

3745-34-34      **Mechanical integrity.**

- (A) An injection well has mechanical integrity if the following are met:
  - (1) There are no significant leaks in the casing, tubing or packer.
  - (2) There is no significant fluid movement into an underground source of drinking water (USDW) through vertical channels adjacent to the injection well bore.
- (B) One of the following methods shall be used to evaluate the absence of leaks under paragraph (A)(1) of this rule:
  - (1) Monitoring of the tubing-casing annulus pressure with sufficient frequency to be representative, as determined by the director, while maintaining an annulus pressure different from atmospheric pressure measured at the surface.
  - (2) Pressure test with liquid or gas.
- (C) The results of a temperature or noise log shall be used to determine the absence of significant fluid movement under paragraph (A)(2) of this rule.
- (D) The director may allow the use of a test to demonstrate mechanical integrity other than those listed in paragraphs (B) and (C) of this rule with the written approval of the administrator of the United States environmental protection agency (USEPA). To obtain approval, the director shall submit a written request to the administrator of USEPA, which shall set forth the proposed test and all technical data supporting its use. Any alternate method approved by the director shall be published pursuant to the requirements of Chapter 3745-49 of the Administrative Code.
- (E) In conducting and evaluating the tests enumerated in this rule or others to be allowed by the director, the owner or operator and the director shall apply methods and standards generally accepted in the industry. When the owner or operator reports the results of mechanical integrity tests to the director, a description of any test and any method used shall be included. In making an evaluation, the director shall review monitoring and other test data submitted since the previous evaluation.
- (F) The director or the director's authorized representative shall be present during the test for demonstration of mechanical integrity, unless the director or the director's authorized representative waives this requirement before the test occurs.
- (G) The director may require additional or alternative tests if the results presented by the owner or operator under paragraph (E) of this rule are not satisfactory to the director to demonstrate that there is no movement of fluid into or between USDWs resulting from the injection activity.
- (H) No injection without the director's approval shall occur into a class I well that cannot maintain technical integrity as defined by paragraph (A) of this rule unless the injection of fluids is intended to prevent the flow of waste up the well to the surface. In the event that a loss of mechanical integrity of a class I well is discovered, the owner or operator shall follow the requirements of paragraph (H) of rule 3745-34-56 of the Administrative Code.

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