# TRANSMITTAL SHEET FOR NOTICE OF INTENDED ACTION

Control	335	Departme	ent or Agency	<b>Enviro</b>	nmental Management
Rule No.	335-6-8-	.27			
Rule Title:	Class VI V	Vell Permit Requi	rements		
X	New	Amend	R	epeal	Adopt by Reference
	tly harm or en	ne proposed rule danger the public	health,		YES
state's pol		lationship between the protection of the welfare?			YES
	available tha	strictive method of t could adequately			NO
indirectly	increasing th	have the effect of one costs of any good f so, to what degree	s or		NO
public tha		if any, more harmf nat might result fro d rule?			N/A
solely for	the purpose of	emaking process do f, and so they have ection of the public	e, as their		YES
*****	******	******	*****	*****	*****
Does the	proposed rule	have an economic	impact?		NO
accompar	•				is required to be ection (f) of section 41-
*****	·*****	******	*****	****	*****
Certificati	ion of Authori	zed Official			
requireme all applica Legislativ	ents of Chapte able filing reque e Reference Se	er 22, Title 41, Coduirements of the Acervice.	e of Alabama Iministrative	1975, an	all compliance with the d that it conforms to e Division of the
Signature	e of certifying	officer Mand	h- 60	list	- George and
Date	May 20, 2011		3.3		A Common Stand of the Conference of the Conferen
			Date	Filed	

## ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT WATER DIVISION

#### NOTICE OF INTENDED ACTION

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

Rule NO.	Title			
335-6-801	Purpose			
335-6-802	Definitions			
335-6-805	Prohibited Actions			
335-6-807	Permit Issuance Procedures			
335-6-808	Public Notice Requirements			
335-6-810	Class V Well Permit Application Requirements			
335-6-812	Class V Well Permit Requirements			
335-6-813	Class VI Well Applicability and General			
	Requirements			
335-6-814	Class VI Well Permit Application and Application			
	Review Requirements			
335-6-815	Class VI Well Minimum Criteria for Siting			
335-6-816	Class VI Well Area of Review and Area of Review			
	Corrective Action			
335-6-817	Class VI Well Financial Responsibility			
	Requirements			
335-6-818	Class VI Well Construction Requirements			
335-6-819	Class VI Well Logging, Sampling and Testing			
	Requirements Prior to Injection Well Operation			
335-6-820	Class VI Well Operating Requirements			
335-6-821	Class VI Well Mechanical Integrity Requirements			
335-6-822	Class VI Well Testing and Monitoring Requirements			
335-6-823	Class VI Well Reporting Requirements			
335-6-824	Class VI Well Plugging Requirements			
335-6-825	Class VI Well Post-Injection Site Care and Site			
	Closure Requirements			
335-6-826	Class VI Well Emergency and Remedial Response			
	Requirements			
335-6-827	Class VI Well Permit Requirements			
335-6-828	Technical Submittals and Other Reports to the			
	Department			
335-6-829	Coordination with EPA			
335-6-830	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-.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

Lance R. LéFleur

Director

### 335-6-8-.27 Class VI Well Permit Requirements.

The following conditions apply to all Class VI permits. All conditions applicable to all permits shall be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the applicable rule will be given in the permit.

- (1) Duty to comply. The permittee must comply with all conditions of the permit. Any permit non-compliance constitutes a violation of this chapter and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification.
- (2) Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (3) Duty to mitigate. The permittee shall take all necessary steps to minimize or correct any adverse impact on a USDW, the environment, or the health of persons, in accordance with the requirements of rule 335-6-8-.05(2) and rule 335-6-8-.06.
- (4) Proper operation and maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit.
- (5) Permit actions. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated non-compliance, does not stay any permit condition.
- (6) Property rights. This permit does not convey any property rights of any sort, or any exclusive privilege.
- (7) Duty to provide information. The permittee shall furnish to the Department, within a time specified, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Department, upon request, copies of records required to be kept by this permit.
- (8) Inspection and entry. The permittee shall allow an authorized representative of the Department, upon the presentation of credentials and other documents as may be required by law, to:

- (a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of the permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- [c] Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- (d) Sample or monitor at reasonable times, for the purposes of assuring permit compliance, any substances or parameters at any location.
- (9) Monitoring and records. The following monitoring and recordkeeping requirements shall apply:
- (a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- (b) EPA approved analytical methods shall be used for all sampling and analytical requirements. If there is no EPA approved method for a monitoring parameter, the Department reserves the right to approve the analytical method to be used.
- (c) The permittee shall retain records of all monitoring information, including the following:
- (i) Calibration and maintenance records and all original strip chart recording for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 10 years from the date of the sample, measurement, report, or application. This period may be extended by request of the Department at any time; and
- (ii) The nature and composition of all injected fluids collected pursuant to 335-6-8-.22(1)(a) shall be retained until 10 years after site closure pursuant to 335-6-8-.23(1)(f)2. The Department may require the owner or operator to deliver the records to the Department at the conclusion of the retention period.
  - (d) Records of monitoring information shall include:
  - (i) The date, exact place, and time of sampling or measurements:
  - (ii) The individual(s) who performed the sampling or measurements;
  - (iii) The date(s) analyses were performed;
  - (iv) The individual(s) who performed the analyses:
  - (v) The analytical techniques or methods used; and
  - (vi) The results of such analyses.

- (e) Owners or operators of Class VI wells shall also retain records as specified in rules 335-6-8-.16(7), 335-6-8-.23(1)(f), 335-6-8-.24(5), 335-6-8-.25(6), and 335-6-8-.25(8)
- (10) Signatory requirement. All applications, reports, or information submitted to the Department shall be signed and certified:
- (a) For a corporation, by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means;
- (i) A president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decisionmaking functions for the corporation, or
- (ii) The manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures
- (b) For a partnership or sole proprietorship, by a general partner or the proprietor, respectlively; or
- (c) For a municipality, State. Federal, or other public agency, by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:
  - (i) The chief executive officer of the agency, or
- (ii) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
- (11) Reports. All reports required by permits and other information requested by the Department shall be signed by a person described in paragraph (10) of this rule, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
- (a) The authorization is made in writing by a person described in paragraph (10) of this rule;
- (b) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility. (A duly authorized representative may be either a named individual or any individual occupying a named position); and
  - (c) The written authorization is submitted to the Department.
- (12) Changes in authorization. If an authorization under paragraph (11) of this rule is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (11) if this rule must be submitted to

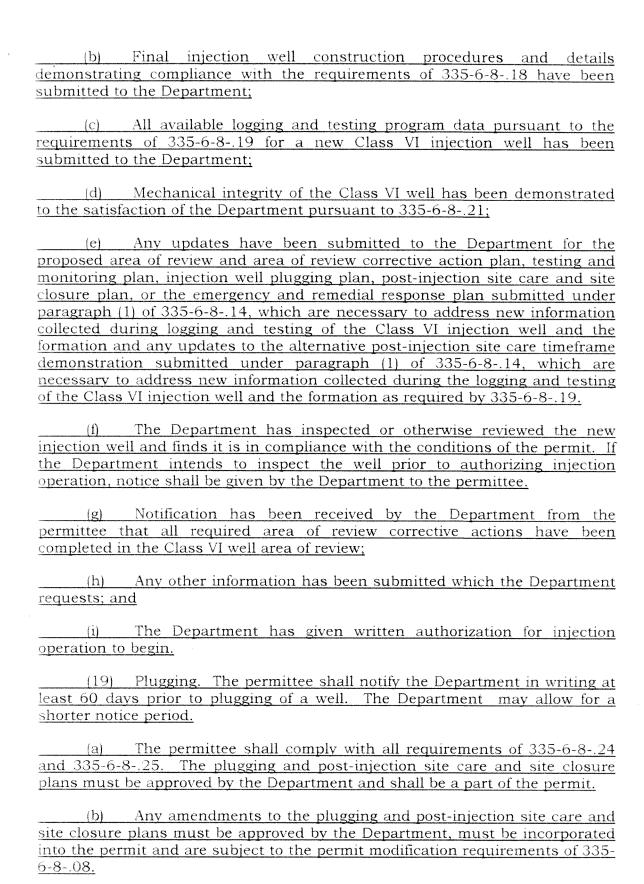
the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.

- (13) Certification. Any person signing a document under paragraph (10) or (11) of this rule shall make the following certification:
- (i) I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations.

#### (14) Reporting requirements

- (a) Compliance with 335-6-8-.23. The permittee shall comply with all requirements of 335-6-8-.23. All Class VI program reports shall be consistent with reporting requirements set forth in 335-6-8-.23.
- (b) Planned Changes. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility.
- (c) Anticipated noncompliance. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements
- (d) Transfers. The permittee shall report any proposed change of ownership to the Department. This permit is not transferable to any person except by modification of the permit or revocation and reissuance of the permit pursuant to 335-6-8-.08 to change the name of the permittee and incorporate such other requirements as may be necessary under the requirements of this chapter.
- (e) Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit. Monitoring reports shall be submitted to the Department not later than 28 days after the reporting period specified in the permit.
- (f) Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.
- (g) Twenty-four hour reporting. The permittee shall report within 24 hours, any noncompliance which may endanger the health of persons or the environment, including:
- 1. Any monitoring or other information which indicates that any contaminant may cause the pollution of a USDW, surface waters, or soils which could result in the pollution of a USDW or surface waters; or

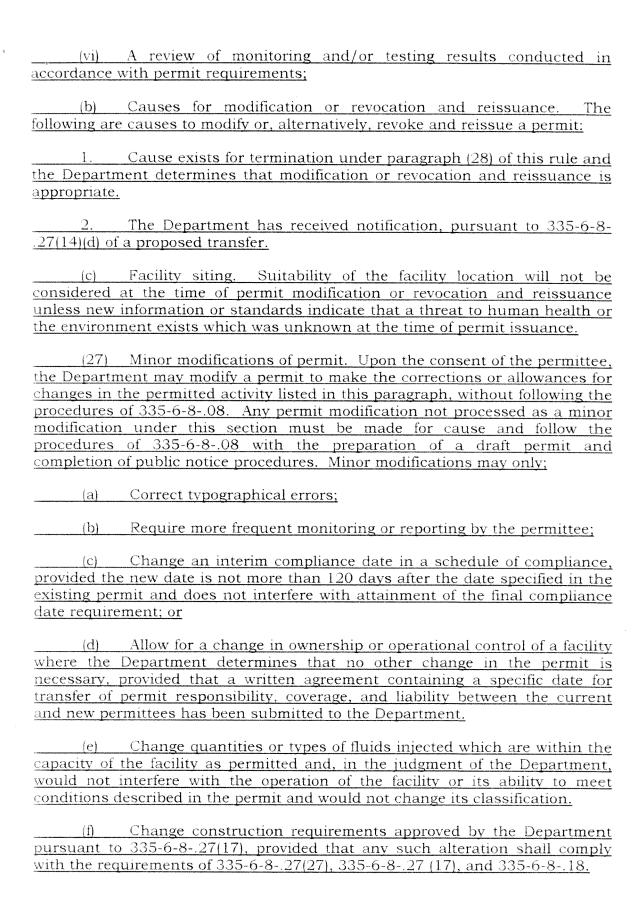
- 2. Any noncompliance with a permit condition or malfunction of the injection system which may cause fluid migration into or between USDWs.
- (h) Any circumstance or event which requires 24 hour reporting pursuant to paragraph (14)(g) of this rule shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause, the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue, and steps taken or planned to reduce, eliminate and prevent reoccurrence of the noncompliance.
- (i) Other noncompliance. The permittee shall report all instances of noncompliance not otherwise reported under paragraph (14) of this rule, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (14)(h) of this rule.
- (j) Other information. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information.
- (15) The requirements of rules 335-6-8-.13(1) through (4) and 335-6-8-.14 through 335-6-8-.26 shall be incorporated into any Class VI permit, either expressly or by reference. If incorporated by reference, a specific citation to the applicable rule will be given in the permit.
- (16) The permit duration for a Class VI well shall be for the operating life of the facility and the post-injection site care period. The Department shall review each issued Class VI well UIC permit at least once every 5 years to determine whether it should be modified, revoked and reissued, terminated or a minor modification made as provided in 335-6-8-.08.
- (17) Construction of a new Class VI injection well is prohibited prior to the issuance of a permit which contains the construction requirements of 335-6-8-.18 and specific construction details approved by the Department in accordance with this chapter, pursuant to 335-6-8-.05 (1)(b). Changes in construction plans during construction may be approved by the Department as a minor modification.
- (18) Requirements prior to commencing injection. Injection may not begin through a permitted Class VI well until:
- (a) Modification of the Class VI UIC permit authorizing construction to authorize Class VI injection well operation pursuant to 335-6-8-08. The Class VI operating permit shall include all applicable requirements of this chapter regarding Class VI wells, including but not limited to, area of review and area of review corrective action, operational requirements, maintenance of mechanical integrity, testing and monitoring, emergency and remedial response, plugging and abandonment and post-injection site care requirements for Class VI injection wells.



Within 60 days after plugging, the permittee must submit a plugging report to the Department pursuant to 335-6-8-.24. The plugging report shall be certified as accurate by the person who performed the plugging operation. Such report shall consist of: A statement that the well was plugged in accordance with the plan which is included in the permit; or (ii) Where actual plugging differed from the plan previously submitted, a description of all differences shall be submitted to the Department. (d) For the purposes of this paragraph, temporary or intermittent cessation of injection operations is not abandonment as long as all requirements for active wells are met. (e) After a cessation of operations of two years the owner or operator shall plug the well in accordance with the approved plan unless the permittee: (i) Provides notice to the Department; (ii) Describes actions or procedures, satisfactory to the Department, that the permittee will take to ensure that the well will not endanger USDWs during the period of temporary abandonment. These actions and procedures shall include compliance with all requirements applicable to active Class VI injection wells unless waived by the Department. (20) Duty to establish and maintain mechanical integrity. (a) The owner or operator of a Class VI well permitted under this chapter shall establish mechanical integrity prior to commencing injection. Thereafter the owner or operator of a Class VI well must maintain mechanical integrity pursuant to 335-6-8-.21. (b) When the Department determines that a Class VI well lacks mechanical integrity pursuant to 335-6-8-.21, the Department shall give written notice of such determination to the permittee. The Department may require immediate cessation of injection. (c) Operation of a Class VI well which lacks mechanical integrity is prohibited until the permittee can again demonstrate mechanical integrity to the satisfaction of the Department pursuant to 335-6-8-.21. The Department may allow plugging of a well which lacks mechanical integrity, pursuant to the requirements of 335-6-8-.24 or require the permittee to take such actions as are necessary to prevent the movement of fluid into or between USDWs caused by the lack of mechanical integrity. The permittee may not resume injection until receiving written notification from the Department that mechanical integrity has again been adequately

demonstrated.

(21) In the case of an existing well the following may be required; A schedule of compliance in accordance with 40 CFR Part 144.53 (a) Construction requirements necessary to achieve compliance. (b) (22) Area of review corrective action. Area of review corrective action shall be performed in accordance with a plan approved pursuant to 335-6-8-.16. The area of review and corrective action plan shall be established, maintained, reviewed and revised pursuant to 335-6-8-.16, and is subject to approval by the Department. (23) A Class VI injection well permit shall include maximum injection volumes and/or pressures necessary to assure that fractures are not initiated in the confining zone, that injected fluids do not migrate into any USDW, that formation fluids are not displaced into any USDW, and must require compliance with the Class VI operating requirements of 335-6-8-.20. (24) Financial Responsibility. The permittee shall show evidence of such financial responsibility to the Department by the submission of a qualifying instrument pursuant to 335-6-8-.17. The owner or operator of a Class VI well must comply with the financial responsibility requirements set forth in 335-6-8-.17, until: (a) The well has been plugged in accordance with an approved plugging plan pursuant to 335-6-8-.24; submitted a plugging report; and has met all post-injection site care requirements of 335-6-8-.25; or (b) The transferor of a permit has received notice from the Department that the owner or operator receiving transfer of the permit, the new permittee, has demonstrated financial responsibility for the well. (25) Additional conditions. (a) The Department shall impose on a case-by-case basis such additional conditions as are necessary to prevent the migration of fluids into underground sources of drinking water; (b) The Department shall establish conditions in permits as required on a case-by-case basis, to provide for and assure compliance with all state statutory or regulatory requirements relating to Class VI injection wells. An applicable requirement is any requirement which takes effect prior to the modification or revocation and reissuance of a permit, pursuant to 335-6-8-.08. (26) Modification or revocation and reissuance of permit. When the Department receives any information from such sources as a facility inspection, information submitted by the permittee, a request for modification or revocation and reissuance under 40 CFR Part 124.5, or conducts a review of the permit file, the Department may determine whether or not one or more of the causes listed in subparagraphs (a) and (b) of this paragraph for modification or revocation and reissuance or both exist. If cause exists, the Department may modify or revoke and reissue the permit accordingly, subject to the limitations of paragraph (c) of this rule, and may request an updated application if necessary. When a permit is modified, only the conditions subject to modification are reopened. If a permit is revoked and reissued, the entire permit is reopened and subject to revision. See 40 CFR Part 124.5(c)(2). If cause does not exist under this paragraph or paragraph (27) of this rule, the Department shall not modify or revoke and reissue the permit. If a permit modification satisfies the criteria in paragraph (27) of this rule for "minor modifications" the permit may be modified without a draft permit or public review. Otherwise, a draft permit must be prepared and the public notice procedures in 335-6-8-.08 must be followed. (a) Causes for modification. The following are causes for modification. For Class VI wells the following may be causes for revocation and reissuance as well as modification; 1. Alterations. There are material and substantial alterations or additions to the permitted facility or activity which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit. Information. The permit may be modified for this cause only if the information was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and would have justified the application of different permit conditions at the time of issuance. New regulations. The standards or regulations on which the permit was based have been changed by promulgation of new or amended standards or regulations or by judicial decision after the permit was issued. Compliance schedules. The Department determines good cause exists for modification of a compliance schedule, such as an act of God, strike, flood, or materials shortage or other events over which the permittee has little or no control and for which there is no reasonably available remedy. Additional causes for modification of permits for Class VI wells: (i) Area of review reevaluation under 335-6-8-.16; Any amendments to the testing and monitoring plan under 335-6-Any amendments to the injection well plugging plan under 335-6-Any amendments to the post-injection site care and site closure plan under 335-6-8-.25; Any amendments to the emergency and remedial response plan under 335-6-8-.26; or



(g) Amend a Class VI injection well testing and monitoring plan,
plugging plan, post-injection site care and site closure plan, or emergency and
remedial response plan where the modifications merely clarify or correct the
plan, as determined by the Department.
(28) Termination of permit.
(a) The Department may terminate a permit during its term, or deny
a permit renewal application for the following causes:
(1) Noncompliance by the permittee with any condition of the permit;
(2) The permittee's failure in the application or during the permit
issuance process to disclose fully all relevant facts, or the permittee's
misrepresentation of any relevant facts at any time; or
(3) A determination that the permitted activity endangers human
health or the environment and can only be regulated to acceptable levels by
permit modification or termination.
(b) The Department shall follow the applicable procedures in 335-6
808 in terminating any permit for cause under this section.

Author: Sonja Massey.
Statutory Authority: Code of Alabama 1975, §§ 22-22-9, 22-22A-5, 22-22A-6,

22-22A-8.

History: XXXXXX, 2011.