**Section 730.189 Mechanical Integrity**

a) A Class VI injection well has mechanical integrity if both of the following conditions exist:

1) There is no significant leak in the casing, tubing, or packer; and

2) There is no significant fluid movement into a USDW through channels adjacent to the injection well bore.

b) To evaluate the absence of significant leaks under subsection (a)(1), the owner or operator must, following an initial annulus pressure test, continuously monitor each of the following parameters:

1) The injection pressure, rate, and injected volumes;

2) The pressure on the annulus between the tubing and the long-string casing; and

3) The annulus fluid volume, as specified in Section 730.188(e);

c) At least once per year, the owner or operator must use one of the following methods to determine the absence of significant fluid movement under subsection (a)(2):

1) An approved tracer survey, such as an oxygen-activation log; or

2) A temperature or noise log.

d) If required by the Agency, at a frequency specified in the testing and monitoring plan required by Section 730.190, the owner or operator must run a casing inspection log to determine the presence or absence of corrosion in the long-string casing.

e) The Agency must require any requested alternative test that the Agency has determined is necessary to evaluate mechanical integrity under subsections (a)(1) or (a)(2) after obtaining the written approval of USEPA.

BOARD NOTE: Corresponding 40 CFR 146.89(e) provides that the Agency must submit a written request to USEPA setting forth the proposed test and all technical data supporting its use to obtain approval for a new mechanical integrity test. USEPA stated that it will approve the request if USEPA determines that the proposed test will reliably demonstrate the mechanical integrity of wells for which its use was proposed. USEPA stated that it will publish any alternative method that USEPA has approved in the Federal Register, and the Agency must approve use of the published method if the Agency has determined that the method is appropriate to evaluate mechanical integrity, unless USEPA restricts its use at the time of approval by USEPA.

f) In conducting and evaluating the tests enumerated in this Section or others that the Agency has required by permit, the owner or operator and the Agency must apply methods and standards generally accepted in the industry. When the owner or operator reports the results of mechanical integrity tests to the Agency, the owner or operator must include a description of the tests and the methods used. In making its evaluation, the Agency must review monitoring and other test data submitted since the previous evaluation.

g) The Agency must require additional or alternative tests if the Agency determines that the results presented by the owner or operator pursuant to subsections (a) through (d) are not satisfactory to demonstrate that there is no significant leak in the casing, tubing, or packer or that there is no significant movement of fluid into a USDW resulting from the injection activity, as required by subsections (a)(1) and (a)(2).

BOARD NOTE: This Section corresponds with 40 CFR 146.89 (2017).

(Source: Amended at 42 Ill. Reg. 24145, effective November 19, 2018)