

APA-1  
11/96

**TRANSMITTAL SHEET FOR  
NOTICE OF INTENDED ACTION**

Control 335 Department or Agency Environmental Management  
Rule No. 335-6-8-.21  
Rule Title: Class VI Well Mechanical Integrity Requirements

X New          Amend          Repeal          Adopt by Reference

Would the absence of the proposed rule significantly harm or endanger the public health, welfare, or safety?          YES         

Is there a reasonable relationship between the state's police power and the protection of the public health, safety, or welfare?          YES         

Is there another, less restrictive method of regulation available that could adequately protect the public?          NO         

Does the proposed rule have the effect of directly or indirectly increasing the costs of any goods or services involved and, if so, to what degree?          NO         

Is the increase in cost, if any, more harmful to the public than the harm that might result from the absence of the proposed rule?          N/A         

Are all facets of the rulemaking process designed solely for the purpose of, and so they have, as their primary effect, the protection of the public?          YES         

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Does the proposed rule have an economic impact?          NO         

If the proposed rule has an economic impact, the proposed rule is required to be accompanied by a fiscal note prepared in accordance with subsection (f) of section 41-22-23, Code of Alabama 1975.

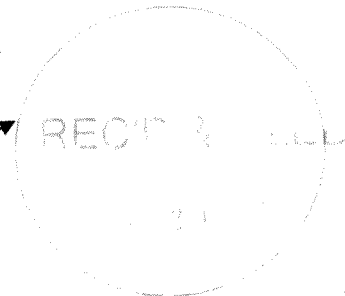
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Certification of Authorized Official

I certify that the attached proposed rule has been proposed in full compliance with the requirements of Chapter 22, Title 41, Code of Alabama 1975, and that it conforms to all applicable filing requirements of the Administrative Procedure Division of the Legislative Reference Service.

Signature of certifying officer Marilyn Elliott

Date May 20, 2011

Date Filed



APA-2  
11/96

**ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
WATER DIVISION**

**NOTICE OF INTENDED ACTION**

**AGENCY NAME:** Alabama Department of Environmental Management

| <b>Rule NO.</b> | <b>Title</b>                                                                               |
|-----------------|--------------------------------------------------------------------------------------------|
| 335-6-8-.01     | Purpose                                                                                    |
| 335-6-8-.02     | Definitions                                                                                |
| 335-6-8-.05     | Prohibited Actions                                                                         |
| 335-6-8-.07     | Permit Issuance Procedures                                                                 |
| 335-6-8-.08     | Public Notice Requirements                                                                 |
| 335-6-8-.10     | Class V Well Permit Application Requirements                                               |
| 335-6-8-.12     | Class V Well Permit Requirements                                                           |
| 335-6-8-.13     | Class VI Well Applicability and General Requirements                                       |
| 335-6-8-.14     | Class VI Well Permit Application and Application Review Requirements                       |
| 335-6-8-.15     | Class VI Well Minimum Criteria for Siting                                                  |
| 335-6-8-.16     | Class VI Well Area of Review and Area of Review Corrective Action                          |
| 335-6-8-.17     | Class VI Well Financial Responsibility Requirements                                        |
| 335-6-8-.18     | Class VI Well Construction Requirements                                                    |
| 335-6-8-.19     | Class VI Well Logging, Sampling and Testing Requirements Prior to Injection Well Operation |
| 335-6-8-.20     | Class VI Well Operating Requirements                                                       |
| 335-6-8-.21     | Class VI Well Mechanical Integrity Requirements                                            |
| 335-6-8-.22     | Class VI Well Testing and Monitoring Requirements                                          |
| 335-6-8-.23     | Class VI Well Reporting Requirements                                                       |
| 335-6-8-.24     | Class VI Well Plugging Requirements                                                        |
| 335-6-8-.25     | Class VI Well Post-Injection Site Care and Site Closure Requirements                       |
| 335-6-8-.26     | Class VI Well Emergency and Remedial Response Requirements                                 |
| 335-6-8-.27     | Class VI Well Permit Requirements                                                          |
| 335-6-8-.28     | Technical Submittals and Other Reports to the Department                                   |
| 335-6-8-.29     | Coordination with EPA                                                                      |
| 335-6-8-.30     | Confidentiality                                                                            |

**INTENDED ACTION:** Revise Division 6 of the ADEM Administrative Code with the addition or amendment of Rules 335-6-8-.01 (Purpose), 335-6-8-.02 (Definitions), 335-6-8-.05 (Prohibited Actions), 335-6-8-.07 (Permit Issuance Procedures), 335-6-8-.08

(Public Notice), 335-6-8-.10 (Class V Well Permit Application Requirements), 335-6-8-.12 (Permit Issuance Procedures), 335-6-8-.13 (Class VI Well Applicability and General Requirements), 335-6-8-.14 (Class VI Well Permit Application and Application Review Requirements), 335-6-8-.15 (Class VI Well Minimum Criteria for Siting), 335-6-8-.16 (Area of Review and Area of Review Corrective Action), 335-6-8-.17 (Class VI Well Financial Responsibility Requirements), 335-6-8-.18 (Class VI Well Construction Requirements), 335-6-8-.19 (Class VI Well Logging, Sampling and Testing Requirements Prior to Injection Well Operation), 335-6-8-.20 (Class VI Well Operating Requirements), 335-6-8-.21 (Class VI Well Mechanical Integrity Requirements), 335-6-8-.22 (Class VI Well Testing and Monitoring Requirements), 335-6-8-.23 (Class VI Well Reporting Requirements), 335-6-8-.24 (Class VI Well Plugging Plan), 335-6-8-.25 (Post-Injection Site Care and Site Closure Requirements), 335-6-8-.26 (Class VI Well Emergency and Remedial Response Requirements), 335-6-8-.27 (Class VI Well Permit Requirements), 335-6-8-.28 (Technical Submittals and Other Reports to the Department), 335-6-8-.29 (Coordination with EPA), and 335-6-8-.30 (Confidentiality).

**SUBSTANCE OF PROPOSED ACTION:**

Revisions to the Division 6 Code are being proposed to include requirements for Class VI injection wells, for geologic sequestration of carbon dioxide. The proposed additions and amendments are consistent with the federal regulations for Class VI wells published in the Federal Register on December 10, 2010.


**TIME, PLACE, MANNER OF PRESENTING VIEWS:**

Comments may be submitted in writing or orally at a public hearing to be held 1:00 p.m., July 11, 2011, in the ADEM Hearing Room, 1400 Coliseum Blvd., Montgomery, Alabama 36110.

**FINAL DATE FOR COMMENT AND COMPLETION OF NOTICE:** July 11, 2011

**CONTACT PERSON AT AGENCY:**

Sonja Massey (334) 271-7832



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Lance R. LeFleur  
Director

**335-6-8-.21 Class VI Well Mechanical Integrity Requirements.**

(1) Operation of a Class VI well without mechanical integrity is prohibited. Mechanical integrity must be demonstrated to the satisfaction of the Department. A Class VI well has mechanical integrity if:

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

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

(2) To evaluate the absence of significant leaks under paragraph (1)(a) of this section, owners or operators must, following an initial annulus pressure test, continuously monitor injection pressure, rate, injected volumes; pressure on the annulus between tubing and long-string casing; and annulus fluid volume as specified in 335-6-8-.20(5);

(3) 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 paragraph (1)(b) of this section:

(a) An approved tracer survey such as an oxygen-activation log; or

(b) A temperature or noise log.

(4) If required by the Department, at a frequency specified in the testing and monitoring plan required at 335-6-8-.22, the owner or operator must run a casing inspection log to determine the presence or absence of corrosion in the long-string casing.

(5) The Department may require any other test to evaluate mechanical integrity under paragraphs (1)(a) or (1)(b) of this rule. Also, the Department may allow the use of a test to demonstrate mechanical integrity other than those listed above with written approval of the Administrator. To obtain approval for a new mechanical integrity test, the Department must submit a written request to the Administrator setting forth the proposed test and all technical data supporting its use. The Administrator may approve the request if he or she determines that it will reliably demonstrate the mechanical integrity of wells for which its use is proposed.

(6) In conducting and evaluating the tests enumerated in this section or others to be allowed by the Department, the owner or operator and the Department must apply methods and standards generally accepted in the industry. When the owner or operator reports the results of mechanical integrity tests to the Department, he/she shall include a description of the test(s) and the method(s) used. In making his/her evaluation, the Department must review monitoring and other test data submitted since the previous evaluation.

(7) The Department may require additional or alternative tests if the results presented by the owner or operator under paragraphs (1) through (4) of

this section are not satisfactory to the Department to demonstrate that there is no significant leak in the casing, tubing, or packer, or to demonstrate that there is no significant movement of fluid into a USDW resulting from the injection activity as stated in paragraphs (1)(a) and (b) of this rule.

**Author:** Sonja Massey.

**Statutory Authority:** Code of Alabama 1975, §§ 22-22-9, 22-22A-5, 22-22A-6, 22-22A-8.

**History:** XXXXXX, 2011.