CHAPTER 28

SEISMIC TESTING

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PART 1

Regulating of Seismic Testing

<u>§101. Short Title.</u>

This Part may be known and may be cited as the "Slippery Rock Township Seismic Testing Ordinance." (Ord. 2011-1, 5/23/2011, §1)

<u>§102. Definitions.</u>

For the purpose of this Part the following words and phrases shall have the meanings ascribed to them in this Section:

ENERGY SOURCE OPERATIONS — Operations that involve the transmittal of seismic waves to model the geophysical properties of the Earth's crust. (Ord. 2011-1, 5/23/2011, §2)

<u>§103. Permit Required</u>

1. It shall be unlawful for any person to conduct any exploration activities within the Township regarding oil, gas, and/or other minerals by the use of energy source operations, including without limitation weight drops, explosives, and/or vibrating machines, thumper trucks or any other vehicles or equipment that causes vibrations, without first obtaining a permit therefore from the Township. To the extent an applicant, pursuant to this Ordinance, seeks to conduct Energy Source Operations on Township property, including but not limited to Township roads, highways, and real estate. The Board of Supervisors has the express right to grant or deny any application under this ordinance. (Ord. 2011-1, 5/23/2011, §3)

§104. Permit Application; Fee Procedure

- 1. Application for a permit hereunder shall be made with the Township. Such application shall contain the following information:
 - A. Name of the applicant.
 - B. Address of the applicant.
 - C. Type of explosives or other geophysical methods of mineral exploration to be used, and the purposes therefore.

- D. A map designating a testing area and showing the location of all points of use and the energy source to be used at each point.
- E. A traffic control plan for any operations or testing that will impede traffic on a public right-of-way.
- F. The applicant's insurance information, including the name of applicant's insurance carrier, the types and amount of insurance covering its proposed operations, the name and telephone number of an individual to contact in case of a claim for personal injury or property damage, and the procedure for obtaining a copy of applicant's certificate of insurance.

A non-refundable permit fee of five hundred dollars (\$500.00) for processing the application and preparing the permit shall accompany each such application. On receipt of such application, the Township or designee shall prepare a report showing all Township facilities or infrastructure that may be affected by the proposed exploration activity located in the testing area shown in such application. Such report and the application shall then be submitted to the Board of Supervisors with the recommendations of the Zoning Officer or his designee. No permit shall be issued except upon approval of the Township Board of Supervisors. (Ord. 2011-1, 5/23/2011, §4)

§105. Term of Permit

1. The term of a permit issued under this article shall be for one (1) year beginning on the date of approval of the permit by the Board of Supervisors, and all energy source operations shall be completed within said term. The applicant shall the Township or his designee a minimum of seven (7) business days in advance of the actual commencement of energy source operations. Once operations have commenced, in the event applicant is rendered unable, wholly or in part, by circumstances beyond the applicant's control, to complete operations within the remaining term of the permit, then the time for completion may be extended, at the sole discretion of the Township Supervisors, for a period of time not to exceed six (6) months, upon written request by the applicant setting forth full particulars of the circumstances causing the delay which were not within the control of the applicant and which the applicant could not have avoided by the exercise of due diligence and care. (Ord. 2011-1, 5/23/2011, §5)

§106. Operations in General

1. All geophysical operations shall be limited to the areas determined by Township Board of Supervisors and depicted on the map kept in the Township Office. A copy of such map shall be attached to any permit issued by the township. If, during the course of operations, any utility line must be relocated to maintain compliance with the terms and conditions set forth herein or to ensure the safety of the general population, the applicant shall notify the Township Office at least seven (7) business days prior to embarking on such relocation, which shall be performed in compliance with Township standards.

- 2. The applicant shall employ an engineer specializing in seismology whose qualifications may be reviewed and approved by the Township Engineer, who shall be on the job site during the entire period of testing to mitigate any potential damage to public or private property. The applicant shall also designate a point of contact who will respond within twenty-four (24) hours to any request from the Township for information regarding the applicant's testing operations, including a request for maps for the testing area that show the points of use as planned by the applicant at the time of the request.
- 3. The applicant shall obtain written permission, as required by law, from property owners before entering upon or crossing their property.
- 4. The applicant shall be responsible for and shall settle all reasonable and legitimate claims demands and causes of actions relating to property or persons arising out of or as a result of the applicant's operations under this permit and shall handle all such claims in an expedient manner. (Ord. 2011-1, 5/23/2011, §6)

<u>§107. Notice</u>

- 1. The applicant shall notify each owner of property located within two hundred fifty (250) feet of its planned energy source operations, in writing by certified U. S. mail to or personal delivery at the property, a minimum of ten (10) working days prior to the conducting of any test. Said notice will include the anticipated start date of energy source operations and the energy source planned to be used. The applicant will offer to provide and will provide if requested, to such owner, in writing, the insurance information required by <u>§104 Permit Application; fee schedule</u>, to be included in its application.
- 2. The applicant shall notify each owner of property, within four hundred (400) feet of charge tests or one hundred twenty-five (125) feet of vibroseis or weight drop tests, in writing by U.S. mail to or personal delivery at the property, a minimum of ten (10) working days prior to the conducting of any test, of the availability at no cost to the property owner of pre-and post-test inspections of all structures located on or under said property, including appropriate testing and lab test for water wells. The applicant shall perform the offered inspections if requested y the property owner. The applicant shall maintain records of such inspections for a period of two (2) years and shall make such records available upon request by the Township.
- 3. The applicant shall place a weatherproof sign explaining the work to be performed along public roads at the boundaries of the proposed testing. The location of such signs shall be included on the map provided as part of the application and approved by the Township. The notice shall be fixed upon durable posts at least four (4) feet in height and placed in the public right- of -way at least fourteen (14) days before work commences. This notice shall be at least 11x17 inches in size and shall state:

- a. A brief summary of the testing and methods employed
- b. The location of the proposed work.
- c. A toll free telephone number where residents may call for more information. The toll-free telephone number provided by the applicant shall be answered during hours of operation as set forth in the <u>§106 Operations in the General section</u> while work is ongoing in the Township, and an answering machine shall be installed to receive afterhour calls.

(Ord. 2011-1, 5/23/2011, §7)

§108 Energy Level Restrictions

- 1. The applicant shall engineer all source locations (explosive charge size and depth, and vibrator source sweep frequency and drive levels or other geophysical sources) so that no structure, subject to limitations contained in subsection §111 testing (4) herein, shall be subject to any peak particle velocity greater than six-tenths-inch per second. The applicant shall conduct all the necessary engineering tests on property located within a one-hundred mile radius from the Township and containing soils similar to that at the planned locations of the geophysical operations, and shall provide all reports to the Township in an appropriate format for evaluation at the time of application.
- 2. Using industry standard equipment and techniques, the engineer required by <u>§106 Operations in General section</u> shall monitor and record, during operations, all pertinent locations to ensure compliance with the maximum peak particle velocity established in <u>§108 Energy Level Restrictions section (1)</u>. If peak particle velocity for any test exceeds said maximum, the engineer shall notify the Township and cease all operations until corrections are made. The applicant shall maintain all documentation of monitoring activities for a period of at least two (2) years and make said documentation available upon request for inspection by the Township.
- 3. The applicant shall obtain location and/or maps for all water wells, septic systems, underground hazardous waste storage/disposal sites, and water, sewer, oil, gas and chemical pipelines as well as underground utilities located in the testing area and conduct all energy source operations in a manner so as to not damage, interrupt, or otherwise interfere with said structures. Information obtained by the applicant shall be used by the surveying teams and operations manager to ensure compliance with the terms and conditions of this permit and that safe operating distances are maintained. If requested by the applicant, the Township shall make available for inspection and copying, maps, if any, prepared by or on behalf of the Township that indicate subsurface structures or facilities,; provide, however that the applicant's reliance on any information furnished by the Township, its agents, representatives, and employees, whether written or verbal shall be at the sole risk of the applicant and the following disclaimer shall be placed on and shall apply to any and all such information:

APPLCANT ACKNOWLEDGES THAT THE TOWNSHIP HAS NOT MADE ANY

INDEPENDENT INVESTIGATION OR VERIFICATION OF INFORMATION REGARDING SUBSURFACE STRUCTURES AND FACILITIES FURNISHED TO APPLICANT AND MAKES NO REPRESENTATION OR WARRANTIES AS TO THE ACCURACY OR COMPLETENESS OF SUCH INFORMATION. APPLICANT EXPRESSLY ACKNOWLEDGES THAT THE TOWNSHIP MAKES NO WARRANTY OR REPRESENTATION, EXPRESSED OR IMPLIED, OR ARISING BY OPERATION OF LAW, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTY OF FITNESS FOR A PARTICULAR USE OR PURPOSE OF SUCH SUBSURFACE INFORMATION.

- 4. All township or city owned structures, including but not limited to susceptible underground utilities (water mains, sewer mains, etc.) shall have pre-and post-testing inspections paid for by the applicant if subjected to a peak particle velocity greater than thirty-five-hundredths-inch per second. The Township shall have the option of receiving reimbursement of its actual cost of performing said inspections or having the inspections done by a third-party firm hired by the applicant. Any reimbursement provided by this section shall be paid to the Township within thirty (30) days following the applicant's receipt of an invoice from the Township.
- (Ord. 2011-1, 5/23/2011, §8)

§109. Hours of Operation.

Energy source testing may be conducted from 8:00 a.m. until the earlier of sunset or 8:00 p.m. local time, on Mondays through Saturdays testing shall not be permitted on Sunday. (Ord. 2011-1, 5/23/2011, §9)

§110. Lands, Streets, Rights-Of-Way, and Easements.

- 1. The applicant shall restore, at its own cost, Township-owned lands or rights- ofway used in its operations to the original condition just prior to the testing operations, free of damage, including ruts or any injury to landscaping.
- 2. The applicant shall ensure that its operations will not interfere with the free and safe flow of traffic. When operations are immediately adjacent to the pavement, all equipment shall be parked and/or operated in one (1) lane of traffic.
- 3. The applicant shall notify the Township of any equipment to be operated on Township roads that will exceed the maximum load limit of said road and obtain any special permitting required.
- 4. Cables placed on the pavement within rights-of-way must be arranged so they do not create a hazardous condition or rumble strip effect. All cables must be securely anchored to the roadway with materials that will not damage and/or puncture the pavement. Nails, spikes, and similar materials used for anchors shall not e placed inside the pavement edge.
- 5. Operations under the permit shall be barred when the Township determines that the ground conditions are such that operations would cause ruts deeper than five (5) inches in the rights-of-way or easements. In addition, when ground conditions

would cause the tracking of mud, gravel, rock, or debris onto the roadway surface of any right-of-way or other Township improvements in a way that creates a safety hazard or potential for damage to vehicles, operations shall include measures to prevent such hazardous tracking. In the event that hazardous tracking occurs, the applicant shall immediately clean the roadway of all mud, gravel, rock or debris and cease operations until such time as appropriate preventative measures are implemented to ensure that said hazardous tracking does not occur.

6. Each testing crew performing work that impedes the flow of traffic, such as testing on Township streets or rights-of-way, shall be accompanied by a certified peace officer provided by the applicant. The applicant shall furnish at its cost adequate signs, barricades, flares, flagmen, etc., as necessary, to protect the traveling public. (Ord. 2011-1, 5/23/2011, §10)

§111 Testing

- 1. The applicant shall furnish to the Township, or designee, a schedule of each week's test plans. If Thumper Trucks are utilized on Township Roads, which will require permission of the Township, the Township Engineer shall inspect the road before and after testing. Applicant shall pay any and all cost incurred by the Township as a result of these inspections.
- 2. All vibroseis or weight drop operations shall be conducted a minimum distance of 150 feet from any building, which shall mean a structure built for the support, shelter, or enclosure of persons, chattel, or moveable property of any kind and which is affixed to the land. No charge test shall be detonated within three hundred (300) feet of any building, water well or underground hazardous waste storage/disposal site. The applicant will provide multiple monitoring of any charge testing within six hundred (600) feet of any occupied building.
- 3. The applicant shall maintain and make available upon request to the Township, for a period of two (2) years, the daily log of energy source tests showing date, location, energy source used, drive level, operator, and all other related information including seismic and pre- and post-test survey.
- 4. No energy source operation shall subject any building intended for human habitation, utility line, water well, or underground hazardous waste storage/disposal site to a peak particle velocity greater than five-tenths-inch per second.
- 5. Explosives shall be transported in constantly attended Type-three magazines as defined by section 1902.4.7 of the 1994 Standard Fire Prevention Code. All vehicles transporting explosives will be placarded according to Regulation of Hazardous Materials 49 C.F.R. Only the necessary amount of explosives for each day's operations, during such period as the permit is in effect, shall be transported within the Tow ship at any given time. No explosives shall be stored within the corporate Township limits, unless approved by the Township's Fire Chief. If such storage is approved, explosives must be stored in a locked and secure, constantly attended

Type-two magazine, as defined by section 1902.4.6 of the 1994 Standard Fire Prevention Code, at a single, isolated, and sparsely populated location.

 The applicant shall notify the Township, or designee, within three (3) business days after the occurrence of any violation of these permit requirements. (Ord. 2011-1, 5/23/2011, §11)

§112 Bond, Insurance, and Indemnity

1. The applicant shall submit to the Township a performance bond in the amount of Two Hundred and Fifty Thousand dollars (\$250,000.00) from a surety authorized to do business in the state. The performance bond shall be valid for a period of two (2) years from the date that the permit is issued. The bond shall provide, but not be limited to, the following condition: there shall be recoverable by the Township, jointly and severally from the principal and surety any and all damages, loss or costs suffered by the Township in connection with the applicant's geophysical operations within the Township. The bond shall contain the, following endorsement: "It is hereby understood and agreed that this bond may not be canceled by the surety company until sixty (60) days after receipt by the Township, by registered mail or written notice, of such intent to cancel or not to renew." The rights reserved to the Township with respect to the bond are in addition to all other rights of the Township and no action, proceeding or exercise of a right with respect to such bond shall affect any other rights of the Township.

2. Prior to conducting any operations hereunder, the applicant and/or its contactors shall furnish a certificate of insurance to the Township showing the Township as an "additional insured" with respect to operations conducted within the Township and showing liability insurance coverage covering commercial, personal injury, and general liability in amounts not less than one million dollars (\$1,000,000.00) per person, three million dollars (\$3,000,000.00) per occurrence, and one million dollars (\$1,000,000.00) property damage.

3. The applicant shall protect, indemnify, defend and hold the Township, its officers, employees, agents, and representatives harmless from and against all claims, demands and causes of action of every kind and character for injury to, or death of , any person or persons, damages, liabilities, losses, and/or expenses, occurring or in any way incident to , arising out of , or in connection with its or its contractors', agents', or representatives' operations under this permit, including attorneys' fees, and any other costs and expenses uncured by the Township in defending against any such claims, demands, and causes of action. Within thirty (30) days of receipt of same, the applicant shall notify the Township, in writing, of each claim for injuries to, or death or, persons or damages or losses to property occurring or in any way incident to arising out of, or in connection with its or its contractors', agents', or representatives' operations conducted under this permit. At the Township's discretion, the Township may conduct an independent investigation, monitor and review the processing of any such claim to ensure that such claim is handles as required herein.

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4. Any permit granted hereunder may be revoked upon breach of any term or condition contained herein.

5. Not with standing anything contained herein to the contrary, any permit granted hereunder shall not be effective unless and until a copy of the permit, signed by an authorized officer of the applicant, the performance bond, and the certificates of insurance have been filed with the Township secretary. (Ord. 2011-1, 5/23/2011, §12)

<u>§113 Penalties.</u>

A person who knowingly violates any provision of this Article shall be deemed guilty of a misdemeanor and, upon conviction, shall be fined in an amount not to exceed two thousand dollars (\$2,000.00). Each day of violation shall constitute a separate offense. (Ord. 2011-1, 5/23/2011, §13)

§114 Effective Date.

This ordinance shall take effect immediately upon passage. (Ord. 2011-1, 5/23/2011, §14)

§115 Construction of Ordinance.

The enactment and existence of the Ordinance shall not be construed as creating any right or entitlement whatsoever in any individual, group or business entity to perform Energy Source Operations on Township property or any other property, private or public. Furthermore, this Ordinance shall not be construed as conferring the legal right to perform Energy Source Operations as described herein on private property, and the issuance of a permit pursuant to this Ordinance does not concomitantly confer any right to perform Energy Source Operations on such property. This Ordinance neither expands nor limits the requirements for Energy Source Operations on private property, but rather leaves applicable law regarding the same intact. This Ordinance shall not be construed as rendering on behalf of the Township any statement, assertion, warranty or guarantee concerning the scope, methods, and/or safety of Energy Source Operations by any individual, group, or entity permitted by the Board of supervisors under this Ordinance. Accordingly, the Township shall not, as a result of any decision to grant or deny any permit under this Ordinance, be held liable for any harm directly or indirectly related to Energy Source Operations performed in the Township. Ordained and enacted by the Supervisors of Slippery Rock Township, Butler County, Pennsylvania the 23rd day of May, 2011.