SHOHOLA TOWNSHIP
PIKE COUNTY, PENNSYLVANIA

ORDINANCE NO. 59

AN ORDINANCE PROVIDING FOR THE SUPERVISION AND REGULATION OF WATER WELLS IN SHOHOLA TOWNSHIP; ESTABLISHING RULES AND REGULATIONS GOVERNING CONSTRUCTION AND OPERATION OF WATER SUPPLY WELLS; PROVIDING FOR WELL CERTIFICATION; PROVIDING FOR MANDATORY CONNECTION TO CENTRAL WATER SYSTEMS; AND PROVIDING PENALTIES FOR VIOLATIONS OF THIS ORDINANCE.

BE IT ENACTED AND ORDAINED by the Township of Shohola, Pike County, Pennsylvania, under the authority granted by the Pennsylvania Second Class Township Code, Act of May 1, 1933 (P.L. 103, No. 69), Reenacted and amended July 10, 1947 (P.L. 1481, No 567), as amended; and it is hereby enacted and ordained by the authority of the same as follows:

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SECTION 100 -- SHORT TITLE
This Ordinance shall be known and may be cited as THE SHOHOLA TOWNSHIP WATER WELL ORDINANCE.

SECTION 200 -- PURPOSE
The purpose of this ordinance is:

A. To promote and protect the general health and welfare of the residents of Shohola Township by conserving the supply and preventing the pollution and contamination of groundwater;
B. To protect the quantity, quality, suitability, and sustainability of water supplies and;
C. To secure and maintain the minimum required isolation distances between water supplies and sewage disposal systems or other sources of pollution and contamination.

SECTION 300 -- APPLICABILITY
This ordinance shall apply to the construction and/or installation of all water wells to the extent that the same are not regulated by the Pennsylvania Department of Environmental Protection.

SECTION 400 – MANDATORY WATER SUPPLY CONNECTIONS
The intent of this §400 is to limit the number of wells in areas where a central water system is available and can provide an adequate supply; and to maintain the economic viability of the central system. All water users located within the service area of a central water supply system shall be required to make connection to such system and pay
applicable tapping and connection fees and service rates to the system owner. The construction of individual wells within the service area of the central system shall not be permitted except by waiver in accord with §900 where the Applicant provides documentation that the central system cannot provide an adequate and safe supply.

SECTION 500 – PERMITS

501 Permit Required
The installation of a well, casing, or well pit shall require a permit.

502 Application Form; Enforcement Officer
Application for a well permit shall be made upon a form supplied by the Township and shall be submitted to the duly appointed Enforcement Officer.

503 Application Information; Site Plan

A. Application Information - The application shall be completed in full and be signed and dated. The Township shall require any such additional information as deemed necessary to document compliance with the provisions of this Ordinance.

B. Site Plan - The Applicant shall provide a site plan of the premises drawn to scale showing:

1. The boundary lines of the premises upon which the well is proposed and the name of the adjoining street.
2. The proposed location of the well.
3. The location or proposed location of all buildings.
4. The location or proposed location of septic tanks and drain fields.
5. The names of adjoining property owners.
6. Such other information as may be required to document compliance with the isolation distance and other requirements of this Ordinance.

C. Survey - In cases where the well is proposed at or near the minimum isolation distance requirements of this Ordinance, the Township may require a survey made by a Professional Land Surveyor.

504 Fees
Each application for a well permit shall be accompanied by a fee payable to Shohola Township in accord with a schedule of fees established from time to time by resolution of the Board of Supervisors.

505 Incomplete or Inadequate Information
When the Enforcement Officer finds an application incomplete, or the enforcement officer is unable to verify the information submitted, the application shall be rejected.

506 Inspection; Permit Issuance, Denial and Revocation

A. Site Inspection - Upon receipt of a complete application, the Enforcement Officer shall perform an inspection of the premises on which the well is to be constructed to determine if the location conforms to the standards of this ordinance.

B. Well and Lot Line Locations - The location of the well and all lot lines shall be clearly marked on the premises.
C. **Action** - Upon completion of the inspection, the Enforcement Officer shall either:

1. Issue a permit to the Applicant indicating the approved location for the well and special instructions for construction, if any; or

2. Deny the issuance of the permit, and, in such event, provide the Applicant with written reasons for such denial.

D. **Time for Action** - Permits shall be issued or denied within thirty (30) days after receiving a completed application for a permit.

E. **Permit Effective Dates** - All permits shall be in effect as of the date of issuance and shall remain in effect for a period of three (3) years. If construction has not been completed within the three-year period the permit shall expire, all fees paid shall be forfeited, and a new permit shall be required.

F. **Revocation** - A permit shall be revoked by the Enforcement Officer for any one (1) or more of the following reasons, which shall be incorporated into a written revocation:

1. When any change has occurred in the physical conditions of any lands which will materially affect the operation of the well.

2. When information material to the issuance of the permit has been falsified.

3. When the Permittee has violated any of the provisions of this ordinance.

507 Final Inspection; Certificate of Operation

A. **Inspection** - Upon the completion of construction, or at such other time as the Enforcement Officer may deem appropriate, the Enforcement Officer shall perform a final inspection of the well to determine compliance with the permit issued.

B. **Action** - Upon completion of the said inspection, the Enforcement Officer shall:

1. Issue a certificate of operation upon the original permit, or

2. Deny such approval due to non-compliance with the permit issued, and, in such event, provide the Applicant with written reasons for such denial.

C. **Information Required** - As a condition precedent to the issuance of the certificate of operation, the Applicant shall provide the well completion report as required by this ordinance, including, but not limited to, the number of gallons of water per minute produced by the well, the depth, size and type of casing, and water quality test reports.

D. **Non-Guarantee** - The issuance of an operating permit by the Township does not in any way constitute a guarantee to the applicant that the subject well will produce any quantity of water or that the subject well is pure and fit for consumption either at the time of the issuance of the permit or at any time in the future.

508 Appeal

Upon denial of a permit or certificate of operation, or the revocation of a permit, the Applicant may request in writing a hearing before the Board designated by the Board of Supervisors within fourteen (14) days of the Applicant’s receipt of the denial or revocation. The designated Board shall conduct a hearing within sixty (60) days of receipt of such
request. Hearings and any subsequent appeal shall be pursuant to the Act of December 2, 1968, P.L. 1133, No. 353, as amended, known as the Local Agency Law.

509 Reporting
The Applicant shall, upon completion of the well, provide to the Township a copy of the Well Completion Report submitted to the Pennsylvania Department of Conservation and Natural Resources and the results of the testing required in §700.

SECTION 600 – WATER WELL LOCATION AND CONSTRUCTION

601 Adjoining Lots
When proposing a location for a water well the Applicant shall take into consideration the need to site a water well and/or an on-lot sewage disposal system on neighboring properties. Unless a waiver is granted in accord with §900, no permit shall be issued for any well location which would preclude the development of an adjoining lot with a single-family dwelling. No such waiver shall be granted unless the Board of Supervisors finds that there is no other location possible for the construction of the well.

602 Aquifer Depth
The source of supply for any water well shall be drawn from a water bearing formation not less than forty (40) feet from the ground surface.

603 Isolation Distances
The following isolation distances shall be maintained from all water wells:

<table>
<thead>
<tr>
<th>POTENTIAL POLLUTION SOURCE</th>
<th>MINIMUM REQUIRED ISOLATION DISTANCE (feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal enclosures and manure piles</td>
<td>100</td>
</tr>
<tr>
<td>Any clear water (roof/basement) drain</td>
<td>10</td>
</tr>
<tr>
<td>Building foundations</td>
<td>10</td>
</tr>
<tr>
<td>Cemetery or grave site</td>
<td>50</td>
</tr>
<tr>
<td>Chemical preparation/storage area</td>
<td>300</td>
</tr>
<tr>
<td>Chemicals; above- or below-ground storage</td>
<td>100</td>
</tr>
<tr>
<td>Fertilizers preparation/storage area</td>
<td>300</td>
</tr>
<tr>
<td>Hazardous spray materials preparation/storage area</td>
<td>300</td>
</tr>
<tr>
<td>Lakes, ponds, streams</td>
<td>25</td>
</tr>
<tr>
<td>Landfill, existing, proposed, or abandoned</td>
<td>1,000</td>
</tr>
<tr>
<td>Property lines</td>
<td>10</td>
</tr>
<tr>
<td>Railroad tracks</td>
<td>50</td>
</tr>
<tr>
<td>Rainwater pits</td>
<td>25</td>
</tr>
<tr>
<td>Road right of way, private</td>
<td>10</td>
</tr>
<tr>
<td>Road right of way, public</td>
<td>25</td>
</tr>
<tr>
<td>Salt piles</td>
<td>300</td>
</tr>
<tr>
<td>Salvage yard</td>
<td>300</td>
</tr>
<tr>
<td>Septic tanks</td>
<td>50</td>
</tr>
<tr>
<td>Sewage disposal systems, subsurface</td>
<td>100</td>
</tr>
</tbody>
</table>
### Table: Potential Pollution Sources and Minimum Required Isolation Distances

<table>
<thead>
<tr>
<th>Potential Pollution Source</th>
<th>Minimum Required Isolation Distance (feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sewage seepage pits, privies, cesspools</td>
<td>100</td>
</tr>
<tr>
<td>Sewage sludge or septage disposal sites</td>
<td>300</td>
</tr>
<tr>
<td>Sewer lines</td>
<td>50</td>
</tr>
<tr>
<td>Silos, farm</td>
<td>100</td>
</tr>
<tr>
<td>Spray irrigation sites</td>
<td>300</td>
</tr>
<tr>
<td>Storm drains</td>
<td>25</td>
</tr>
<tr>
<td>Storm water retention/stabilization basins</td>
<td>25</td>
</tr>
<tr>
<td>Water well, properly decommissioned</td>
<td>10</td>
</tr>
<tr>
<td>Water well, existing</td>
<td>25</td>
</tr>
</tbody>
</table>

### 604 Construction Standards

The construction of all water wells in the Township shall conform to the following standards and such compliance shall be certified by the well driller in the well completion report. In cases where state or federal regulations are more stringent, such standards shall apply.

**A. Construction by Licensed Driller** - All water wells in the Township shall be constructed in accordance with PA Act 610 (Water Well Drillers License Act) by a well driller licensed by the Commonwealth of Pennsylvania.

**B. Disinfection Criteria** - The well owner shall disinfect a water well in accord with *Attachment A* prior to testing and prior to use. A statement that the well has been disinfected shall be submitted to the Township along with the Water Well Completion Report.

**C. Sanitary Seal** - A sanitary seal (well seal) shall be provided on the top of the water well casing.

**D. Casing**

1. **Casing Stickup**
   a. Permanent casing for all water wells shall project at least twelve (12) inches above a pump house floor or concrete apron, and at least twelve (12) inches above the final ground surface.
   b. Where a well house is constructed, the floor surface shall be at least six (6) inches above the final ground surface.

2. **Casing Length**
   a. All water wells shall be constructed in such a manner to be watertight to such depths as may be necessary to exclude pollution from surface runoff and from polluted aquifers above the aquifer serving as the source of supply.
   b. The minimum protective casing depth shall be forty (40) feet or fifteen (15) feet into bedrock, whichever is greater.
3. **Casing Material**

   a. Protective casing of wrought iron or steel shall have minimum weights and thickness as specified in AWWA’s most recent Standard for Deep Wells. Well casing material other than wrought iron or steel must be resistant to the corrosiveness of the water and to the stresses to which it will be subjected during installation, grouting and operation. Casing and grouting materials must be compatible.

   b. In general, the criteria established in AWWA Standard A-1 00-90 should be followed.

   c. Ferrous casings shall:

      1) be new pipe meeting ASTM or API specifications for water well construction.

      2) have additional thickness and weight if minimum thickness is not considered sufficient to ensure reasonable life expectancy of the well.

      3) be capable of withstanding forces to which it is subjected.

      4) be equipped with a drive shoe when driven.

      5) have full circumferential welds or threaded pipe joints.

   d. Nonferrous casing shall meet appropriate ANSI/ASTM or NSF standards for well casing applications as outlined in AWWA Standard A-100-90. Nonferrous casing materials shall not impart taste, odor or toxic substances to the well water. Nonferrous casing, if used, shall not be driven. The casing shall be placed a minimum of five (5) feet into the consolidated formation with a minimum annular opening of three (3) inches larger than the outside diameter of the casing so that grout can be placed in accordance with §604,E.

**E. Grout Requirements** - A statement that the well has been grouted in accord with this Section shall be submitted to the Township along with the Well Completion Report. All permanent water well casings shall be surrounded by a minimum of one and one-half (1.5) inches of grout to a minimum depth of at least five (5) feet below grade to effectively prevent contamination from ground surface sources. Grouting materials shall comply with the standards established by the American Water Works Association in the most current *AWWA Standard for Water Wells* or as otherwise approved by the Township.

**F. Well Pits**

1. Where well pits are used, such pits shall be designed to remain free of water at all times. The floor of the pit shall be a watertight reinforced concrete platform at least four (4) inches thick poured around the casing and shall be provided with a watertight seal. The floor of the pit shall extend at least two (2) feet from the center of the casing in all directions. In all cases, the pit shall be sized to allow adequate working space.

2. The pit shall have watertight reinforced concrete walls four (4) inches thick or equivalent which provide for an effective watertight seal against the floor. The top of the pit shall be a watertight reinforced monolithic concrete slab at least four (4) inches thick (or an approved equivalent) which shall be sealed with the wall to effectively prevent the entrance of water. The top of the pit shall not be more than six (6) inches below the ground surface. A durable watertight manhole shall be installed in the top of the pit centered over the casing and effectively sealed with the top to prevent the entrance of water, or an approved equivalent.

3. Pit installations shall not be used in areas subject to flooding by ground or surface water or where the ground water level rises to within one (1) foot of the bottom of the proposed pit.
4. Where pipes enter the pit, the annular opening between the pipes and the wall shall be effectively sealed by a watertight permanent seal.

5. The design of the well and well pit system shall make provision for:
   a. Access to disinfect the well
   b. A properly constructed casing vent.
   c. Facilities to measure water levels in the well.
   d. A cover at the upper terminal of the well that will prevent the entrance of contamination.
   e. A contamination-proof entrance connection for electrical cable.
   f. An inside diameter as great as that of the well casing, up to and including casing diameters of twelve (12) inches, to facilitate work and repair on the well, pump, or well screen.
   g. At least one (1) check valve within the well casing.

G. Pitless Well Installations

1. Pitless units shall:
   a. be shop-fabricated from the point of connection with the well casing to the unit cap or cover.
   b. be threaded or welded to the well casing.
   c. be of watertight construction throughout.
   d. be of materials and weight at least equivalent and compatible to the casing.
   e. have field connection to the lateral discharge from the pitless unit of threaded, flanged or mechanical joint connection.
   f. have the well casing terminate at least twelve (12) inches above final ground elevation.

2. The design of the pitless unit shall make provision for:
   a. Access to disinfect the well.
   b. A properly constructed casing vent.
   c. Facilities to measure water levels in the well.
   d. A cover at the upper terminal of the well that will prevent the entrance of contamination.
   e. A contamination-proof entrance connection for electrical cable.
   f. An inside diameter as great as that of the well casing, up to and including casing diameters of twelve (12) inches, to facilitate work and repair on the well, pump, or well screen.
g. At least one (1) check valve within the well casing.

SECTION 700 – YIELD AND QUALITY

A. Certification - Certification as to capacity and quality by a licensed well driller shall be required prior to issuance of a certificate of operation of any water well in accord with §507.

B. Yield Test - The well yield shall be determined by a pumping test of not less than one (1) four (4) hour duration conducted at a rate of not less than one hundred fifty (150) percent of the intended long-term withdrawal from the well. The 1-hour test shall be conducted at a constant pumping rate that should not deviate greater than five (5) percent, plus or minus, during the test.

C. Report - Upon completion of the well the Applicant shall provide the Township with a copy of the report submitted to the Pennsylvania Department of Environmental Protection and sufficient data and documentation to verify compliance with this §700.

SECTION 800 – ABANDONED WATER WELLS

A. Filling and Sealing - An abandoned well shall be filled and sealed in accord with Attachment B.

B. Act 160 - Well owners shall comply with the well abandonment requirements of the regulations implementing PA Act 160.

SECTION 900 – WAIVERS/MODIFICATIONS

901 Intent
The provisions of this Ordinance are intended as a minimum standard for the protection of the public health, safety, and welfare. If the literal compliance with any mandatory provision of these regulations is shown by the Applicant, to the satisfaction of the Board of Supervisors, to be unreasonable or to cause undue hardship as it applies to a particular property, or if the Applicant shows that an alternative proposal will allow for equal or better results, the Township may grant a waiver/modification from such mandatory provision, so that substantial justice may be done and the public interest secured while permitting the reasonable utilization of the property. However, the granting of a waiver/modification shall not have the effect of making null and void the intent and purpose of this Ordinance.

902 Conditions
In granting waivers/modifications the Board of Supervisors may impose such conditions as will, in its judgement, secure substantially the objectives of the standards and requirements of this Ordinance.

903 Procedure
All requests for waivers/modifications shall be in writing, shall accompany and be a part of the development application, and shall include:

A. The specific sections of this Ordinance in question.

B. Provisions for the minimum waiver/modification necessary as an alternate to the requirements.

C. Justification for the waiver/modification including the full grounds and facts of unreasonableness or hardship.

904 Action
If the Board of Supervisors denies the request, the applicant shall be notified, in writing, of the reasons for denial. If the Board of Supervisors grants the request, the water well permit shall include a note which identifies the waiver/modification as granted.
SECTION 1000 – DEFINITIONS
For purposes of this Ordinance, the following terms, phrases, words, and their derivations shall have the meaning given herein unless the context clearly indicates otherwise:


Aquifer: A geological formation that contains and transmits water.

Annular Opening: The space between two (2) cylindrical objects, one of which surrounds the other, such as the space between a borehole and a casing pipe.


Board of Supervisors: The Board of Supervisors of Shohola Township, Pike County, Pennsylvania.

Casing: An impervious durable pipe placed in a well to prevent the walls from caving and to seal off surface drainage or undesirable water, gas or other fluids and prevent their entering the well.

Central Water Supply: Any water supply system serving fifteen (15) or more connections which is operated by a community association or homeowners association or which is operated by any entity regulated by the Pennsylvania Public Utility Commission.

Grout: A permanent water tight joint or connection made by filling with concrete, neat cement, or other approved impervious material between the casing and the undisturbed formation surrounding the well or between two (2) strings of casing.

NSF: National Sanitation Foundation.

Pitless Adaptor: A device or assembly of parts which will permit water to pass through the wall of the well casing or extension thereof, and which provides access to the well and to the parts of the water system within the well in a manner to prevent entrance of pollution into the well and the water produced.

Township: Shohola Township, Pike County, Pennsylvania.

Water Well: Any excavation that is drilled, cored, bored, washed, driven, dug, jetted, or otherwise constructed when the intended use of such excavation is for the location, acquisition or artificial recharge of groundwater. This includes but is not limited to test wells, test borings, and monitoring wells, in addition to wells to be utilized as private, shared, agricultural, or irrigation water supplies.

Well Seal: An approved devise or method used to protect a well casing or water system from the entrance of any external pollutant at the point of entrance into the casing of a pipe, electric conduit or water level measuring device.

SECTION 1100 – PENALTIES FOR VIOLATIONS
Failure to comply with any provision of this Ordinance, and/or failure to comply with an order to abate a nuisance, shall be violations of this Ordinance. Any person who has violated or permitted the violation of any of the provisions of this Ordinance shall, upon being found liable therefore in a civil enforcement proceeding, pay a fine as prescribed by the Magisterial District Judge plus all court costs, including reasonable attorney fees, incurred by the Shohola Township as a result thereof. Each day that a violation continues shall constitute a separate violation. All fines, costs
and reasonable attorney fees collected for the violation of this Ordinance shall be paid over to Shohola Township. If the defendant neither pays nor timely appeals the judgement, the Shohola Township may enforce the judgement pursuant to the rules of civil procedure.

SECTION 1200 – SEVERABILITY
Should any section, subsection, clause, provision or other portion of this Ordinance be declared invalid by any court of competent jurisdiction, such decision shall not affect the validity of the remainder of this Ordinance; the Board of Supervisors having adopted this Ordinance as if such invalid portions had not been included therein.

SECTION 1300 – EFFECTIVE DATE
This Ordinance shall become effective five (5) days after the adoption thereof.

SECTION 1400 – ADOPTION
Enacted and Ordained into law by the Board of Supervisors of Shohola Township, Pike County, Pennsylvania, this 9th day of March of 2006.

___________________________________
Chairman

___________________________________
Vice-Chairman

___________________________________
Supervisor

ATTEST:

___________________________________
Secretary
ATTACHMENT A
ATTACHMENT B