

ANNEX A

TITLE 25. ENVIRONMENTAL PROTECTION
PART I. DEPARTMENT OF ENVIRONMENTAL PROTECTION
Subpart C. PROTECTION OF NATURAL RESOURCES
ARTICLE I. LAND RESOURCES
CHAPTER 78. OIL AND GAS WELLS
Subchapter A. GENERAL PROVISIONS

78.1. Definitions.

* * * * *

(b) The following words and terms, when used in this chapter, have the following meanings, unless the context clearly indicates otherwise **or as otherwise provided in this chapter:**

* * * * *

Unconventional formation - A geological shale formation existing below the base of the Elk Sandstone or its geologic equivalent stratigraphic interval where natural gas generally cannot be produced at economic flow rates or in economic volumes except by vertical or horizontal well bores stimulated by hydraulic fracture treatments or by using multilateral well bores or other techniques to expose more of the formation to the well bore.

~~[Unconventional formations - Formations that typically produce gas through the use of enhanced drilling or completion technologies such as the Rhinestreet, Burket, Marcellus, Mandata and Utica Shale formations, or other formations identified by the Department.]~~

Unconventional well - A bore hole drilled or being drilled for the purpose of or to be used for the production of natural gas from an unconventional formation.

* * * * *

Subchapter C. ENVIRONMENTAL PROTECTION PERFORMANCE STANDARDS

* * * * *

§ 78.55. Control and disposal ~~[plan]~~ planning; emergency response for unconventional well sites.

* * * * *

(Editor's Note: The following subsection is new and has been printed in regular print to enhance readability.)

(e) Emergency response for unconventional well sites.

(1) Applicability. This subsection applies to unconventional wells.

(2) Definitions. For the purposes of this subsection, the following definitions apply:

Access Road - A road connecting a well site to the nearest public road, private named road, administrative road with a name and address range, or private unnamed road with an address range.

Address - A location, by reference to a road or a landmark, made by a county or municipality responsible for assigning addresses within its jurisdiction.

Administrative road - A road owned and maintained by the Commonwealth of Pennsylvania, that is open to the public at the discretion of the Commonwealth, and may or may not have a name and address range.

Emergency Responder - Police, firefighters, emergency medical technicians, paramedics, emergency management personnel, public health personnel, state certified hazardous materials response teams, Department emergency personnel, and other personnel authorized in the course of their occupations or duties, or as an authorized volunteer, to respond to an emergency.

Entrance - The point where the access road to a well site connects to the nearest public road, private named road, administrative road with a name and address range, or a private unnamed road with an address range.

GPS Coordinates - The coordinates in latitude and longitude as expressed in Degrees Decimal to at least six (6) digits after the decimal point, based upon the World Geodetic System 1984 Datum (WGS 84) or any other datum approved by the Department.

PEMA - the Pennsylvania Emergency Management Agency.

Private Named Road - A private road, with a name and address range.

Private Road - A road that is not a public road.

Private Unnamed Road - A private road that is not a private named road.

Public Road - A road owned and maintained by the Commonwealth of Pennsylvania, a county within the Commonwealth, a municipality within the Commonwealth, or any combination thereof, and that is open to the public.

Public Safety Answering Point - An entity operating in cooperation with local municipalities and counties to receive 9-1-1 calls for a defined geographic area, and processes those calls according to a specific operational policy.

Well site name - The name used to designate the well site by the operator on the well permit application submitted to the Department.

(3) Registration of Addresses.

- (i) Prior to construction of an access road to a well site, the operator of an unconventional well shall request a street address for the well site from the county or municipality responsible for assigning street addresses.
- (ii) The operator shall determine the GPS coordinates for both the well site and the entrance to the well site. The GPS coordinates shall have a horizontal accuracy of plus or minus 6.67 feet or better. If there is more than one well on a well site, one set of GPS coordinates shall be used for the well site.

- (iii) The operator shall register the following with PEMA, the Department, the Public Safety Answering Point and the county emergency management organization within the county where the well site is located.
 - (A) Well site name.
 - (B) Well site address.
 - (C) GPS coordinates for the entrance and the well site.
- (iv) When there is a change of well site address, the operator shall register the new address as provided in subparagraph (iii).
- (v) When there is a change of the entrance due to a change in the well site address or otherwise, the operator shall register the GPS coordinates for the entrance as provided in subparagraph (iii).
- (vi) The following shall be retained at the well site for reference when contacting emergency responders:
 - (A) Well site name.
 - (B) Well site address.
 - (C) GPS coordinates for the entrance and the well site.

(4) Signage.

- (i) Prior to construction of the access road, the operator of an unconventional well shall display a reflective sign at the entrance.
- (ii) The sign shall meet the following:
 - (A) The sign shall be fabricated with approved retroreflective sheeting material meeting ASTM 4956 Type III.
 - (B) The sign shall have a white background with a two (2) inch red border and black numbers and letters. Signs for entrances on administrative roads may use other colors, provided that the signs use contrasting colors between the background, and the border, numbers and letters.
 - (C) The sign shall be of sufficient size to accommodate the required information described in this section, but at a minimum shall be thirty-six (36) inches in height and forty-eight (48) inches in width.
 - (D) The sign shall follow the format of Figure 1, and shall contain the following:
 - (I) The address number for the well site, once it is assigned, displayed horizontally on the first line of the sign in text no smaller than four (4) inches in height.
 - (II) The full address of the entrance, once it is assigned, including the county and municipality in which the entrance is located.

- (III) The well operator's company name.
 - (IV) The twenty-four hour contact telephone information for the operator of the well site.
 - (V) The GPS coordinates for the entrance.
 - (VI) The well site name.
 - (VII) The wording "In Case of Emergency Call 9-1-1".
- (iii) The sign shall be mounted independently from other signage.
 - (iv) The bottom of the sign shall be positioned a minimum of three (3) feet above ground level.
 - (v) The sign shall contain no other markings.
 - (vi) Signs, as viewed from the applicable road, shall not be obstructed from view by vegetation, equipment, vehicles or any other obstruction.
 - (vii) During drilling operations, the American Petroleum Institute (API) permit numbers of the wells at the site may be posted on a non-reflective sign below the principal sign. The API sign can be removed after the well is completed, provided that it is not otherwise required to be posted.

Sample Site Entrance Signage:

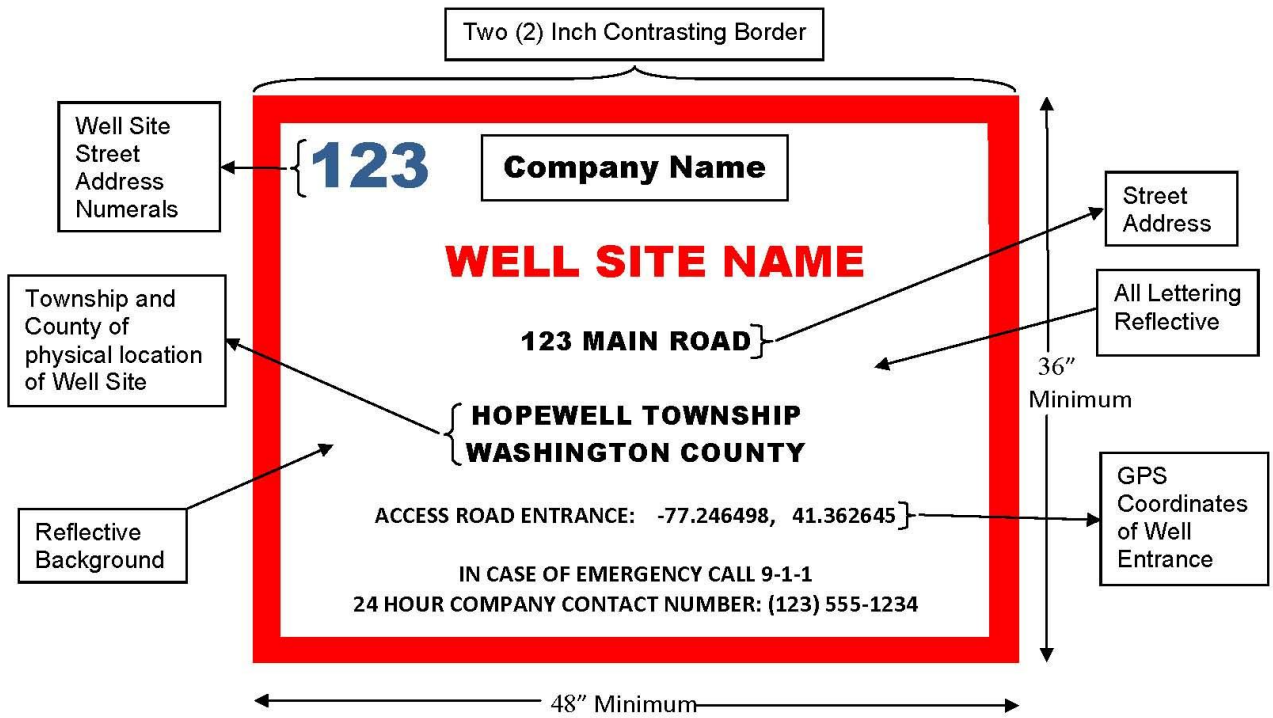


Figure 1
(Not to scale)

(5) Emergency Response Planning.

- (i) The operator of an unconventional well shall develop and implement an emergency response plan that provides for equipment, procedures, training and documentation to properly respond to emergencies that threaten human health and safety for each well site. The plan shall incorporate National Incident Management System (NIMS) planning standards, including the use of the Incident Command System, Incident Action Planning, and Common Communications Plans, and shall include the following:
 - (A) Emergency contact information, including phone numbers, for the well operator's local representative for the well site, and the well operator's 24-hour emergency phone number.
 - (B) The emergency notification procedures that the operator will utilize to contact emergency responders during an emergency.
 - (C) A description of the well site personnel's response to the following well site emergencies:
 - (I) Fire.
 - (II) Medical emergency.
 - (III) Explosion or similar event.
 - (IV) Spill.
 - (V) Security breach or other security event.
 - (VI) Any other incident that necessitates the presence of emergency responders.
 - (D) A description of the procedure to be used to provide the most current information to emergency responders in the event of an emergency, including the following:
 - (I) The current MSDSs required by law to be present at the well site.
 - (II) The location of the MSDSs at the well site.
 - (III) The name of the position in the operator's organization responsible for providing the information in subclauses (I) and (II).
 - (E) A list containing the location of any fire suppression and spill control equipment maintained by the well operator at the well site.
 - (F) A description of any emergency equipment available to the operator that is located off of the well site.
 - (G) A summary of the risks and hazards to the public within ½ mile of the well site, and the associated planning assumptions.
 - (H) An outline of the emergency response training plan that the operator has established.

- (ii) The emergency response plan described in subparagraph (i) may consist of two parts, as follows:
 - (A) A base plan common to all of the operator's well sites, containing some of the elements described in subparagraph (i), and
 - (B) A site-specific plan containing the remaining elements described in subparagraph (i).
- (iii) The operator shall submit a copy of the current emergency response plan for that well site, unless the permit provides otherwise. For plans using the approach in subparagraph (ii), the operator may submit one base plan, provided that the site-specific plans are submitted for each well site.
- (iv) The operator shall review the plan and submit an update annually on or before March 1 each year. In the event that no updates are made to the plan for that review period, the operator shall submit a statement indicating the review was completed and no updates to the plan were necessary.
- (v) The plan and subsequent updates shall be submitted to the following:
 - (A) PEMA.
 - (B) The Department.
 - (C) The county emergency management agency.
 - (D) The Public Safety Answering Point with jurisdiction over the well site.
- (vi) A copy of the plan shall be available at the well site during all phases of operation.
- (vii) The emergency response plan shall address response actions for the following stages of operation at the well site:
 - (A) Preparation of the access road and well site.
 - (B) Drilling of the well.
 - (C) Hydraulic fracturing and stimulation of the well.
 - (D) Production.
 - (E) Well site restoration.
 - (F) Plugging of the well.
- (viii) The requirements in subparagraphs (i) – (vii) may be met by implementing guidance issued by the Department in coordination with PEMA.

(6) Transition.

- (i) This regulation shall be effective immediately upon publication in the *Pennsylvania Bulletin*, except as provided in subparagraph (ii).
- (ii) For a well site containing a well that is being drilled or has been drilled as of the effective date of this regulation, or a well site for which a well permit has

been issued but no wells have commenced drilling as of the effective date of this regulation, or a well site for which an administratively complete application is pending as of the effective date of this regulation as provided in subparagraph (i), the following applies:

- (A) The requirements of paragraph (3) shall be effective on _____ [30 days after the effective date of the regulation].
- (B) The requirements of paragraph (4) shall be effective on _____ [180 days after the effective date of the regulation].
- (C) The requirements of paragraph (5) shall be effective on ____ [90 days after the effective date of the regulation].