**Section 240.760 Establishment of** **Internal Mechanical Integrity** **for Class II UIC Wells**

a) For purposes of this Section, establishment of internal mechanical integrity includes proper placement of the packer in accordance with subsection (b) and successful completion of a pressure test in accordance with subsection (g). If the Department determines that the packer is not set in accordance with subsection (b) or (c), the permittee shall be required to remove the tubing and packer from the well and reset it in the presence of a Department representative in accordance with this Section.

b) Injection shall be through tubing and packer unless alternative construction methods are approved by the U.S. Environmental Protection Agency. The packer shall be placed no higher than 200 feet above the uppermost permitted perforations or the casing seat in an open hole completion, provided the packer is within the cemented portion of the production casing such that there is at least 50 feet of cement above the packer, and further provided the packer is no less than 100 feet below the base of the fresh water. No perforations shall be left open above the packer unless they are isolated by a dual packer or concentric packer system. If a dual packer is used, the uppermost packer must satisfy the placement requirements of this subsection.

c) If the packer cannot be set in accordance with subsection (b) due to existing well construction, casing leaks within the cemented portion of the production casing, or an obstruction in the well, the permittee may request and the Department may specify an alternative packer setting depth provided the packer remains within the cemented portion of the production casing. In determining an alternative packer setting depth the Department shall take into consideration the current construction of the well, the depth of the fresh water and the nature of the obstruction.

d) The permittee shall contact the District Office in which the well is located at least 24 hours prior to the initial setting or any resetting of the packer in a Class II UIC well to enable an inspector to be present when the packer is set. Setting of the packer must be reported on a form prescribed by the Department.

e) An internal mechanical integrity test shall be performed:

1) prior to initial injection into a newly permitted Class II UIC well;

2) prior to initial injection into a Class II UIC well after a change to a new, permitted injection zone;

3) prior to resuming injection into any Class II UIC well after any workover of the well involving the resetting or movement of a packer;

4) prior to initial injection into a Class II UIC well after the well has been reactivated from temporary abandonment status;

5) whenever the Department has reason to believe, based upon well records or field observation, and subject to the provisions of Sections 240.140, 240.150 and 240.180, that the Class II UIC well may be leaking or improperly constructed; and

6) at least once every 5 years measured from the date of the last successful test unless a temporary abandonment is approved in accordance with Section 240.1132.

f) All Class II UIC wells not subjected to an internal mechanical integrity pressure test as of September 1, 1990 were required to be tested by September 1, 1995, unless Temporary Abandonment status was approved prior to July 14, 2000. During the first 4 years, each permittee shall conduct an internal mechanical integrity test each year commencing September 1 on at least 20% of the permittee's total Class II UIC wells of record as of September 1 as reported to each permittee by the Department. During the fifth year each permittee shall conduct an internal mechanical integrity test on all remaining untested Class II UIC wells that were of record September 1, 1994 or were acquired during the year ending September 1, 1995. Class II UIC wells sold or acquired during the first 4 years shall not affect the total number of wells from which the 20% testing requirement is derived for that year. Wells tested during the year in which they are transferred shall count toward the 20% testing requirement of the permittee who conducted the test. Class II UIC wells temporarily abandoned, converted to production wells or plugged in accordance with the provisions of Subpart K during any year shall count toward the 20% testing requirement.

g) Pressure Test

The following pressure test shall be performed on Class II UIC wells to establish the internal mechanical integrity of the tubing, casing and packer of the well. The permittee shall contact the District Office in which the well is located at least 24 hours prior to conducting a pressure test to enable an inspector to be present when the test is done. The permittee shall report the test results on a form prescribed by the Department.

1) Pressure Test

The casing-tubing annulus above the packer shall be tested in the presence of a Department representative at a minimum pressure differential between the tubing and the annulus of 50 PSIG for a period of 30 minutes. In addition, the casing-tubing annulus starting test pressure shall not be less than 300 PSIG and may vary no more than 5 percent of the starting test pressure during the test. The well may be operating or shut in during the test.

2) Monitoring Test

For those wells that are structurally unable to withstand the pressure test specified in subsection (g)(1) because the packer would unseat, but not because the well is improperly constructed, the permittee may make application to perform a monitoring test in lieu of the pressure test on forms prescribed by the Department. An approved monitoring test will consist of pressuring the annulus to a specified pressure no less than 50 PSIG and monitoring the positive annular pressure over a specified period of time. In determining whether to approve a monitoring test, and in establishing the test parameters (i.e., positive annulus pressure, tubing injection pressure, injection rate, monitoring method and length and frequency of monitoring), the Department shall consider well construction including:

A) the volume of the casing-tubing annulus;

B) depth of packer;

C) pressure below the packer; and

D) type of tubing and packer.

h) Any Class II UIC well that fails an internal mechanical integrity test, or on which an internal mechanical integrity test has not been performed when required by subsections (e) and (f), shall be shut in until the well is plugged or until remedial work is commenced and completed and an internal mechanical integrity test is successfully completed. The necessary work shall be completed and an internal mechanical integrity test successfully completed within 90 days, or within any greater length of time established by the Department due to weather conditions.

(Source: Amended at 35 Ill. Reg. 13281, effective July 26, 2011)