

APA-1
07/04

**TRANSMITTAL SHEET FOR
NOTICE OF INTENDED ACTION**

Control No. 335 Department or Agency Environmental Management
Rule No. 335-13-4-16
Rule Title: Explosive Gases

 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 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

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.

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 October 20, 2017



APA-2
11/96

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
LAND DIVISION

NOTICE OF INTENDED ACTION

AGENCY NAME: DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

RULE NO. & TITLE:

335-13-4-.01	<u>Landfill Unit Siting Standards</u> (Amend)
335-13-4-.12	<u>Plans and Operational Reports</u> (Amend)
335-13-4-.13	<u>Site Geology and Hydrology</u> (Amend)
335-13-4-.16	<u>Explosive Gases</u> (Amend)
335-13-4-.18	<u>Liners and Leachate Collection</u> (Amend)
335-13-4-.20	<u>Closure and Post-Closure</u> (Amend)
335-13-4-.21	<u>General Operational Standards for Landfill Units</u> (Amend)
335-13-4-.22	<u>Specific Requirements for Municipal Solid Waste Landfills</u> (Amend)
335-13-4-.23	<u>Specific Requirements for Inert- Construction/Demolition Landfills</u> <u>and</u> <u>Industrial Landfills</u> (Amend)
335-13-4-.26	<u>Requirements for Management and Disposal of Special Waste</u> (Amend)
335-13-4-.27	<u>Groundwater Monitoring and Corrective Action</u> (Amend)
335-13-4-.28	<u>Financial Assurance Criteria</u> (Amend)
335-13-4-.29	<u>Recordkeeping Requirements</u> (Amend)
335-13-4-APPENDIX II	<u>List of Hazardous Inorganic and Organic</u> <u>Constituents</u> (Amend)

INTENDED ACTION: Revise Division 13 of the ADEM Administrative Code.

SUBSTANCE OR PROPOSED ACTION:

Revisions to the Division 13 are being proposed to amend the solid waste permitting application regulations to incorporate a statutory change to the Code of Alabama to update the local host governmental approval process.

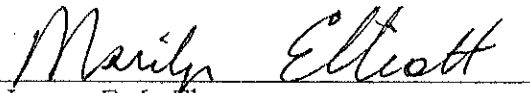
Additionally, the definition of "municipal solid waste landfill unit" is proposed to be amended in accordance with EPA's Hazardous Waste Generator Improvements Rule (81 FR 85805, November 28, 2016).

TIME, PLACE, MANNER OF PRESENTING VIEWS:

Comments may be submitted in writing or orally at a public hearing to be held Wednesday, December 6, 2017 at 10:30 AM in the Main Hearing Room at the ADEM Central Office located at 1400 Coliseum Boulevard, Montgomery, Alabama 36110.

FINAL DATE FOR COMMENT AND COMPLETION OF NOTICE: December 6, 2017

CONTACT PERSON AT AGENCY: Eric L. Sanderson, Chief of the Solid Waste Branch, ADEM Land Division (334/271-7755)

A handwritten signature in cursive script, appearing to read "Lance R. LeFleur", written over a horizontal line.

Lance R. LeFleur
Director

335-13-4-.16 Explosive Gases. The generation of explosive gases, especially methane (CH₄), at a landfill unit which accepts organic waste shall be considered in the design and operation of the facility. Special attention shall be given to control and monitoring of explosive gases as follows:

(1) Control.

(a) Explosive gases shall not exceed the lower explosive limit (LEL) at the facility boundary.

(b) Explosive gases shall not exceed 25 percent of the lower explosive limit LEL in facility structures except for gas control or recovery system components.

(c) Facility structures shall be designed and constructed so as not to allow explosive gases to collect in, under or around structures in concentrations exceeding the requirements of this rRule.

(2) Monitoring.

(a) Gas monitoring equipment as required by the Department shall be provided at the landfill unit by the operating agency.

(b) The Department, upon review of waste type, facility structures, site geology and surrounding land use, may require installation of permanent gas monitoring structures, gas vents, gas control or recovery systems.

(c) An explosive gas monitoring and reporting plan shall be prepared and filed at the facility for all landfill units receiving organic wastes. All sites required to monitor for explosive gases shall submit a plat which indicates permanent monitoring points. The plan shall also include what measures shall be taken by the permittee, landfill supervisor, and any operators present on-site to protect human health and property should explosive gases be detected which exceed the lower explosive limit (LEL). The plan must be prepared by a registered professional engineer and include seal or signature and registration number in accordance with rRule 335-13-5-.02(1)(ed)1. of the ADEM Administrative Code.

1. The type and frequency of monitoring must be determined based on the following factors:

- (i) Soil conditions;
- (ii) Hydrogeological conditions surrounding the landfill unit;
- (iii) Hydraulic conditions surrounding the landfill unit;
- (iv) Location of the facility structures and property boundaries;
- (v) Location of structures adjacent to facility.

2. The minimum frequency for monitoring shall be quarterly for MSWLF and yearly for C/DLF and ILF.

(i) All monitoring reports shall be submitted to the Department and placed in the operating record of the facility within 30 days of the monitoring event.

(ii) Levels of gas detected shall be expressed in percent LEL and percent volume.

3. If explosive gas levels exceeds the limits specified in this Rule, the permittee shall:

(i) Immediately take all necessary steps to ensure protection of human health and property and notify the Department;

(ii) Within 7 days of detection, place in the operating record of the facility the explosive gas levels detected and the immediate steps taken to protect human health and property;

(iii) Within 20 days of detection, submit to the Department for approval a remedial plan for the explosive gas releases. This plan shall describe the nature and extent of the problem and the proposed remedy. The plan shall be implemented upon approval by the Department, but within 60 days of detection. Also, within 60 days of detection, a copy of the plan shall be placed in the operating record of the facility and the Department notified that the plan has been implemented.

4. Monitoring points shall be located every 300 feet along the landfill permit boundaries. In areas where a dwelling is within 1000 feet of the boundaries, the monitoring points shall be 100 feet apart or as otherwise directed by the Department.

(i) Monitoring shall be conducted in structures, culverts, under bridges, drop inlets, and any other place that is conducive to gas accumulation.

(ii) Permanent gas monitoring structures, or use of the bar hole punch method, are required by the Department.

(iii) A minimum depth of six feet must be obtained for permanent monitoring structures and four feet when using the bar hole punch method.

Author: Russell A. Kelly, Eric L. Sanderson, S. Scott Story.

Statutory Authority: Code of Alabama 1975, §§ 22-27-3, 22-27-7.

History: November 18, 1981.

Amended: July 21, 1988; November 2, 1993; July 26, 1996; XXXXX, 2018.