

MEMO

TO: South Strabane Township Planning Commission

FROM: Roberta J. Sarraf, A.I.C.P., Planning Consultant

DATE: April 5, 2011

SUBJECT: OIL AND GAS ZONING AMENDMENT

The proposed amendment to the Township Zoning Ordinance to regulate oil and gas drilling accomplishes the following:

- Authorizes subsurface facilities (horizontal drilling beyond the well site, gathering and distribution lines between the well site, the compressor station and the natural gas processing facility and transmission lines for commercial distribution of the product) as a permitted use by right in all zoning districts.
- Deletes oil and gas wells as a conditional use in the R-1, R-3, R-4 and C-1 Districts (where they are currently authorized).
- Authorizes oil and gas shallow well sites (above the Marcellus Shale) by conditional use in the A-1, R-2, C-2, C-3, I-1 and I-2 Districts.
- Authorizes oil and gas deep well sites (Marcellus Shale) by conditional use on sites of 20 acres or more in the A-1, I-1 and I-2 Districts and on sites of 50 acres or more in the R-2 District.
- Authorizes compressor stations and natural gas processing facilities by conditional use in the I-2 District.
- Establishes conditional use criteria for reviewing and approving oil and gas well sites. Among those criteria are:
 - Evidence of written permission from property owner;
 - Well survey plat with planned location of well(s);
 - Schedule for undertaking site preparation, drilling, fracking and production;
 - Map of proposed routes to be used by trucks and construction vehicles;
 - Emergency contact information and emergency action plan;
 - Training for Township first responders;
 - Allows one (1) mobile home for on-site supervision/security, but no housing of well site workers;
 - Submission of all required State permits before drilling starts;

- Maintenance agreement with the Township and bond for damage to Township roads;
 - Safety measures during periods of heavy truck traffic;
 - Gated entrance to the site with 24/7 security personnel;
 - No standing of vehicles on public streets;
 - No construction activities to prepare the site between 7:00 PM and 7:00 AM; time limits do not apply to drilling and fracking;
 - Submission of results of pre-drilling water testing, Material Safety Data Sheets (MSDS) and Preparedness, Prevention and Contingency Plan (PPC) to the Township;
 - Requires Operator to conduct a meeting with residents living within 1,000 feet of the well site at least 30 days prior to construction of the well site
 - Requires Operator to conduct a site orientation for Township's first responders at least 30 days prior to beginning drilling;
 - Requires compliance with Zoning Ordinance noise standards and remediation if standards are exceeded;
- Establishes conditional use criteria for reviewing and approving compressor stations and natural gas processing facilities. Among those criteria are:
 - A 50 acre site is required for a processing facility;
 - No minimum site is required for a compressor station;
 - All facilities must be set back 1,000 feet from any property line adjoining the R-2 District;
 - Compressors and engines must be in a sound-proofed, enclosed building;
 - Buffer Area "A" (two rows of planting) must be provided along property lines adjoining A-1, R-1, R-2, R-3 or R-4 Districts;
 - Submission of Material Safety Data Sheets (MSDS) to Township;
 - Site orientation for Township's first responders.
 - Evidence of recorded easements for permanent gathering and distribution lines.
 - Continued compliance with State and Federal regulations and permits;
 - Heavy truck traffic during daylight hours only.
 - Maintain cleanliness of Township streets;
 - Lighting to be extinguished at night, if practical;
 - Fencing of site with access for first responders;
 - Compliance with noise standards of Zoning Ordinance; remediation if standard is exceeded.

TOWNSHIP OF SOUTH STRABANE

ORDINANCE NO. _____

AN ORDINANCE OF THE TOWNSHIP OF SOUTH STRABANE, WASHINGTON COUNTY, PENNSYLVANIA, AMENDING ORDINANCE NO. 3-2009 ENTITLED "ZONING" TO (1) DELETE THE DEFINITION FOR OIL AND GAS WELLS; (2) ADD DEFINITIONS FOR COMPRESSOR, COMPRESSOR STATION, DRILLING, DRILLING EQUIPMENT, NATURAL GAS PROCESSING FACILITY, OIL AND GAS, OIL AND GAS DRILLING, OIL AND GAS DRILLING DEEP WELL, OIL AND GAS DRILLING SHALLOW WELL, OIL AND GAS DRILLING SUBSURFACE FACILITIES, OPERATOR, PROTECTED STRUCTURE, SITE, WELL HEAD AND WELL SITE; (3) ADD OIL AND GAS DRILLING SUBSURFACE FACILITIES TO THE LIST OF PERMITTED USES IN ALL ZONING DISTRICTS; (4) DELETE OIL AND GAS WELLS AS A CONDITIONAL USE IN THE R-1, R-3, R-4 AND C-1 DISTRICTS; (5) ADD OIL AND GAS DRILLING SHALLOW WELL SITE AS A CONDITIONAL USE IN THE A-1, R-2, C-2, C-3, I-1 AND I-2 DISTRICTS; (6) ADD OIL AND GAS DRILLING DEEP WELL SITE AS A CONDITIONAL USE ON SITES OF TWENTY (20) ACRES OR MORE IN THE A-1, I-1 AND I-2 DISTRICTS AND ON SITES OF FIFTY (50) ACRES OR MORE IN THE R-2 DISTRICT; (7) ADD COMPRESSOR STATION AND NATURAL GAS PROCESSING FACILITY AS A CONDITIONAL USE IN THE I-2 DISTRICT; (8) ADD CONDITIONAL USE CRITERIA FOR OIL AND GAS DRILLING WELL SITES, COMPRESSOR STATION AND NATURAL GAS PROCESSING FACILITY; AND (9) ADD PARKING REQUIREMENTS FOR OIL AND GAS DRILLING WELL SITES, COMPRESSOR STATION AND NATURAL GAS PROCESSING FACILITY.

NOW, THEREFORE, BE IT ORDAINED AND ENACTED by the Board of Supervisors of the Township of South Strabane, Washington County, Pennsylvania and it is hereby enacted by and with the authority of the same as follows:

SECTION 1. In Article II, Section 201, the definition of "oil and gas wells" is hereby deleted.

SECTION 2. In Article II, Section 201, the following new definitions are hereby inserted in alphabetical order:

COMPRESSOR: A device used alone or in series to raise the pressure of natural gas and/or by-products to create a pressure differential to move or compress a liquid, vapor or gas.

COMPRESSOR STATION: A facility designed and constructed to compress natural gas and/or oil that originates from a single well site or a collection of such well sites, operating as a midstream

facility for delivery of gas and/or oil to a transmission pipeline, distribution pipeline, processing plant or underground storage field, including one (1) or more natural gas and/or oil compressors, associated buildings, pipes, valves, tanks and other equipment.

DRILLING: Any digging or boring of a new well or re-working of an existing well to explore, develop or produce oil, gas or other hydrocarbons or to inject gas, water or any other fluids or substances into the earth.

DRILLING EQUIPMENT: The derrick, all parts and appurtenances to such structure and every piece of apparatus, machinery or equipment used, erected or maintained in connection with oil and gas drilling, as defined herein.

NATURAL GAS PROCESSING FACILITY: A facility that receives natural gas and associated hydrocarbons from a gathering line system serving one (1) or more well sites that compresses, condenses, pressurizes or otherwise treats natural gas and which removes water and water vapor and/or separates materials such as ethane, propane, butane and other constituents or similar naturally occurring 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, including, but not limited to: cooling facilities, storage tanks and related equipment and facilities.

OIL AND GAS: Crude oil, natural gas, coal bed methane gas, propane, butane and/or any other constituents or similar substances that are produced by drilling a well of any depth into, through and below the surface of the earth.

OIL AND GAS DRILLING: The removal of oil and gas resources from the ground by means of drilling, as defined herein, in accordance with a valid permit issued by the Pennsylvania Department of Environmental Protection (PA DEP) under the provisions of the PA Oil and Gas Act (58 P.S. §601.101 - §602.605), as now or hereafter amended.

OIL AND GAS DRILLING DEEP WELL: Oil and gas drilling, as defined herein, drilled to depths deeper than the base of the Elk Sandstone or its stratigraphic equivalent for the sole purpose of exploring the Marcellus Shale.

OIL AND GAS DRILLING SHALLOW WELL: Oil and gas drilling, as defined herein, drilled to depths shallower than the base of the Elk Sandstone or its stratigraphic equivalent and any well site that

proposes drilling of a single well for no more than seven (7) consecutive days total in any calendar year.

OIL AND GAS DRILLING SUBSURFACE FACILITIES: Activities performed under the surface of the ground that are part of the operation of oil and gas drilling, as defined herein, located on properties within the unit for a particular well site, but that are not included in the well site, including, but not limited to: horizontal drilling and hydraulic fracturing zones, underground gathering and transmission pipelines established in accordance with Public Utility Commission (PUC) guidelines, water distribution lines and similar underground facilities incidental to oil and gas drilling.

OPERATOR: Any person, partnership, company or corporation and its subcontractors and agents who have an interest in real estate for the purpose of exploring or drilling for, producing or transporting oil or gas.

PROTECTED STRUCTURE: Any occupied residence, business, school, church or public building located within one thousand (1,000) feet of a natural gas well head, as defined herein, that may be adversely affected by noise generated from the drilling or hydraulic fracturing at the well site, as defined herein, excluding any structure owned by an oil or gas lessor who has signed a lease with the Operator granting surface rights to drill the subject well or whose owner or occupants have signed a waiver relieving the Operator from complying with the noise abatement provisions of this Ordinance.

SITE: One (1) or more contiguous lots or parcels proposed for development that meet the minimum area and bulk requirements of the Zoning District in which they are located for the intended use.

WELL HEAD: The precise point of entry into the ground where drilling takes place including the structure that is placed over the opening upon completion of drilling and that is maintained during production.

WELL SITE: All of the area occupied by the drilling equipment, as defined herein, and all surface facilities, structures, water and other fluid storage impoundments and storage tanks and associated equipment including tanks, meters and other permanent or temporary structures and equipment incidental to oil and gas drilling, as defined herein, including facilities and equipment necessary for site preparation, site construction, drilling, hydraulic

fracturing, site restoration, production and operation of the well upon completion of drilling.

SECTION 3.

In Article IV (A-1 District), Section 401-A-1, Subparagraphs “e” through “g” are hereby designated “f” through “h” and the following new Subparagraph “e” is hereby inserted:

- e. Oil and Gas Drilling Subsurface Facilities

SECTION 4.

In Article IV (A-1 District), Section 401-B-1, Subparagraph “q” is hereby deleted and the following new Subparagraph “q” is substituted therefore:

- q. Oil and Gas Drilling Deep Well Site, subject to §1503.42

SECTION 5.

In Article IV (A-1 District), Section 401-B-1, Subparagraphs “r” and “s” are hereby designated “s” and “t” and the following new Subparagraph “r” is hereby inserted:

- r. Oil and Gas Drilling Shallow Well Site, subject to §1503.42

SECTION 6.

In Article V (R-1 District), Section 501-A-1, Subparagraphs “c” through “e” are hereby designated “d” through “f” and the following new Subparagraph “c” is hereby inserted:

- c. Oil and Gas Drilling Subsurface Facilities

SECTION 7.

In Article V (R-1 District), Section 501-B-1, Subparagraph “e” is hereby deleted.

SECTION 8.

In Article VI (R-2 District), Section 601-A-1, Subparagraphs “c” through “e” are hereby designated “d” through “f” and the following new Subparagraph “c” is hereby inserted:

- c. Oil and Gas Drilling Subsurface Facilities

SECTION 9.

In Article VI (R-2 District), Section 601-B-1, Subparagraph “f” is hereby deleted and the following new Subparagraph “f” is substituted therefore:

- f. Oil and Gas Drilling Deep Well Site, subject to §1503.42

SECTION 10.

In Article VI (R-2 District), Section 601-B-1, Subparagraph “g” is hereby designated “h” and the following new Subparagraph “g” is hereby inserted:

- g.** Oil and Gas Drilling Shallow Well Site, subject to §1503.42

SECTION 11.

In Article VII (R-3 District), Section 701-A-1, Subparagraphs “c” through “e” are hereby designated “d” through “f” and the following new Subparagraph “c” is hereby inserted:

- c.** Oil and Gas Drilling Subsurface Facilities

SECTION 12.

In Article VII (R-3 District), Section 701-B-1, Subparagraph “k” is hereby deleted and Subparagraphs “l” through “n” are hereby designated “k” through “m.”

SECTION 13.

In Article VIII (R-4 District), Section 801-A-1, Subparagraphs “c” through “f” are hereby designated “d” through “g” and the following new Subparagraph “c” is hereby inserted:

- c.** Oil and Gas Drilling Subsurface Facilities

SECTION 14.

In Article VIII (R-4 District), Section 801-B-1, Subparagraph “l” is hereby deleted and Subparagraph “m” is hereby designated “l.”

SECTION 15.

In Article IX (C-1 District), Section 901-A-1, the following new Subparagraph “c” is hereby inserted:

- c.** Oil and Gas Drilling Subsurface Facilities

SECTION 16.

In Article IX (C-1 District), Section 901-B-1, Subparagraph “d” is hereby deleted and Subparagraph “e” is hereby designated “d”.

SECTION 17.

In Article X (C-2 District), Section 1001-A-1, Subparagraphs “mm” through “ww” are hereby designated “nn” through “xx” and the following new Subparagraph “mm” is hereby inserted:

- mm.** Oil and Gas Drilling Subsurface Facilities

SECTION 18.

In Article X (C-2 District), Section 1001-B-1, Subparagraph “n” is hereby deleted and the following new Subparagraph “n” is substituted therefore:

- n. Oil and Gas Drilling Shallow Well Site, subject to §1503.42

SECTION 19.

In Article XI (C-3 District), Section 1101-A-1, Subparagraph “c” is hereby designated “d” and the following new Subparagraph “c” is hereby inserted:

- c. Oil and Gas Drilling Subsurface Facilities

SECTION 20.

In Article XI (C-3 District), Section 1101-B-1, Subparagraph “f” is hereby deleted and the following new Subparagraph “f” is substituted therefore:

- f. Oil and Gas Drilling Shallow Well Site, subject to §1503.42

SECTION 21.

In Article XII (I-1 District), Section 1201-A-1, Subparagraphs “l” through “q” are hereby designated “m” through “r” and the following new Subparagraph “l” is hereby inserted:

- l. Oil and Gas Drilling Subsurface Facilities

SECTION 22.

In Article XII (I-1 District), Section 1201-B-1, Subparagraph “g” is hereby deleted and the following new Subparagraph “g” is substituted therefore:

- g. Oil and Gas Drilling Deep Well Site, subject to §1503.42

SECTION 23.

In Article XII (I-1 District), Section 1201-B-1, Subparagraphs “h” through “o” are hereby designated “i” through “p”, and the following new Subparagraph “h” is hereby inserted:

- h. Oil and Gas Drilling Shallow Well Site, subject to §1503.42

SECTION 24.

In Article XIII (I-2 District), Section 1301-A-1, Subparagraphs “p” through “y” are hereby designated “q” through “z” and the following new Subparagraph “p” is hereby inserted:

- p. Oil and Gas Drilling Subsurface Facilities

SECTION 25.

In Article XIII (I-2 District), Section 1301-B-1, Subparagraph “j” is hereby deleted and the following new Subparagraph “j” is hereby inserted:

- j. Oil and Gas Drilling Deep Well Site, subject to §1503.42

SECTION 26.

In Article XIII (I-2 District), Section 1301-B-1, Subparagraphs “k” through “p” are hereby designated “l” through “q” and the following new Subparagraph “k” is hereby inserted:

- k. Oil and Gas Drilling Shallow Well Site, subject to §1503.42

SECTION 27.

In Article XIII (I-2 District), Section 1301-B-1, Subparagraphs “e” through “q” are hereby designated “f” through “r” and the following new Subparagraph “e” is hereby inserted:

- e. Compressor Station, subject to §1503.64

SECTION 28.

In Article XIII (I-2 District), Section 1301-B-1, revised Subparagraphs “k” through “r” are hereby designated “l” through “s” and the following new Subparagraph “k” is hereby inserted:

- k. Natural Gas Processing Facility, subject to §1503.64

SECTION 29.

In Article XV, §1503.42 is hereby deleted and the following new §1503.42 is substituted therefore:

§1503.42 Oil and Gas Drilling Shallow Well Site and Oil and Gas Drilling Deep Well Site, subject to:

- a. In the R-2 District, the leased area for a well site for an oil and gas drilling deep well shall be located on a parcel or parcels that have a combined total area of at least fifty (50) contiguous acres. There shall be no minimum area required for the well site itself.
- b. In all other Districts where oil and gas drilling deep wells are authorized, the leased area for a well site for an oil and gas drilling deep well shall be located on a parcel or parcels that have a combined total area of at least twenty (20) contiguous acres. There shall be no minimum area required for the well site itself.

- c.** There shall be no minimum area required for the parcel on which an oil and gas drilling shallow well is located, nor shall there be a minimum area required for the well site itself.
- d.** No portion of the well site for an oil and gas drilling deep well shall be located closer than one thousand (1,000) feet from any property line, excluding the lease lines for the well site.
- e.** A conditional use application for an oil and gas drilling well site, whether deep or shallow, shall be accompanied by written permission from the property owner who has legal or equitable title in and to the surface of the well site.
- f.** The following information shall be provided as part of the conditional use application:
- 1.** A map showing the planned access route via public streets to the well sites;
 - 2.** Information on the status of road bonding;
 - 3.** The Operator's Erosion and Sedimentation Plan;
 - 4.** The well survey plat submitted to the Pennsylvania Department of Environmental Protection (PA DEP) showing the planned surface location of the well;
 - 5.** A schedule indicating the following dates:
 - [a]** Site preparation beginnings and endings;
 - [b]** Anticipated drilling activity beginnings and endings;
 - [c]** Anticipated completion (perforating) work to begin and end;
 - [d]** Anticipated stimulation (fracturing) work to begin and end;

- [e]** Anticipated production work to begin and end;
 - [f]** Anticipated plugging date.
- 6.** A plan for control of dust and mud on the well site, surrounding properties and on the public streets being utilized by vehicles servicing the well site.
- 7.** A copy of an emergency action plan that addresses methods to handle the following:
 - a.** Well leakage;
 - b.** Spill containment;
 - c.** Vandalism creating unknown conditions;
 - d.** Defective casing or cementing;
 - e.** Potential communication between the well and the public water supply; and
 - f.** Procedures for evacuation and an identification of circumstances warranting evacuation.
- 8.** Contact information for the Operator; and
- 9.** A general description of the planned operations at the planned well, including associated equipment used in the development of the well site and the number, type, weight and frequency of vehicles that will visit the site during drilling and hydraulic fracturing.
- g.** At the time of conditional use application, a survey of the well site with all proposed permanent facilities (tanks or other surface installations) with locations and distances to property lines shall be filed.
- h.** There shall be no facilities provided on the well site for the temporary housing of well site workers; however, temporary living quarters may be provided in no more than one (1)

mobile home for an on-site supervisor or security officer during the drilling and fracturing process for that well site only.

- i. The applicant shall consider locating the proposed temporary and permanent facilities, to the extent practical, given the geotechnical basis for determining the location of the well site, in order to minimize interference with Township residents' safety and enjoyment of their property.
- j. In constructing the well site, the applicant shall prepare a tree survey and preservation plan and, to the extent practical, shall maintain existing trees as a visual buffer between the well site and any adjacent residential properties.
- k. No later than thirty (30) days prior to beginning any work on an approved well site, the applicant shall submit to the Township a true and correct copy of all permits (General, ESCGP-1) issued by the Pennsylvania Department of Environmental Protection (PA DEP). In addition, the Township shall be provided copies of all plans (erosion and sedimentation control, grading, etc.) required by the Pennsylvania Department of Environmental Protection (PA DEP). All required permits shall be maintained throughout the duration of the drilling operation. Any suspension or revocation of permits by the Pennsylvania Department of Environmental Protection (PA DEP) shall be reported to the Township and shall constitute a violation of Township zoning approval and may result in the suspension or revocation of zoning approval.
- l. Access directly to State roads shall require Pennsylvania Department of Transportation (Penn DOT) Highway Occupancy Permit approval. Prior to initiating any work at a well site, the Township shall be provided a copy of the Highway Occupancy Permit.

- m.** The applicant shall provide the Township with a plan showing the proposed truck routes to be utilized during the drilling operation. The proposed hauling routes shall be designed to minimize the impact on collector and local streets within the Township. The Township reserves the right to designate required truck hauling routes throughout the Township.
- n.** The Operator shall execute a Maintenance Agreement with the Township and post a bond in favor of the Township in a form acceptable to the Township and in an amount to be determined by the Township Engineer in accordance with limits provided by law prior to beginning any work at a well site to guarantee restoration of Township streets damaged as a result of hauling associated with the drilling operation.
- o.** The Operator shall post a performance bond in a form acceptable to the Township and in an amount determined by the Township Engineer to guarantee the proper installation of the access driveway, security fencing and gating and any other required site features that are not regulated by the Pennsylvania Department of Environmental Protection (PA DEP).
- p.** The Operator shall take all necessary precautions to ensure the safety of persons in the areas established for road crossings and/or areas adjacent to roadways, including, but not limited to: school crossings, pedestrian crossings and transit or school bus stops. Where necessary during periods of anticipated heavy or frequent truck traffic associated with the oil and gas drilling, the Operator shall provide flagmen to ensure safety of children at or near schools or school bus stops and shall provide adequate signs or other warning measures for control of truck and other vehicular traffic.

- q.** No construction activities involving excavation, alteration or repair work on any access road or well site shall be performed between the hours of 7:00 P.M. and 7:00 A.M. There shall be no time restrictions on drilling or hydraulic fracturing.
- r.** Driveways accessing the well site shall be paved with an impervious material from the edge of the public street cartway for a distance at least fifty (50) feet into the well site. The impervious material shall be in place prior to the commencement of the drilling operation.
- s.** Driveways shall be of sufficient length so that there will be no stacking of vehicles on public streets.
- t.** The access driveway off the public street to the well site shall be gated at the entrance to prevent illegal access into the well site. The well site assigned address shall be clearly visible on the access gate for Emergency 911 purposes. In addition, the sign shall include the well name and number, the name of the Operator and the telephone number for a person responsible who may be contacted in case of emergency.
- u.** Public streets, the well site entrance and the property on which a well site is located shall at all times be kept free of mud, debris, trash or other waste materials.
- v.** The Material Safety Data Sheets (MSDS) shall be provided to the Township and the Township Fire Department.
- w.** A copy of the Operator's Preparedness, Prevention and Contingency (PPC) Plan shall be submitted to the Township Zoning Officer for distribution to the Township's first responders.

- x.** The Operator shall invite residents of properties within one thousand feet (1,000') of the well site to a meeting to be held at least thirty (30) days, but no more than ninety (90) days, prior to the initiation of construction of the well site, to present the Operator's plans for the well(s) and to allow for questions and answers.
- y.** At the meeting with the residents, the Operator shall provide the following information to each resident within one thousand (1,000) feet of the planned surface location of the well or wells:
- 1.** A copy of the well survey plat showing the location(s) of the planned well(s);
 - 2.** A general description of the planned operations at the planned well(s) and associated equipment to be used in the development of the well(s); and
 - 3.** The contact information for the Operator and the well site supervisor.
 - 4.** The Operator's emergency action plan and plan for evacuation of surrounding properties.
- z.** At least thirty (30) days prior to the initiation of drilling, the Operator shall conduct a site orientation for the Township's first responders. The Operator shall file a written emergency action plan with the Township's first responders, including a plan for evacuation of surrounding properties should it be necessary.
- aa.** The Township shall be provided with the name of the person supervising the drilling operation and a phone number where such person can be reached twenty-four (24) hours a day.
- bb.** The results of any pre-drilling water testing conducted by the Operator shall be provided to the Township.

cc. Salt water and/or waste water and/or chemicals shall be managed and disposed of in such a manner to prevent it from affecting or entering into any regulated waterway.

dd. In the event of any spill, leak or malfunction, the Operator shall remove or cause to be removed, to the satisfaction of the Township's Fire Chief and the Pennsylvania Department of Environmental Protection (PA DEP) inspectors, all waste materials from any public or private property affected by such spill, leak or malfunction. Clean-up operations shall begin immediately upon knowledge that a spill, leak or malfunction occurs.

ee. No person shall place, deposit, discharge or cause to be placed, deposited or discharged any oil, petroleum, asphalt, tar, hydrocarbon substances or any refuse including wastewater or brine from any oil and gas drilling or the contents of any container used in connection with any oil and gas drilling into, or upon any public right-of-way, alley, street, lot, storm drain, ditch or sewer, sanitary drain, lake, pond, creek or similar body of water or any private property without permits from the appropriate regulatory agencies.

ff. In the case of oil and gas drilling deep wells, all well head pads and on-site or off-site fracture ponds shall be secured with a temporary fence with a secured gate as follows:

1. The fence shall be a minimum of six (6) feet in height, chain link with green fabric mesh.
2. The fencing shall be in place throughout the drilling operation and until the fracture pond is removed.
3. The chain link fence shall have a minimum thickness of eleven (11) gauge.

gg. Upon completion of drilling and fracturing, the well heads shall be secured with a permanent fence with secured gate that meets the requirements of Subparagraph aa, above. Permanent fencing of the entire well site may be substituted for this requirement.

hh. If the planned surface location of the oil and gas drilling deep well head is within one thousand (1,000) feet of a protected structure, as defined herein, the Operator shall:

1. Install temporary safety fencing, at least six (6) feet in height, around drilling and hydraulic fracturing equipment and install permanent fall protection fencing meeting OSHA requirements around any pits that contain or could contain water or other liquids at depths greater than two (2) feet.

2. Install warning signs providing notice of the potential dangers at the well site.

3. Provide at least one (1) security personnel twenty-four hours a day, seven days a week (24/7) at all times when a drilling rig or hydraulic fracturing equipment is on the well site.

ii. All drilling operations shall be conducted in such a manner to minimize dust, vibration or noxious odors and shall be in accordance with the best accepted practices incident to drilling for oil or gas in suburban areas. All equipment used shall be constructed and operated so that vibrations, dust, odor or other harmful or annoying effects are minimized by the operations carried on at the well site to avoid injury to or annoyance of persons living in the vicinity.

jj. Recognizing that adequate and appropriate lighting is essential to the safety of those involved in oil and gas drilling, the Operator shall take steps, to the extent practicable, to

direct site lighting downward and inward toward the well site, well head or other area being developed so as to attempt to minimize glare on public streets and adjacent buildings within three hundred (300) feet of the well site, well head or other area being developed.

kk. All permanent gathering and distribution lines shall be placed in an easement or right-of-way. Evidence of recording of an easement or right-of-way agreement shall be supplied to the Township for any pipelines that are not located in an existing easement or right of way.

ll. All operations, including drilling and fracturing, shall comply with the noise standards specified in §1601.3 of the Township Zoning Ordinance.

mm. If, after initiation of oil and gas deep well drilling activities, a complaint is received by the Township from any persons, whether a resident or otherwise, occupying a protected structure, as defined herein, regarding noise generated during drilling or hydraulic fracturing activities, the Operator shall, within twenty-four (24) hours of receipt of the complaint from the Township, continuously monitor for a forty-eight (48) hour period at a point which is the closer to the complainant's building of:

1. the complainant's protected structure property line nearest to the well site or equipment generating the noise, or
2. one hundred (100) feet from the protected structure.

nn. If the Operator of any oil and gas drilling deep well engages in any noise testing as required by this Ordinance, the Operator shall provide preliminary data to the Township no later than ten (10) business days following completion of the noise testing. Once the monitoring is complete, the Operator shall meet with representatives of the Township and affected residents to discuss whether possible noise

abatement measures are warranted, if the permitted levels set forth herein were exceeded.

- oo. In the case of oil and gas drilling deep wells, the Township may require acoustical blankets, sound walls, mufflers or other alternative methods to ensure compliance with the noise standards depending on the location of a proposed well site with respect to protected structures and the results of noise monitoring.
- pp. Exhaust from any internal combustion engine or compressor used in connection with the drilling of any well or for use on any production equipment or used in the development of the well site shall not be discharged into the open air unless it is equipped with an exhaust muffler or an exhaust box. The exhaust muffler or exhaust box shall be constructed of noncombustible materials designed and installed to suppress noise and disruptive vibrations. Moreover, all such equipment with an exhaust muffler or exhaust box shall be maintained in good operating condition according to manufacturer's specifications.
- qq. After the drilling operation is complete, the Operator shall clean the well site, complete all restoration activities and repair any damage to public property caused by such operations within sixty (60) days.

SECTION 30.

In Article XV, Section 1503, the following new §1503.64 is hereby inserted:

1503.64

Natural Gas Processing Facility or Compressor Station, subject to:

- a. The minimum site required for a natural gas processing facility shall be fifty (50) acres. There shall be no minimum site required for a compressor station.

- b.** All facilities and structures, whether principal or accessory, shall be set back at least one thousand feet (1,000') from any property line adjoining property in the R-2 District.
- c.** Compressors shall be located within a completely enclosed building. During periods of normal operations, doors, windows and similar operations shall remain closed to ensure maximum noise suppression.
- d.** The building housing the engines and compressors shall be sound-proofed, if necessary to meet the maximum allowed noise at the property line specified in §1601.3 of the Township Zoning Ordinance.
- e.** If compressors and other power driven equipment utilize electric motors rather than internal combustion engines, no electric power shall be generated on the site and all electrical installations shall conform to local State and National codes.
- f.** All property lines adjoining property in an A-1, R-1, R-2, R-3 or R-4 District shall be screened by Buffer Area "A" for the distance necessary to screen buildings, structures, parking areas, storage areas and equipment.
- g.** All permanent gathering and distribution lines shall be placed underground at a depth of at least three (3) feet.
- h.** All permanent gathering and distribution lines shall be placed in an easement or right-of-way. Evidence of recording of an easement or right-of-way agreement shall be supplied to the Township for any pipelines that are not located in an existing easement or right of way.
- i.** The Operator shall provide all material safety data sheets (MSDSs) for all hazardous materials produced. Stored or distributed on site. To the Township Fire Department and to

the Township Emergency Management Coordinator.

- j.** The Operator shall provide a site orientation for Township's emergency first responders regarding operations, equipment and chemicals present at the facility.
- k.** The Operator shall provide the name, address and phone number for 24 hour emergency contact.
- l.** Heavy truck traffic to and from the site shall be restricted to daylight hours. Emergency vehicles and field maintenance vehicles are exempted from this limitation.
- m.** Tracking of mud, dirt and debris onto Township streets shall be minimized. Measures shall be taken to clean any mud, dirt and debris from Township streets within a reasonable time.
- n.** All waste disposal and storage of gases or by-products shall be in accordance with the rules and regulations of the Pennsylvania Department of Environmental Protection (PA DEP) and any other applicable Federal, State or local agency.
- o.** The Operator shall demonstrate continued compliance with all applicable local, State and Federal permits and regulations.
- p.** No person shall place, deposit, discharge or cause to be placed, deposited or discharged any oil, petroleum, asphalt, tar, hydrocarbon substance or any refuse including wastewater or brine from any natural gas processing facility or the contents of any container used in connection with any natural gas processing facility into, or upon any public right-of-way, alley, street, lot, storm drain, ditch or sewer, sanitary drain, lake, pond, creek or similar body of water or any private property without permits from the appropriate regulatory agencies.

- q.** Drip pans and other containment devices shall be placed or installed underneath all tanks, containers, pumps, lubricating oil systems, engines, fuel and chemical tanks, system valves, connections and any other areas or structures that could potentially leak, discharge or spill hazardous liquids, semi-liquids or solid waste materials, including hazardous waste that is inseparable by simple mechanical removal processes and is made up primarily of natural material.
- r.** All chemicals and/or hazardous materials shall be stored in such a manner as to prevent, contain and facilitate rapid remediation and cleanup of any accidental spill, leak or discharge of a hazardous material. The Operator shall have all material safety data sheets (MSDSs) for all hazardous materials on site. All applicable Federal and State regulatory requirements for the proper labeling of containers shall be followed. Appropriate pollution prevention actions shall be required and include, but are not limited to: chemical and materials raised from the ground (e.g. wooden pallets), bulk storage, installation and maintenance of secondary containment systems, and protection from stormwater and weather elements.
- s.** The site shall be secured by a minimum eight (8) foot high chain link fence with a locking gate that shall be kept locked when employees are not on the premises. Twenty-four (24) hour access shall be provided to the first responders.
- t.** All equipment and facilities shall comply with the noise standards of §1601.3 of the Township Zoning Ordinance. If the equipment and facilities exceed the noise limits established by the Township Zoning Ordinance, the Township may require acoustical blankets, sound walls, mufflers or other alternative methods to ensure compliance with the noise standards.

- u. Exterior lighting shall be shielded and directed away from adjacent streets and properties. To the extent permitted by safety considerations, exterior lighting shall be turned off between dusk and dawn.

SECTION 31.

In Article XVII, §1702.3, the following new requirements are hereby inserted in alphabetical order in the Table of Parking Requirements:

USE	PARKING SPACES REQUIRED
Compressor Station	A minimum of five (5) spaces for visitors and maintenance vehicles
Natural Gas Processing Facility	One (1) space for each employee on peak shift, plus a minimum of five (5) spaces designated for visitors
Oil and Gas Well Site	During drilling operations, adequate unpaved parking areas shall be provided for employees working on peak shift and all vehicles and equipment stored on site

SECTION 32.

All ordinances or parts of ordinances in conflict with the provisions of this Ordinance are hereby repealed to the extent of such conflict.

ORDAINED AND ENACTED THIS _____ DAY OF _____, 2011.

TOWNSHIP OF SOUTH STRABANE

Chairman, Board of Supervisors

ATTEST:

Township Manager

MEMO

TO: South Strabane Township Planning Commission

FROM: Roberta J. Sarraf, A.I.C.P., Planning Consultant

DATE: April 4, 2011

SUBJECT: ZONING ORDINANCE ERRATA

There are seven (7) sections in the zoning amendment to correct errors in the text of the Township Zoning Ordinance that have been discovered in using the Ordinance since its adoption in June, 2009. This amendment accomplishes the following:

Sections 1, 3 & 8: Revise incorrect section numbers for wind farms in the A-1 District and for Section headings in the R-1 District and change the incorrect references to the R-A District to A-1 in the criteria for four (4) different conditional uses in Article XV.

Section 2: Establishes a 15 foot side yard in the A-1 District to correct the omission of a side yard requirement in that District.

Section 4: Inserts essential services as a permitted use in the C-3 District to correct its omission from that District. (Essential services are authorized in every District.)

Sections 5 & 6: Deletes communications antennas on a building or utility structure as a use by special exception in the I-1 and I-2 District to remove a conflict since they are already listed as a permitted use in those Districts.

Section 7: Revises criteria for service stations to delete setback requirements that are regulated by State law and replace them with requirements for repair operations in an enclosed building and handling of hazardous materials in accordance with State requirements.

Section 9: Deletes Buffer Area "D" from the Table of Buffer requirements since the Zoning Ordinance does not describe or require a Buffer Area "D."

TOWNSHIP OF SOUTH STRABANE

ORDINANCE NO. _____

AN ORDINANCE OF THE TOWNSHIP OF SOUTH STRABANE, WASHINGTON COUNTY, PENNSYLVANIA, AMENDING ORDINANCE NO. 3-2009 ENTITLED "ZONING" TO: (1) CORRECT SECTION CROSS-REFERENCE FOR WIND FARMS IN THE A-1 DISTRICT; (2) INSERT SIDE YARD REQUIREMENTS FOR ACCESSORY STRUCTURES IN THE A-1 DISTRICT; (3) CORRECT SECTION NUMBERS IN ARTICLE V; (4) ADD ESSENTIAL SERVICES AS A PERMITTED USE IN THE C-3 DISTRICT; (5) DELETE COMMUNICATIONS ANTENNA MOUNTED ON AN APPROVED COMMUNICATIONS TOWER AS A PRINCIPAL USE BY SPECIAL EXCEPTION IN THE I-1 AND I-2 DISTRICTS; (6) REVISE CRITERIA FOR AUTOMOBILE SERVICE STATION; (7) CORRECT REFERENCE FROM R-A DISTRICT TO A-1 DISTRICT IN EXPRESS STANDARDS AND CRITERIA IN §1503.27f, §1503.31g, §1503.40j, AND §1503.44j; AND (8) CORRECT ERROR IN TABLE OF BUFFER AREA REQUIREMENTS.

NOW, THEREFORE, BE IT ORDAINED AND ENACTED by the Board of Supervisors of the Township of South Strabane, Washington County, Pennsylvania and it is hereby enacted by and with the authority of the same as follows:

SECTION 1. In Article IV (A-1 District), Section 401-C-1, Subparagraph "j" is hereby deleted and the following new Subparagraph "j" is substituted therefore:

j. Wind Farm, Subject to §1503.63

SECTION 2. In Article IV (A-1 District), Section 402-F, the minimum side yard for accessory structures is hereby corrected by replacing "See §1603.3" with "15 feet".

SECTION 3. In Article V (R-1 District), the Section numbers for Sections entitled "Purpose", "Authorized Uses" and "Area and Bulk Regulations are hereby corrected by changing them from 400, 401 and 402 to 500, 501 and 502, respectively.

SECTION 4.

In Article XI (C-3 District), Section 1101-A-1, Subparagraph “b” is hereby designated “c” and the following new Subparagraph “b” is hereby inserted:

- b. Essential Services

SECTION 5.

In Article XII (I-1 District), Section 1201-C-1, Subparagraph “a” is hereby deleted and the following new Subparagraph “a” is substituted therefore:

- a. Communications Antenna Mounted on an Existing Building or on an Existing Public Utility Storage or Transmission Structure, subject to §1503.14

SECTION 6.

In Article XIII (I-2 District), Section 1301-C-1, Subparagraph “a” is hereby deleted and the following new Subparagraph “a” is substituted therefore:

- a. Communications Antenna Mounted on an Existing Building or on an Existing Public Utility Storage or Transmission Structure, subject to §1503.14

SECTION 7.

In Article XV, §1503.6, Subparagraphs “a” and “c” are hereby deleted and the following new Subparagraphs “a” and “c” are substituted therefore:

- a. All repair work shall be performed within a completely enclosed building, as defined herein.
- c. Storage, handling and disposal of hazardous materials, as defined by Federal or State Statute, shall comply with the current requirements of the Pennsylvania Department of Environmental Protection (DEP) and the U.S. Environmental Protection Agency (EPA).

SECTION 8.

In Article XV, §1503.27f, §1503.31g, §1503.40j and §1503.44j, one of the Zoning Districts referred to is hereby corrected by changing R-A to A-1 in each Subparagraph.

SECTION 9.

In Article XVI, §1602.2, Subparagraph “b” is hereby deleted and the following new Subparagraph “b” is substituted therefore:

- b. Where development of the types listed in the following table are proposed, the applicable Buffer Area shall be provided along all property lines adjoining property in the indicated zoning classification or containing the type of land use indicated:

DEVELOPMENT PROPOSED	BUFFER AREA REQUIRED		
	A	B	C
MULTIFAMILY			
Adjoining Single or Two Family Use		X	
Adjoining Multifamily Use			X
Adjoining Undeveloped “R” Property		X	
Adjoining any C-1 or C-2 District			X
Adjoining any I-1 or I-2 District			X
ALL USES IN C-1 OR C-2 DISTRICTS			
Adjoining Single or Two Family Use	X		
Adjoining Multifamily Use			X
Adjoining Undeveloped “R” Property	X		
Adjoining any C-1 or C-2 District			X
Adjoining any C-3, I-1 or I-2 District			X
ALL USES IN C-3, I-1 OR I-2 DISTRICTS			
Adjoining any “R” District	X		
Adjoining any Undeveloped “R” District	X		
Adjoining any C-1, C-2 or C-3 District			X
Adjoining any I-1 or I-2 District			X

SECTION 11.

All ordinances or parts of ordinances in conflict with the provisions of this Ordinance are hereby repealed to the extent of such conflict.

ORDAINED AND ENACTED THIS ____ DAY OF _____, 2011.

TOWNSHIP OF SOUTH STRABANE

Chairman, Board of Supervisors

ATTEST:

Township Manager