

**TOWNSHIP OF UPPER BURRELL  
WESTMORELAND COUNTY, PENNSYLVANIA  
ORDINANCE NO. \_\_\_\_\_**

**AN ORDINANCE OF THE TOWNSHIP OF UPPER BURRELL,  
WESTMORELAND COUNTY, UPPER BURRELL, PENNSYLVANIA  
AMENDING CODE CHAPTER 350 ZONING, AND SETTING  
STANDARDS FOR THE OPERATION AND LOCATION OF INJECTION  
WELLS WITHIN THE TOWNSHIP AS A CONDITIONAL USE IN THE  
INDUSTRIAL ZONE ONLY.**

**WHEREAS**, the TOWNSHIP OF UPPER BURRELL wishes to update Chapter 350, Zoning, to provide zoning district locations, standards, application procedures and definitions for Injection Wells, and

**WHEREAS**, the TOWNSHIP OF UPPER BURRELL wishes to impose standards necessary to provide for the public health, safety, and welfare for this land use.

- (1) The Township recognizes that the Pennsylvania Supreme Court has more fully developed the parameters of Article 1, Section 27 of the Pennsylvania State Constitution, and has created a duty upon the Township to act as a Trustee of the environment and natural resources present in Upper Burrell Township, Westmoreland County;
- (2) That the wastewater from unconventional gas wells often contains PFAS and PFOA type chemicals which are permanent in nature and cannot be remediated, see *Fracking with Forever Chemicals* by *Physicians for Social Responsibility*, *Dusty Horwitt* incorporated here by reference;
- (3) That wastewater from unconventional gas wells is often radioactive, which is so long lasting that it is effectively permanent.

**NOW THEREFORE, BE IT HEREBY ORDAINED AND ENACTED,** by the  
TOWNSHIP OF UPPER BURRELL, the Zoning Ordinance is amended as follows:

**SECTION I.**

The following definitions, shall be added, as follows:

**INJECTION WELL** - An Injection Well is a device which helps in placing fluids underground in porous rock formations like limestone and sandstone, or below in the shallow soil layer. For the purposes of this definition, an Injection Well shall include all U.S. Environmental Protection Agency (EPA) Injection Well classifications (Classes I through VI) under its Underground Injection Control (UIC) program.

This program includes the Class II Oil and Gas Related Injection Well as defined by the EPA's Underground Injection Control program. The fluids could be wastewater, brine, water, or water mixed with chemicals.

Disposal of fluids is included. An Injection Well is not intended to extract gas like Marcellus Shale Wells.

**SECTION II.**

**Injection Well** shall be a Conditional Use in the Industrial Zone Only.

**SECTION III.**

Injection Wells, subject to:

- (1) The minimum site required shall be 25 acres.
- (2) The site shall have frontage on and direct vehicular access to an arterial or collector street.
- (3) The site shall not be located within 2,640 feet of any protected use (residential dwelling, church, commercial building, public building, hospital, school, or public park) measured from any property boundary of the site in a straight line along a public street right-of-way to the nearest wall of a residential dwelling.
- (4) All activities shall comply with the performance standards specified in Article XVI, Supplemental Regulations, where applicable. Injection Wells setbacks will be regulated in accordance with 350-63 unless otherwise stated herein.
- (5) Adjacent public streets shall be adequate to accommodate traffic volumes and weight limits associated with truck traffic to and from the site.

- (6) The storage, handling, transportation and disposal of hazardous or potentially hazardous materials shall be in accordance with all applicable permits and requirements of Upper Burrell Township (TOWNSHIP), the Pennsylvania Department of Environmental Protection (PA DEP) and the EPA.
- (7) No permanent component of the injection well site shall be closer than 500 feet from the property line in which the well is located.
- (8) Written permission from the Industrial Zone property owner(s) with legal or equitable title to the property where the proposed development or facility is located or demonstrable documentation of the applicant's authority to occupy the property.
- (9) The GPS location and 911 address of the Injection Well.
- (10) Copies of any and all applications and permits required from all applicable local, county, state, and federal agencies for development of the Injection Well.
- (11) A site plan prepared by an engineer or surveyor licensed in PENNSYLVANIA shall be provided to establish compliance with all applicable regulations. All temporary and permanent structures, equipment, machinery, and sediment and erosion controls shall be identified. All protected structures within 1,500 feet of the property lines shall be identified. All roads related to the development or facility must also be shown. A sufficient number of copies of the site plan shall be provided for review and comment by all TOWNSHIP emergency service organizations.
- (12) Scheduling: The applicant shall provide a schedule with the application indicating the anticipated beginning and ending dates for all proposed activities.
- (13) A Risk Assessment Report: A report prepared by a professional expert in that field, that identifies the potential hazards stemming from the Injection Well at the proposed site and determines the quantitative and qualitative risk associated with the identified hazards. The quantitative risk assessment shall include calculations of two components of risk (R), the magnitude of the potential loss (L), and the probability (P) that the loss will occur. The report shall include a public health risk assessment including potential impacts to water supply. This assessment is the process of characterizing the nature and likelihood of harmful effects to individuals or populations within one linear mile from the well site. The report shall also include an assessment of potential seismic impacts created by the operations of the Injection Well. If it is determined that public health is affected, the application for the Injection Well will be denied.
- (14) A Traffic Impact Study: The study shall include:
  - a. A description of plans for the transportation and delivery of equipment, machinery, water, chemicals, products, materials and other items to be utilized in the siting, drilling, stimulating, completion, alteration and

operation of the development or facility. Such description shall include a map showing the planned vehicular access roads and the transportation infrastructure being proposed and the type, weight, number of trucks and delivery schedule necessary to support each phase of the development.

- b. An inventory, analysis and evaluation of existing road conditions on TOWNSHIP roads along the proposed transportation route identified by the application, including photography, video and core boring as determined to be necessary by the TOWNSHIP engineer(s).

Traffic Impact Study Guidelines: The Traffic Impact Study shall be performed by a qualified Pennsylvania professional traffic engineer. The following is an outline of issues to be addressed by the Study.

1. Description of the proposed project in terms of land use type and magnitude.
2. An inventory of existing conditions in the site environs including:
  - A. Roadway network and traffic control;
  - B. Existing traffic volumes in terms of peak hours and Average Daily Traffic (ADT); and
  - C. Planned improvements to roadways by others.
3. An analysis of existing traffic conditions including:
  - A. Intersection levels of service;
  - B. Roadway levels of service (where appropriate); and
  - C. Other measures of roadway adequacy; i.e., lane widths; traffic signal warrants; vehicle delay studies, etc.
4. Projected site generated traffic volumes in terms of:
  - A. Peak hours and ADT;
  - B. Approach/departure distribution including method of determination;
  - C. Site traffic volumes on roadways; and
  - D. Comparison of existing zoning to proposed site generation.
5. An analysis of future traffic conditions including:
  - A. Future design year (development fully completed) combined volumes (site traffic plus future roadway traffic);
  - B. Intersection levels of service;
  - C. Roadway levels of service (where appropriate); and
  - D. Other measures of roadway adequacy; i.e., lane widths, traffic signals warrants, vehicle delay studies, et cetera.
6. A description of the recommended access plan and off-site improvements:
  - A. Schematic plan of access and on-site circulation; and
  - B. General description of off-site improvements required. The aforementioned guidelines shall be used to determine a scope of work. The specific roadways and intersections to be studied shall be identified along with the planned data collection and analysis procedures.

If the TOWNSHIP'S traffic concerns cannot be addressed, the application for the Injection Well will be denied.

- (15) An Environmental Impacts Analysis: To the extent that the same is not otherwise included or provided within copies of applications for permits from the Commonwealth of Pennsylvania or other governmental units and herewith submitted or where no such permit is required, the applicant shall provide an environmental impact analysis. The environmental impact analysis shall describe, identify and analyze all environmental aspects of the site and of neighboring properties that may be affected by the proposed operations or the ultimate use proposed to be conducted on the site. The limits of the impact area to be studied shall be reviewed and approved by the TOWNSHIP Board of Supervisors. The environmental impact study shall include, but not be limited to, all critical impact areas on or off-site that may be impacted by the proposed or ultimate use of the facility, including the impact on the critical areas, the protective measures and procedures to protect the critical areas from damage, and the actions to be taken to minimize environmental damage to the critical areas on the site and surrounding areas during and after completion of the operation. Critical impact areas include, but are not limited to, stream corridors; streams; wetlands; slopes in excess of twenty-five (25%) percent; sites where there is a history of adverse subsurface conditions or where available soils information or other geotechnical data, including data from the Bureau of Mines indicates the potential for landslides, subsidence or other subsurface hazards; Class I agricultural lands; highly acidic or erodible soils; carbonate or highly fractured bedrock; aquifer recharge and discharge areas; areas of unique or protected vegetation, wildlife habitat, and areas of historic, cultural and/or archaeological significance. If it is determined that the environment is adversely affected, the application for the Injection Well will be denied.
- (16) An Air Quality Study: To the extent that the same is not otherwise included or provided within copies of applications for permits from the Commonwealth of Pennsylvania or other governmental units and herewith submitted or where no such permit is required, the applicant shall provide an Air Quality Study. The Study shall be prepared by experts acceptable to the TOWNSHIP and submitted with the application and shall include an analysis of the existing and predicted air quality levels, including smoke, odors, fumes, dust, and pollutants at the site. This report shall contain the sources of the information, the data and background tests that were conducted and the conclusions and recommendations of the professionals preparing the report that would be required to maintain the air quality at a level equal to or better than the existing background level prior to the proposed use; or the applicant/developer shall submit a statement prepared by an engineer warranting that the nature of the use will produce no impact on air quality. If it is determined that the air quality is adversely affected, the application for the Injection Well will be denied.

- (17) A Geological Study: To the extent that the same is not otherwise included or provided within copies of applications for permits from the Commonwealth of Pennsylvania or other governmental units and herewith submitted or where no such permit is required, the applicant shall provide a Geological Study. The Study shall be prepared by experts acceptable to the TOWNSHIP and submitted with the application and shall include an analysis of the existing geological formations in and surrounding the proposed site. This report shall contain the sources of the information, the data and background tests that were conducted and the conclusions and recommendations of the professionals preparing the report regarding the potential geological impact of the proposed use.
- (18) A Hydrological Study: To the extent that the same is not otherwise included or provided within copies of applications for permits from the Commonwealth of Pennsylvania or other governmental units, and herewith submitted or where no such permit is required, the applicant shall provide a hydrological study. The study shall be prepared by a hydrogeologist acceptable to the TOWNSHIP. The study shall evaluate the existing surface and subsurface hydrogeology, based upon historical data and on-site investigation and studies. The study shall identify groundwater discharge and recharge areas that may be affected by the proposed use, map the groundwater table and analyze and delineate the effects of the proposed use on the hydrology, including surface and ground water quantity and quality. Acceptance of the study is subject to final approval by the TOWNSHIP Board of Supervisors. If the study shows an alteration to the groundwater, the application shall be denied.
- (19) Pre-Development and Post-Development Soil Testing: Prior to beginning any injection well development activities, the operator shall be responsible for testing soil conditions within 300 feet of each Injection Well site. The purpose of testing is to determine the baseline soil conditions surrounding the proposed Injection Well site and address resultant changes that may occur or have an impact on the soils of the site and surrounding area.
- a. Pre-drilling testing results shall be submitted as part of the Conditional Use application.
  - b. Post-development testing shall be completed twelve (12) months after operations have begun.
  - c. The results shall be submitted to the TOWNSHIP and PA DEP within ten (10) days of their receipt.
  - d. The operator shall be responsible for all costs associated with testing and testing shall be done by an independent state-certified testing laboratory agreed upon by the TOWNSHIP.
- (20) Insurance: Applicant shall furnish to the TOWNSHIP a Certificate of Liability Insurance naming the TOWNSHIP as an additional insured with respect to operations conducted within the TOWNSHIP, showing proof of liability insurance covering commercial, personal injury, and general liability in amounts not less than \$25,000,000 per occurrence. The applicant shall fully defend, protect, indemnify, and hold harmless the TOWNSHIP, its departments, agents, officers, employees,

or volunteers from and against such and every claim, except for those claims relating to any negligent, willful or intentional acts of the TOWNSHIP, its department, agents, officers, employees, or volunteers. The insurance coverage may consist of a combination of self-insurance, excess coverage, and umbrella coverage.

- (21) Conditional Use approval is non-transferable without consent from TOWNSHIP Board of Supervisors and shall automatically terminate, unless extended, if operations have not commenced within one (1) year from the date of issuance of the approval. The Conditional Use approval may be extended by the TOWNSHIP Board of Supervisors upon written request by the operator, after notice and hearing. The operator shall provide proof that the requested Conditional Use meets the applicable criteria contained in this Section.
- (22) The applicant shall comply with Zoning Ordinance, Code Article II, Chapter 320, pertaining to overweight vehicles, where applicable.
- (23) Hours of Operation: Except for emergency and governmental compliance activity, hours of operation shall be limited to Monday through Friday, 9:00 a.m. to 5:00 p.m. All deliveries and pickup incidental to the Injection Well development or facility shall occur during these defined hours of operation.
- (24) Noise: The TOWNSHIP recognizes and acknowledges that Injection Well operations are accompanied by inherent noise. However, the operator shall take steps as outlined in Township Code 350-107Q (Oil and Gas Well Operations) to minimize the noise resulting from the Injection Well.
- (25) School District Transportation: The applicant shall coordinate its Injection Well operations to accommodate and not interfere with the local school districts' bus schedules and all other school transportation services.
- (26) Lighting:
  - a. Lighting at an Injection Well and well pad shall, when practicable, be limited to security lighting.
  - b. All temporary outdoor lighting shall be shielded and/or reflected away from adjoining properties so that no direct beam of light, but only diffused or reflected light, enters adjoining properties.
  - c. No site lighting used for or associated with well site construction, drilling operations, or post-drilling production shall be positioned in a manner such that it shines directly on public roads, protected structures, or any property within 3,000 feet of the well site. Site lighting must be directed downward and shielded to prevent glare on public roads and adjacent properties.
- (27) The property owner shall have his/her deed modified to show that an Injection Well is present on the property.

- (28) Wells shallower than 1,500 feet shall not be permitted. All well heads shall not be less than 4 inches in diameter.
- (29) Copies of all periodic EPA/PA DEP well and site inspections shall be provided to the TOWNSHIP. The TOWNSHIP reserves the right to inspect the Injection Well and site at any time to determine compliance.
- (30) The applicant shall comply with Zoning Ordinance, Code Article II, Chapter 350-107, where applicable.
- (31) Only the use of existing vertical wells shall be permitted for use as Injection Wells. Only new casings and/or liners in accordance with EPA safety standards shall be utilized for the existing wells.
- (32) Each truck manifest shall be submitted to the TOWNSHIP.
- (33) Prohibited substances:
  - a. No water, solids, or substances of any kind or description, shall be permitted to be disposed of in any Injection Well in the TOWNSHIP if:
    - i. it tests positive for radioactivity of any kind;
    - ii. it contains chemicals commonly referred to as PFAS or PFOA; and
    - iii. it contains benzene toluene, ethylbenzene, xylenes, or formaldehyde.
  - b. No water, solids, or substances of any kind or description, shall be permitted to be stored on or transferred to or from any Injection Well site in the TOWNSHIP if:
    - i. it tests positive for radioactivity of any kind;
    - ii. it contains chemicals commonly referred to as PFAS or PFOA; and
    - iii. it contains benzene toluene, ethylbenzene, xylenes, or formaldehyde.
- (34) Testing of wastewater (at applicant's expense):
  - a. All water, solids, or substances of any kind or description, brought to the Injection Well site for disposal or transfer, must be tested for radioactivity, PFAS, PFOA, toluene, ethylbenzene, xylenes, and formaldehyde, by a neutral laboratory, approved by the TOWNSHIP, and not affiliated with any person or entity associated with the producer of the waste, the carrier of the waste, or the owner or operator of the Injection Well.
  - b. In the event that any water, solids, or substances of any kind or description test positive for any of the prohibited substances listed in D-2, then the material must be removed from the site and the TOWNSHIP immediately, and no further treatment or handling of the material is permitted within the TOWNSHIP.



- (35) Pre-construction testing (at applicant's expense):
- a. Prior to the beginning of any construction on any Injection Well or well pad, the applicant must, at the applicant's expense, conduct soil and water sampling in the area in a one (1) mile radius from the edge of the proposed well pad.
  - b. The company or individuals conducting the sampling ("Testing Company") shall be approved by the TOWNSHIP, and shall be deemed in any further proceeding to have been competent to have conducted the testing.
  - c. The Testing Company shall obtain sufficient water and soil samples, and test such samples for all of the substances contained in Paragraph D-2 above, as well as any other substance that the TOWNSHIP or the Testing Company, within their sole discretion, may be associated with the Injection Well.
  - d. After the conclusion of the sampling and testing, the TOWNSHIP shall submit those results to the applicant for the applicant's review. The applicant may accept the results of the testing as accurate, and if the applicant does so, the results shall be conclusive proof of the condition of the site and the environment within one (1) mile of the well pad, in all future proceedings.
  - e. If the applicant disagrees with the results of the sampling and testing, the applicant may, at its sole expense, choose a different Testing Company, to sample and test soil and water within a one (1) mile radius of the edge of the proposed well pad. If the results are different from the TOWNSHIP'S results, the presence or absence of any substance shall be litigated by a court of competent jurisdiction.
- (36) Post-Construction Testing (at applicant's expense):  
After construction of the well pad, testing of the well site as required under Pre-Construction Testing in the previous section shall be conducted on a yearly basis to determine the presence of contamination.
- (37) Insurance and Bonding:
- a. The applicant, prior to the start of any construction on the well pad, shall obtain a policy of liability insurance in an amount not less than twenty-five million dollars (\$25,000,000.00), naming the TOWNSHIP as an additional insured. This policy of insurance shall cover any accidents, spills, migrations of chemicals, fluids, substances of any kind, and any and all other occurrences that arise out of the construction, operation, and activities around and associated with the Injection well, including trucking accidents, and trucking spills, that cause damage to any person, entity, or cause damage to the environment, including the release of any chemicals, or substances of any kind, that were tested for under Paragraph D-4 of this document. The insurance shall cover the complete clean-up and remediation of the site, and any area surrounding and in excess of the one (1) mile radius that was tested, to the conditions that existed prior to the sampling and testing under Paragraph D-4. This policy of insurance must be obtained and

be in force prior until the injection well is plugged, and until the entire site is remediated to the condition that existed prior to the soil sampling and testing.

- b. The applicant, prior to the start of any construction on the well pad, shall obtain a performance bond in an amount not less than twenty-five million dollars (\$25,000,000.00), naming the TOWNSHIP as Obligee. This bond shall provide for the plugging of the well and for the complete restoration of the site, including the remediation any accidents, spills, migrations of chemicals, fluids, substances of any kind, and any and all other occurrences that arise out of the construction, operation, and activities around and associated with the Injection Well, including trucking accidents, and trucking spills, impact, or cause damage to the environment, including the release of any chemicals, or substances of any kind, that were tested for under Paragraph D-4 of this document. The performance bond shall cover the complete clean-up and remediation of the site, and any area surrounding and in excess of the one (1) mile radius that was tested, back to the conditions that existed prior to the sampling and testing under Paragraph D-4. This performance bond shall be in addition to, and shall supplement the insurance policy required under this Paragraph D(5)(a).

(38) Fines and Penalties.

Fines and penalties for violations of this Ordinance shall be in accordance with the Upper Burrell Township Code, Chapter 350, Zoning, Article XXI Administration and Enforcement. Also, violations of this Ordinance shall be in accordance with subparagraph 37 of Section III, where applicable.

(39) Fees: The well developer (applicant) shall be responsible for all TOWNSHIP costs involved with the review and approval of the Injection Well, including inspection, testing, and all other associated costs.

(40) Security fencing shall be required as set forth in Code 350-107Q and this section:

- a. Security fencing shall not be required at Injection Well sites during the initial drilling or redrilling operations, as long as manned twenty-four-hour on-site supervision and security are provided.
- b. Upon completion of the Injection Well processes, security fencing consisting of a permanent chain-link fence shall be promptly installed at the Injection Well site to secure all facilities, and other associated equipment and structures on the Injection Well site. All security fencing shall be eight (8) feet in height including one (1) foot of three-strand barbed wire at the top of the fence. A lockable eight (8) feet high chain link security gate shall be provided where the site access road meets the public road right-of-way.
- c. The TOWNSHIP First Responders shall be given means to access Injection Well sites in case of an emergency. Applicant must provide Westmoreland County 911 Communications Center necessary information to access the site in case of an emergency.

- d. Warning signs shall be placed on the fencing surrounding the Injection Well site providing notice of the potential dangers and the contact information in case of an Emergency. During injection operations, clearly visible warning signage must be posted on the well pad site.

#### SECTION IV.

The provisions of this Ordinance are severable. If any clause, sentence, part or provision thereof shall be held illegal, invalid or unconstitutional by any court of competent jurisdiction, such decisions of the court shall not impair the validity of any of the remaining sections, clauses, sentences, part or provisions of the Ordinance. It is hereby declared the intent of the Board of Supervisors of UPPER BURRELL TOWNSHIP that this Ordinance would have been enacted if such illegal, invalid or unconstitutional section, clause, sentence, part or provision had not been included herein.

ORDAINED AND ENACTED by the Board of Supervisors of UPPER BURRELL TOWNSHIP this \_\_\_\_\_, day of \_\_\_\_\_ 2025.

BOARD OF SUPERVISORS OF UPPER BURRELL TOWNSHIP

By: \_\_\_\_\_  
Chairman

\_\_\_\_\_  
Supervisor

\_\_\_\_\_  
Supervisor

ATTEST:

\_\_\_\_\_  
Secretary