

TRANSMITTAL SHEET FOR  
NOTICE OF INTENDED ACTION

Control 335 Department or Agency Environmental Management  
Rule No. 335-6-8-.09  
Rule Title: Class III Well Permit Application Requirements  
       New        X 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?        NO       

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

\*\*\*\*\*  
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        *Nancy Elliott*       

Date April 20, 2015

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
WATER DIVISION

NOTICE OF INTENDED ACTION

**Agency Name:** Alabama Department of Environmental Management  
**Rule No. & Title:** 335-6-8-.09 Class III Well Permit Application Requirements  
(Amend)  
**Intended Action:** The Alabama Department of Environmental Management proposes  
to amend rule 335-6-8-.09.

**Substance of Proposed Action:**

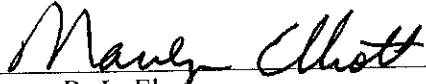
The Department proposes to amend rule 335-6-8-.09 "Class III Well Permit Application Requirements" to correct a reference to rule 335-6-8-.10 made necessary by changes to rule 335-6-8-.10.

**Time, Place, Manner of Presenting Views:**

Comments may be submitted in writing or orally at a public hearing to be held at 10:00 A.M., June 11, 2015, in the ADEM Main Hearing Room, 1400 Coliseum Boulevard, Montgomery, Alabama 36110.

**Final Date for Comment and Completion of Notice:** June 11, 2015

**Contact Person at Agency:** Christy Monk, (334) 394-4364

  
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Lance R. LeFleur  
Director

### **335-6-8-.09 Class III Well Permit Application Requirements.**

(1) For any new well field(s), the owner or operator shall submit in duplicate completed EPA Consolidated Permit Application Form 1 "General Information" and Form 4 "Underground Injection of Fluids", the information required in subparagraphs (1)(ea) through (1)(e), and (1)(h) of rule 335-6-8-.10, any additional information required by paragraph (23) of rule 335-6-8-.10, and the following information:

(a) Data on all wells (to include injection wells, oil and gas exploration and/or production wells, and water wells) located within the area of review which represents well type, well construction, date drilled, location, depth, record of plugging and/or completion and the present use of the well.

(b) An inventory of all surface waters located within the area of review to include type, location, and use.

(c) A map(s) which shows the location of wells, surface waters, and other pertinent surface features such as roads, mines, quarries, residences, and other structures within the area of review.

(d) Hydrogeological data including maps and cross sections showing local geological structure, regional geological structure, and the horizontal and vertical location of USDW's within the area of review. Where sufficient information is available, the direction of flow of water in each USDW shall also be shown.

(e) The source and analysis of the chemical, physical, radiological, and biological characteristics of the pollutants to be injected and, if available, of the formation fluid from the intended injection zone.

(f) A best management practice plan shall be developed in accordance with sound engineering practices to prevent or respond to pollution of any USDW or surface water which may be caused by operation or failure of the well or any other associated equipment at the facility as follows:

1. Examine each facility component or system with respect to its potential for causing a release of significant amounts of fluids and/or pollutants into a USDW or surface water due to equipment failure, improper operation, natural phenomena such as rain, freezing temperatures, etc.;

2. Include a prediction of the direction, rate of flow and total quantity of fluids and/or pollutants which could be discharged from the facility as a result of equipment failure, natural phenomena or other circumstances;

3. Establish best management practices addressing each system capable of causing a release of significant amounts of fluids and/or pollutants into a USDW or surface water;

4. Reflect all applicable requirements for Spill Prevention Control and Countermeasure (SPCC) plans under 40 CFR Part 151, and incorporate such plans into the plan by reference;

5. Assure the proper management of solid and hazardous waste;

6. Address materials storage areas, process and material handling areas, loading and unloading areas, plant site runoff, and sludge and waste disposal areas;

7. Consider including statement of policy, employee training, inspections, preventative maintenance, and housekeeping;

8. When necessary, provide impervious liners, dikes, or other structures sufficient to prevent the discharge of a fluids and/or pollutant to a USDW;

9. Document the plan in narrative form and include any necessary plot plans, drawings or maps.

(g) A plan for plugging and abandonment of the injection well. Plugging shall be accomplished so that USDW's are completely isolated and the movement of fluids and/or pollutants into any USDW or between USDW's is prevented and so that the injection zone is isolated. Plugging shall also be accomplished so that surface water cannot enter the well.

(h) An executed financial guarantee sufficient to demonstrate the financial responsibility and resources to close, plug, and abandon the underground injection operation in a manner acceptable to the Department. Financial responsibility may be demonstrated by the submission of adequate assurance, such as financial statements or other materials acceptable to the Department.

(i) A description of the corrective actions planned to eliminate any deficiencies in the plugging or completion of wells located in the area of review which, if not eliminated, may result in pollution of a USDW. In determining the adequacy of the corrective action, the following criteria shall be considered:

1. Nature and volume of the injected fluid;
2. Nature of by-products of injection;
3. Potentially affected population;
4. Geology;
5. Hydrology;
6. History of the injection operation; and

7. Hydraulic connections with underground sources of drinking water.

(j) A proposed ground water monitoring program showing the location, depth, and method of construction of any monitoring wells to be installed and similar information concerning any existing wells or surface water bodies to be monitored. This submittal shall also provide a proposed sampling and testing scheme to be followed during groundwater monitoring. Monitoring wells shall be located and constructed in accordance with approved plans and shall conform to subparagraph (1)(e) items 1. through 4. of rule 335-6-8-.10 and the following requirements:

1. Where injection is into a formation containing less than 10,000 mg/l total dissolved solids, monitoring wells shall extend into the injection zone.

2. Where a USDW is penetrated by the injection well and the operation may cause or be affected by subsidence or catastrophic collapse, monitoring wells shall be located outside the physical influence of the possible subsidence or collapse.

3. Where the injection zone is an USDW; the number, location, construction, and frequency of monitoring of the monitoring wells shall be determined by considering:

(i) The population relying upon the USDW affected or potentially affected by the injection operation;

(ii) The proximity of the injection operation to points of withdrawal of drinking water;

(iii) The local geology and hydrology;

(iv) The operating pressure and whether a negative gradient is being maintained;

(v) The nature and volume of the injected fluid, the formation water, and the process by-products; and

(vi) The injection well density.

(k) If the permit application is for a well field with more than one well, the ultimate expected well field configuration shall be submitted on a drawing showing the area of review, and showing injection and recovery wells.

(l) Proposed operational procedures which include estimated average and maximum daily injection rates and injection pressures.

(m) Drilling and well testing plans, completion plans, and surface construction plans which meet the requirements of subparagraph (1)(b), (1)(c), and (1)(d) items 4. and 5. of rule 335-6-8-.11.

(n) A signature of a person who meets the requirements of a responsible official as indicated below:

1. In the case of a corporation, by a principal executive officer of at least the level of vice-president;
2. In the case of a partnership, by a general partner;
3. In the case of a sole proprietorship, by the owner;
4. In the case of a municipal, state, federal, or other public agency, by either a principal executive officer or ranking elected official.

(o) A signed certification by the responsible official described in subparagraph (1)(n) of the permit application as follows:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

(2) For any existing well field(s), the owner or operator of the well(s) or well field(s) shall, in addition to the information required by paragraph (1) of this rule, submit in duplicate the following information:

(a) Available past operation data, to include average and maximum daily injection rates, volume and characteristics of the fluids and/or pollutants injected, the average and maximum injection pressures, and annular pressures shall be submitted in a format that allows comparison of data such as injection rate versus corresponding injection pressure.

(b) The following cased hole logs and their interpretation, or substitute logs as agreed upon by the Department, to form base conditions for future well monitoring:

1. A combination cement bond, variable density, gamma ray, and casing collar locator log;
2. A high resolution temperature log performed after the well has been shut down for a minimum of three days or a thermal decay log;
3. A caliper log;
4. Any well logs run previously in the well to determine the past performance of the well system;
5. Other logs as the Department may require.

(c) A description of the actions planned to upgrade the well and meet the minimum requirements of paragraph (1) of this rule or other requirement determined by the Department and a proposed compliance schedule for completion of these actions.

(d) Proof of mechanical integrity of the well which shall demonstrate that there is no detectable leak in the casing, tubing, or packer and that there is no detectable movement of pollutants from the injection zone through vertical channels adjacent to the injection well bore. As a minimum the absence of leaks must be determined by the monitoring of annulus pressure or pressure test with liquid or gas. As a minimum, the absence of vertical pollutant migration must be determined by a temperature log or a noise or acoustic log. The owner or operator may submit a request for substitution of another test method to the Department. This request must be in such detail as to show that the proposed test method will reliably demonstrate mechanical integrity of the wells for which its use is proposed. Should the Department agree to the request, approval of the Administrator will be requested and must be obtained prior to substitution of the method. The owner or operator and the Department will apply methods and standards generally accepted in the industry. Reports on mechanical integrity will include description of the tests and methods used. In making the evaluation, the Department shall review all data submitted since the previous evaluation.

(3) For purpose of this rule, the area of review shall include all of that area within a one and one-half mile radius of a well or in the case of a well field, a circumscribing area the width of which is the lateral distance from the perimeter of the well field, unless the Department approves a smaller radius or width of not less than one-fourth mile. The Department may, on a case-by-case basis require a radius or width greater than one and one-half miles if available data indicate that a larger area of review is justified.

(4) The permit application will not be processed until a completed application is received by the Department with the appropriate permit fee in accordance with rule 335-1-6.

**Author:** Curt Johnson, Thad Pittman, Sonja Massey.

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

**History:** June 19, 1982; **Repealed:** April 11, 2002. **Readopted:** May 16, 2002.

**Amended:** XXXX XX, 2015