

**ORDINANCE NO. 118 OF 2026**

**BUFFALO TOWNSHIP  
WASHINGTON COUNTY, PENNSYLVANIA**

**AN ORDINANCE OF BUFFALO TOWNSHIP, WASHINGTON COUNTY. COMMONWEALTH OF PENNSYLVANIA, AMENDING THE 2001 BUFFALO TOWNSHIP ZONING ORDINANCE, TO PROVIDE DEFINITIONS AND STANDARDS RELATED TO INJECTION WELLS, AND ADD REGULATIONS AS TO THE REQUIREMENTS OF DIFFERENT ZONING AREAS.**

**WHEREAS**, the Board of Supervisors of Buffalo Township, Washington County, Pennsylvania, have previously enacted the Buffalo Township Zoning Ordinance; and

**Whereas**, Buffalo Township seeks to promote the general health, safety and welfare of the community by adopting and implementing an amendment to the Zoning Ordinance providing for regulations and definitions relating to Injection Wells; and

**NOW THEREFORE**, IT IS HEREBY ENACTED AND ORDAINED by the Board of Supervisors of Buffalo Township, Washington County, Pennsylvania, as follows:

**SECTION 1. TITLE.**

This Ordinance shall be known as the “Buffalo Township Injection Well Ordinance of 2026.”

**SECTION 2. DEFINITIONS**

**Amendment of Article II, Section 280-7 of the 2001 Buffalo Township Zoning Ordinance entitled “Definitions”.** Section 280-7 of the 2001 Buffalo Township Zoning Ordinance is hereby amended to add or amend the following definitions to the ordinance.

**BEST MANAGEMENT PRACTICES (BMPs)-** State of the art mitigation measures applied to the development and operation of well facilities to help ensure those activities are

conducted in a safe and environmentally responsible manner that protects air and water quality landscapes, natural resources and public health.

GEOLOGICAL SEQUESTRATION (GS) - Long-term underground storage, as part of carbon capture and storage (CCS), is a technology that can be used to reduce carbon dioxide (CO<sub>2</sub>) emissions to the atmosphere.

INJECTION WELL, Classes I through IV as defined by the EPA - Injection wells used to place fluid underground into porous geological formations. Injected fluids may include water, wastewater, brine (salt water), or water mixed with chemicals. This definition shall not include class V or VI wells as defined by the EPA.

INJECTION WELL, Classes V and VI - Wells that are not classified as class I through IV. Class V well category includes deep complex wells used at commercial and industrial facilities. Complex Class V well types may include aquifer storage and recovery wells, geothermal electric power wells, and deep injection wells for salinity control. Class VI wells are used to inject carbon dioxide (CO<sub>2</sub>) into deep rock formations.

PROTECTED STRUCTURE - Any structure with walls and a roof within which persons can live or customarily work.

UNDERGROUND SOURCES OF DRINKING WATER (USDW's) - aquifers or parts of aquifers that supply a public water system or contain a sufficient quantity of groundwater to supply a public water system now or in the future.

WELL- A bored, drilled, or driven shaft whose depth is greater than the largest surface dimension; or a dug hole whose depth is greater than the largest surface dimension; or a subsurface fluid distribution system.

WELL PAD - The area extending to the limits of disturbance of the grading plan for a

drilling site where a well is to be drilled and occupied by any of the facilities, structures, and equipment associated with or incidental to the construction, drilling, fracturing, production, or operation of an oil or gas well. Notwithstanding the foregoing, the well pad site does not include the access road.

WELLHEAD - The precise point of entry into the ground where the drilling of a gas well takes place.

**SECTION 3. Amendment of Article XXII of the 2001 Buffalo Township Zoning Ordinance entitled “Table of Authorized Uses (Appendix A) of the 2001 Buffalo Township Zoning Ordinance.** The Table of Authorized Uses, Appendix A, H-1 Heavy Industrial District of the 2001 Buffalo Township Zoning Ordinance are hereby amended to add “Injection Wells” as Conditional Uses, to the aforementioned Zoning District.

**SECTION 4. Amendment of Article XVII of the 2001 Buffalo Township Zoning Ordinance entitled “Supplementary Regulations” to add a new Section 280-118 for regulation of Injection Wells.** There is hereby added a new Section 280-118 with related subsections, to Article XVII of the 2001 Buffalo Township Zoning Ordinance, entitled “Supplementary Regulations” to add regulations for the use of Injection Wells which shall read as follows:

#### **280-118- Injection Wells**

##### **280-118.1 Application Requirements for Class I-VI Wells**

A. For Class I-VI Injection wells, to be evaluated as a conditional use, the applicant shall be required to submit the following documents and information to Buffalo Township:

- a. A person or entity desiring approval of a special exception pursuant to this subsection shall submit a written application for conditional use. Before submitting

an application, the applicant is strongly encouraged to meet with the Buffalo Township officials/staff to determine the requirements of and the procedural steps for the application. The intent of this process is for the applicant to obtain necessary information and guidance from the staff about the site, plan preparation and governing laws.

- b. The application shall not be complete and properly filed unless a signed (original) application accompanied by the application fee has been received.
- c. Additional items required shall include the following information and plans to be presented to the Board of Supervisors:
  - i. One paper copy of the completed "Application for Conditional Use" form supplied by the Township along with supporting documentation as identified in this section.
  - ii. Written permission from the property owner(s) who have legal or equitable title in and to the surface of the drill site or a demonstrable documentation of the applicant's authority to occupy the surface for the purpose of injection well.
  - iii. The GPS location and 911 address (if designated) of the Well Site.
  - iv. Copies of all permits and applications submitted to the various local, county, state, and federal agencies. Permits and plans shall include but not be limited to the Pennsylvania Department of Environmental Protection well application and permit, Erosion and Sediment Control General Permit- 2, or current permit requirements, all other required erosion and sediment, air, water and waste management permits or approvals, and any

other applications or permits as required by the United States Environmental Protection Agency in regards to Class V-VI Injection wells.

- v. A site plan prepared by an engineer or surveyor licensed in Pennsylvania shall be provided to establish compliance with all applicable regulations. All improvements and equipment on the site shall be identified. All required yard setbacks, location and owners of Protected Structures shall be identified. All roads related to the development or facility must also be shown. Copies of the site plan shall be provided for review and comment by Board of Supervisors. The site plan shall be furnished to Buffalo Township officials and the county Emergency Management Agency prior to the Conditional Use hearing.
- vi. The minimum site area shall be 10 acres.
- vii. The site shall have frontage on and direct vehicular access to a public road.
- viii. No permanent component of the injection well site shall be closer than 500 feet from the property line in of the parcel which the well is located and 1,000 feet from a protected structure.

#### **280-118.2 Regulations Applicable to All Injection Wells (Class I-VI)**

- A. All Injection Wells are a Conditional Use in H-1 Heavy Industrial District Zoning District.
- B. The wellhead of a Class I-VI injection well shall be located not less than 1,000 feet from any protected structure.
- C. All Class I-VI injection well operations and the well pad, including but not limited to

derricks, vacuum pumps, compressors, storage tanks, vehicle parking, structures, machinery, ponds, pits, and ancillary equipment, shall be located not less than 500 feet from the nearest property line.

D. The developer or operator shall pay for any planned improvements (whether off-site or otherwise) as determined by a traffic study. The traffic study shall be paid for by the developer or operator. The traffic study submitted by the developer or operator 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 Buffalo 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 or elected officials.

c. Traffic impact study guidelines. The traffic impact study shall be performed by a qualified professional traffic engineer. The following is an outline of the minimum issues to be addressed by the Study:

i. Description of the proposed project in terms of land use type and magnitude.

ii. An inventory of existing conditions in the site environs (surrounding area or

district) including:

1. Roadway network and traffic control;
2. Existing traffic volumes in terms of peak hours and Average Daily Traffic (ADT);
3. Planned improvements to roadways by others.

iii. An analysis of existing traffic conditions including:

1. Intersection levels of service;
2. Roadway levels of service (where appropriate);
3. Other measures of roadway adequacy, i.e. lane widths, traffic signal warrants, vehicle delay studies, etc.

iv. Projected site generated traffic volumes in terms of:

1. Peak hours and ADT;
2. Approach/departure distribution including method of determination;
3. Site traffic volumes on roadways;
4. Comparison of existing zoning to proposed site generation.

v. An analysis of future traffic conditions including:

1. Future design year (development fully completed) combined volumes (site traffic plus future roadway traffic);
2. Intersection levels of service;
3. Roadway levels of service (where appropriate);
4. Other measures of roadway adequacy; i.e., lane widths, traffic signal warrants, vehicle delay studies, etc.

vi. A description of the recommended access plan and off-site improvements, which shall include:

1. Schematic plan of access and on-site circulation;
2. General description of off-site improvements required. The aforementioned guidelines shall be used to determine the scope of work. The specific roadways and intersections to be studied shall be identified along with the planned data collection and analysis procedures.

E. An acoustics study shall be submitted with the application that has been prepared by an acoustics expert to confirm compliance at a level not the standards set forth in the Buffalo Township Noise Ordinance as measured at the exterior of any structure. The applicant will be required to provide continuous noise monitoring during the construction phase and operational phase of the development.

F. A report prepared by a professional expert in that field, which 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 the water supply. This assessment is the process of characterizing the nature and likelihood of harmful effects to individuals or populations within one linear mile of the well site. The report shall also include an assessment of potential seismic impacts created by the operations of the injection well.

G. 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 operation, or the ultimate use proposed to be conducted on the site. The limits of the impact area to be studied shall be reviewed and accepted by the Board of Supervisors, with substantial weight given to each comment and concern. The environmental impact study shall include, but not be limited to, all critical impact areas on or offsite 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 25%; 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; 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.

H. 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 Board of Supervisors 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.

- I. 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 Board of Supervisors 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.
- J. 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 Board of Supervisors. 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 Board of Supervisors, with substantial weight given to each comment and concern. If the study shows an alteration to the groundwater, the application shall be denied.

- K. 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 application.
  - b. Post-development testing shall be completed 12 months after operations have begun.
  - c. The results shall be submitted to the Board of Supervisors and PA DEP within 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 Board of Supervisors.
- L. The Operator shall hire a consultant (hydrogeologist) to conduct water quality testing. Qualifications of selected hydrogeologist shall be provided to the Zoning Hearing Board

prior to testing for approval. The consultant shall submit a pre-testing and a pre-drilling plan to be accepted by the Board of Supervisors. The consultant shall test for gallons per minute (gpm) flow rates, yield, groundwater levels, and other pertinent information for all viable aquifer zones via drawdown test or other suitable means. The consultant shall measure and record flow rates in gallons per minute (gpm) for all surface water sources. Groundwater levels and other pertinent information via drawdown test or other suitable means shall be measured from all available wells. Also, GPS coordinated information shall be recorded for all surface water and groundwater sites. The results shall be certified by the hydrologist.

M. Operators shall test for the following list of parameters all surface water and groundwater. The list is not exhaustive, and the Board of Supervisors reserves the right to add additional parameters, with substantial weight given to by any concerns/comments from Buffalo Township:

a. INORGANIC

- i. Alkalinity
- ii. Ph
- iii. Chloride
- iv. Sulfate Conductivity
- v. Hardness Oil/Grease/Bromide
- vi. Total Dissolved Solids Reside- Filterable Turbidity Ethylene Glycol
- vii. Acetone

b. TRACE METAL

- i. Barium
  - ii. Calcium
  - iii. Potassium
  - iv. Sodium
  - v. Selenium
  - vi. Boron
  - vii. Iron
  - viii. Strontium
  - ix. Magnesium
  - x. Manganese
  - xi. Aluminum
  - xii. Lithium
- c. ORGANIC
- i. Ethane
  - ii. Methane
  - iii. Propane
  - iv. Total Petroleum Hydrocarbons
- d. MICROBIOLOGY
- i. Total Coliform/E. Coli
- e. OTHER
- i. Volatile Organic Compounds

ii. Detergent (MBAs) Total Organic Carbon Nitrate Radionuclides gross alpha,  
radium

iii. Radon Lead Total Coliform

N. The applicant shall provide a schedule with the application indicating the anticipated beginning and ending dates for all proposed activities.

O. Best Management Practices for all operations shall be followed.

P. Any hazardous or toxic material shall be securely contained, stored and removed in accordance with applicable state or Federal regulations. On-site disposal is prohibited. All hazardous materials stored must be clearly marked, identifying the contents, chemicals, and hazards as required by the OSHA Hazard Communication Standard 29 CFR 1910.1200 and National Fire Protection Association ("NFPA") Code 704 - Standard System for the identification of the Hazards of Materials for Emergency Response. All regulated tanks are to be labeled to a NFPA specification.

Q. All operations shall be in accordance with applicable Federal laws and regulations, the Pennsylvania Oil and Gas Act (58 P.S. §§ 60 1.10 I et seq.), as amended, and pursuant to all other applicable rules, regulations, and procedures adopted pursuant thereto.

R. The operator shall be responsible for prevention and prompt removal of spills involving waste materials, oil, and toxic or hazardous materials.

S. Changes in the site plan require a new conditional use approval pursuant to the terms and conditions of this Ordinance.

T. Traffic Controls

a. The proposed routes must be designed to minimize the impact on streets within Buffalo Township. Buffalo Township reserves the right to designate alternate routes

in the event that the applicant's proposed routes are deemed inadequate, unsafe or overly disruptive to normal vehicular traffic by Buffalo Township. Vehicles are to operate on state roads and may only use Buffalo Township roads when the use of state roads is not feasible.

- b. Prior to the commencement of any activity at the development or facility, the operator shall enter into a Buffalo Township roadway maintenance and repair agreement with Buffalo Township, in a form acceptable to Buffalo Township regarding maintenance, repair and bonding of Buffalo Township roads that are to be used by vehicles for development activities. The Buffalo Township roadway maintenance and repair agreement will identify the responsibilities of the applicant to prepare, maintain, and repair Buffalo Township roads before, during and immediately after drilling operations associated with the development or facility. The operator shall take all necessary corrective action and measures as directed by Buffalo Township pursuant to the agreement to ensure the roadways are repaired and maintained during and at the conclusion of all development activities.
- c. The operator shall take all necessary precautions to ensure the safety of persons in areas established for road crossing and or/adjacent to roadways (for example, persons waiting for public or school transportation). Where necessary and allowed, during periods of anticipated heavy or frequent truck traffic associated with the development of the facility, the operator will provide flagmen to ensure the public safety and include adequate signs and/or other warning measures for truck traffic and vehicular traffic.
- d. There will be no staging of trucks or equipment on public roads.

- e. The access driveway off the public road to the site shall be gated at the entrance to prevent illegal access. The site assigned address shall be clearly marked.
  - f. A traffic control plan in conformance with PennDOT standards shall be provided.
- U. Except for emergency and governmental compliance activity, hours of operation are 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 must occur during defined hours of operation. Hauling shall not occur during bus schedule. The Developer is responsible to coordinate with the Area School District Transportation Director.
- V. At least 30 days prior to any activity at the development or facility, the operator shall provide the following information to each property owner within 1,000 feet of the planned surface location of the development or facility:
- a. A copy of the site plan submitted as part of the special exception application/petition;
  - b. A general description of the planned operations at the development or facility and associated equipment to be used;
  - c. The contact information for the operator;
  - d. The date to hold a meeting locally with such residents to present the operator's plans for the development or facility and to allow for questions and answers. The meeting shall be held prior to the commencement of development activity.
- W. The operator of the facility, prior to the start of any activity on site, shall obtain a policy of liability insurance in an amount not less than twenty- five million dollars (\$25,000,000), naming Buffalo Township as an additional insured. This policy 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 this Ordinance. The insurance shall cover the complete clean-up and remediation of the site, and any area surrounding and in excess of the radius of areas tested, to the conditions that existed prior to the sampling and testing under this Ordinance. 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.

- X. The operator of the facility, prior to the start of any activity on site, shall obtain a performance bond in an amount not less than twenty-five million dollars (\$25,000,000), naming Buffalo Township as an Obligee. This bond shall provide for the plugging of the well and for the complete restoration of the site, including the remediation of 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 this Ordinance. The performance bond shall cover the complete clean-up and remediation of the site, and any area surrounding and in excess of the radius of areas tested, to the conditions that existed prior to the sampling and testing under this Ordinance. This performance bond shall be in addition to and shall supplement the insurance policy

required under this Ordinance.

- Y. A duly authorized representative(s) of the local, county, state and/or their authorized professional agent shall have the authority, in relation to the enforcement, to enter upon the property of a development or facility for the purpose of inspecting the site, equipment and all other aspects of the site necessary to assess compliance with all sections of this Ordinance.
- Z. The operator of any development or facility shall notify the Emergency Management Coordinator, Buffalo Township Zoning Officer and Buffalo Township Board of Supervisors no less than 90 days prior to the startup and abandonment or shutdown of any well site.
- AA. The injection well facility shall be located, designed, and constructed to minimize the removal of trees and shrubs, protect all natural resources, and minimize the amount of surface disturbance.
  - a. The operator shall not clear brush or trees by way of burning and shall chip, grind, or remove all tree stumps from properties it clears for development purposes.
  - b. The location and design of structures and site improvements shall be integrated with the natural color, form, and texture of the surrounding area.
  - c. Abutting properties with residential structures, the landscaping shall be dense vegetation. Fencing installed shall be blocking the view of site from the residential structure.
- BB. Upon request of the Emergency Management Coordinator, the operator shall, prior to start of operations, make available with at least thirty (30) days' notice, at the applicant's sole cost and expense, an appropriate group training program for emergency responders

and Wharton Township officials. Such training shall be made available at least annually during any year that the injection well is in operation. Training should cover each phase of the development from sitework to well completion. If additional wells are drilled at the site, the operator and Emergency Management Coordinator or Fire Chief will determine if additional training is required.

CC. The applicant shall maintain at the property and on file with Buffalo Township a current list and the Safety Data Sheets ("SDS") for all chemicals used in the drilling operations (including but not limited to types of additives, acids, polymers, salts, surfactants, and solvents) and in any fracturing operations. If the Public Protection Classification ("PPC") requires availability and/or utilization of special equipment or supplies particular to the hazards or conditions addressed in the PPC, Buffalo Township shall require the operator to provide the Township for the cost of procurement of such special equipment or supplies in advance of construction, operation and/or decommissioning.

DD. Security fencing shall be at least six feet in height and shall be installed around the well pad area. The fencing should be equipped with lockable gates at every access point and have openings no less than 12 feet wide. Gates shall be kept locked except when being used for access to the site. The fence posts shall be set in concrete at sufficient depths to maintain the stability of the fence.

a. Buffalo Township officials and emergency responders shall be given means to access the well site in case of an emergency via lock box or a Wharton Township-approved equivalent. The applicant must provide the Washington County 911 Communications Center with necessary information to access the development or facility in case of an emergency.

- b. Warning signs shall be placed on the fencing surrounding the development or facility, providing notice of the potential dangers and the contact information in case of an emergency.
  - c. In construction of the injection well, the natural surroundings should be considered, and attempts made to minimize impacts to adjacent properties.
  - d. In addition, landscaping around the required well pad fencing area shall be planted with evergreens of a minimum height of six feet at time of planting and spaced every twelve (12) feet.
- EE. Lighting at an injection well and well pad shall, when practicable, be limited to security lighting.
- a. All temporary outdoor lighting shall be shielded and/or reflected away from adjoining properties so that no direct beam of light, but only diffuse or reflected light, enters adjoining properties.
  - b. 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.
- FF. Beginning with its intersection with a public street, any ingress, egress or off-loading areas shall be paved with a bituminous material. No water, sediment, or debris will be carried onto any public street. If any amount of mud, dirt or other debris is carried onto public or private ROW from the well site, the operator shall immediately clean the roads and implement a remedial plan as directed by Buffalo Township to keep the streets

continuously clean.

- GG. Ingress, egress point shall be located and improved to:
- a. Meet Pennsylvania Code 67, Chapter 441, Access to and Occupancy of Highways by Driveway and Local Roads, PennDOT Design Manual 2.
  - b. Ensure adequate capacity for existing and projected traffic volume.
  - c. Provide efficient movement of traffic, including appropriate turning radii and transition grade.
  - d. Minimize hazards to highway users and adjacent property and human activity.
- HH. All applicable permits or approvals must be obtained, including, without limitation:
- a. Access or driveway permits to state or Buffalo Township roads.
  - b. Overweight or oversized loads.
- II. One off-street parking space for each employee, plus one off-street parking space for each facility vehicle should be provided.
- JJ. No equipment, including drilling, re-drilling, re-working, or other portable equipment, shall be stored on the development or facility which is not essential to the everyday operation of the development or facility. This includes the removal of idle equipment unnecessary for the operation of wells.
- a. Lumber, pipes, tubing and casing shall not be left on the development or facility except when drilling or well-servicing operations are being conducted on the site.
  - b. It shall be illegal to park or store any vehicle or item of machinery on any street, ROW or in any driveway, alley or on the development or facility which constitutes a fire hazard or an obstruction to or interference with fighting or controlling fires, except that equipment which is necessary for the maintenance of the development or

facility or for the gathering or transporting of hydrocarbon substances from the site.

- KK. Conditional Use approval shall automatically terminate, unless extended, if drilling is not commenced within one year from the date of issuance of the written approval of the special exception. The conditional use approval may be extended by the Board of Supervisors, in its discretion, upon written request by the operator. The operator shall provide proof that the requested conditional use for such location has not changed.
- LL. The applicant and any subcontractors associated with the development of the injection well operation shall be required to sign, upon receiving Conditional Use approval, a developer's agreement, approved by the Township Solicitor. Such developer's agreement shall contain the conditions of approval as granted by Board of Supervisors and hold applicants and assigns responsible for compliance with those conditions.
- MM. The applicant, upon approval of the Conditional Use, shall be required to apply for a zoning permit with the Township Zoning Officer. An additional building permit subject to the UCC (Uniform Construction Code) may be required. Check with the Buffalo Township BCO (Building Code Official).

### **280-118.3 Supplemental Regulations Applicable to Class VI Injection Wells**

- A. Class VI Injection Wells must comply with the Environmental Protection Agency's (EPA) Underground Injection Control (UIC) Program, as well as the Safe Drinking Water Act (SDWA).
- B. The UIC program regulates the injection of fluids (such as water, wastewater, brines from oil and gas production, and CO<sub>2</sub>) into the subsurface for the purposes of storage or disposal. The main goal of the UIC Program is the protection of Underground Sources of Drinking Water (or USDWs).

- C. The EPA's Class VI well requirements are designed to protect public health and USDWs from the unique nature of CO<sub>2</sub> injection for GS, including the:
- a. Relative buoyancy of CO<sub>2</sub>;
  - b. Subsurface mobility;
  - c. Corrosivity in the presence of water; and
  - d. Large injection volumes.
- D. EPA Class VI well requirements include:
- a. Site characterization requirements to ensure the geology in the project area can receive and contain the CO<sub>2</sub> within the zone where it will be injected, including that the area is free of faults and fractures and that induced seismicity is not a concern.
  - b. Requirements to predict the extent of the injected CO<sub>2</sub> plume and associated pressure front for the project using computational modeling, and to identify and address any deficiencies of existing wells within the Area of Review through corrective action. The Area of Review includes the area where the injected plume and its associated pressure front may impact pore fluids.
  - c. Well construction requirements to ensure the Class VI injection well and in-zone monitoring wells are constructed in a manner that will prevent any CO<sub>2</sub> or formation fluids from leaking outside of the injection zone. Class VI injection wells and in-zone monitoring wells are designed for the life of the project.
    - i. Owners or operators must demonstrate that the well materials are corrosion resistant and compatible with the conditions and fluids to which they may be exposed.
    - ii. Appropriate construction materials depend upon site specific conditions

including the CO<sub>2</sub> stream, the formation fluids, and formation temperatures and pressures.

- iii. Laboratory testing and modeling based upon site specific conditions may be used to determine appropriate well construction plans.
- d. Testing and monitoring requirements to monitor the integrity of the injection well, the integrity of other wells such as monitoring wells, groundwater quality, and the movement of the CO<sub>2</sub> plume and pressure front. These requirements are in place throughout the life of the project, including after CO<sub>2</sub> injection has ended, until the permitting authority determines no additional monitoring is needed to ensure that the GS project does not pose an endangerment to USDWs.
  - i. Corrosion monitoring is required from the commencement of CO<sub>2</sub> injection through site closure.
- e. Operating requirements to ensure the injection activity is appropriate to the well's construction and geologic characteristics so that it will not endanger USDWs or human health.
- f. Requirements to plug the injection well in a manner that will not allow fluid movement that endangers USDWs.
- g. Requirements for the operator to establish and maintain financial instruments sufficient to cover the cost of corrective action, plugging the injection well, post-injection site care, and emergency and remedial response for the GS project (i.e., financial responsibility).
- h. Requirements to develop and maintain a site-specific emergency and remedial response plan.

- i. Requirements for the Class VI well owner or operator to report all testing and monitoring results to the permitting authority to ensure the project is operating in compliance with all permit and regulatory requirements.
- E. Any Class VI Injection Well development must comply with the UIC program permitting requirements, which include:
- a. Completeness Review
    - i. The first step of the review is determining that the permit application is complete and contains all of the required information. Completeness reviews typically take 30 days for applications where Notice of Deficiencies (NOD's) are not needed.
    - ii. Notice of Deficiencies are defined by the EPA/UIC program as identifying any required information that is missing from an application. NOD's are sent to the applicant, who must provide the missing information before the application can be deemed complete.
    - iii. Any NOD's determined by the EPA must be provided to the Buffalo Township Emergency Management Coordinator, the Buffalo Township Engineer, and Buffalo Township Board of Supervisors for their records and review.
  - b. Technical Review
    - i. This involves a thorough review of all application materials and an ongoing dialogue with the applicant to understand the proposed project and ensure that it will be constructed and operated in a manner that will not endanger USDWs. This is accomplished through an ongoing dialogue between the applicant and

the permitting authority.

c. Draft Permit

- i. If the technical review determines that the permit application meets the requirements of the Class VI Rule and the proposed project is suitable for CO<sub>2</sub> injection for GS, a draft permit will be prepared, specifying the conditions that the well would be able to operate under. The permit includes the Class VI Project Plans as enforceable conditions.
- ii. If a Draft Permit has been issued by the EPA or other permitting authority, the Draft permit must be provided to the Buffalo Township Emergency Management Coordinator, the Buffalo Township Engineer, and Buffalo Township Board of Supervisors for their records and review.

d. Public Comment Period

- i. Public comment periods allow the public an opportunity to review and provide comment on the draft permit. The public comment period is also when the public can request the Agency to conduct a hearing on the draft permitting decision.
- ii. The developer, or whomever submitted the application to the Agency or other permitting authority, must coordinate with Buffalo Township and its Board of Supervisors in order to receive public comment(s) or conduct a public hearing.

e. Final Permit

- i. The final permit is prepared with modifications based on feedback received during the Public Comment Period, where appropriate. Additionally, the Agency or other permitting authority shall prepare a document with responses

to comments received. A final permit authorizes the applicant to construct or convert the injection well and monitoring wells and perform required preoperational testing.

**SECTION 5. Construction and Severability**

- A. The provisions of this Ordinance shall be construed to the maximum extent possible to further the purposes and policies set forth herein, as consistent with applicable state statutes and regulations. If the provisions of this section and state law are in conflict, then state law shall prevail.
- B. It is the intention of the Township's Board of Supervisors that the provisions of this Ordinance shall be declared unconstitutional or invalid by the judgement or decree of a court of competent jurisdiction, such unconstitutionality or invalidity shall not affect any of the remaining provisions of this Ordinance.

**SECTION 6. Repealer.** All prior ordinances that are inconsistent herewith are hereby repealed to the extent of such inconsistency.

**SECTION 7. Ratification.** Except as amended by this Ordinance, all other portions, parts and provisions of the Buffalo Township Zoning Ordinance, as heretofore enacted and amended, shall remain in force and effect.

**SECTION 8. EFFECTIVE DATE.** This Ordinance shall be effective five (5) days after its enactment.

**ENACTED AND ORDAINED** by the Board of Supervisors of Buffalo Township,  
Washington County, Pennsylvania, this 1<sup>st</sup> day of July 2026.

**ATTEST:**

**BUFFALO TOWNSHIP**

\_\_\_\_\_  
Michelle L. Markley, Township  
Manager

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

Randall Mounts, Chairman

\_\_\_\_\_  
Jim Mounts, Vice-Chairman

\_\_\_\_\_  
Kenneth Gorby, Jr., Supervisor