62-528.435 Plugging and Abandonment Criteria and Procedures for Class I and III Wells.

- (1) Upon determination by the Department that a well poses a threat to waters of the State or within one year of determining that a well has been abandoned, the Department shall order the well plugged, unless otherwise provided for in a consent order.
- (2) Any Class I or III permit shall include conditions to ensure that plugging and abandonment of the well will not allow the movement of fluids either into an underground source of drinking water or from one underground source of drinking water to another. These conditions shall include mechanical integrity testing prior to plugging of the injection well, or monitor well which penetrates the injection zone or final confining unit, if fluid movement through channels adjacent to the injection well bore is suspected. Any applicant for an underground injection control permit shall be required to submit a plan for plugging and abandonment, which shall address post-closure monitoring of the injection operation. The post-closure monitoring plan shall be designed in accordance with the requirements of paragraph 62-528.425(1)(j), F.A.C. Where the plan meets the requirements of this chapter, the Department shall incorporate it into the permit as a condition. Where the Department's review of an application indicates that the permittee's plan is inadequate, the Department shall require the applicant to revise the plan, prescribe conditions meeting the requirements of this chapter, or deny the application. Where applicable, the plugging and abandonment plan shall address the proposed post-closure monitoring.
- (3) Prior to abandoning Class I or III wells, the well shall be plugged with cement, or other materials if a Class III well, in a manner which will not allow the movement of fluids either into or between underground sources of drinking water. To use other plugging materials for Class III wells, the applicant shall demonstrate in the plugging and abandonment permit application that the proposed plugging materials will prevent movement of fluids into or between underground sources of drinking water.
 - (4) Placement of the plugging material shall be accomplished by one of the following methods:
 - (a) The Balance Method;
 - (b) The Dump Bailer Method;
 - (c) The Two-Plug Method; or
- (d) Any other recognized method which is as effective or more effective than those listed above for the placement of plugging material in a manner that will not allow fluid movement to occur into or between underground sources of drinking water.
- (e) For wells with an open hole completion, the cement shall be emplaced beginning at the deepest point required in the permit and upward to land surface or other method approved by the Department following the process described in subsection 62-528.100(2), F.A.C.
- (5) The well to be abandoned shall be in a state of static equilibrium with the mud weight equalized from top to bottom, either by circulating the mud in the well at least once or by a comparable method prescribed by the Department, prior to the placement of the cement plug(s).
- (6) The permittee shall notify the Department at least 180 days before conversion or abandonment of a Class I well, unless abandonment within a lesser period of time is necessary to protect the waters of the State.
- (7) For all Class I wells, after removal of the tubing and packer (if applicable), the final or innermost string of casing shall be filled with neat cement grout or an approved equivalent from a depth of at least 10 feet below the bottom of the casing to land surface. Annular monitor tubes in an injection well are allowed to be left unplugged temporarily if they are to be used for their intended purpose and do not compromise the objectives listed above. If temporarily left open, the annular monitor tubes shall be plugged with cement at the end of post-closure monitoring. If the tubes are not used for monitoring, they shall be filled with neat cement from the bottom of the monitor zone to land surface.
- (8) The plugging and abandonment plan required in Rules 62-528.435 and 62-528.460, F.A.C., shall, in the case of a Class III well field which underlies or is in an aquifer which has been exempted under subsection 62-528.300(3), F.A.C., also demonstrate that no movement of contaminants from the mined zone into an underground source of drinking water will occur. The Department shall prescribe aquifer cleanup and monitoring where necessary and feasible to ensure that no migration of contaminants from the mined zone into an underground source of drinking water will occur.
- (9) Financial Responsibility. The permit shall require the permittee to demonstrate and maintain financial responsibility and resources necessary in the form of performance bonds or other equivalent form of financial assurance approved as described in paragraph (b) below, to close, plug, and abandon the underground injection operation.
- (a) Class I hazardous waste wells shall comply with the financial responsibility requirements of 40 C.F.R. pt. 144 Subpart F (1994).
 - (b) For Class I wells used to inject non-hazardous fluids these requirements are specified in the Department's document "State

of Florida Underground Injection Control Program Financial Responsibility Options for Owners and Operators of Injection Wells" (1996), which is incorporated herein by reference, and which may be obtained by writing to the Division of Water Resource Management, Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. In lieu of individual financial guarantees, the applicant shall furnish a financial guarantee covering all the applicant's injection wells in this State. The Department shall require a certificate showing that the applicant has assured, through a performance bond or other appropriate means, that resources necessary to cover post-closure monitoring and any corrective action resulting from this monitoring have been provided.

- (10) In the event a radioactive source tool has been irretrievably lost down an injection well, the Department shall be immediately notified. The well shall not be plugged until all applicable Nuclear Regulatory Commission regulations have been satisfied.
- (11) Within 90 days after completion of plugging and abandonment the permittee of a well shall provide documentation that the well was properly abandoned.

Specific Authority 403.061, 403.087 FS. Law Implemented 403.021, 403.061, 403.062, 403.087, 403.161 FS. History—New 4-1-82, Amended 8-30-82, 5-8-85, Formerly 17-28.27, 17-28.270, 62-28.270, Amended 8-10-95, 6-24-97.