

October 20, 2021

RE: Abandoned Oil and Gas Wells

To Whom It May Concern:

The purpose of this letter is to provide your municipality with information about needed support for plugging abandoned wells throughout Pennsylvania – including, providing information about this issue to your municipality's residents, reporting the location of abandoned wells and assessing grant opportunities available to remediate or plug abandoned wells.

The first commercial oil well was drilled in 1859 near Titusville, Pennsylvania. Since then, it has been estimated that as many as 300,000 to 760,000 oil and gas wells have been drilled in this Commonwealth. However, for as long as the industry has existed, some operators abandoned these wells for a variety of reasons without plugging or inadequately plugging these wells. A significant number of wells were drilled and abandoned prior to enactment of Pennsylvania's modern oil and gas statute, which was established in 1984 (1984 Oil and Gas Act). The 1984 Oil and Gas Act required an operator to plug a well that was not used to produce for over one year or from which production equipment was removed. Other wells have been abandoned by operators who declare bankruptcy or move operations out of Pennsylvania, leaving their wells unplugged. Regardless of the cause, the result has been the same – a large number of oil and gas wells in Pennsylvania have never been reported and have never been properly decommissioned through plugging. Such wells may pose a potential threat to public health, public safety and the environment. Many of these abandoned conventional wells have no identifiable responsible party to complete plugging. For this reason, it is important for residents to report the location of abandoned wells to DEP so that DEP may determine if a responsible operator exists and conduct inspections to determine if the wells pose an immediate threat to public health and safety or the environment. DEP's investigation of an abandoned well is at no charge to the landowner and DEP will provide an evaluation of any risks associated with the well. If an immediate threat is identified, DEP has the authority to remediate the well. If the abandoned well poses no immediate threat it will be entered into the DEP database, be periodically inspected, and if funding is available, permanently plugged.

If residents suspect that they have identified the location of an abandoned well, please advise residents to notify DEP. Residents may be able to identify an abandoned well because collection lines, tanks and other equipment remain in the area of the well. Steel casing is typically used in oil and gas wells and often remain in the well after abandonment. Sometimes this casing is removed prior to abandonment, leaving an open wellbore. Generally, an abandoned well will be a vertical metal pipe several inches in diameter sticking out of the ground However, in many cases the well is so old that equipment may no longer be present and someone may have buried the top

of the well pipe below ground surface. If casing has been removed, a well may be located by surface staining around it from leaks.





Abandoned wells that have not been properly plugged have the potential of flowing oil, natural gas or saltwater to the surface or shallow subsurface. The result can be the migration of gas or fluids through aquifers and soil into water wells or buildings, affecting drinking water and public safety. Abandoned wells can be hazardous to people and cause pollution of soil and water. Old wells can be a safety hazard simply because the associated infrastructure may cause bodily harm, or they can deteriorate into large holes in the ground. Methane (the primary component of natural gas) leaking from wells is a hazard and may create explosive environments inside buildings and water wells.

The 2012 Oil and Gas Act authorizes DEP to remediate or plug orphan and abandoned wells to address environmental, health and safety concerns. The applicable law also establishes permit surcharges to fund DEP's program to identify and address abandoned wells throughout the state. Over the past five years, the Department received approximately \$520,000 per year from these permit surcharges. Since the plugging program began, the Department has used these funds, along with additional funding from a variety of other sources, to document over 12,000 abandoned wells and to plug more than 3,000 wells using a priority process to address emergency situations. Yet that leaves more than 8,600 identified wells without a responsible owner and operator that need to be plugged.

Local governments are an important partner in reducing the risk of abandoned wells in their communities. Local officials are often approached by concerned citizens regarding wells they've identified, or issues related to stray gas associated with improperly abandoned wells. A webpage with abandoned well information for local governments as well as maps showing where abandoned wells are in your area available here:

https://www.dep.pa.gov/Business/Energy/OilandGasPrograms/OilandGasMgmt/LegacyWells/Pages/default.aspx

One specific issue for local government entities to be aware of is that abandoned wells may be encountered during development or redevelopment activities. These instances can lead to emergency situations (i.e., bulldozing over an old wellhead or building a dwelling atop of a legacy well). Attempting to properly decommission an abandoned well after damaging it or development has occurred may cost more and present more challenges then identifying and plugging abandoned wells prior to commencing development. Individuals or companies may be liable or subject to cost recovery if they damage, improperly backfill a borehole, or otherwise alter a well (intentionally or through negligence). Technical assistance is available for land developers looking to plug wells ahead of construction projects by contacting DEP's Oil and Gas Program.

When an abandoned well is located, local municipalities or jurisdictions may formulate agreements regarding developers that are interested in developing properties which contain an abandoned well. when approached by developer to develop land, have the developer agree to have the well plugged.

What do you need you to do if you know of abandoned wells or citizens report abandoned wells to you? Abandoned wells must be reported by any individual or company within 30 days of discovery. Doing so is easy, simply call the Pittsburgh District office at (412) 442-4024 and inform the Oil and Gas Program of the location of the well, what they well looks like, and contact information in case the inspector needs additional information to locate the well.

If your municipality is aware of abandoned wells causing an environmental or public safety issue or is in an area undergoing development, a grant opportunity is available to you (or other organizations) to remediate or plug abandoned or orphan wells. More information on the grant can be found here:

https://www.dep.pa.gov/Business/Energy/OilandGasPrograms/OilandGasMgmt/LegacyWells/Pages/Grants.aspx

An example Fact Sheet which can be used to communicate this issue to residents is available here:

http://files.dep.state.pa.us/OilGas/BOGM/BOGMPortalFiles/AbandonedOrphanWells/ExampleF lyerLocalGovernment.pdf

Please contact the DEP's Southwest Regional Office Oil and Gas Program with any questions:

- Allegheny, Beaver, Greene, and Washington counties: Scott Sabocheck, Oil and Gas Inspector Supervisor, at (724) 769-1070
- Cambria, Fayette, Somerset, and Westmoreland counties: Justin Najewicz, Oil and Gas Inspector Supervisor, at (724) 925-5511.

Sincerely,

Brian Schimmel Legislative Liaison Southwest Regional Office