DRAFT

MEMORANDUM

SUBJECT: Annual Compliance Review of Wells Permitted or Authorized-by-rule Under the UIC Program Guidance #64

FROM: Michael B. Cook, Director
Office of Drinking Water

TO: Water Division Directors
Regions I - X

Purpose

Starting in FY 1990, we would like to establish a new measure of effectiveness of the UIC programs which will help us determine what portion of the regulated universe has been specifically reviewed in any given year and found to be in compliance with the regulations. This guidance applies to all class I, II, and III wells, and to permitted Class V wells. The guidance incorporates appropriate elements of guidance #55 and supersedes that guidance.

Background

Except for very few cases, all UIC programs will be at least 5 years old by the end of FY 89. The phase-in part of the program will be over, i.e., permits will have been issued for all existing wells requiring them, and file reviews will have been completed for all class II wells authorized by rule for life. The program will be entering a more routine maintenance phase and States and Regions need to develop strategies and procedures to insure the continued compliance of the regulated universe. The goal of these strategies should be to insure that all wells are thoroughly reviewed on a regular basis. This guidance describes the elements of a complete compliance determination review which differ from class to class and gives suggestions on the frequency and timing of the reviews.

This guidance presumes that at some point in time during the first five years of the program the Director has ascertained through the permitting process or the file review process that the well is:

a. Completed into formation below the lowest most USDW or which have been exempted.

b. Separated from USDW's by adequate confining zones.

c. Designed for its expected use and geology.

In addition, through the use of permit conditions, field rules or authorization by rule requirements, certain operating, monitoring and reporting conditions have been imposed on all wells.

Guidance

The Regions and states should develop comprehensive compliance review strategies. The goal of these strategies is to enable Regions and States to ascertain on a periodic basis that wells are in compliance. The number of wells or facilities checked for compliance and the results of these reviews will be reported to headquarters on a quarterly basis and will replace the file review reportings.

I. Timing and Frequency of Compliance Reviews

Ideally all wells in each program should be reviewed for compliance once a year. However, for States with major programs such a frequency may not be feasible for all classes of wells.

Programs should strive to review:

- All Class I wells on a yearly basis.
- All Class III facilities on a yearly basis.
- All permitted Class V wells on a yearly basis

For Class II wells, programs should consider reviewing salt water disposal wells on a fairly frequent basis. In addition enhanced recovery wells could be reviewed yearly on a project basis or every five years on a well by well basis.

The compliance review should be tied to the field inspection strategy. We would expect that some programs have a routine inspection strategy where a certain percent of the well universe is looked at on a given frequency. On the other hand other programs may review annual reports submitted by the operators and use them to prioritize their inspection workload. Another scenario would lend itself to the completion of the compliance review at the time of field inspection. However, the program should be flexible enough to allow for compliance

reviews to be completed in such circumstances as a major non-compliance event, change of ownership or major modification to an operation. In addition, 5 year permit reviews or major permit modifications would be expected to trigger a compliance review.

II. Elements of a Compliance Review

The following is simply a list of all documents, reports, etc. which should be examined when determining the compliance status of an injection well. As explained above, certain reports or events may trigger the need to do a compliance review, while in other cases the review may be part of the routine strategy. In any case, a report that a compliance review has been completed would imply that all of the elements below have been examined.

A. Monitoring Reports

1. Class I injection well owner/operator(s) are required to report quarterly on the following:

    a. Physical, chemical, and other relevant characteristics of injectate;

    b. Monthly average, maximum and minimum values for injection pressure, flow rate and volume, and annular pressure;

    c. Results from groundwater monitoring;

    d. Results of any required test performed during the quarter; and

    e. Any well work-over.

2. Class II well owner/operator(s) are required to report annually on the following:

    a. Recorded observations of the injection pressure, flow rate, and cumulative volume, with at least the following frequency;

        i. Monthly- Enhanced recovery operations

        ii. Weekly- Salt water disposal operations

iii. Daily- Injection of liquid hydrocarbon or injection for withdrawal of stored hydrocarbons.

iv. Daily- Injection phase of cyclic steam operations

b. Major changes in the characteristics or source of the injected fluids

c. The monthly average of this information is what is recorded in the annual report.

3. Class III injection well owner/operator(s) are required to report quarterly on the following:

a. All monitoring as required by ¶144.28(g)(3).

b. Results of any required tests performed during the quarter.

4. Where Class V wells have been permitted some monitoring may be required and should be reviewed at least yearly.

Of particular importance when reviewing monitoring reports is to ascertain that no unapproved changes of the character of injection fluid, flow pressure or scope and type of the project have occurred.

III. Review and Approval of Well Work Overs

In many cases (particularly for Class I wells) well work overs require prior notification by the owner/operator and should have been reviewed and approved as they occurred. Such events may be used to trigger a complete compliance review. For class II wells, however, programs may not be able to review and approve all major work overs although they should be encouraged to review and approve a minimum of 25% of all major well rework records (EPA form 7520-12) at both proposal and execution stage to assure continued nonendangerment. Major well rework should be defined in light of typical practices, but at a minimum shall include any removal of tubing or packer or any change in existing cementing or construction. Any such review must include commitments to witness rework and subsequent MIT as well as provide specific authorization to recommence injection after a successful MIT.

Review of completion reports of minor work overs, and major workovers which have not been reviewed as they occurred should be part of the compliance review. The program should also ascertain that the owner/operator complied with the advance notification requirements and take action where they did not.

C. Mechanical Integrity Testing Report

a. The mechanical integrity test (MIT) report should include:

i. Results of testing

ii. description of the test and the methods used

b. In evaluating MIT results, the Director shall review monitoring and other test data submitted since the previous evaluation.

D. Review of Well's ownership and Acceptability of Financial Responsibility Demonstration.

As part of the compliance review, programs should ascertain the ownership of the wells. In cases where ownership has changed the reviewer should check whether:

- Proper notification of change of ownership occurred;
- The financial responsibility demonstration for the new owners is adequate; and
- The new owner/operator has an updated plugging and abandonment plan (EPA form 7520-14).

Even where ownership of the well has not changed the adequacy of the financial responsibility demonstration should be reviewed. The revised FR guidance (in preparation) will require annual updates of financial statement submission. Other types of FR demonstrations may need to be revised based on DOE's "Cost and Indices for Domestic oil and gas field equipment and production operations."

E. Temporarily Abandoned Wells

For temporarily abandoned (TA) wells, the strategy must incorporate provisions to track the two year temporarily abandoned cycle and to require non-endangerment demonstrations on this cycle.

All other compliance review elements for TA wells should be conducted in accordance with prescribed schedules.

Implementation

Regions and States should develop strategies to achieve the goal stated by this guidance. These strategies will be discussed with the Regions during the FY 89 Mid-Year evaluation process. The Regions should encourage their states to put their compliance review strategies in place during FY 89. Starting in FY 90, these compliance reviews will be a reporting element for the UIC program in lieu of file reviews.