

**MODEL ORDINANCE AMENDING A MUNICIPAL ZONING ORDINANCE  
RELATING TO THE USE OF LAND FOR THE DEVELOPMENT OF GAS AND OIL  
WELL SITES**

**BACKGROUND**

WHEREAS, the Municipality has enacted a zoning ordinance (“Zoning Ordinance”) pursuant to its authority under, *inter alia*, Article 27 of the Constitution of the Commonwealth of Pennsylvania, the Second Class Township Code, and the Municipalities Planning Code (“MPC”).

WHEREAS, Municipalities have authority under Pennsylvania law to regulate the use of land, including for industrial activities generally and development of oil and gas well sites and the extraction of subsurface oil and gas specifically.

WHEREAS, the Municipality has studied the impacts of using land for the development of oil and gas well sites and oil and gas extraction, and has determined that it is prudent to amend the Code relating to the use of land for the development of oil and gas well sites and the extraction of subsurface oil and gas.

WHEREAS, the Municipality enacts these amendments to reflect the policy goals of the statement of community development objectives, giving consideration to the character of the Municipality, the needs of the citizens and the suitabilities and special nature of particular parts of the Municipality and to preserve the health, safety and welfare of its residents through the enactment of appropriate zoning ordinance provisions and regulations.

WHEREAS, the Pennsylvania Constitution and the Municipalities Planning Code authorize the Municipality to enact zoning ordinances which permit, prohibit, regulate, restrict and determine use of land, size, height, bulk, location, erection, construction, repair, maintenance,

alteration, razing, removal and use of structures and the protection and preservation of natural and historic resources and prime agricultural land and activities, among other things.

**NOW, THEREFORE,** it is hereby **ENACTED AND ORDAINED** by the Board of Supervisors of the Municipality, as follows:

**Section 1. Definitions.** The Municipality's Zoning Ordinance is hereby amended to include the following definitions:

**DRILLING:** The digging or boring of a well for the purpose of exploring for, developing or producing oil and/or gas or other hydrocarbons.

**FRACKING:** The process of injecting water, customized fluids, sand, steam or gas into a gas or oil well under pressure in an attempt to enhance and/or improve gas or oil extraction or recovery.

**GAS:** Any fluid, either combustible or noncombustible, which is produced in a natural state from the earth and which maintains a gaseous or rarefied state at standard temperature and pressure conditions and or the gaseous components or vapors occurring in or derived from petroleum or natural gas, including, but not limited to, natural gas, methane, ethane, butane and propane.

**GAS OR OIL WELL:** Any pierced or bored hole drilled, to be drilled or being drilled in the ground for the actual or intended purpose of, or to be used for, producing, extracting or injecting gas, oil, petroleum or any other liquid related to gas or oil production or storage, including brine disposal and fracking fluid.

**GAS OR OIL WELL SITE:** The location where facilities, structures, materials and equipment whether temporary or permanent, necessary for or incidental to the preparation, construction, drilling, extraction, production or operation of an gas or oil well. This definition also includes exploratory wells.

**GAS OR OIL WELL SITE DEVELOPMENT:** The gas or oil well site preparation, construction, drilling, redrilling, extraction, hydraulic fracturing, and/or site restoration associated with an oil or gas well of any depth; water and other fluid storage, impoundment and transportation used for such activities; and the installation and use of all associated equipment, including tanks, meters, and other equipment and structures whether permanent or temporary; and the site preparation, construction, installation, maintenance and repair of oil and gas pipelines and associated equipment and other equipment and activities associated with the exploration for, production and transportation of oil and gas. The definition does not include natural gas compressor stations and natural gas processing plants or facilities performing the equivalent functions.

**NATURAL GAS COMPRESSOR STATION:** Facility designed and constructed to compress natural gas that originates from a gas well or multiple gas wells operations as a midstream facility for the collection and delivery of gas to a transmission pipeline, distribution pipeline, natural gas processing plant or underground storage field, including one or more natural gas compressors, associated buildings, pipes, valves, tanks and other equipment.

**NATURAL GAS PROCESSING PLANT:** A facility designed and constructed to remove materials such as ethane, propane, butane, and other constituents or similar substances from natural gas to allow such natural gas to be of such quality as is required or appropriate for transmission or distribution to commercial markets but not including facilities or equipment that is designed and constructed primarily to remove water, water vapor, oil or naturally occurring liquids from the natural gas.

**STORAGE WELL:** A well used for and in connection with the underground storage of natural gas, including injection into or withdrawal from an underground storage reservoir for monitoring or observation of reservoir pressure.

## **Section 2. Establishment of Use [] -- Development of Gas and Oil Well Sites.**

Section [], Industrial Use Regulation of the Code shall be amended so that it contains a Subsection [], which shall read in full as follows:

**A. Use [] – Development of Gas and Oil Well Sites.** The use of land for the Development of Gas and Oil Well Sites is limited to gas or oil well site preparation, construction, drilling, redrilling, extraction, hydraulic fracturing, and/or site restoration associated with an oil or gas well of any depth; water and other fluid storage, impoundment and transportation used for such activities; and the installation and use of all associated equipment, including tanks, meters, and other equipment and structures whether permanent or temporary; and the site preparation, construction, installation, maintenance and repair of oil and gas pipelines and associated equipment and other equipment and activities associated with the exploration for, production and transportation of oil and gas.. This does not include the recovery and extraction any other

subsurface minerals, such as coal, gravel, sand, clay, topsoil, stone or any other mineral other than oil and gas.

**B. Statement of Purposes.** The purpose of this Subsection [] is, in addition to the general purposes set forth above, to provide for the health, safety, welfare and environment of the residents and their property in the Municipality; to provide the procedure for the issuance of zoning permits to enable oil and gas deposits to be extracted through direct, on-site wells; and to permit the use of land in a safe manner with the utmost regard for protection of existing Municipal water supply wells, structures, natural resources, farmland and other environmental features. It is also the purpose of this Subsection [] to reflect the policy goals of the statement of community development objectives, giving consideration to the character of the Municipality, the needs of the citizens and the suitabilities and special nature of particular parts of the Municipality and to preserve the health, safety and welfare of its residents through the enactment of appropriate zoning ordinance provisions and regulations.

**C. Permitted As Conditional Use in I - Industrial Zoning District.** Subject to the provisions of this Subsection [], this use shall be permitted as a principal use upon conditional use approval in the I - Industrial Zoning District only.

**D. Conservation Easements.** This use is prohibited as a principal use on any property subject to a conservation easement or open space conditions, or any similar restrictions, whether public or private.

**E. Conditional Use Standards.** Use [], Development of Gas and Oil Well Sites, is permitted as set forth herein subject to all general conditional use standards and all

conditional use standards applicable for other Industrial Uses as well as all of the following requirements:

- 1. Compliance with All Applicable Standards and Procedures.** This use shall not occur, no conditional use approval shall be granted, and no building or zoning permit shall be issued, until the applicable procedures and standards in this Subsection [] have been satisfied, the applicable provisions of this Zoning Ordinance and the Code of Ordinances of the Municipality have been satisfied, and all applicable requirements of the Commonwealth of Pennsylvania and United States Government have been satisfied, as evidenced by the prior written approval of the agency having jurisdiction, including without limitation the operator's license and copies of all state and federal permits.
- 2. DEP Plat.** Provide [the Municipality] with a copy of the plat submitted to Pennsylvania Department of Environmental Protection, or its successor agency, as part of the permit application process.
- 3. Site Plan.** Submission of a site development plan prepared and signed by a licensed architect, engineer or landscape architect showing the ingress and egress of all residential properties affected by the proposed use. The site plan shall reflect landscaping adequately so as to screen and buffer neighboring properties, as provided in this Section, and the availability of ingress and egress does not disturb residential dwellings.
- 4. Emergency Response Plan.** Submission to the [Municipality] Police Department, Fire Department and Zoning Officer a copy of its Emergency Response Plan. Also applicant operator shall at its sole cost and expense provide

to Emergency Services appropriate site orientation with adequate information and ongoing training on dealing with any potential dangerous conditions that may result from development activities.

**5. Inhabited Building Setback.** No Development of Gas or Oil Well Sites shall be located within two hundred (200) feet of any inhabited building or enclosed structure, residential or otherwise.

**6. Existing Building Setback.** No Development of Gas or Oil Well Sites shall be located within two hundred (200) feet of any existing building or enclosed structure.

**7. Airport Runway Setback.** No Development of Gas or Oil Well Sites shall be located within 2,500 feet of the flight path of a runway facility of an airport.

**8. Historic and Natural Resource Setback.** No Development of Gas or Oil Well Sites shall be located within 1,000 feet of any historic or natural structure, feature, habitat or resource which is protected or preserved under federal, state, or local law, regulation, ordinance.

**9. School Setback.** No Development of Gas or Oil Well Sites shall be located within 2,500 feet from any public or private school building, facility, or other property owned, operated or controlled by any public or private school.

**10. Property Line and Right-of-Way Setback.** All oil and gas well sites and above ground equipment including compressor engines and any structure in which they are enclosed must be set back a minimum of one hundred (100) feet from any adjacent property lines or rights-of-way.

**11. Setback Reduction Approval.** A Setback Reduction Approval may be authorized by [the Municipality] [Governing Body] as part of the Conditional Use approval process provided that the applicant can submit compelling evidence that such a reduction is necessary and will not be detrimental to the purposes of this ordinance.

**12. Road Use Plan.** The applicant shall submit a road use plan showing the proposed routes of all trucks to be utilized for hauling equipment supplies and the like and the estimated weights of those trucks and the estimated number of trucks entering and exiting the facility on a daily basis as well as keep a record log of actual use which may be requested from time to time by the [Governing Body of the Municipality]. In conjunction with [the Municipality], applicant shall design the hauling routes to and from the facility to minimize the impact on local roads. At no time shall any overweight vehicle travel upon any [Municipality] roads or portion thereof other than the specified portion of [Municipality] roads for which security has been provided.

**13. Road Maintenance Agreement.** The applicant shall enter into a road use maintenance agreement, pay the prescribed fee, and adhere to all conditions set forth in the agreement.

**14. Gated Access.** Unless otherwise required by any applicable law or regulations, applicant shall provide a gated access driveway off the public road(s) to the property in order to prevent illegal access. The gas or oil production site assigned address shall be clearly visible on the access gate for emergency 911 purposes. In addition, the applicant shall ensure that signage shall be posted

which includes the well name and number, name of the operator and the telephone number for a person responsible who may be contacted in case of emergency.

**15. Screening; Landscaping.**

(a) Screening developed areas. All wells, tanks and other drilling related equipment shall be screened by a fence enclosure constructed of one of the following materials:

(1) A solid masonry wall;

(2) A chain link fabric with three-and-one-half-inch mesh interwoven with opaque slats;

(3) Any other material, compatible with surrounding uses, which effectively screen the operation and drilling site and are approved by the Board of Supervisors.

(4) All fencing, masonry walls, opaque slatting, or other compatible materials for use with chain link fabric, shall be of a solid neutral color, compatible with surrounding uses, and maintained in a neat, orderly, and secure condition. Neutral colors shall include sand, gray and unobtrusive shades of green, blue and brown, or other colors approved by the Board of Supervisors.

(b) Landscaping. Within 60 days after completion of drilling or redrilling or within 60 days after activation of any idle well, any oil operation site shall be landscaped in accordance with a plan submitted to and approved by the Board of Supervisors.

**16. Storage of Equipment.**



- (a) No drilling, redrilling, reworking or other portable equipment shall be stored on the operation site which is not essential to the everyday operation of the well located thereon. This includes the removal of idle equipment unnecessary for the operation of such wells.
- (b) Lumber, pipes, tubing and casing shall not be left on the operation site except when drilling or well servicing operations are being conducted on the site.
- (c) It shall be illegal for any person, owner or operator to park or store any vehicle or item of machinery on any street, right-of-way or in any driveway, alley or upon any operation or drilling site 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 well site or for gathering or transportation of hydrocarbon substances from the site.

**Section 3. Schedule of Uses.**

The Schedule of Uses of the [Municipality] Zoning Ordinance is hereby amended as follows:

Nonresidential Uses	District						
	RP	R1	R2	R3	C	I	O/R
Development of Gas or Oil Well Site	N	N	N	N	N	C	N

**Section 4. Ordinance Effect on [Municipality] Code and Conflict.**

All other provisions of the [Municipality] Code, as amended, shall remain in full force and effect. All other Ordinances or provisions of the [Municipality] Code inconsistent herewith or in conflict with any of the terms hereof are, to the extent of said inconsistencies or conflicts, hereby specifically repealed.

**Section 5. Ordinance Severability.**

The provisions of this Ordinance are severable. If any section, clause, sentence, part or provision thereof shall be held illegal, invalid, or unconstitutional by a court of competent jurisdiction, such decision of the court shall not affect or impair any of the remaining sections, clauses, sentences, parts or provisions of this Ordinance. It is hereby declared to be the intent of the [Governing Body] that this Ordinance would have been enacted if such illegal, invalid, or unconstitutional section, clause, sentence or part of a provision had not been included herein.

**Section 6. Ordinance Effective.**

All provisions of this Ordinance shall be in full force and effect five (5) days after the approval and enactment, but [the Municipality] shall take such anticipatory administrative action in advance as shall be necessary for the implementation of this Ordinance.

**ORDAINED AND ENACTED** this \_\_\_ day of \_\_\_\_\_, 20\_\_.

[MUNICIPALITY]

[GOVERNING BODY]

[SEAL]

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

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

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

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

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

Attest: \_\_\_\_\_

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**Municipalities Should Treat the Use of Land for Gas Drilling Comparably to How They Treat Other Industrial Uses.**

**MODEL ZONING ORDINANCE PROVISIONS FOR CONDITIONAL USE  
STANDARDS IN INDUSTRIAL ZONING DISTRICT**

1. An applicant for an Industrial Use requiring conditional use approval shall submit an application, a site plan, and all documentation necessary to satisfy the requirements of this Subsection []. An impact statement/report shall be provided that is in conformance with and provides all applicable information required by the Municipal Subdivision and Land Development Ordinance, Sections [] (relating to traffic), [] (relating to water resources), and [] (relating to environmental and cultural assessment), as well as other applicable information required in this Zoning Ordinance (including this Subsection []). Upon approval of the application, all subsequent operations of the Industrial Use shall be in conformance with the site plan, zoning permit, conditional use decision, all state and federal permits (as applicable) and all standards contained in this Subsection [].

2. For all Industrial Uses requiring conditional use approval, if the permitted use has not been initiated within one (1) year after the conditional use approval, such approval is automatically rescinded. An extension may be granted by the Municipal Board of Supervisors for a maximum of 1 year upon written request by the applicant, prior to the expiration of the original 1-year period, subject to the finding that the plan is in compliance with all standards.

3. Conditional Use Standards for Industrial Uses.

a. General

(1) Offensive or noxious odors, fluids, gases, dust or glare shall be confined to the subject parcel or the leasehold premises and shall not substantially or significantly impact any occupied structures or dwellings.

(2) Junk, refuse, trash, waste, or abandoned material shall not be disposed of on-site. All refuse stored on site for final off-site disposal shall be indoors, in a dumpster or other permitted enclosure.

(3) 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.

(4) All operations shall be in accordance with all applicable federal and state laws and regulations.

(5) All Industrial Uses requiring conditional use approval shall be located at least five hundred (500) feet from any building containing a residential dwelling; or from any structure used for public assembly, including schools and churches; or from any non-residential structure, where the owners of such structures are not a party to the Industrial activity.

(6) All Industrial Uses requiring conditional use approval shall be located at least three hundred (300) feet from the ultimate right-of-way of any public or private street, and three hundred (300) feet from any property line.

(7) The owners(s) and operator(s) of any Industrial Use requiring conditional use approval shall be responsible for prevention and prompt removal of spills involving waste materials, oil, gas, chemicals, and toxic or hazardous materials.

(8) A copy of a valid insurance policy, issued by a corporate insurer licensed in the Commonwealth of Pennsylvania, shall be provided to the Municipality. Such insurance shall be of sufficient amount to:

(a) Provide for payment for all damages or injury to persons or property resulting from the Industrial Use and any and all structures, machinery or appurtenances used in conjunction with it;

(b) Provide for payment to control and/or eliminate any hazardous or dangerous event or condition; and provide for payment for injury or damages to persons, equipment or agencies responding to same event or condition;

(c) Contain no pollution exclusions from coverage whatsoever, including without limitation from contamination or pollution to surface or subterranean streams, watercourses, lakes, wetlands or public or private water supplies; and

(d) All required policies shall provide for a minimum of thirty (30) days written notice by carrier to the additional insured by

regular mail before cancellation by carrier. Each policy shall clearly set forth the date when insurance will expire. All carrier(s) shall be licensed to do business in Pennsylvania and shall have a rating not less than a B++ as rated in the most recent edition of Best's Insurance Reports and shall be in business for at least the past five (5) years.

(9) Expansion of surface use area. Any expansion of the ground surface area used and/or devoted toward any approved Industrial Use requires further application and approval pursuant to the terms and conditions of this Subsection [].

(10) Hours of operation for outdoor Industrial Uses. Except for emergency activities, hours of operation for any unenclosed outdoor Industrial Uses located within 1000 feet of any residential use are limited to Monday through Saturday, 7 a.m. to 7 p.m.

(b) Visual.

(1) Each Industrial Use, accessory uses, access roads/driveways and all structures 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. All natural resource protection provisions of this Zoning Ordinance shall be met.

(2) Excavation, structures and/or equipment in sensitive areas such as ridges, hilltops, scenic or other areas of special visual quality shall be avoided.

(3) The location and design of structures and site improvements shall be integrated with the natural color, form and texture of the surrounding area.

(4) All structures, equipment and operation shall be fully screened from off-site view. Methods may include, but are not limited to:

(a) Existing and/or replanted vegetation.

(b) Existing and/or artificially created land forms.

(5) Glare from site lighting and activities shall not impact on nearby properties, except any such property held in common ownership.

(6) Viewshed mitigation. All viewsheds to the property shall be identified. Where viewsheds are determined by the Municipality to be scenic and such viewsheds will be adversely impacted by the use, viewshed mitigation measures, including without limitation, perimeter or other appropriate location buffers and other plantings per the

standards in the Municipal Subdivision and Land Development Ordinance, as amended, shall be installed along all property lines and the extraction area perimeter.

c. Air and Water Quality; Noise. Operators of all Industrial Uses requiring conditional use approval shall conform to all following in connection with air and water quality and noise:

(1) Air contaminant emissions shall be in compliance with all county, state and federal regulations, including without limitation the control provisions of the Clean Air Act, as amended; and all fugitive dust regulations for smoke, ash, dust, fumes, gases, odors and vapors.

(2) Noise. The operator shall take all possible precautions and measures to minimize the level and duration of noise created by the Industrial activities, including without limitation maximum muffling generators, construction of earthen berms, etc. All equipment utilized in connection with the Industrial Use must comply with the noise limits in this subsection.

(a) The noise (sound) pressure levels at any point beyond the property boundary shall be no more than 55 decibels (dB) during the day (7 a.m. to 7 p.m.); and no more than 45 decibels (dB) during the night (7 p.m. to 7 a.m.), and on Sundays and federal holidays.

(b) Based upon special site characteristics, additional noise measures may be required upon inspection and determination by the Municipality.

(c) When taking noise measurements to determine whether additional noise mitigation measures are necessary, sound pressure levels shall be measured under conditions that are representative of the most demanding assumptions related to the specific site. Consideration shall be given to (including but not limited to) the nature and proximity of adjoining properties; time of day; prevailing weather patterns; amount of vegetative cover on or adjacent to the property; and topography of the site.

(d) If, based upon special site conditions and analysis, additional noise measurements are necessary, one or more of the following additional noise abatement measures, listed below in ascending order of mitigation, shall be required:

- (i) acoustically insulated housing or covers enclosing any motor or engine;
- (ii) screening the site or noise emitting equipment by fence or landscaping;
- (iii) solid wall or fence of acoustically insulating material surrounding all or part of the facility;
- (iv) a noise management plan specifying the hours of maximum noise and the type, frequency and level of noise emitted; and
- (v) construction of buildings or other enclosures where facilities create noise and such adverse impacts cannot be mitigated because of proximity, density and/or intensity of adjacent land use.

d. Wildlife and Cultural Resources.

(1) No habitat disturbance is to occur where threatened or endangered species or critical habitats exist, as defined by the Pennsylvania Department of Conservation and Natural Resources. A Pennsylvania Natural Heritage Program study shall be completed and provided to the Municipality.

(2) All activity in an archaeological or historic resource area, as identified in the Municipal Zoning Ordinance, the Municipal Comprehensive Plan, County Comprehensive Plan, or by the Pennsylvania Department of Conservation and Natural Resources (DCNR) or the Pennsylvania Historical and Museum Commission (PHMC), shall provide for the preservation of the resource or provide for the completion of necessary study and work as specified by DCNR and/or PHMC before any aspect of use begins. Should a resource be uncovered during operations, those operations shall be suspended pending recommendation of DCNR and/or PHMC, as applicable.

e. Hazards



(1) For areas of potential wildfire hazard, fireline intensities shall be abated to less than 100 BTU/foot/second through fuelbreaks or other equally effective means around structures or areas of activity. Required practices for grass/shrub lands include the following:

- (a) Fuelbreaks of a width 3-4 times the height of adjacent vegetation.
- (b) Re-vegetation to short grasses.

(2) Activities or structures proposed within a floodplain shall independently meet the floodplain provisions of this Zoning Ordinance; and shall be carried out in a manner that does not increase flood hazards upstream or downstream, nor reduces the efficiency with which flood waters are carried through the site.

(3) All Industrial Uses requiring conditional use approval shall be included within a fire district; or, be under contract with a fire district for protection services; or, be provided with private fire protection. If private fire protection is used, the following conditions shall be met:

- (a) A fire protection plan shall be provided, specifying types of equipment, response time, number and capabilities of personnel available, planned actions for probable emergency events, and any other pertinent information.
- (b) The fire protection plan shall be submitted for review to the public fire protection district in closest proximity to the proposed Industrial Use, or that district providing service to the general area. Such submittal shall take place prior to application to The Municipality.
- (c) The plan shall provide for a level of protection at least equal to that provided by the reviewing public fire protection district.

(4) Prior to making a conditional use application to establish an Industrial Use, the proposal shall be reviewed by the public fire protection district of jurisdiction indicating degree of conformance to applicable sections of the Municipal fire codes and other rules, ordinances or regulations as applicable.

(5) The applicant shall maintain at the property and on file with the Municipality, a current list and the Material Safety Data Sheets (MSDS) for all chemicals brought on site and/or generated in connection with the Industrial Use.

(6) Emergency Preparedness and Public Safety Plan. As part of the application for a conditional use, the applicant shall provide an emergency preparedness and public safety plan. The plan shall demonstrate the following:

- (a) Name, address and phone number, including 24 hour emergency number of at least two (2) persons responsible for the Industrial Use;
- (b) As-built facilities plan;
- (c) First responders plan for potential emergencies, including but not limited to explosions, fires, and spills; and
- (d) Specific emergency preparedness plan for all potential hazardous scenarios.

f. Access.

(1) Ingress and egress points shall be located and improved in order to:

- (a) Ensure adequate capacity for existing and projected traffic volumes.
- (b) Provide efficient movement of traffic.
- (c) Minimize hazards to highway users and adjacent property and human activity.

(2) All applicable permits or approvals must be obtained, including

without limitation:

- (a) Access or driveway permits to State or County or Municipal roads.
- (b) Construction within State or County or Local Municipal highways.
- (c) Overweight or oversize loads.

(3) Use of streets serving exclusively residential neighborhoods is

prohibited.

(4) All weather access roads, suitable to handle emergency equipment, shall be provided to within 50 feet of any structure, improvement, or activity area.

(5) The operator shall be responsible to keep all public and private rights-of-way which are used to enter or exit the site substantially free from mud, dirt and other debris. In any substantial amount of mud, dirt or other debris is carried on to public or private rights-of-way from the site, the operator shall clean the roads at regular intervals.

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