, pumping, collecting and conveying of groundwater or surface water for any permitted building, lot or use shall be done solely by or under the direction and control of Upper Bern Township, and shall only be made at such site or sites as may be approved by Upper Bern Township and the Pennsylvania Department of Environmental Protection.

(E) Upper Bern Township has the legal authority to inspect on-lot water supply systems in accordance with the Pennsylvania Sewage Facilities Act, the Pennsylvania Municipalities Planning Code and the Second Class Township Code. The Upper Bern Township Sewage Enforcement Officer shall have the right and not the obligation to inspect any on-lot water supply facility as part of any building permit or through the testing of systems as part of the subdivision or land development process.

### **Section 4: Design Standards and Specifications**

Unless otherwise permitted by Upper Bern Township, the following design standards and specifications shall apply to all proposed on-lot water supply facilities:

(A) Drilled or driven wells shall be located to comply with the following isolation or separation distances:

(1) A minimum distance of 100 feet shall be required and maintained from all primary or alternate sites for on-lot sewage disposal systems, as further specified within the PA Code Title 25, Chapter 73.

(2) A minimum distance of 25 feet shall be required and maintained from any surface water feature, including any streams, lakes, detention ponds, retention ponds, swales, ditches, storm drains, infiltration pits, and other features that have the capabilities of holding or conveying surface water or infiltration of stormwater.

- (3) A minimum distance of 50 feet shall be required and maintained from any external fuel storage facility.
  - (4) A minimum distance of 15 feet shall be required and maintained from any principal building.
  - (5) A minimum distance of 15 feet shall be required and maintained from any road right-of-way or driveway.
  - (6) A minimum distance of 15 feet shall be required and maintained from any off-street parking facility.
  - (7) A minimum distance of 25 feet shall be required and maintained from any property line.
- (B) Upper Bern Township may consider site modifications relating to the isolation or separation distances specified under Section 4(A) of this Ordinance provided that: the existing lot is nonconforming in terms of size or dimension; the lot is shaped in a manner that may prevent compliance; the existing well is being replaced; and/or the lot has physical or natural site constraints.
- (C) Unless otherwise permitted by Upper Bern Township, drilled or driven wells shall be constructed in accordance with the following standards and specifications:
- (1) The source of supply shall be from a water-bearing formation. The casing shall be properly sealed, grouted and set at least twenty (20) feet into a solid formation of rock.
  - (2) The minimum standard of quality for casing shall be new steel or wrought iron equivalent to American Standard Schedule 30 pipe for sizes eight (8) inches and over and Schedule 40 pipe for sizes less than eight inches. All connections to a well casing and all joints in the casing itself must be assembled pressure-tight, made up of correctly mated threaded pipe fittings, welded connections, sanitary well seals or other approved connections. Well casing pipe shall be driven and installed considering the quality and quantity of the water supply.
  - (3) A copy of the well drilling log or report shall be filed with Upper Bern Township and the PA DEP.
  - (4) The well shall be equipped with a suitable watertight cap or plug to protect the well from tampering or from the entrance of foreign substances or vermin. The well caps should indicate the name of the well driller, the depth of well and the depth of casing, which should be at least 12 inches above grade. Any restoration or repair of wells with casing terminating below grade shall be raised to 12 inches above grade.
  - (5) Where pump sections or discharge lines enter or leave a well through the side of the casing, the circle of contact shall be watertight. The use of plastic/nylon adapters for this purpose is not acceptable. A brass pitless adapter with brass connectors or equivalent shall be required.
  - (6) All pumps installed in wells drilled to a depth greater than 300 feet, but not to exceed 450 feet shall be installed with 200 pound per square inch plastic pipe. Well depths exceeding 450 feet shall have pumps installed with Schedule 80 PVC threaded pipe or galvanized steel pipe to support the increased pumping pressure required for deeper wells. The minimum acceptable pressure rating on plastic pipe is 160 pounds per square inch, regardless of water supply depth.
  - (7) Any pump room or any enclosure around a well pump shall be drained and protected from freezing by heating or other approved means. Where pumps are installed in basements, they shall be mounted on a block or shelf not less than 18 inches above the basement floor. Well pits shall only be permitted in accordance with the provisions established by the Commonwealth of Pennsylvania.
  - (8) Electrical wiring for well pumps shall be encased in conduit in accordance with the manufacture's specifications or as required by the Commonwealth of Pennsylvania.

- (D) Upper Bern Township may consider alternative standards and specifications for drilled or driven wells, as required and listed under Section 4(C) of this Ordinance provided that such standards and specifications comply with the manufacture's specification and are permitted by the Commonwealth of Pennsylvania.
- (E) A drilling log or report for each well shall be prepared by the driller and shall be submitted to Upper Bern Township for evaluation. The drilling log or report shall contain the following information: name of the landowner; street address or site location; lot number; name of the well driller; date the well was drilled; depth of the well; type and size of the casing; method of volume testing; depth of the casing; static water level; yield (gallons per minute); pump output (gallons per minute); water quality test results; and grouting information.
- (F) Prior to the issuance of a use and occupancy permit for the building or use, the landowner shall initiate appropriate action to have the on-lot water supply system tested by a certified laboratory, to determine levels of nitrates/nitrogen, and the presence of total coliform and fecal coliform. The use and occupancy permit shall only be issued if the on-lot water system is determined to be potable, safe and dependable.
- (G) Unless otherwise permitted for agricultural, municipal or irrigation purposes, no new hand-dug wells shall be permitted as part of the principal supply of water to any building or use within Upper Bern Township due to the great danger of pollution and unreliability of water supply.
- (H) Unless otherwise permitted for agricultural, municipal or irrigation purposes, no new spring fed water supply facilities or intakes shall be permitted as part of the principal supply of water to any building or use within Upper Bern Township due to the great danger of pollution and unreliability of water supply.
- (I) The use of explosives for increasing or recovering yield of any well developed into any geological formation shall be undertaken only in accordance with the permit requirements and authority granted from Upper Bern Township. Any person engaged in blasting shall be licensed by the Commonwealth of Pennsylvania.
- (J) The use of dry ice, detergents, chlorine, acids or other chemicals in wells for the purpose of improving the quality of the supply or restoring yield shall be undertaken only under permit from Upper Bern Township.

## **Section 5: Planning Requirements, Permits, and Inspections**

The following provisions shall apply to the requirements involving planning, permits, construction and inspections of on-lot water supply facilities:

- (A) All proposed on-lot water supply facilities shall be located, designed, constructed and installed in accordance with the standards and specifications of Upper Bern Township and the Commonwealth of Pennsylvania.
- (B) Unless otherwise permitted by Upper Bern Township and the Pennsylvania Department of Environmental Protection, on-lot water supply facilities shall be designed as part of the permanent sanitary facilities for any permitted building, structure or use that has been approved by Upper Bern Township.
- (C) Based upon the results of a preliminary hydrogeological analysis conducted by Upper Bern Township as part of the Act 537 Plan, certain areas have been identified as a high nitrate/nitrogen zone. As part of the planning requirements for subdivision and land development, the applicant may be required to consult with a qualified geologist or hydrogeologist in order to submit the necessary documentation to verify that the proposed lot size in conjunction with quantity and quality of the groundwater are adequate to support the proposed subdivision and land development activity.
- (D) A hydrogeological study shall be required for subdivision plans involving twenty (20) or more residential lots or for land development plans in which the estimated water usage is estimated to exceed 5,000 gallons per day. The hydrogeological study shall be prepared by a professional hydrogeologist or geologist, who shall provide documentation to conclude that the proposed individual well(s) will be capable of supplying each lot or use(s) with a dependable supply of water and that the proposed well(s) will not adversely affect the groundwater table or existing wells near the project site.

- (E) All proposed wells shall be located, drilled and constructed by a qualified well driller who has been registered with Upper Bern Township and the Commonwealth of Pennsylvania.
- (F) Application for a well permit shall be made upon a form supplied by Upper Bern Township, which shall be submitted to the Upper Bern Township Sewage Enforcement Officer for review and consideration. The required permit fee shall be in the amount established by Resolution of Upper Bern Township.
- (G) Upon receipt of an application for a well permit and payment of the required permit fee, the Sewage Enforcement Officer shall perform an inspection of the premises on which the well is to be constructed in accordance with the provisions of this Ordinance. Upon completion of the inspection, the Sewage Enforcement Officer shall execute the appropriate actions specified for the permit and include any special instructions. The Sewage Enforcement Officer may deny the permit if compliance has not been achieved, as specified by this Ordinance.
- (H) A schedule of routine inspections conducted by the Sewage Enforcement Officer or other code officials may be established to assure the proper functioning of the on-lot water supply facility. All inspections shall be completed under the authority and guidelines established by Upper Bern Township and the Commonwealth of Pennsylvania.
- (I) Prior to the issuance of a use and occupancy permit for the building or use, the landowner shall initiate appropriate action to have the on-lot water supply system tested by a certified laboratory, to determine levels of nitrates/nitrogen, total coliform and fecal coliform.
- (J) All permits shall be in effect as of the date of issuance and shall remain in effect for a period of one (1) year. In the event that water supply construction under the permit has not been completed within one (1) year from the date of issuance, the permit shall cease and terminate. In the event that a permit expires and construction has not begun, an application for a new permit must be submitted with appropriate fee.
- (K) A request for an extension of time for a permit involving an on-lot water supply system may be granted by the Upper Bern Township Sewage Enforcement Officer, provided that the request has been submitted at least 30 days before the expiration date of the original permit. The extension of time shall be limited to 180 days. Any subsequent request for an extension of time in which to complete water supply construction shall be limited to an application for a new permit and payment of the appropriate fee.
- (L) Emergency well permits shall be issued to landowners to replace a well or water supply source that is no longer operational or capable of supplying safe and dependable supply of water for the use on the property.

**Section 6: Abandonment and Discontinuation of On-Lot Water Supply Facilities**

- (A) Wells, springs, cisterns and water storage tanks, which are no longer in use shall be removed, filled or otherwise maintained in a condition such as to prevent access by unauthorized persons or animals, to prevent accidental injury, and to effectively prevent pollution of groundwater.
- (B) Abandoned wells shall be filled with pre-washed screenings or other approved materials permitted by Upper Bern Township and the Commonwealth of Pennsylvania. The abandoned well shall be capped and sealed.
- (C) Hand dug wells shall be pushed shut or closed with uncontaminated materials, topped with eight (8) inches of clay, finished with six (6) inches of top soil and stabilized.
- (D) Wells and springs shall not be utilized for the disposal of liquid, gaseous and/or solid waste.
- (E) All on-lot water supply facilities shall be properly abandoned and discontinued in accordance with the provisions of Upper Bern Township and Commonwealth of Pennsylvania.
- (F) A report shall be issued to Upper Bern Township by the landowner of the well that has been abandoned or discontinued from service. The report shall include a detailed description of location, construction, geologic features, and method of sealing the well.

## **Section 7: Administration, Enforcement, Penalties and Appeals**

- (A) All administrative and enforcement provisions established by this On-Lot Water Supply Ordinance shall be regulated and enforced by Upper Bern Township. In addition to the Sewage Enforcement Officer, the Board of Supervisors may authorize certain persons or consultants to enforce the provisions of this On-Lot Water Supply Ordinance as well as any other pertinent laws of Upper Bern Township and the Commonwealth of Pennsylvania.
- (B) All permits, records, reports, files and other written material relating to the installation, operation and maintenance of on-lot water supply facilities shall become the property of, and be maintained by Upper Bern Township. Existing and future records shall be available for public inspection during regular business hours at the municipal office of Upper Bern Township. All records pertaining to sewage permits, building permits, well permits, occupancy permits and all other aspects of this On-Lot Water Supply Ordinance shall be made available, upon request, for inspection by representatives of the Pennsylvania Department of Environmental Protection.
- (C) All costs and expenses associated with the design, construction, permitting, inspection of any connection, modification, rehabilitation and repair to on-lot water supply facilities shall be borne by the landowner of the occupied building or use to be served by the on-lot water supply facility. Said landowner shall indemnify and hold Upper Bern Township harmless of any loss or damage that may be directly or indirectly a result of any connection, operation and/or malfunction of a permitted on-lot water supply facility.
- (D) Application for a well permit shall be made upon a form supplied by Upper Bern Township, which shall be submitted to the Upper Bern Township Sewage Enforcement Officer for review and consideration. The required permit fee shall be in the amount established by Resolution of Upper Bern Township.
- (E) Any person who shall violate any provisions of this Ordinance, as the same may now be or may hereafter be amended, or any order issued by Upper Bern Township pursuant to the provisions of this Ordinance, including violations for any alterations, disturbances, modifications, permits, repairs, connections, discharges, and/or permits, shall upon summary conviction before an issuing authority having jurisdiction thereof, be punished by a fine within the range established by the Commonwealth of Pennsylvania for summary offenses in effect of the date of the violation. Each separate building, permitted use, dwelling unit, or point of discharge in respect to which a violation occurs shall constitute a separate offence and subject to the appropriate penalties. Each day in which such violation of such provisions shall continue shall be deemed a separate offense and subject to the appropriate penalties.
- (F) Appeals from any interpretation, decision or enforcement action issued by Upper Bern Township or any of its authorized agents relating to the provisions of this Ordinance shall be made in writing to Upper Bern Township within thirty (30) days from the date of the interpretation, decision or enforcement action. All appeals shall be conducted in accordance with the laws of the Commonwealth of Pennsylvania.
- (G) Upper Bern Township reserves the right to adopt, from time to time, additional rules and regulations as it shall deem necessary relating to the municipal water supply or on-lot water supply, which additional rules and regulations, to the extent appropriate, and shall be construed as part of this On-Lot Water Supply Ordinance.

## **Section 8: Severability and Repealer**

- (A) All other provisions or Ordinances adopted by Upper Bern Township are hereby ratified and confirmed.
- (B) Any provision of any Ordinance inconsistent with the provisions of this Ordinance is hereby repealed to the extent of the inconsistency.