**Section 730.108 Mechanical Integrity**

a) The owner or operator must demonstrate mechanical integrity when required by other Sections. An injection well has mechanical integrity if both of the following conditions are fulfilled:

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

2) There is no significant fluid movement into an underground source of drinking water through vertical channels adjacent to the injection bore.

b) One of the following tests must be used to demonstrate the absence of significant leaks pursuant to subsection (a)(1):

1) Following an initial pressure test, monitoring of the tubing-casing annulus pressure with sufficient frequency to be representative, as determined by the Agency, while maintaining an annulus pressure different from atmospheric pressure measured at the surface; or

2) A pressure test with liquid or gas.

c) One of the following methods may be used to determine the absence of significant fluid movement pursuant to subsection (a)(2):

1) The results of a temperature or noise log;

2) For Class III injection wells where the nature of the casing precludes the use of the logging techniques prescribed at subsection (c)(1), cementing records demonstrating the presence of adequate cement to prevent migration; or

3) For Class III injection wells where the Agency elects to rely on cementing records to demonstrate the absence of significant fluid movement, the monitoring program prescribed by 35 Ill. Adm. Code 730.113(b) must be designed to verify the absence of significant fluid movement.

d) The Agency may allow the use of a test to demonstrate mechanical integrity other than those listed in subsections (b) and (c). To obtain approval, the owner or operator must submit a written request to the Agency that sets forth the proposed test and all technical data supporting its use. The Agency must approve the request if the test will reliably demonstrate the mechanical integrity of wells for which its use is proposed.

e) In conducting and evaluating the tests enumerated in this Section or others to be allowed by the Agency, 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, it must include a description of the test and the method used. In making its evaluation, the Agency must review monitoring and other test data submitted since the previous evaluation.

f) The Agency may require additional or alternative tests if the results presented by the owner or operator pursuant to subsection (e) are not satisfactory to the Agency to demonstrate that there is no movement of fluid into or between USDWs resulting from the injection activity.

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