**FREQUENTLY ASKED QUESTIONS**

Implementation of the Infrastructure Investment and Jobs Act

Orphan and Abandoned Well Plugging

OIL AND GAS Title 58 Oil and Gas,
Chapter 32. Development. (Act 13)

Oil and Gas Wells – Subchapter D. Well Drilling, Operation and Plugging

25 Pa.Code §§ 78.91–78.98.

*The purpose of this Frequently Asked Questions (FAQ) document is to highlight frequently asked questions relating to the Commonwealth of Pennsylvania’s Implementation of the Infrastructure Investment and Jobs Act (IIJA) – Orphan and Abandoned Well Plugging. This FAQ should not be used in lieu of reference to the IIJA, the 2012 Oil and Gas Act, 25 Pa.Code Chapter 78 and other applicable laws and regulations. The answers outlined in this FAQ are intended to supplement existing requirements. Nothing in this document shall affect statutory or regulatory requirements.*

*This document is not an adjudication or a regulation. There is no intent on the part of the Department to give this document that weight or deference. The Department may supplement or amend this document at any time as necessary without notice.*

**A. Well Inventory**

1. What is DEP's best estimate of the number of abandoned or orphan (AO) oil and gas wells in Pennsylvania?

• DEP can account for approximately 160,000 AO wells.

• DEP’s current documented inventory consists of approximately 27,000 known AO wells spread across the commonwealth. On December 23, 2021, the Department reported 26,098 documented AO wells to the Department of the Interior (DOI) as part of the Notice of Intent (NOI) to Apply for Formula Grant Funding.

• DEP has inspected and investigated approximately 8,900 AO wells. These 8,900 AO wells comprise DEP’s Abandoned and Orphan database. This list includes a significant number of AO wells located in the Allegheny National Forest. The Department is awaiting additional guidance from DOI as to whether the state can plug those wells using IIJA funds.

• DEP believes that there are significant numbers of undocumented AO wells in Pennsylvania. Scholarly reports range from 100,000 to over 700,000 undocumented AO wells. Based on this research and our current oil and gas well databases, DEP estimates there may be at least an additional 200,000 undocumented AO oil and gas wells in the commonwealth.

1. Does DEP have a list of known abandoned wells?

• Yes. DEP identified 26,908 documented AO wells as part of its NOI to apply for the IIJA Formula Grant. According to DEP records, there are more than 1,200 additional wells located in the Allegheny National Forest that were not included in the NOI application pending additional guidance from DOI about whether Pennsylvania can use IIJA funding to plug those wells.

• DEP has inspected and investigated approximately 8,900 AO wells. These wells comprise DEP’s Abandoned and Orphan database. DEP continues to work on identifying additional abandoned wells.

1. What is DEP doing to identify or locate more of those undocumented AO wells which DEP believes exist?

• DEP inspectors identifying and inspecting undocumented AO wells is an enforcement priority and staff are constantly working to update information in the Department’s AO well databases. DEP is also considering contracting for such AO well location services, as that is an allowable expense under the IIJA. Finally, DEP and other states are working under the IIJA with the U.S. Department of Energy and the Interstate Oil and Gas Compact Commission to develop effective and efficient methodologies for locating undocumented AO wells.

1. What is the difference between “abandoned well” and “orphan well”?

• All “orphan wells” in Pennsylvania are also “abandoned wells,” but not all “abandoned wells” are “orphan wells.” Section 3203 of Act 13 (58 Pa.C.S.A. § 3203) defines “abandoned well” as:

* Any well that has not been used to produce, extract, or inject any gas, petroleum, or other liquid within the preceding 12 months, or
* Any well for which the equipment necessary for production, extraction, or injection has been removed, or
* Any well, considered dry, not equipped for production within 60 days after drilling, re-drilling, or deepening.

• Section 3203 of Act 13 (58 Pa.C.S.A. § 3203) defines “orphan well” as:

* A well abandoned prior to April 18, 1985, that has not been affected or operated by the present owner or operator and from which the present owner, operator, or lessee has received no economic benefit other than as a landowner or recipient of a royalty interest from the well.

**B. Well Prioritization**

1. Have the known abandoned wells been prioritized so that the highest emitters of methane, or other significant environmental issue, are addressed first? How many wells are in this category?

• DEP has scored the risk factors for the approximately 8,900 AO wells in DEP’s Abandoned and Orphan database. Highest priority is assigned to wells that pose imminent threats to public safety, then to wells that are actively harming the environment. (For example, wells that are discharging brine or oil to the ground or to surface waters). Finally, consideration is given to the proximity of the well to certain features like water supplies or homes and the general hazards posed by features of the well site, such as open tanks located on a well site. The current prioritization process considers the presence or absence of methane emissions but does not require quantification of those emissions.

1. What is the process to determine which will be plugged first?

• DEP is focusing initial contracts on: (1) highest scoring AO wells and other AO wells in close proximity to the high scoring AO wells; (2) AO wells associated with stray gas migration cases and other AO wells in close proximity to those wells; and (3) wells on commonwealth property (for public resource protection and ease of access). In addition, although the majority of projects will be located in the DEP Northwest District territory given the sheer number of AO wells in that area, the Department will be generating projects in all three Oil and Gas Districts in order to maximize economic development opportunities.

**C.** **Well Records**

1. Regarding wells which are plugged, what information does the Department

maintain (for example, depth, plugging material, name of contactor, etc.)?

• The well plugging certificate includes the operator and well plugging contractor’s information as well as the materials used to plug the well, the location of the various plug set depths, the casing that was pulled from the well, and the ultimate depth at which the well was plugged (either its true vertical depth or an approved alternative attainable bottom). Please see the Department’s [Certificate of Well Plugging form (8000-FM-OOGM0005)](http://www.depgreenport.state.pa.us/elibrary/GetFolder?FolderID=3071).

**D. Bidding Process**

1. Does DEP publicly bid well plugging projects?

• Unless an emergency contract is issued, all plugging jobs are publicly bid via Bid Express (<https://www.bidexpress.com>).

1. Will entities awarded plugging contracts under the IIJA still need to go through the small business procurement process or will there be additional opportunities for others to secure these contracts?

• The Department’s intent is to have a mix grouping of contracts. The Department is required to comply with the Procurement Code and implementing policies and orders. Examples include [Executive Order 2011-09, Small Business Procurement Initiative](https://www.oa.pa.gov/Policies/eo/Documents/2011_09.pdf), issued by Governor Corbett on November 21, 2011; [Executive Order 2015-11, Diversity, Inclusion and Small Business Opportunities in Commonwealth Procurement](https://www.oa.pa.gov/Policies/eo/Documents/2015_11.pdf), issued by Governor Wolf on September 23, 2015; and the [Bureau of Procurement Policy Directive 2020-1 and BDISBO Policy](https://www.dgs.pa.gov/Documents/Procurement%20Forms/BOP%20Policy%20Directive/BOP%20Policy%20Directive%202020-1%20and%20BDISBO%20Policy.pdf), dated June 15, 2020. For a website with more details about small businesses and procurement, the Department recommends [Small Diverse Business Verification | Department of General Services | Commonwealth of Pennsylvania](https://www.dgs.pa.gov/Small%20Diverse%20Business%20Program/Small-Diverse-Business-Verification/Pages/default.aspx).

The threshold for small business requirements in commonwealth construction contracts is $400,000. Some of the AO well plugging contracts will likely be under that threshold and that will put them in the “small business category.” DEP is also planning to have large contracts that would go over the $400,000 threshold and those contracts fall into the “good faith” category for contracting. Being in the “good faith” category means if the winning contractor subcontracts any of the work, they need to try to have a percentage of the work they sub out go to small businesses.

**E. Program Management**

1. What is DEP doing to manage the 40-fold increase in funding for the well plugging program?

• DEP has been evaluating this issue for some time and has identified several steps that it will take to manage this historic level of well plugging funding. This includes adding positions to focus on IIJA implementation, evaluating and developing contracts with third parties for a variety of services including well identification, methane emission quantification, plugging projects of various sizes, contracts to develop plans and permit applications, and overall well plugging program management. It should be noted that up to 10 percent of the federal IIJA Grant funds can be utilized for administrative purposes. The Department continues to work closely with the Governor’s Budget Office to address any unfilled needs.

1. Is DEP considering public-private undertakings as part of the well plugging program?

• Yes. The Department has been in discussion with several entities that have shown an interest in this AO well plugging work. In addition, the Department developed a survey and reached out to oil and gas plugging and plugging support contractors to gather information about their capabilities for plugging wells and providing support services in Pennsylvania. To date, the Department has received responses from more than 150 respondents and this information is being used by the Department to develop strategies for coordinating potential future public-private partnerships or opportunities for such collaboration.

1. What is known about the timeline for the allocation of the remaining $79M from federal aid?

• Timing of Grants: NOTE THAT THE LEGISLATION WAS SIGNED INTO LAW ON 11/15/2021:

Initial Grant: Pennsylvania has 180 days (May 13, 2022) after enactment to submit the certification that qualifies the state for the Initial Grant of $25 million. The Secretary of DOI must award that grant within 30 days of submission of the certification, and Pennsylvania must certify that it will use 90% of the funds to issue new/amend existing contracts or issue grants for plugging/remediation within 90 days of receipt and “obligate” funds within 365 days of receipt.

Status: On May 12, 2022, the Department successfully submitted a grant application package to receive $25 million dollars via the Initial Grant portion of this funding.

Formula Grant: Pennsylvania must submit notice of intent to pursue formula grants within 45 days of enactment; the Secretary of DOI announces amounts for each state 30 days later. As for the allocation of the Phase One $79M Formula Grant, DEP is waiting for further guidance from DOI concerning how to apply to receive those funds.

Status: On December 23, 2021, the Department submitted a Notice of Intent (NOI) to the Department of Interior to apply for a Formula Grant; one week ahead of the December 30 deadline. DEP awaiting further guidance from the U.S. Department of Interior.

Performance Grant – Regulatory Improvement: DEP can apply for these Grants any time from 180 days after receipt of the Initial Grant.

Status: DEP awaiting further guidance from the U.S. Department of Interior.

Performance Grant – Match Grant: DEP can apply for this grant annually on a fiscal year basis over a period of 10 years.

Status: DEP awaiting further guidance from the U.S. Department of Interior.

**F.** **Funds/Funding**

1. How many wells can be plugged with $25M?

• The Department has identified approximately 500 AO wells that will potentially make up 50+ contracts to be addressed by the Initial Grant ($25 million). How many wells can be plugged will depend in large measure on what the bid amounts on the initial contracts are. It is anticipated the contracts will range from about $250,000 to over $1 million each.

1. How much, on average, does it cost to plug a well?

• For long-term planning purposes, DEP initially used a statistical approach to determine that average annual per-well plugging costs were around $33,000 per well plugged over the 33 years of the well plugging program. However, the price has ranged from approximately $10,000 per well on the low-end to as high as $800,000 or even greater per well, depending on complications encountered during the plugging process. It is also apparent in the agency’s historical data that costs are dependent on location, depth, and the number of wells per contract, with some influences from other factors. Recently, DEP has seen an average cost to plug a well of around $68,000 but costs will vary depending on geographic location, depth, and several other factors.

1. What is the estimate on when $25M will be put into action?

• The plan is to release 10 contracts per month starting in the summer of 2022, after receipt of the Initial Grant funds. All Initial Grant funds must be obligated within one year of the date of receipt.

1. How much funding was already in program coffers before the $25M infusion?

• The 1984 Oil and Gas Act and 1992 Omnibus Amendments established permit surcharges of $150 and $250 per oil and gas wells, respectively, to fund the Department’s Abandoned and Orphan Well Plugging Program. Over the past five fiscal years (FY2016-17 to FY2020-21) the Department received on average $418,935 per year from these permit surcharges.

**G.** **Plugging Process**

1. What methods are used to plug and seal wells in Pennsylvania?

• Well plugging must be performed in compliance with DEP regulations at 25 Pa.Code §§ 78.91–78.98. In general, wells are plugged using cement plugs strategically placed to stop the vertical flow of fluids or gas within the well bore.

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