

## **Proposed Regulations for Oil and Gas Surface Activities** **(Amendments to 25 Pa. Code Chapter 78, Subchapter C)**

In 2012, Governor Corbett signed the 2012 Oil and Gas Act (Chapter 32, Act 13 of 2012), which significantly revised Pennsylvania's oil and gas laws to address unconventional well development in the Commonwealth. Unconventional well development includes gas extracted from the Marcellus and Utica Shale formations. The purpose of the law was to ensure the safe and responsible development of oil and gas resources, and it included many new environmental safeguards. It also directed the Environmental Quality Board (EQB) to adopt new rules for certain activities at well sites.

Additionally, since 2008, the oil and gas industry has developed new practices to extract natural gas from shale formations. These new practices require additional oversight of applicable standards and controls. For these reasons, new regulations are needed to ensure that the Commonwealth's oil and gas resources are developed safely, responsibly and in an environmentally protective manner. As a result, this proposed rulemaking related to oil and gas surface activities has been developed by DEP and adopted by the EQB.

The purpose of these proposed regulations is to:

- Ensure the protection of public health, safety, and the environment
- Protect public resources to minimize impacts from oil and gas drilling.
- Modernize the regulatory program to recognize advances in extraction technology.
- Specify the acceptable containment practices to prevent spills and releases.

### **How to Get Involved**

The proposed regulation and supporting documents are available for viewing by clicking the "Draft Oil and Gas Regulations" button on the main page of the DEP website ([www.dep.state.pa.us](http://www.dep.state.pa.us)).

During the public comment period, anyone may submit comments about this proposed regulation for potential consideration in the development of the final rules.

#### **Written Comments**

This fall, the EQB will be accepting written public comments related to this proposed regulation for 60-days. After review by the Attorney General's Office, the public comment period will be opened for this proposed regulation.

#### **Verbal Comments**

Also this fall, the EQB will be conducting at least six public hearings, one held in each of the DEP regions, across the state, to receive comments on this proposed regulation. Verbal comments will only be accepted at the public hearings (yet to be scheduled).

## **Key Provisions of the Regulation**

### **Protection of Public Resources**

The public resources enjoyed by millions of Pennsylvanians and out of state visitors are considered precious to everyone who visits them. Public resources are also a major economic contributor (>\$1 billion per year) to Pennsylvania through tourism, outdoor fish and game sports, and recreation. The purpose of this provision is to ensure that the businesses that rely on this tourism, residents of Pennsylvania and out-of-state visitors can continue to use and benefit from all of the public resources throughout the Commonwealth, while still allowing optimal development of the state's oil and gas resources.

With these proposed regulations, DEP has outlined a streamlined process for considering the potential impacts to public resources during the well permitting process. An applicant for a well permit will be required to notify the appropriate public resource agency (such as the Department of Conservation and Natural Resources or Pennsylvania Game Commission) if a well site is within:

- 200 feet of a publicly owned park, forest, game land or wild life area;
- In or within the corridor of a state or national scenic river;
- Within 200 feet of a national natural landmark;
- In a location that will impact other critical communities (species of special concern);
- Within 200 feet of a historical or archaeological site listed on the Federal or State list of historic places;
- or
- Within 1,000 feet of a water well, surface water intake, reservoir or other water supply extraction point used by a water purveyor (unconventional wells only).

The resource agency may provide comments and recommendations to DEP and the operator on the well permit application. DEP will make the final determination on the permit and has the ability to add conditions to a well permit to ensure operators mitigate any potential impacts.

### **Orphan and Abandoned Well Identification**

Since the first commercial oil well was drilled in Pennsylvania in 1859, it is estimated that 325,000 oil and gas wells have been drilled in the state. Pennsylvania began permitting new drilling operations in 1956, and in 1985 began requiring operators to register old wells. In the early years of the oil and gas industry in Pennsylvania, many wells were not properly plugged once they stopped producing and were abandoned. There are estimates of upwards of 250,000 wells that were not properly plugged, leaving them as "orphaned or abandoned."

An unplugged abandoned well can be a hazard not only to the environment, but also to the health and safety of Pennsylvania residents. Unplugged wells may be a contributor to methane migration. Although most abandoned and orphan wells do not pose an immediate threat, there have been events in Pennsylvania when a high-volume hydraulically fractured well altered an unplugged abandoned well.

This proposed regulation will:

- Require operators of gas wells or horizontal oil wells to identify any orphan or abandoned wells within 1,000 feet of the vertical and the horizontal well bores, prior to hydraulic fracturing;
- Require visual monitoring of the identified orphan or abandoned wells that are likely to have penetrated the formation intended to be stimulated during hydraulic fracturing activities;
- Require plugging by the operator if their fracturing process alters the identified abandoned well.

## **Containment Practices**

Inadequate containment practices pose a potential threat of pollution to the waters of the Commonwealth. The containment provisions included in this proposed regulation were carefully developed based on DEP's inspection and field experience. Act 13 includes new containment systems and practices requirements for unconventional well sites. There are many options for containment that the oil and gas industry uses and is constantly developing improvements for, so DEP must be on the forefront of the curve.

### *Temporary Storage:*

- Open pits may only be used for the temporary storage of materials (production pits are banned).
- Pits must have a liner of minimum thickness and be compatible with the wastes that will be stored.
- Pit seams must be tested prior to use.
- Pits must be fenced-in completely to prevent vandalism and damage from wildlife unless there is 24-hour security on site.
- Modular storage must be approved by DEP. (DEP will maintain approved list).
- Tank valves and access lids must be locked to prevent unauthorized access.

### *Longer-term Storage:*

- Open top structures will not be permitted to store produced water.
- Underground or partially buried storage tanks cannot be used to store brine unless approved by DEP.
- All tanks should be protected from unauthorized acts of third parties.

### *Freshwater Impoundments:*

- Required to be constructed with a synthetic impervious liner. This prevents lesser-quality freshwater from impacting HQ or EV waters or groundwater.
- Required to be registered with the Department.
- Required to be fenced to prevent access by third parties and damage from wildlife.
- Must be restored, unless approved by the landowner.

### *Secondary Containment:*

- Require operators employ secondary containment at unconventional well sites (e.g. liners or double walled tanks, etc) to prevent regulated substances from reaching the waters of the Commonwealth.
- Subsurface secondary containment is an option for operators.

## **Protection of Water Resources**

Pennsylvania has more water resources than any other state except Alaska. One focus of this regulation is to protect the vast water resources throughout Pennsylvania. These water resources are the primary drinking water sources for millions of people. Nearly half of all Pennsylvanians obtain their drinking water from private water wells that are not regulated by the state.

DEP is proposing with this regulation, additional requirements for liners of pits and impoundments. Secondary containment must be used at all unconventional well sites. The secondary containment systems must be inspected by the operator at least weekly to ensure integrity. Secondary containment includes: liners, dykes, berms, and double walled tanks.

This proposed regulation also outlines rules for operator response to spills and releases, and requires remediation to Act 2 standards. It also will require pipeline construction companies to develop Preparedness, Prevention, and Contingency Plans when performing Horizontal Directional Drilling under a waterway to minimize impacts on waters in the event of an inadvertent return.

Operators will be required to restore a well site, including filling pits and removing drilling supplies and equipment within 9 months of completion of drilling.