

FREQUENTLY ASKED QUESTIONS

Environmental Protection Performance Standards at Oil and Gas Well Sites

Requirements for Pulling Uncemented Surface Casing on Pre-Act Wells (Pennsylvania's Oil and Gas Act of 1984 – Act 223) During Well Plugging

25 Pa.Code § 78.93(a)(3)-(4) and § 78.94(a)(3).
Environmental Protection. Chapter 78. Oil and Gas Wells.

The purpose of this Frequently Asked Questions (FAQ) document is to highlight changes in and address questions about the new regulations. This FAQ should not be used in lieu of reference to 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.

- 1) What is the requirement for pulling uncemented surface casing for pre-Act wells (that is, wells drilled prior to the passage of Act 223 of 1984) during plugging?

§ 78.93 Wells in Coal Areas – Surface or Coal Protective Casing Anchored With A Packer or Cement

(a) In a well where the surface casing or coal protective casing and production casing are anchored with a packer or cement, the owner or operator shall plug the well as follows:

* * * *

(3) After it has been established that the surface casing or coal protective casing is free and can be retrieved, the surface or coal protective casing shall be retrieved by applying a pulling force at least equal to the casing weight plus 5,000 pounds or 120% whichever is greater. If this fails, an attempt shall be made to separate the casing by cutting, ripping, shooting or other method approved by the Department, and making a second attempt to remove the casing by exerting a pulling force equal to the casing weight plus 5,000 pounds or 120% of the casing weight, whichever is greater. . . .

(4) If the surface or coal protective string is not free and cannot be retrieved, it shall be perforated or cut below the lowest workable coal to allow the cement used to cement the casing(s) to communicate between the surface casing or coal protective casing, or both, and the well bore. . . .

§ 78.94 Wells in Noncoal Areas – Surface Casing Is Not Cemented Or Not Present.

(a) The owner or operator shall plug a noncoal well, where the surface casing and production casing are not cemented, or is not present as follows:

* * * *

(3) After setting the uppermost 50-foot plug, the retrievable surface casing shall be removed by applying a pulling force at least equal to the casing weight plus 5,000 pounds or 120% whichever is greater. If this fails, an attempt shall be made to separate the casing by cutting, ripping, shooting or other method approved by the Department, and making a second attempt to remove the casing by exerting a pulling force equal to the casing weight plus 5,000 pounds or 120% of the casing weight, whichever is greater. . . .

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Answer:

Many pre-Act wells were constructed using uncemented surface casing and, in some instances, this may be the only casing string associated with a well. Although the regulatory framework above establishes a requirement for attempting to remove or perforate and cement uncemented surface casing strings during plugging, based on the Department’s experience there are circumstances when the procedure is not advisable. The Department will review and consider for approval alternative methods for plugging under 25 Pa.Code § 78.75 that do not include pulling or perforating and squeezing uncemented surface casing when the operator completes the following well assessment:

- (1) Evaluation of the well to ensure that no brines, oil, or gas is flowing to the surface outside of the surface casing; and
- (2) Evaluation of the well to ensure that the surface casing does not penetrate any brine-, oil-or gas-bearing zones.

If the operator can ensure that and the assessments under (1) and (2) do not identify any vertical movement of fluids or the potential for the vertical movement of fluids, the operator may submit an alternative method to the Department for review in advance of plugging activities. Allowing the uncemented surface casing to remain affords the ability to re-enter the well if additional work is needed to re-plug or remediate a well.

For wells penetrating a workable coal seam (as determined by current Department policy) that are equipped with a separate and distinct coal protective casing deeper than any shallower strings in the well, or for wells with a combined surface and coal-protective casing serving as the only shallow casing string other than the conductor pipe, an operator should comply with the provisions of 25 Pa.Code § 78.93(a)(4), as written, when plugging the well. The methodology the Department recommends above does not apply

to those casing strings that, by virtue of position in the well, are ultimately critical for preventing deeper gas from entering workable coal seams.

The Department recommends that the following standard language be used on the alternative method form:

For the well that is the subject of this alternative method, the following observations have been made based on an assessment conducted by the operator, plugging contractor, or other responsible person:

- (1) There is no evidence of current movement of brines, oil, or gas outside of the uncemented surface casing. This has been confirmed by (describe assessment procedure).
- (2) The uncemented surface casing does not penetrate any brine-, oil-, or gas-bearing zones. This has been confirmed by (describe assessment procedure).

The uncemented surface casing will be left in place during the plugging and abandonment to improve the likelihood of maintaining hole stability and allow future re-entry, should the need arise for any reason. The plugging procedure exceeds the plugging requirements of 25 Pa. Code **[Section 78.93(a)(3) or Section 78.94(a)(3) – choose which section applies]**.

(posted 02/15/2019).