Issue No. 7

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION TECHNICAL PEER REVIEW DOCUMENT

This Section to be Completed by Issue Initiator

TITLE OR ISSUE

Monitoring of Class I Injection Well when Temporarily Abandoned or when operator has ceased injection operations temporarily.

DOCUMENT INITIATED BY (Name/Office/Phone Number)	DATE
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ISSUE DESCRIPTION

Clarification of monitoring requirements for Class I injection wells when temporarily abandoned or when operator has ceased injection operations temporarily.

WHO'S AFFECTED?

Class I Injection Well Operators, TNRCC UIC Program staff and Regional Office inspectors

This Section to be Completed by Peer Review Team

FACTORS CONSIDERED

STATE REQUIREMENTS

Texas regulations for Class I injection wells do not use the term "Temporary Abandonment". The rule concerning a Class I well that is not in operation (30 TAC §331.63(k)) states that:

"An owner or operator of a Class I well who ceases injection operations temporarily may keep the well open provided he:

- (1) has received written authorization from the executive director; and,
- (2) has described actions or procedures, satisfactory to the executive director, that the owner or operator will take to ensure that the well will not endanger USDW's, and fresh or surface water during the period of temporary disuse. These actions and procedures shall include compliance with the technical requirements applicable to active injection wells, including mechanical integrity."

30 TAC §331.64 addresses the requirement for continuous monitoring as follows:

"Continuous recording devices shall be installed and used, and maintained in proper operating condition at all times to record injection tubing pressures, injection flow rates, injection fluid temperatures, injection volumes, tubing-long string casing annulus pressure and volume, and any other data specified by the permit."

The requirement for continuous monitoring makes no distinction between the presence or absence of injection activity. The rule does not make exceptions for when the well is in between injection episodes, or if the well is out of service. If the well is not physically able to inject (i.e. not completed, not connected to transmission lines, etc.) some of these parameters, such as flow rates, injection fluid temperatures, injection volumes would not be applicable. The requirement that would still be appropriate is the continuous monitoring of the tubing-long string casing annulus pressure and annulus volume, provided tubing and packer are installed, except during approved workovers that involve the annulus system.

FEDERAL REQUIREMENTS

40 CFR 144.28(c)(2)(iv) requires:

"After a cessation of operations of two years the owner or operator shall plug and abandon the well in accordance with the plan unless he:

- (A) Provides notice to the Regional Administrator;
- (B) Describes actions or procedures, satisfactory to the Regional Administrator, that the owner or operator will take to ensure that the well will not endanger USDW's during the period of temporary abandonment. These actions and procedures shall include compliance with the technical requirements applicable to active injection wells unless waived by the Regional Administrator."

Federal rules require that temporarily abandoned wells comply with technical requirements applicable to active injection wells. These requirements include financial responsibility (40 CFR 144.28(d)), operating requirements (40 CFR 144.28(f)), monitoring requirements (40 CFR 144.28(g)), reporting requirements (40 CFR 144.28(h)), retention of records (40 CFR 144.28(I)) and plugging and abandonment report (40 CFR 144.28(k)). Operating reports (40 CFR 144.28(f) (2)) contain the requirement for establishing and maintaining mechanical integrity.

FINDING(S) AND RECOMMENDATION(S)

Monitoring of Class I injection wells that are temporarily abandoned or when the operator has ceased injection operations temporarily is required by both state and federal rules to be the same as required for active injection wells. The primary difference between the state and federal rules is that the federal rules allow for the Regional Administrator to waive the necessity for compliance with the technical requirements of active injection wells. This flexibility is not provided for in the state rules.

A revision of the state rules is recommended to more closely follow the federal rules to provide the flexibility to waive compliance with the technical requirements of active injection wells.

30 TAC §331.63(k) refers to a well that "ceases operations temporarily". This expression is not defined; therefore, in order to maintain consistency with the federal regulations, the phrase "ceases injection operations temporarily" is considered to mean "cessation of operations of two years".

COMMENTS

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