APA-1
Revised 4/2018

TRANSMITTAL SHEET FOR
NOTICE OF INTENDED ACTION

Control 335 Department or Agency **Environmental Management**
Rule No. **335-14-2-.10**
Rule Title: **Tank Systems**

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 action relate to or affect in any manner any litigation which the agency is a party to concerning the subject matter of the proposed rule?	NO

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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 if conforms to all applicable filing requirements of the Administrative Procedure Division of the Legislative Services Agency.

Signature of certifying officer Mandy Elliott

Date **November 18, 2022**

RECD & FILED
NOV 18 2022
LEGISLATIVE SVC AGENCY

APA-2

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
LAND DIVISION

NOTICE OF INTENDED ACTION

AGENCY NAME: DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

RULE NO. & TITLE:

335-14-2-.01	General (Amend)
335-14-2-.03	Characteristics of Hazardous Waste (Amend)
335-14-2-.04	Lists of Hazardous Wastes (Amend)
335-14-2-.05	Exclusions/Exemptions (Amend)
335-14-2-.08	Financial Requirements for Management of Excluded Hazardous Secondary Materials (Amend)
335-14-2-.09	Use and Management of Containers (Amend)
335-14-2-.10	Tank Systems (Amend)
335-14-2-.13	Emergency Preparedness and Response for Management of Excluded Hazardous Secondary Materials (Amend)
335-14-2-.27	Subpart AA-Air Emission Standards for Process Vents (Amend)
335-14-2-.28	Subpart BB-Air Emission Standards for Equipment Leaks (Amend)
335-14-2-.29	Subpart CC - Air Emission Standards for Tanks and Containers (Amend)
335-14-2-Appendix VIII	Hazardous Constituents (Amend)
335-14-2 Appendix IX	Wastes Excluded Under 335-14-1-.03(2) (Amend)

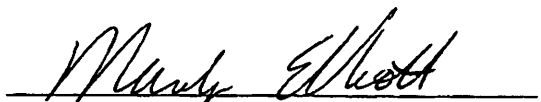
INTENDED ACTION: Revise Division 14 of the ADEM Administrative Code.

SUBSTANCE OR PROPOSED ACTION: Revise portions of Division 14 Regulations to incorporate changes to ensure consistency with State and Federal Statutes; to adopt certain State specific requirements; and to provide clarification of State requirements for the management of hazardous waste.

TIME, PLACE, MANNER OF PRESENTING VIEWS:
Comments may be submitted in writing or orally at a public hearing to be held January 24, 2023, at 2:00 pm 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: January 24, 2023

CONTACT PERSON AT AGENCY: Lynn Roper, Chief, Office of Land Services (334-271-7728)



Lance R. LeFleur
Director

335-14-2-.10 Tank Systems

(1) Applicability

(a) The requirements of ~~this subpart~~335-14-2-.10 apply to tank systems for storing or treating hazardous secondary material excluded under the remanufacturing exclusion at 335-14-2-.01(4)(a)27.

(b) Tank systems, including sumps, as defined in 335-14-1-.02(1), that serve as part of a secondary containment system to collect or contain releases of hazardous secondary materials are exempted from the requirements in 335-14-2-.10(4)(a).

(2) Assessment of existing tank system's integrity.

(a) Tank systems must meet the secondary containment requirements of 335-14-2-.10(4), or the remanufacturer or other person that handles the hazardous secondary material must determine that the tank system is not leaking or is unfit for use. Except as provided in ~~paragraph~~ 335-14-2-.10(2)(c) ~~of this section~~, a written assessment reviewed and certified by a qualified Professional Engineer must be kept on file at the remanufacturer's facility or other facility that stores or treats the hazardous secondary material that attests to the tank system's integrity.

(b) This assessment must determine that the tank system is adequately designed and has sufficient structural strength and compatibility with the material(s) to be stored or treated, to ensure that it will not collapse, rupture, or fail. At a minimum, this assessment must consider the following:

1. Design standard(s), if available, according to which the tank and ancillary equipment were constructed;

2. Hazardous characteristics of the material(s) that have been and will be handled;

3. Existing corrosion protection measures;

4. Documented age of the tank system, if available (otherwise, an estimate of the age); and

5. Results of a leak test, internal inspection, or other tank integrity examination such that:

(i) For non-enterable underground tanks, the assessment must include a leak test that is capable of taking into account the effects of temperature variations, tank end deflection, vapor pockets, and high water table effects, and

(ii) For other than non-enterable underground tanks and for ancillary equipment, this assessment must include either a leak test, as described above, or other integrity examination that is certified by a qualified Professional Engineer that addresses cracks, leaks, corrosion, and erosion.

[**Note:** The practices described in the American Petroleum Institute (API) Publication, Guide for Inspection of Refinery Equipment, Chapter XIII, "Atmospheric and Low-Pressure Storage Tanks," 4th edition, 1981, may be used, where applicable, as guidelines in conducting other than a leak test.]

(c) If, as a result of the assessment conducted in accordance with ~~paragraph~~ 335-14-2-.10(2)(a) ~~of this section~~, a tank system is found to be leaking or unfit for use, the remanufacturer or other person that stores or treats the hazardous secondary material must comply with the requirements of 335-14-2-.10(7).

(3) **[Reserved].**

(4) Containment and detection of releases.

(a) Secondary containment systems must be:

1. Designed, installed, and operated to prevent any migration of materials or accumulated liquid out of the system to the soil, ground water, or surface water at any time during the use of the tank system; and

2. Capable of detecting and collecting releases and accumulated liquids until the collected material is removed.

[**Note:** If the collected material is a hazardous waste under 335-14-2, it is subject to management as a hazardous waste in accordance with all applicable requirements of 335-14-3 through 335-14-6, 335-14-7 and 335-14-9. If the collected material is discharged through a point source to waters of the United States, it is subject to the requirements of sections 301, 304, and 402 of the Clean Water Act, as amended. If discharged to a Publicly Owned Treatment Works (POTW), it is subject to the requirements of section 307 of the Clean Water Act, as amended. If the collected material is released to the environment, it may be subject to the reporting requirements of 40 CFR part 302.]

(b) To meet the requirements of ~~paragraph~~ 335-14-2-.10(4)(a) ~~of this section~~, secondary containment systems must be at a minimum:

1. Constructed of or lined with materials that are compatible with the materials(s) to be placed in the tank system and must have sufficient strength and thickness to prevent failure owing to pressure gradients (including static head and external hydrological forces), physical contact with the material to which it is exposed, climatic conditions, and the stress of daily operation (including stresses from nearby vehicular traffic).

2. Placed on a foundation or base capable of providing support to the secondary containment system, resistance to pressure gradients above and below the system, and capable of preventing failure due to settlement, compression, or uplift;

3. Provided with a leak-detection system that is designed and operated so that it will detect the failure of either the primary or secondary

containment structure or the presence of any release of hazardous secondary material or accumulated liquid in the secondary containment system at the earliest practicable time; and

4. Sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills, or precipitation. Spilled or leaked material and accumulated precipitation must be removed from the secondary containment system within 24 hours, or in as timely a manner as is possible to prevent harm to human health and the environment.

(c) Secondary containment for tanks must include one or more of the following devices:

1. A liner (external to the tank);

2. A vault; or

3. A double-walled tank.

(d) In addition to the requirements of 335-14-2-.10(4)(a), (b), and (c), secondary containment systems must satisfy the following requirements:

1. External liner systems must be:

(i) Designed or operated to contain 100 percent of the capacity of the largest tank within its boundary;

(ii) Designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity to contain run-on or infiltration. Such additional capacity must be sufficient to contain precipitation from a 25-year, 24-hour rainfall event.

(iii) Free of cracks or gaps; and

(iv) Designed and installed to surround the tank completely and to cover all surrounding earth likely to come into contact with the material if the material is released from the tank(s) (i.e., capable of preventing lateral as well as vertical migration of the material).

2. Vault systems must be:

(i) Designed or operated to contain 100 percent of the capacity of the largest tank within its boundary;

(ii) Designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity to contain run-on or infiltration. Such additional capacity must be sufficient to contain precipitation from a 25-year, 24-hour rainfall event;

(iii) Constructed with chemical-resistant water stops in place at all joints (if any);

(iv) Provided with an impermeable interior coating or lining that is compatible with the stored material and that will prevent migration of material into the concrete;

(v) Provided with a means to protect against the formation of and ignition of vapors within the vault, if the material being stored or treated is ignitable or reactive; and

(vi) Provided with an exterior moisture barrier or be otherwise designed or operated to prevent migration of moisture into the vault if the vault is subject to hydraulic pressure.

3. Double-walled tanks must be:

(i) Designed as an integral structure (i.e., an inner tank completely enveloped within an outer shell) so that any release from the inner tank is contained by the outer shell;

(ii) Protected, if constructed of metal, from both corrosion of the primary tank interior and of the external surface of the outer shell; and

(iii) Provided with a built-in continuous leak detection system capable of detecting a release within 24 hours, or at the earliest practicable time.

[**Note:** The provisions outlined in the Steel Tank Institute's (STI) "Standard for Dual Wall Underground Steel Storage Tanks" may be used as guidelines for aspects of the design of underground steel double-walled tanks.]

(e) **[Reserved].**

(f) Ancillary equipment must be provided with secondary containment (e.g., trench, jacketing, double-walled piping) that meets the requirements of 335-14-2-.10(4)(a) and (b) ~~of this section~~ except for:

1. Aboveground piping (exclusive of flanges, joints, valves, and other connections) that are visually inspected for leaks on a daily basis;

2. Welded flanges, welded joints, and welded connections that are visually inspected for leaks on a daily basis;

3. Sealless or magnetic coupling pumps and sealless valves that are visually inspected for leaks on a daily basis; and

4. Pressurized aboveground piping systems with automatic shut-off devices (e.g., excess flow check valves, flow metering shutdown devices, loss of pressure actuated shut-off devices) that are visually inspected for leaks on a daily basis.

(5) General operating requirements

(a) Hazardous secondary materials or treatment reagents must not be placed in a tank system if they could cause the tank, its ancillary equipment, or the containment system to rupture, leak, corrode, or otherwise fail.

(b) The remanufacturer or other person that stores or treats the hazardous secondary material must use appropriate controls and practices to prevent spills and overflows from tank or containment systems. These include at a minimum:

1. Spill prevention controls (e.g., check valves, dry disconnect couplings);

2. Overfill prevention controls (e.g., level sensing devices, high level alarms, automatic feed cutoff, or bypass to a standby tank); and

3. Maintenance of sufficient freeboard in uncovered tanks to prevent overtopping by wave or wind action or by precipitation.

(c) The remanufacturer or other person that stores or treats the hazardous secondary material must comply with the requirements of 335-14-2-.10(7) if a leak or spill occurs in the tank system.

(6) **[Reserved].**

(7) Response to leaks or spills and disposition of leaking or unfit-for-use tank systems. A tank system or secondary containment system from which there has been a leak or spill, or which is unfit for use, must be removed from service immediately, and the remanufacturer or other person that stores or treats the hazardous secondary material must satisfy the following requirements:

(a) *Cessation of use; prevent flow or addition of materials.* The remanufacturer or other person that stores or treats the hazardous secondary material must immediately stop the flow of hazardous secondary material into the tank system or secondary containment system and inspect the system to determine the cause of the release.

(b) *Removal of material from tank system or secondary containment system.*

1. If the release was from the tank system, the remanufacturer or other person that stores or treats the hazardous secondary material must, within 24 hours after detection of the leak or, if the remanufacturer or other person that stores or treats the hazardous secondary material demonstrates that it is not possible, at the earliest practicable time, remove as much of the material as is necessary to prevent further release of hazardous secondary material to the environment and to allow inspection and repair of the tank system to be performed.

2. If the material released was to a secondary containment system, all released materials must be removed within 24 hours or in as timely a manner as is possible to prevent harm to human health and the environment.

(c) *Containment of visible releases to the environment.* The remanufacturer or other person that stores or treats the hazardous secondary material must immediately conduct a visual inspection of the release and, based upon that inspection:

1. Prevent further migration of the leak or spill to soils or surface water; and

2. Remove, and properly dispose of, any visible contamination of the soil or surface water.

(d) *Notifications, reports.*

1. Any release to the environment, except as provided in 335-14-2-.10(7)(d)2., must be reported to the Department within 24 hours of its detection. If the release has been reported pursuant to 40 CFR part 302, that report will satisfy this requirement.

2. A leak or spill of hazardous secondary material is exempted from the requirements of this ~~paragraph~~ requirement if it is:

(i) Less than or equal to a quantity of 1 pound, and

(ii) Immediately contained and cleaned up.

3. Within 30 days of detection of a release to the environment, a report containing the following information must be submitted to the Department:

(i) Likely route of migration of the release;

(ii) Characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate);

(iii) Results of any monitoring or sampling conducted in connection with the release (if available). If sampling or monitoring data relating to the release are not available within 30 days, these data must be submitted to the Department as soon as they become available.

(iv) Proximity to downgradient drinking water, surface water, and populated areas; and

(v) Description of response actions taken or planned.

(e) *Provision of secondary containment, repair, or closure.*

1. Unless the remanufacturer or other person that stores or treats the hazardous secondary material satisfies the requirements of 335-14-2-.10(7)(e)2. through 4., the tank system must cease to operate under the remanufacturing exclusion at 335-14-2-.01(4)(a)27.

2. If the cause of the release was a spill that has not damaged the integrity of the system, the remanufacturer or other person that stores or treats the hazardous secondary material may return the system to service as soon as the released material is removed and repairs, if necessary, are made.

3. If the cause of the release was a leak from the primary tank system into the secondary containment system, the system must be repaired prior to returning the tank system to service.

4. If the source of the release was a leak to the environment from a component of a tank system without secondary containment, the remanufacturer or other person that stores or treats the hazardous secondary material must provide the component of the system from which the leak occurred with secondary containment that satisfies the requirements of 335-14-2-.10(4) before it can be returned to service, unless the source of the leak is an aboveground portion of a tank system that can be inspected visually. If the source is an aboveground component that can be inspected visually, the component must be repaired and may be returned to service without secondary containment as long as the requirements of ~~paragraph~~ 335-14-2-.10(7)(f) ~~of this section~~ are satisfied. Additionally, if a leak has occurred in any portion of a tank system component that is not readily accessible for visual inspection (e.g., the bottom of an inground or onground tank), the entire component must be provided with secondary containment in accordance with 335-14-2-.10(4) prior to being returned to use.

(f) *Certification of major repairs.* If the remanufacturer or other person that stores or treats the hazardous secondary material has repaired a tank system in accordance with ~~paragraph~~ 335-14-2-.10(7)(e) ~~of this section~~, and the repair has been extensive (e.g., installation of an internal liner; repair of a ruptured primary containment or secondary containment vessel), the tank system must not be returned to service unless the remanufacturer or other person that stores or treats the hazardous secondary material has obtained a certification by a qualified Professional Engineer that the repaired system is capable of handling hazardous secondary materials without release for the intended life of the system. This certification must be kept on file at the facility and maintained until closure of the facility.

[**Note:** The Department may, on the basis of any information received that there is or has been a release of hazardous secondary material or hazardous constituents into the environment, issue an order under RCRA section 7003(a) or Code of Alabama 1975, §22-30-19(a) requiring corrective action or such other response as deemed necessary to protect human health or the environment.]

[**Note:** 40 CFR part 302 may require the owner or operator to notify the National Response Center of certain releases.]

(8) Termination of remanufacturing exclusion. Hazardous secondary material stored in units more than 90 days after the unit ceases to operate under the remanufacturing exclusion at 335-14-2-.01(4)(a)27 or otherwise ceases to be operated for manufacturing, or for storage of a product or a raw material, then becomes subject to regulation as hazardous waste under 335-14-2 through 9, as applicable.

(9) Special requirements for ignitable or reactive materials.

(a) Ignitable or reactive material must not be placed in tank systems, unless the material is stored or treated in such a way that it is protected from any material or conditions that may cause the material to ignite or react.

(b) The remanufacturer or other person that stores or treats hazardous secondary material which is ignitable or reactive must store or treat the hazardous secondary material in a tank that is in compliance with the requirements for the maintenance of protective distances between the material management area and any public ways, streets, alleys, or an adjoining property line that can be built upon as required in Tables 2–1 through 2–6 of the National Fire Protection Association's "Flammable and Combustible Liquids Code," (1977 or 1981). [incorporated by reference, see 40 CFR 260.11].

(10) Special requirements for incompatible materials.

(a) Incompatible materials must not be placed in the same tank system.

(b) Hazardous secondary material must not be placed in a tank system that has not been decontaminated and that previously held an incompatible material.

(11) Air emission standards.

The remanufacturer or other person that stores or treats the hazardous secondary material shall manage all hazardous secondary material placed in a tank in accordance with the applicable requirements of subparts AA [incorporated by reference in 335-14-2-.27], BB [incorporated by reference in 335-14-2-.28], and CC ~~of this part~~[incorporated by reference in 335-14-2-.29].

Authors: Bradley N. Curvin; Metz P. Duites; Sonja B. Favors; Brent A. Watson; Jonah L. Harris.
Statutory Authority: Code of Alabama 1975, §§ 22-30-11.
History: April 8, 2016; **Amended:** Filed: February 28, 2020;-Effective: April 13, 2020; **Proposed: November 18, 2022.**