## 335-14-1-.02 Definitions and References.

## (1) Definitions.

- (a) For the purpose of these rules, the following words and phrases shall have the meanings given to them in this rule and as given by law unless the context of ADEM Administrative Code 335-14 indicates differently.
- 1. "Aboveground tank" means a device meeting the definition of "tank" in 335-14-1-.02 and that is situated in such a way that the entire surface area of the tank is completely above the plane of the adjacent surrounding surface and the entire surface area of the tank (including the tank bottom) is able to be visually inspected.
- 2. "Aboveground used oil tank" means a tank used to store or process used oil that is not an underground storage tank as defined in 335-6-15-.02.
- 3. "Accumulated speculatively" or "Speculative accumulation" means a material that is accumulated before being recycled. A material is not accumulated speculatively, however, if the person accumulating it can show that the material is potentially recyclable and has a feasible means of being recycled; and that - during the calendar year (commencing on January 1) - the amount of material that is recycled, or transferred to a different site for recycling, equals at least 75 percent by weight or volume of the amount of that material accumulated at the beginning of the period. Materials must be placed in a storage unit with a label indicating the first date that the material began to be accumulated. If placing a label on the storage unit is not practicable, the accumulation period must be documented through an inventory log or other appropriate method. In calculating the percentage of turnover, the 75 percent requirement is to be applied to each material of the same type (e.g., slags from a single smelting process) that is recycled in the same way (i.e., from which the same material is recovered or that is used in the same way). Materials accumulating in units that would be exempt from regulation under 335-14-2-.01(4)(c) are not to be included in making the calculation. Materials that are already defined as solid wastes also are not to be included in making the calculation. Materials are no longer in this category once they are removed from accumulation for recycling, however.
- (i) A material is not accumulated speculatively, however, if the person accumulating it can show that:
- (I) the material is managed in lined waste pile(s) which meet(s) the requirements of 335-14-5-.12 or tank(s) or container(s) as those terms are defined in 335-14:
- (II) the material is potentially recyclable and has a feasible means of being recycled; and
- (III) that, during the calendar year (commencing on January 1), the amount of material that is recycled, or transferred to a different site for recycling, equals at least 75 percent by weight or volume of the amount of that material accumulated at the beginning of the period. [In calculating the percentage of turnover, the 75 percent requirement is to be applied to each material of the same type (e.g., slags from a single

smelting process) that is recycled in the same way (i.e., from which the same material is recovered or that is used in the same way). Materials accumulating in units that would be exempt from regulation under 335-14-2-.01(4)(c) are not included in making the calculation. Materials that are already defined as solid wastes also are not to be included in making the calculation. Materials are no longer in this category once they are removed from accumulation for recycling, however.]

- (ii) Notwithstanding the preceding requirements, pulping liquors (i.e., black liquor) subject to the exclusion provided by 335-14-2-.01(4)(a)6. are not required to be managed in lined waste pile(s) which meet(s) the requirements of 335-14-5-.12 or tank(s) or container(s) as those terms are defined in 335-14.
- 4. "Active life" of a facility means the period from the initial receipt of hazardous waste at the facility until the Department receives certification of final closure.
- 5. "Active portion" means that portion of a facility where treatment, storage, or disposal operations are being or have been conducted after November 19, 1980 and which is not a closed portion. (See also "closed portion" and "inactive portion".)
- 6. "Active range" for the purposes of 335-14-7-.13 means a military range that is currently in service and is being regularly used for range activities.
- 7. "Acute hazardous waste" means hazardous wastes that meet the listing criteria in 335-14-2-.02(2) and therefore all either listed in 335-14-2-.04(2) with the assigned hazard code (H) or are listed in 335-14-2-.04(4)(e).
- 8. "ADEM" means the Alabama Department of Environmental Management as established by <u>Code of Alabama 1975</u>, §22-22A-4.
- 9. "Adequate notification" for the purposes of 335-14-3-.08 means one meeting the requirements of 335-14-3-.08(5)(a) for each waste stream. An adequate notification shall be made for each individual waste stream from each generator.
  - 10. "Administrator" means the Administrator of EPA or his designee.
- 11. "Agreement State" for the purposes of 335-14-7-.14 means a State that has entered into an agreement with the NRC under subsection 274b of the Atomic Energy Act of 1954, as amended (68 Stat. 919), to assume responsibility for regulating within its borders byproduct, source, or special nuclear material in quantities not sufficient to form a critical mass.
- 12. "AHWMMA" means the Alabama Hazardous Wastes Management and Minimization Act of 1978, as amended, <u>Code of Alabama 1975</u>, §§22-30-1, <u>et seq.</u>
- 13. <u>"Airbag waste" means any hazardous waste airbag modules or</u> hazardous waste airbag inflators.

- 14. "Airbag waste collection facility" means any facility that receives airbag waste from airbag handlers subject to regulation under 335-2-.01(4)(j), and accumulates the waste for more than ten days.
- 15. "Airbag waste handler" means any person, by site, who generates airbag waste that is subject to regulation under 335-14.
- <u>16.</u> "Ampule" means an airtight vial made of glass, plastic, metal, or any combination of these materials.
- 4417. "Ancillary equipment" means any device including, but not limited to, such devices as piping, fittings, flanges, valves, and pumps, that is used to distribute, meter, or control the flow of hazardous waste from its point of generation to a storage or treatment tank(s), between hazardous waste storage and treatment tanks to a point of disposal onsite, or to a point of shipment for disposal off-site.
  - 4518. "Annual" means a calendar year.
  - 1619. "Annually" means once during each calendar year.
- <u>1720</u>. "Application" for the purposes of 335-14-8 means the EPA standard national forms for applying for a permit, including any additions, revisions or modifications by the Department. Application also includes the information required by the Department in 335-14-8-.02(5) through (19) (contents of Part B of the application).
- 1821. "Aquifer" means a geologic formation, group of formations or part of a formation capable of yielding a significant amount of groundwater to wells or springs.
- 4922. "Area of concern (AOC)" includes any area having a probable release of hazardous waste or hazardous constituent which is not from a solid waste management unit and is determined by the Department to pose a current or potential threat to human health or the environment. Such areas of concern may require investigations and remedial action as required under Section 3005(c)(3) of the Resource Conservation and Recovery Act and ADEM Admin. Code Rule 335-14-8-.03(3)(b)2. in order to ensure adequate protection of human health and the environment.
- 2023. "Authorized representative" means the person responsible for the overall operation of a facility or an operational unit (i.e., part of a facility), e.g., the plant manager, superintendent, or person of equivalent responsibility.
- 2124. "Battery" means a device consisting of one or more electrically connected electrochemical cells which are designed to receive, store, and deliver electric energy. An electrochemical cell is a system consisting of an anode, cathode, and an electrolyte, plus such connections (electrical and mechanical) as may be needed to allow the cell to deliver or receive electrical energy. The term battery also includes an intact, unbroken battery from which the electrolyte has been removed.
- 2225. "Battery breaking" for the purposes of 335-14-7 means the decapitation, cutting, or otherwise liberating the contents of a lead-acid battery. This activity includes the separation of any component of the battery from the other

components (e.g., drainage of acid from a spent lead-acid battery or removal of plates and groups from a spent lead-acid battery).

- 2326. "Boiler" means an enclosed device using controlled flame combustion and having the following characteristics:
- (I) The unit must have physical provisions for recovering and exporting thermal energy in the form of steam, heated fluids, or heated gases; and
- (II) The unit's combustion chamber and primary energy recovery section(s) must be of integral design. To be of integral design, the combustion chamber and the primary energy recovery section(s) (such as waterwalls and superheaters) must be physically formed into one manufactured or assembled unit. A unit in which the combustion chamber and the primary energy recovery section(s) are joined only by ducts or connections carrying flue gas is not integrally designed; however, secondary energy recovery equipment (such as economizers or air preheaters) need not be physically formed into the same unit as the combustion chamber and the primary energy recovery section. The following units are not precluded from being boilers solely because they are not of integral design: process heaters (units that transfer energy directly to a process stream) and fluidized bed combustion units; and
- (III) While in operation, the unit must maintain a thermal energy recovery efficiency of at least 60 percent, calculated in terms of the recovered energy compared with the thermal value of the fuel; and
- (IV) The unit must export and utilize at least 75 percent of the recovered energy, calculated on an annual basis. In this calculation, no credit shall be given for recovered heat used internally in the same unit. (Examples of internal use are the preheating of fuel or combustion air and the driving of induced or forced draft fans or feedwater pumps); or
- (V) The unit is one which the Department has determined, on a case-by-case basis, to be a boiler, after consideration of the standards in 335-14-1-.03(12).
- 2427. "Broker" for the purposes of 335-14-3-.08 means a person who acts as an agent for a generator in return for a fee or commission.
- 2528. "Bulked waste stream" for the purposes of 335-14-3-.08 means one in which multiple waste streams have been physically mixed together into an individual container or containers.
- 2629. "By-product" for the purposes of 335-14-2-.01 is a material that is not one of the primary products of a production process and is not solely or separately produced by the production process. Examples are process residues such as slags or distillation column bottoms. The term does not include a co-product that is produced for the general public's use and is ordinarily used in the form it is produced by the process.

- 2730. "CAMU-eligible waste" means all solid and hazardous wastes, and all media (including groundwater, surface water, soils, and sediments) and debris, that are managed for implementing cleanup, pursuant to the requirements of 335-14-5-.19(1), (2), and (3).
- 2831. "Captive insurance" as used in 335-14-5-.08 and 335-14-6-.08 means insurance provided by a company meeting any of the following conditions:
  - (i) Shares a common pool of assets as its parent corporation,
  - (ii) Belongs to the same economic family as its parent corporation,
- (iii) Is wholly owned and/or capitalized with funds provided exclusively by the parent company, or
- (iv) Is a wholly owned insurance interest operated and managed within the corporate family of the owner or operator for the primary purpose of insuring risks from within the same corporate family.
- 2932. "Carbon regeneration unit" means any enclosed thermal treatment device used to regenerate spent activated carbon.
- 3033. "Cathode ray tube" or CRT means a vacuum tube, composed primarily of glass, which is the visual or video display component of an electronic device. A used, intact CRT means a CRT whose vacuum has not been released. A used, broken CRT means glass removed from its housing or casing whose vacuum has been released.
- 3134. "Central accumulation area" means an on-site hazardous waste accumulation area subject to either 335-14-3-.01(7)(a) for large quantity generators; or 335-14-3-.01(6)(b) for small quantity generators. A central accumulation area at an eligible academic entity that chooses to be subject to 335-14-3-.12 must also comply with 335-14-3-.12(12) when accumulating unwanted material and/or hazardous waste.
  - 3235. "Certification" or "Recertification" means:
- (i) A statement of professional opinion based upon knowledge and belief.
- (ii) For the purposes of 335-14-3-.08 and Appendices thereto is a statement based upon knowledge and belief of the accuracy of the information required by Rule 335-14-3-.08.
- 3336. "Certified delivery" for the purposes of 335-14-7-.14 means certified mail with return receipt requested, or equivalent courier service, or other means, that provides the sender with a receipt confirming delivery.
- $\frac{3437}{1}$ . "Chemical agents and munitions" for the purposes of 335-14-7-.13 are as defined in 50 U.S.C. section 1521(j)(1).

- 3538. "Closed container" means a container with a lid that is secured in a manner such that the waste will not leak if the container is tipped over.
- 3639. "Closed portion" means that portion of a facility which an owner or operator has closed in accordance with the approved facility closure plan and all applicable closure requirements. (See also "active portion" and "inactive portion".)
- 3740. "Closure" for the purposes of 335-14-8 means the act of securing a facility pursuant to the requirements of 335-14-5.
- $\frac{3841}{1}$ . "Closure plan" as used in 335-14-5-.08 and 335-14-6-.08 means the plan for closure prepared in accordance with the requirements of 335-14-5-.07(3) or 335-14-6-.07(3).
- 3942. "College/University" for the purpose of 335-14-3-.12 means a private or public, post-secondary, degree-granting, academic institution, that is accredited by an accrediting agency listed annually by the U.S. Department of Education.
- 40<u>43</u>. "Commercial hazardous waste disposal facility" is one receiving hazardous waste not generated on site for disposal and to which a fee is paid or other compensation is given for disposal.
- 4144. "Commission" means the Alabama Environmental Management Commission as established by <u>Code of Alabama 1975</u>, §2-22A-6.
  - 4245. "Component" means:
  - (i) Either the tank or ancillary equipment of a tank system.
- (ii) For the purposes of 335-14-7 means any of the various materials and parts of a spent lead-acid battery, including but not limited to, plates and groups, rubber and plastic battery chips, acid, and paper/cellulose material.
- (iii) For the purposes of 335-14-8 means any constituent part of a unit or any group of constituent parts of a unit which are assembled to perform a specific function (e.g., a pump seal, pump, kiln liner, kiln thermocouple).
- 4346. "Condition for exemption" means any requirement in 335-14-3 that states an event, action, or standard that must occur or be met in order to obtain an exemption from any application requirement in 335-14.
- 44<u>47</u>. "Confined aquifer" means an aquifer bounded above and below by impermeable beds or by beds of distinctly lower permeability than that of the aquifer itself; an aquifer containing confined groundwater.
- 4548. "Consolidated waste stream" for the purposes of 335-14-3-.08 means one in which multiple waste streams are grouped together in individual containers for shipping purposes, but are not physically mixed together.

- 4649. "Contained" means held in a unit (including a land-based unit as defined in 335-14-1-.02(1)(a)) that meets the following criteria:
- (i) The unit is in good condition, with no leaks or other continuing or intermittent unpermitted releases of the hazardous secondary materials to the environment, and is designed, as appropriate for the hazardous secondary materials, to prevent releases of hazardous secondary materials to the environment. Unpermitted releases are releases that are not covered by a permit (such as a permit to discharge to water or air) and may include, but are not limited to, releases through surface transport by precipitation runoff, releases to soil and groundwater, wind-blown dust, fugitive air emissions, and catastrophic unit failures.
- (ii) The unit is properly labeled or otherwise has a system (such as a log) to immediately identify the hazardous secondary materials in the unit; and.
- (iii) The unit holds hazardous secondary materials that are compatible with other hazardous secondary materials placed in the unit and is compatible with the materials used to construct the unit and addresses any potential risks of fires or explosions.
- (iv) Hazardous secondary materials in units that meet the applicable requirements of 335-14-5 and 335-14-6 are presumptively contained.
- 47<u>50</u>. "Container" means any portable device in which a material is stored, transported, treated, disposed of, or otherwise handled.
- 4851. "Containment building" means a hazardous waste management unit that is used to store or treat hazardous waste under the provisions of 335-14-5-.30 or 335-14-6-.30.
- 49<u>52</u>. "Contamination" means the presence of any hazardous constituent in a concentration that exceeds the naturally occurring concentration of that constituent.
- <u>5053</u>. "Contingency plan" means a document setting out an organized, planned, and coordinated course of action to be followed in case of a fire, explosion, or release of hazardous wastes or hazardous waste constituents which could threaten human health or the environment.
- 5154. "Corrective action cost estimate" for the purposes of 335-14-5-.08 means the most recent of the estimates prepared in accordance with 335-14-5-.08(10).
- 5255. "Corrective action management unit (CAMU)" means an area within a facility that is used only for implementing corrective action or cleanup at the facility, pursuant to the requirements of 335-14-5-.19(1), (2), and (3).

[**Note:** All regulated units included in a CAMU remain subject to all applicable requirements including, but not limited to, the requirements of 335-14-5-.06, 335-14-5-.07 and 335-14-5-.08, 335-14-8, and the unit-specific requirements of

- 335-14-5 and 335-14-6 that applied to the units prior to their incorporation into the CAMU. See 335-14-5-.19(1)(b).]
- 53<u>56</u>. "Corrective action plan" for the purposes of 335-14-5-.08 means the plan(s) which describes the corrective actions to be performed in accordance with the requirements of 335-14-5-.06(11) and (12).
- 5457. "Corrosion expert" means a person who, by reason of his knowledge of the physical sciences and the principles of engineering and mathematics, acquired by a professional education and related practical experience, is qualified to engage in the practice of corrosion control on buried or submerged metal piping systems and metal tanks. Such a person must be certified as being qualified by the National Association of Corrosion Engineers (NACE) or be a registered professional engineer who has certification or licensing that includes education and experience in corrosion control on buried or submerged metal piping systems and metal tanks.
- 5558. "CRT collector" means a person who receives used, intact CRTs for recycling, repair, resale, or donation.
- <u>5659</u>. "CRT Exporter" means any person in the United States who initiates a transaction to send used CRTs outside the United States or its territories for recycling or reuse, or any intermediary in the United States arranging for such export.
- 5760. "CRT glass manufacturer" means an operation or part of an operation that uses a furnace to manufacture CRT glass.
  - 5861. "CRT processing" means conducting all of the following activities:
  - (i) Receiving broken or intact CRTs; and
- (ii) Intentionally breaking intact CRTs or further breaking or separating broken CRTs; and
  - (iii) Sorting or otherwise managing glass removed from CRT monitors.
- $\frac{5962}{100}$ . "Current closure cost estimate" as used in 335-14-5-.08 and 335-14-6-.08 means the most recent of the estimates prepared in accordance with 335-14-5-.08(3)(a), (3)(b), and (3)(c) or 335-14-6-.08(3)(a), (3)(b), and (3)(c).
- $\frac{6063}{335-14-6-.08}$  "Current post-closure cost estimate" as used in 335-14-5-.08 and 335-14-6-.08 means the most recent of the estimates prepared in accordance with 335-14-5-.08(5)(a), (5)(b), and (5)(c) or 335-14-6-.08(5)(a), (5)(b), and (5)(c).
- 6164. "CWA" or "Clean Water Act" for the purposes of 335-14-8 means the act formerly referred to as the Federal Water Pollution Control Act and the amendments to that act.
  - 6265. "Daily" means once during each day of the year.
  - 6366. "Day" means a day of the year.

- 6467. "Department" means the Alabama Department of Environmental Management as established by Code of Alabama 1975, §22-22A-4.
  - 6568. "Designated facility" means:
  - (i) a hazardous waste treatment, storage, or disposal facility which:
- (I) has received a permit (or interim status) in accordance with the requirements of 40 CFR, Parts 270 and 124,
- (II) has received a permit (or interim status) from a state authorized in accordance with 40 CFR Part 271; or
  - (III) is regulated under 335-14-2-.01(6)(c)2. or 335-14-7-.06, and
- (IV) that has been designated on the manifest by the generator pursuant to 335-14-3-.02(1).
- 6669. "Designated facility" also means a generator site designated on the manifest to receive its waste as a return shipment from a facility that has rejected the waste in accordance with 335-14-5-.05(3)(f) or 335-14-6-.05(3)(f).
- (i) If a waste is destined to a facility in an authorized State which has not yet obtained authorization to regulate that particular waste as hazardous, then the designated facility must be a facility allowed by the receiving State to accept such waste.
- 6770. "Destination facility" means a facility that treats, disposes of, or recycles a particular category of universal waste, except those management activities described in 335-14-11-.02(4)(a) and (c) and 335-14-11-.03(4)(a) and (c). A facility at which a particular category of universal waste is only accumulated, is not a destination facility for purposes of managing that category of universal waste.
- 6871. "Dike" means an embankment or ridge of either natural or man-made materials used to prevent the movement of liquids, sludges, solids, or other materials.
- 6972. "Dioxins and furans (D/F)" means tetra, penta, hexa, hepta, and octachlorinated dibenzo dioxins and furans.
- 7073. "Director" means the Director of the Department, appointed pursuant to Code of Ala. 1975, §22-22A-4, or his designee.
- 7174. "Discharge" or "hazardous waste discharge" means the accidental or intentional spilling, leaking, pumping, pouring, emitting, emptying, or dumping of hazardous waste into or on any land or water.
- 7275. "Disposal" means the discharge, deposit, injection, dumping, spilling, leaking, or placing of any hazardous waste into or on any land or water so that

such hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters including groundwaters.

- 73<u>76</u>. "Disposal facility" means a disposal site. The term disposal facility does not include a corrective action management unit into which remediation wastes are placed but does include all hazardous waste management units within a corrective action management unit.
- 7477. "Disposal site" means the location where any ultimate disposal of hazardous waste occurs.
- 7578. "Do-it-yourselfer used oil collection center" means any site or facility that accepts/aggregates and stores used oil collected only from household do-it-yourselfers.
- 79. "Domestic sewage" means untreated sanitary wastes that pass through a sewer system.
- 7680. "Draft permit" for the purposes of 335-14-8 means a document prepared under 335-14-8-.08(4) indicating the Department's tentative decision to issue or deny, modify, revoke and reissue, terminate, or reissue a permit. A notice of intent to terminate a permit and a notice of intent to deny a permit are types of draft permits. A denial of a request for modification, revocation and reissuance, or termination is not a draft permit. [See 335-14-8-.08(4).] A proposed permit is not a draft permit.
- 7781. "Drip pad" is an engineered structure consisting of a curbed, free-draining base, constructed of non-earthen materials and designed to convey preservative kick-back or drippage from treated wood, precipitation, and surface water run-on to an associated collection system at wood preserving plants.
- 7882. "Electronic manifest" or "e-Manifest" means the electronic format of the hazardous waste manifest that is obtained from EPA's nation e-Manifest system and transmitted electronically to the system, and that is the legal equivalent of EPA Forms 8700-22 (Manifest) and 8700-22A (Continuation Sheet).
- 7983. "Electronic manifest system" or "e-Manifest system" means EPA's national information technology system through which the electronic manifest may be obtained, completed, transmitted, and distributed to users of the electronic manifest and to regulatory agencies.
  - 8084. "Elementary neutralization unit" means a device which:
- (i) Is used for neutralizing wastes that are hazardous only because they exhibit the corrosivity characteristic defined in 335-14-2-.03(3), or they are listed in 335-14-2-.04 only for this reason; and
- (ii) Meets the definition of a tank, tank system, container, transport vehicle, or vessel in this paragraph.

- <u>8185</u>. "Eligible academic entity" for the purposes of 335-14-3-.12 means a college or university, or a non-profit research institute that is owned by or has a formal written affiliation agreement with a college or university, or a teaching hospital that is owned by or has a formal written affiliation agreement with a college or university.
- 8286. "Eligible Naturally Occurring and/or Accelerator-produced Radioactive Material (NARM)" for the purposes of 335-14-7-.14 is NARM that is eligible for the Transportation and Disposal Conditional Exemption. It is a NARM waste that contains RCRA hazardous waste, meets the waste acceptance criteria of, and is allowed by State of Alabama NARM regulations to be disposed of at a low-level radioactive waste disposal facility (LLRWDF) licensed in accordance with 10 CFR Part 61 or NRC Agreement State equivalent regulations.
- 8387. "Emergency permit" for the purposes of 335-14-8 means a permit issued in accordance with 335-14-8-.06(1).
- 8488. "Engineer" means a person registered as a licensed professional engineer with the Alabama Board of Licensure for Professional Engineers and Land Surveyors and practicing under the Rules of Professional Conduct, specifically Canon II.
  - 8589. "EPA" means the United States Environmental Protection Agency.
- 8690. "EPA hazardous waste number" means the number assigned by EPA and the Department to each hazardous waste listed in 335-14-2-.04 and to each characteristic identified in 335-14-2-.03.
- 8791. "EPA identification number" means the number assigned by EPA or the Department to each generator, transporter, and treatment, storage or disposal facility.
- 8892. "Episodic event" means an activity or activities, either planned or unplanned, that does not normally occur during generator operations, resulting in an increase in the generation of hazardous wastes that exceeds the calendar month quantity limits for the generator's usual category.
- 8993. "Equivalent method" means any testing or analytical method approved by the Department under 335-14-1-.03(1).
- 94. "Evaluated hazardous waste pharmaceutical" means a prescription hazardous waste pharmaceutical that has been evaluated by a reverse distributor in accordance with 335-14-7-.16(10)(a)3. and will not be sent to another reverse distributor for further evaluation or verification of manufacture credit.
- 9095. "Excluded scrap metal" for the purposes of 335-14-2-.01 is processed scrap metal, unprocessed home scrap metal, and unprocessed prompt scrap metal.
- 9196. "Exempted waste" for the purposes of 335-14-7-.14 means a waste that meets the eligibility criteria in 335-14-7-.14(3) and meets all of the conditions in

- 335-14-7-.14(4), or meets the eligibility criteria in 335-14-7-.14(12) and complies with all the conditions in 335-14-7-.14(13). Such waste is conditionally exempted from the regulatory definition of hazardous waste described in 335-14-2-.01(3).
- 9297. "Existing aboveground used oil tank" means a tank that is used for the storage or processing of used oil and that is in operation, or for which installation has commenced on or prior to the effective date of these rules. Installation will be considered to have commenced if the owner or operator has obtained all federal, State of Alabama, and local approvals or permits necessary to begin installation of the tank and if either:
  - (i) A continuous on-site installation program has begun, or
- (ii) The owner or operator has entered into contractual obligations which cannot be canceled or modified without substantial loss for installation of the tank to be completed within a reasonable time.
- 9398. "Existing hazardous waste management (HWM) facility" or "existing facility" means a facility which was in operation or for which construction commenced on or before November 19, 1980. A facility had commenced construction if:
- (i) The owner or operator had obtained the Federal, State of Alabama, and local approvals or permits necessary to begin actual construction; and
  - (ii) Either
  - (I) a continuous on-site physical construction program had begun; or
- (II) the owner or operator had entered into contractual obligations which could not be canceled or modified without substantial loss for physical construction of the facility to be completed within a reasonable time.
- 94<u>99</u>. "Existing portion" means that land surface area of an existing waste management unit, included in the original Part A permit application, on which wastes have been placed prior to the issuance of a permit.
- 95100. "Existing tank system" or "existing component" means a tank system or component that is used for the storage or treatment of hazardous waste and that is in operation, or for which installation has commenced on or prior to July 14, 1986. Installation will be considered to have commenced if the owner or operator has obtained all Federal, State of Alabama, and local approvals or permits necessary to begin physical construction of the site or installation of the tank system and if either:
- (i) A continuous on-site physical construction or installation program has begun; or
- (ii) The owner or operator has entered into contractual obligations which cannot be canceled or modified without substantial loss for physical construction of the site or installation of the tank system to be completed within a reasonable time.

- 96101. "Explosives or munitions emergency" means a situation involving the suspected or detected presence of unexploded ordnance (UXO), damaged or deteriorated explosives or munitions, an improvised explosive device (IED), other potentially harmful military chemical munitions or device, that creates an actual or potential imminent threat to human health, including safety, or the environment, including property, as determined by an explosives or munitions emergency response specialist. Such situations may require immediate and expeditious action by an explosives or munitions emergency response specialist to control, mitigate, or eliminate the threat.
- 97102. "Explosives or munitions emergency response" means all immediate response activities by an explosives and munitions emergency response specialist to control, mitigate, or eliminate the actual or potential threat encountered during an explosives or munitions emergency. An explosives or munitions emergency response may include in-place render-safe procedures, treatment or destruction of the explosives or munitions and/or transporting those items to another location to be rendered safe, treated, or destroyed. Any reasonable delay in the completion of an explosives or munitions emergency response caused by a necessary, unforeseen, or uncontrollable circumstance will not terminate the explosives or munitions emergency. Explosives and munitions emergency responses can occur on either public or private lands and are not limited to responses at RCRA facilities.
- 98103. "Explosives or munitions emergency response specialist" means an individual trained in chemical or conventional munitions or explosives handling, transportation, render-safe procedures, or destruction techniques. Explosives or munitions emergency response specialists include Department of Defense (DOD) emergency explosive ordnance disposal (EOD), technical escort unit (TEU), and DOD-certified civilian or contractor personnel; and other Federal, State of Alabama, or local government, or civilian personnel similarly trained in explosives or munitions emergency responses.
- 99<u>104</u>. "Extent of contamination" means the horizontal and vertical area in which the concentrations of hazardous constituents in environmental media are above detection limits or background concentrations indicative of the region, whichever is appropriate as determined by the Department.
- 100105. "Facility" or "hazardous waste management facility" or "HWM facility" means:
- (i) All contiguous land, and structures, other appurtenances, and improvements on the land, used for treating, storing, or disposing of hazardous waste, or for managing hazardous secondary materials prior to reclamation. A facility may consist of several treatment, storage, or disposal operational units (e.g., one or more landfills, surface impoundments, or combinations of them).
- (ii) For the purpose of implementing corrective action under 335-14-5-.06(12), all contiguous property under the control of the owner or operator seeking a permit under Chapter 30 of Title 22, Code of Alabama 1975, (AHWMMA). This

- definition also applies to facilities implementing corrective action under §22-30-19 et seq., Code of Alabama 1975, and/or RCRA Section 3008(h).
- (iii) Notwithstanding subparagraph (ii) of this definition, a remediation waste management site is not a facility that is subject to 335-14-5-.06(12), but is subject to corrective action requirements if the site is located within such a facility.
- $\frac{101106}{1000}$ . "Facility mailing list" for the purposes of 335-14-8 means the mailing list for a facility maintained by ADEM in accordance with 335-14-8-.08(6)(c)1.(iv).
- 102107. "Facility owner" means a person who owns a facility. In most cases, this will be the "operator" or the "owner".
- 103108. "Federal, State of Alabama and local approvals or permits necessary to begin physical construction" means permits and approvals required under Federal, State of Alabama, or local hazardous waste control statutes, regulations, or ordinances.
- 104109. "FIFRA" means the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136-136y).
- 105110. "Final closure" means the closure of all hazardous waste management units at the facility in accordance with all applicable closure requirements so that hazardous waste management activities under 335-14-5 and 335-14-6 are no longer conducted at the facility unless subject to the provisions in 335-14-3-.01(7)(a)8.
- 106111. "Food-chain crops" means tobacco, crops grown for human consumption, and crops grown for feed for animals whose products are consumed by humans.
- 107112. "Formal written affiliation agreement" for the purposes of 335-14-3-.12 for a non-profit research institute means a written document that establishes a relationship between institutions for the purposes of research and/or education and is signed by authorized representatives, as defined by 335-14-1-.02 for each institution. A relationship on a project-by-project basis or grant-by-grant basis is not considered a formal written affiliation agreement. A "formal written affiliation agreement" for a teaching hospital means a master affiliation agreement and program letter of agreement, as defined by the Accreditation Council for Graduate Medical Education, with an accredited medical program or medical school.
- 108113. "Free liquids" means liquids which readily separate from the solid portion of a waste under ambient temperature and pressure.
- 109114. "Freeboard" means the vertical distance between the top of a tank or surface impoundment dike and the surface of the waste contained therein.
- 110115. "Functionally equivalent component" for the purposes of 335-14-8 means a component which performs the same function or measurement and which meets or exceeds the performance specifications of another component.

## 111116. "Generator" means:

- (i) Any person, by individual generation site, whose act or process produces hazardous waste identified or listed in 335-14-2 or whose act first causes a hazardous waste to become subject to regulation. The term generator includes those persons further defined as a large quantity generator, a small quantity generator, and/or a very small quantity generator.
- (ii) For the purposes of 335-14-3-.08 is a person as defined in 335-14-1-.02, but such term shall not include the treatment, storage, disposal, or other management of solid or hazardous wastes received from off-site when the final disposal of the waste occurs at the same facility which treated, stored, or otherwise managed the waste.
- 112117. "Geologist" means a person who holds a license as a professional geologist under the Alabama Professional Geologist Licensing Act.
- 113118. "Groundwater" means water below the land surface in a zone of saturation.
- 114<u>119</u>. "Hazardous constituents" are those substances listed in 335-14-2 Appendix VIII and/or 335-14-5 Appendix IX and include hazardous constituents released from solid waste, hazardous waste, or hazardous waste constituents that are reaction by-products.
- 115120. "Hazardous secondary material" means a secondary material (e.g., spent material, by-product, or sludge) that, when discarded, would be identified as hazardous waste under 335-14-2.
- $\frac{116121}{100}$ . "Hazardous secondary material generator" means any person whose act or process produces hazardous secondary materials at the generating facility. For purposes of this paragraph, "generating facility" means all contiguous property owned, leased, or otherwise controlled by the hazardous secondary material generator. For the purposes 335-14-2-.01(4)(a)23., a facility that collects hazardous secondary materials from other persons is not the hazardous secondary material generator.
- 117122. "Hazardous waste" means a hazardous waste as defined in 335-14-2-.01(3).
- 118123. "Hazardous waste constituent" means a constituent that caused the Department to list the hazardous waste in 335-14-2-.04 or a constituent listed in Table 1 of 335-14-2-.03(5).
- 119124. "Hazardous waste management unit" is a contiguous area of land on or in which hazardous waste is placed, or the largest area in which there is significant likelihood of mixing hazardous waste constituents in the same area. Examples of hazardous waste management units include a surface impoundment, a waste pile, a land treatment area, a landfill cell, an incinerator, a tank and its associated piping and underlying containment system, and a container storage area. A container alone does not constitute a unit; the unit includes containers and the land or pad upon which they are placed.

- 125. "Hazardous waste pharmaceutical" means a pharmaceutical that is a solid waste, as defined in 335-14-2-.01(2), and exhibits one or more characteristics identified in 335-14-2-.03 or is listed in 335-14-2-.04. A pharmaceutical is not a solid waste, as defined in 335-14-2-.01(2), and therefore not a hazardous waste pharmaceutical, if it is legitimately used/reused (e.g., lawfully donated for its intended purpose) or reclaimed. An over-the-counter pharmaceutical, dietary supplement, or homeopathic drug is not a solid waste, as defined in 335-14-2-.01(2), and therefore not a hazardous waste pharmaceutical, if it has a reasonable expectation of being legitimately used/reused (e.g., lawfully redistributed for its intended purpose) or reclaimed.
- 126. "Healthcare facility" means any person that is lawfully authorized to:
- (i) Provide preventative, diagnostic, therapeutic, rehabilitative, maintenance or palliative care, and counseling, service, assessment or procedure with respect to the physical or mental condition, or functional status, of a human or animal or that affects the structure or function of the human or animal body; or
- (ii) Distribute, sell, or dispense pharmaceuticals, including over-the-counter pharmaceuticals, dietary supplements, homeopathic drugs, or prescription pharmaceuticals. This definition includes, but is not limited to, wholesale distributors, third-party logistics providers that serve as forward distributors, military medical logistics facilities, hospitals, psychiatric hospitals, ambulatory surgical centers, health clinics, physicians' offices, optical and dental providers, chiropractors, long-term care facilities, ambulance services, pharmacies, long-term care pharmacies, mail-order pharmacies, retailers of pharmaceuticals, veterinary clinics, and veterinary hospitals. This definition does not include pharmaceutical manufacturers, reverse distributors, or reverse logistics centers.
- 120127. "Home scrap metal" for the purposes of 335-14-2-.01 means scrap metal as generated by steel mills, foundries, and refineries such as turnings, cuttings, punchings, and borings.
- 128. "Household waste pharmaceutical" means a pharmaceutical that is a solid waste, as defined in 335-14-2-.01(2), but is excluded from being a hazardous waste under 335-14-2-.01(4)(b)1.
- 121129. "In operation" for the purposes of 335-14-8 refers to a facility which is treating, storing, or disposing of hazardous waste.
- 122130. "Inactive portion" means that portion of a facility which is not operated after November 19, 1980. (See also "active portion" and "closed portion".)
- 123131. "Inactive range" for the purposes of 335-14-7-.13 means a military range that is not currently being used, but that is still under military control and considered by the military to be a potential range area, and that has not been put to a new use that is incompatible with range activities.

- 124132. "Incinerator" means any enclosed device that:
- (i) Uses controlled flame combustion and neither meets the criteria for classification as a boiler, sludge dryer, or carbon regeneration unit, nor is listed as an industrial furnace; or
- (ii) Meets the definition of infrared incinerator or plasma arc incinerator.
- 125133. "Incompatible waste" means a hazardous waste which is unsuitable for:
- (i) Placement in a particular device or facility because it may cause corrosion or decay of containment materials (e.g., container inner liners or tank walls); or
- (ii) Commingling with another waste or material under uncontrolled conditions because the commingling might produce heat or pressure, fire or explosion, violent reaction, toxic dusts, mists, fumes, or gases, or flammable fumes or gases. (See Appendix V of 335-14-5 and 6 for examples.)
- 126134. "Independent requirement" means a requirement of 335-14-3 that states an event, action, or standard that must occur or be met; and that applies without relation to, or irrespective of, the purpose of obtaining a conditional exemption from storage facility permit, interim status, and operating requirements under 335-14.
- 127135. "Individual generation site" means the contiguous site at or on which one or more hazardous wastes are generated. An individual generation site, such as a large manufacturing plant, may have one or more sources of hazardous waste but is considered a single or individual generation site if the site or property is contiguous.
- 128136. "Industrial furnace" means any of the following enclosed devices that are integral components of manufacturing processes and that use thermal treatment to accomplish recovery of materials or energy:
  - (i) Cement kilns;
  - (ii) Lime kilns;
  - (iii) Aggregate kilns;
  - (iv) Phosphate kilns;
  - (v) Coke ovens;
  - (vi) Blast furnaces;

- (vii) Smelting, melting and refining furnaces (including pyrometallurgical devices such as cupolas, reverberator furnaces, sintering machines, roasters, and foundry furnaces);
  - (viii) Titanium dioxide chloride process oxidation reactors;
  - (ix) Methane reforming furnaces;
  - (x) Pulping liquor recovery furnaces;
- (xi) Combustion devices used in the recovery of sulfur values from spent sulfuric acid; and
- (xii) Halogen acid furnaces for the production of acid from halogenated hazardous waste generated by chemical production facilities where the furnace is located on the site of a chemical production facility, the acid product has a halogen acid content of at least 3 percent, the acid product is used in a manufacturing process, and, except for hazardous waste burned as fuel, hazardous waste fed to the furnace has a minimum halogen content of 20 percent as generated.
- (xiii) Such other devices as the Department may, after notice and comment, add to this list on the basis of one or more of the following factors:
- (I) The design and use of the device primarily to accomplish recovery of material products;
- (II) The use of the device to burn or reduce raw materials to make a material product;
- (III) The use of the device to burn or reduce secondary materials as effective substitutes for raw materials, in processes using raw materials as principal feedstocks;
- (IV) The use of the device to burn or reduce secondary materials as ingredients in an industrial process to make a material product;
- (V) The use of the device in common industrial practice to produce a material product; and
  - (VI) Other factors, as appropriate.
- 129137. "Infrared incinerator" means any enclosed device that uses electric powered resistance heaters as a source of radiant heat followed by an afterburner using controlled flame combustion and which is not listed as an industrial furnace.
- 130138. "Inground tank" means a device meeting the definition of "tank" in 335-14-1-.02 whereby a portion of the tank wall is situated to any degree within the ground, thereby preventing visual inspection of that external surface area of the tank that is in the ground.

- 131139. "Injection well" means a bored, drilled, or driven shaft or dug hole which is used for the injection of pollutants. (See also "underground injection".)
- 132140. "Inner liner" means a continuous layer of material placed inside a tank or container which protects the construction materials of the tank or container from the contained waste or reagents used to treat the waste.
- 133141. "Installation inspector" means a person who, by reason of his knowledge of the physical sciences and the principles of engineering, acquired by a professional education and related practical experience, is qualified to supervise the installation of tank systems.
- 134142. "Intermediate facility" means any facility that stores hazardous secondary materials for more than 10 days, other than a hazardous secondary material generator or reclaimer of such material.
- 135143. "International shipment" means the transportation of hazardous waste into or out of the jurisdiction of the United States.
- 136144. "Laboratory" for the purposes of 335-14-3-.12 means an area owned by an eligible academic entity where relatively small quantities of chemicals and other substances are used on a non-production basis for teaching or research (or diagnostic purposes at a teaching hospital) and are stored and used in containers that are easily manipulated by one person. Photo laboratories, art studios, and field laboratories are considered laboratories. Areas such as chemical stockrooms and preparatory laboratories that provide a support function to teaching or research laboratories (or diagnostic laboratories at teaching hospitals) are also considered laboratories.
- 137145. "Laboratory clean-out" for the purposes of 335-14-3-.12 means an evaluation of the inventory of chemicals and other materials in a laboratory that are no longer needed or that have expired and the subsequent removal of those chemicals or other unwanted materials from the laboratory. A clean-out may occur for several reasons. It may be on a routine basis (e.g., at the end of a semester or academic year) or as a result of a renovation, relocation, or change in laboratory supervisor/occupant. A regularly scheduled removal of unwanted material as required by 335-14-3-.12(9) does not qualify as a laboratory clean-out.
- 138146. "Laboratory worker" for the purposes of 335-14-3-.12 means a person who handles chemicals and/or unwanted material in a laboratory and may include, but is not limited to, faculty, staff, post-doctoral fellows, interns, researchers, technicians, supervisors/managers, and principal investigators. A person does not need to be paid or otherwise compensated for his/her work in the laboratory to be considered a laboratory worker. Undergraduate and graduate students in a supervised classroom setting are not laboratory workers.
- 139147. "Lamp", also referred to as "universal waste lamp", means the bulb or tube portion of an electric lighting device. A lamp is specifically designed to produce radiant energy, most often in the ultraviolet, visible, and infrared regions of the electromagnetic spectrum. Examples of common universal waste electric lamps include,

but are not limited to, fluorescent, high intensity discharge, neon, mercury vapor, high pressure sodium, and metal halide lamps.

- 140148. "Land-based unit" means an area where hazardous secondary materials are placed in or on the land before recycling. This definition does not include land-based production units.
- 141149. "Land Disposal Restriction (LDR) treatment standards" for the purposes of 335-14-7-.14 means treatment standards, under 335-14-9, that a RCRA hazardous waste must meet before it can be disposed of in a RCRA hazardous waste land disposal unit.
- 142150. "Land surveyor" means a person registered as a licensed Land Surveyor with the Alabama Board of Licensure for Professional Engineers and Land Surveyors and practicing under the Rules of Professional Conduct (Code of Ethics).
- 143151. "Land treatment facility" means a facility or part of a facility at which hazardous waste is applied onto or incorporated into the soil surface; such facilities are disposal facilities if the waste will remain after closure.
  - "Land use controls" has the same meaning as in 335-15-1-.02.
- 145153. "Landfill" means a disposal facility or part of a facility where hazardous waste is placed in or on land and which is not a pile, a land treatment facility, a surface impoundment, an underground injection well, a salt dome formation, a salt bed formation, an underground mine, a cave or a corrective action management unit.
- 146154. "Landfill cell" means a discrete volume of a hazardous waste landfill which uses a liner to provide isolation of wastes from adjacent cells or wastes. Examples of landfill cells are trenches and pits.
- 147155. "Large Quantity Generator (LQG)" is a generator who generates any of the following amounts in a calendar month:
- (i) Greater than or equal to 1,000 kilograms (2200 lbs) of non-acute hazardous waste; or
- (ii) Greater than 1 kilogram (2.2 lbs) of acute hazardous waste listed in 335-14-2-.04(2) or 335-14-2-.04(4)(e); or
- (iii) Greater than 100 kilograms (220 lbs) of any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous waste listed in 335-14-2-.04(2) or 335-14-2-.04(4)(e). The generator's twelve month period is assigned by county in the "specified month schedule" located at 335-14-1-.02(1)(a).
- 148156. "Large Quantity Handler of Universal Waste" means a universal waste handler (as defined in 335-14-1-.02) who accumulates 5,000 kilograms or more total of universal waste (batteries, pesticides, mercury-containing equipment, or lamps, calculated collectively) at any time. This designation as a large quantity handler of

universal waste is retained through the end of the calendar year in which the 5,000 kilogram limit is met or exceeded.

- 149157. "Leachate" means any liquid, including any suspended components in the liquid, that has percolated through or drained from hazardous waste.
- 150158. "Leak-detection system" means a system capable of detecting the failure of either the primary or secondary containment structure or the presence of a release of hazardous waste or accumulated liquid in the secondary containment structure. Such a system must employ operational controls (e.g., daily visual inspections for releases into the secondary containment system of aboveground tanks) or consist of an interstitial monitoring device designed to detect continuously and automatically the failure of the primary or secondary containment structure or the presence of a release of hazardous waste into the secondary containment structure.
- 151159. "License" for the purposes of 335-14-7-.14 means a license issued by the Nuclear Regulatory Commission, or NRC Agreement State, to users that manage radionuclides regulated by NRC, or NRC Agreement States, under authority of the Atomic Energy Act of 1954, as amended.
- 152160. "Liner" means a continuous layer of natural or man-made materials, beneath or on the sides of a surface impoundment, waste pile, landfill, or landfill cell, which restricts the downward or lateral escape of hazardous waste, hazardous waste constituents, or leachate.
- assistance with activities of daily living, including managing and administering pharmaceuticals to one or more individuals at the facility. This definition includes, but is not limited to, hospice facilities, nursing facilities, skilled nursing facilities, and the nursing and skilled nursing care portions of continuing care retirement communities. Not included within the scope of this definition are group homes, independent living communities, assisted living facilities, and the independent and assisted living portions of continuing care retirement communities.
- 153162. "Low-Level Mixed Waste (LLMW)" for the purposes of 335-14-7-.14 is a waste that contains both low-level radioactive waste and RCRA hazardous waste.
- 154163. "Low-Level Radioactive Waste (LLW)" for the purposes of 335-14-7-.14 is a radioactive waste which contains source, special nuclear, or byproduct material, and which is not classified as high-level radioactive waste, transuranic waste, spent nuclear fuel, or byproduct material as defined in section 11e.(2) of the Atomic Energy Act. (See also NRC definition of "waste" at 10 CFR 61.2)
- 155164. "Low-Level Radioactive Waste Disposal Facility (LLRWDF)" for the purposes of 335-14-7-.14 is a disposal facility licensed by the NRC or an NRC Agreement State to dispose of low-level radioactive waste.
- 156165. "Major facility" for the purposes of 335-14-8 means any facility or activity classed as such by the Department.

- 157166. "Management" or "hazardous waste management" means the systematic control of the collection, source separation, storage, transportation, processing, treatment, recovery, and/or disposal of hazardous waste.
- 158167. "Manifest" means the shipping document EPA Form 8700-22 (including, if necessary, EPA Form 8700-22A), or the electronic manifest, originated and signed in accordance with the applicable requirements of 335-14-3 through 335-14-6.
- 159168. "Manifest tracking number" means the alphanumeric identification number (i.e., a unique three letter suffix preceded by nine numerical digits), which is pre-printed in Item 4 of the Manifest by a registered source.
- 160169. "Mercury-containing equipment" means a device or part of a device (including thermostats, but excluding batteries and lamps) that contains elemental mercury integral to its function.
- 161170. "Method detection limit or MDL" means the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.
- 162171. "Military" for the purposes of 335-14-7-.13 means the Department of Defense (DOD), the Armed Services, Coast Guard, National Guard, Department of Energy (DOE), or other parties under contract or acting as an agent for the foregoing, who handle military munitions.
- <del>163</del>172. "Military munitions" means all ammunition products and components produced or used by or for the US Department of Defense or the US Armed Services for national defense and security, including military munitions under the control of the Department of Defense, the US Coast Guard, the US Department of Energy (DOE), and National Guard personnel. The term military munitions includes: confined gaseous, liquid, and solid propellants, explosives, pyrotechnics, chemical and riot control agents, smokes, and incendiaries used by DOD components, including bulk explosives and chemical warfare agents, chemical munitions, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges, and devices and components thereof. Military munitions do not include wholly inert items, improvised explosive devices, and nuclear weapons, nuclear devices and nuclear components thereof. However, the term does include non-nuclear components of nuclear devices, managed under DOE's nuclear weapons program after all required sanitization operations under the Atomic Energy Act of 1954, as amended, have been completed.
- 164173. "Military range" for the purposes of 335-14-7-.13 means designated land and water areas set aside, managed, and used to conduct research on, develop, test, and evaluate military munitions and explosives, other ordnance, or weapon systems, or to train military personnel in their use and handling. Ranges include firing lines and positions, maneuver areas, firing lanes, test pads, detonation pads, impact areas, and buffer zones with restricted access and exclusionary areas.

- 165174. "Mining overburden returned to the mine site" means any material overlaying an economic mineral deposit which is removed to gain access to that deposit and is then used for reclamation of a surface mine.
- 166175. "Miscellaneous unit" means a hazardous waste management unit where hazardous waste is treated, stored, or disposed of and that is not a container, tank, surface impoundment, pile, land treatment unit, landfill, incinerator, boiler, industrial furnace, underground injection well with appropriate technical standards under 40 CFR Part 146, containment building, corrective action management unit, unit eligible for a research, development and demonstration permit under 335-14-8-.06(4); or staging pile.
- 167176. "Mixed waste" means a solid waste that is a mixture of hazardous waste [as defined in 335-14-2-.01(3)] and radioactive waste (as defined in 10 CFR 61.2). The radioactive component of mixed waste is subject to regulation by the Atomic Energy Act (AEA)/Nuclear Regulatory Commission (NRC). The non-radioactive chemically hazardous component of mixed waste is subject to regulation by the AHWMMA and ADEM Admin. Code Rule 335-14.
  - 168177. "Month" means a month of the year.
  - 169178. "Monthly" means once during each month of the year.
- 170179. "Motor vehicle manufacturing" means the manufacture of automobiles and light trucks/utility vehicles (including light duty vans, pick-up trucks, minivans, and sport utility vehicles). Facilities must be engaged in manufacturing complete vehicles (body and chassis or unibody) or chassis only.
- 171180. "Movement" means that hazardous waste transported to a facility in an individual vehicle.
- 172181. "National Pollutant Discharge Elimination System" or "NPDES" means the program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and enforcing pretreatment requirements under the Alabama Water Pollution Control Act, Code of Alabama 1975, §§ 22-22-1 to 22-22-14, as amended, and the regulations in Division 6 of the Department's Administrative Code.
- 173182. "Naturally Occurring and/or Accelerator-produced Radioactive Material (NARM)" for the purposes of 335-14-7-.14 means radioactive materials that:
- (i) Are naturally occurring and are not source, special nuclear, or byproduct materials (as defined by the AEA) or
  - (ii) Are produced by an accelerator.

[**Note:** NARM is regulated by the States under State law, or by DOE (as authorized by the AEA) under DOE orders.]

- 174183. "New aboveground used oil tank" means an aboveground tank that will be used to store or process used oil and for which installation has commenced after the effective date of these rules.
- 175184. "New hazardous waste management facility" or "new facility" means a facility which began operation, or for which construction commenced after November 19, 1980.
- 176185. "New tank system" or "new tank component" means a tank system or component that will be used for the storage or treatment of hazardous waste and for which installation has commenced after July 14, 1986; except, however, for purposes of 335-14-5-.10(4)(g)4. and 335-14-6-.10(4)(g)4., a new tank system is one for which construction commences after July 14, 1986. (See also "existing tank system".)
- 177186. Non-acute hazardous waste means all hazardous wastes that are not acute hazardous waste, as defined 335-14-1-.02.
- 187. "Non-creditable hazardous waste pharmaceutical" means a prescription hazardous waste pharmaceutical that does not have a reasonable expectation to be eligible for manufacturer credit or a nonprescription hazardous waste pharmaceutical that does not have a reasonable expectation to be legitimately used/reused or reclaimed. This includes but is not limited to, investigational drugs, free samples of pharmaceuticals received by healthcare facilities, residues of pharmaceuticals remaining in empty containers, contaminated personal protective equipment, floor sweepings, and clean-up material from the spills of pharmaceuticals.
- 188. Non-hazardous waste pharmaceutical means a pharmaceutical that is a solid waste, as defined in 335-14-2-.01(2), and is not listed in 335-14-2-.04, and does not exhibit a characteristic identified in 335-14-2-.03.
- 189. "Non-pharmaceutical hazardous waste" means a solid waste, as defined in 335-14-2-.01(2), that is listed in 335-14-2-.04, or exhibits one or more characteristics identified in 335-14-2-.03, but is not a pharmaceutical, as defined in this 335-14-1-.02.
- 178190. "Non-profit research institute" for the purposes of 335-14-3-.12 means an organization that conducts research as its primary function and files as a non-profit organization under the tax code of 26 U.S.C. 501(c)(3).
- 179191. "NRC" for the purposes of 335-14-7-.14 means the U. S. Nuclear Regulatory Commission.
- 180192. "No free liquids" for the purposes of 335-14-2-.01(4)(a)26. and 335-14-2-.01(4)(b)18. means that solvent-contaminated wipes may not contain free liquids as determined by Method 9095B (Paint Filter Liquids Test), included in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (EPA Publication SW-846), which is incorporated by reference, and that there is no free liquid in the container holding the wipes. No free liquids may also be determined using another standard or test method as defined by the Department.

- 182194. "Onground tank" means a device meeting the definition of "tank" in 335-14-1-.02 and that is situated in such a way that the bottom of the tank is on the same level as the adjacent surrounding surface so that the external tank bottom cannot be visually inspected.
- 183195. "On-site" means the same or geographically contiguous property which may be divided by public or private right-of-way, provided that the entrance and exit between the properties is at a cross-roads intersection, and access is by crossing as opposed to going along the right-of-way. Non-contiguous properties owned by the same person but connected by a right-of-way which he/she controls and to which the public does not have access, are also considered on-site property.
- 184196. "Open burning" means the combustion of any material without the following characteristics:
- (i) Control of combustion air to maintain adequate temperature for efficient combustion;
- (ii) Containment of the combustion-reaction in an enclosed device to provide sufficient residence time and mixing for complete combustion; and
  - (iii) Control of emission of the gaseous combustion products.
- 185197. "Operating day" means any day on which hazardous waste is treated, stored, or disposed of in a unit. For example, each day that a hazardous waste storage unit contains hazardous waste is an operating day; as is each day that a disposal unit contains or receives hazardous waste, or each day that hazardous waste is treated in a treatment unit.
- 186198. "Operating facility" as used in 335-14-5-.08 and 335-14-6-.08 means a facility with active treatment, storage, and/or disposal units subject to the requirements of 335-14-5, 335-14-6, and 335-14-8.
- 187<u>199</u>. "Operator" means the person responsible for the overall operation of a facility.
- 188200. "Other wastes" are wastes as defined in 335-14-1-.02 that are not hazardous waste as defined in 335-14-2-.01.
- 189201. "Owner" means the person who owns in fee simple the property on which a facility or part of a facility is sited.

- 190202. "Parent corporation" means a corporation which directly owns at least 50 percent of the voting stock of the corporation which is the facility owner or operator; the latter corporation is deemed a "subsidiary" of the parent corporation.
- 191203. "Partial closure" means the closure of a hazardous waste management unit in accordance with the applicable closure requirements of 335-14-5 and 335-14-6 at a facility that contains other active hazardous waste management units. For example, partial closure may include the closure of a tank (including its associated piping and underlying containment systems), landfill cell, surface impoundment, waste pile, or other hazardous waste management unit, while other units of the same facility continue to operate.
- 192204. "Permit" for the purposes of 335-14-8 means an authorization or equivalent control document issued by the Department to implement the requirements of 335-14-8. Permit does not include any authorization which has not been the subject of final administrative action, such as a draft permit or a proposed permit; but permit does include interim status permits to the extent set out in 335-14-8-.07.
- 193205. "Person" means any and all persons, natural or artificial, including, but not limited to any individual, partnership, association, society, joint stock company, firm company, corporation, institution, trust, estate, or other legal entity or other business organization or any governmental entity, and any successor, representative, agent or agency of the foregoing.
- 194206. "Personnel" or "facility personnel" means all persons who work at, or oversee the operations of, a hazardous waste facility, and whose actions or failure to act may result in noncompliance with the requirements of 335-14-5 or 335-14-6.
- 195207. "Pesticide" means any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, or intended for use as a plant regulator, defoliant, or desiccant, other than any article that:
  - (i) Is a new animal drug under the Federal Food, Drug, and Cosmetic Act (FFDCA) section 201(w), or
  - (ii) Is an animal drug that has been determined by regulation of the Secretary of Health and Human Services not to be a new animal drug, or
- (iii) Is an animal feed under FFDCA section 201(x) that bears or contains any substances described by paragraph (i) or (ii) of this definition, or
- (iv) Is an animal feed under FFDCA Section 201(x) that bears or contains any substances described by 335-14-11-.01(3)(a) or (b).
- 196208. "Petroleum refining facility" means an establishment primarily engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, and lubricants, through fractionation, straight distillation of crude oil, redistillation of unfinished petroleum derivatives, cracking or other processes (i.e., facilities classified as SIC 2911).

- 209. "Pharmaceutical" means any drug or dietary supplement for use by humans or other animals; any electronic nicotine delivery system (e.g., electronic cigarette or vaping pen); or any liquid nicotine (e-liquid) packaged for retail sale for use in electronic nicotine delivery systems (e.g., pre-filled cartridges or vials). This definition includes, but is not limited to, dietary supplements, as defined by the Federal Food, Drug and Cosmetic Act; prescription drugs, as defined by 21 CFR 203.3(y); over-the-counter drugs; homeopathic drugs; compounded drugs; investigational new drugs; pharmaceuticals remaining in non-empty containers; personal protective equipment contaminated with pharmaceuticals; and clean-up material from spills of pharmaceuticals. This definition does not include dental amalgam or sharps.
- 197210. "Physical construction" for the purposes of 335-14-8 means excavation, movement of earth, erection of forms or structures, or similar activity to prepare a hazardous waste management facility to accept hazardous waste.
- 198212. "Pile" means any non-containerized accumulation of solid, non-flowing hazardous waste that is used for treatment or storage and that is not a containment building.
- 199213. "Planned episodic event" means an episodic event that the generator planned and prepared for, including regular maintenance, tank cleanouts, short-term projects, and removal of excess chemical inventory.
- 200214. "Plasma arc incinerator" means any enclosed device using a high intensity electrical discharge or arc as a source of heat followed by an afterburner using controlled flame combustion and which is not listed as an industrial furnace.
- 201215. "Plastic" means the non-metallic compounds that result from a chemical reaction and are molded or formed into rigid or pliable construction materials.
- 202216. "Plastic battery chips" for the purposes of 335-14-7 means whole components and any pieces thereof which are constructed of plastic and utilized in a lead-acid battery.
- 203217. "Plates and groups" for the purposes of 335-14-7 means the internal components of a lead-acid battery which are constructed of lead and/or lead alloys. Plates and groups shall be considered a spent material (solid waste) and a hazardous waste (D008) due to the concentration of leachable lead therein.
- 204218. "Point source" means any discernible, confined, and discrete conveyance, including, but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture.
- 205219. "Post-closure facility" as used in 335-14-5-.08 and 335-14-6-.08 means a facility at which all treatment, storage, and/or disposal units have been closed in accordance with 335-14-5-.07 or 335-14-6-.07, at which the owner or operator is

unable to demonstrate closure by removal in accordance with 335-14-8-.01(1)(c)5., for one or more units.

- 206220. "Post-closure only permit" for the purposes of 335-14-8 means a permit for a facility at which the only hazardous waste treatment, storage, or disposal activities conducted which require a permit pursuant to 335-14-8 are activities related to the post-closure care, monitoring, and/or corrective actions performed at closed hazardous waste management units. Corrective actions specified in post-closure only permits shall include activities related to regulated hazardous waste management units as well as solid waste management units (SWMU) and areas of concern (AOC).
- 207221. "Post-closure permit" for the purposes of 335-14-8 means a permit which addresses the post-closure care requirements for closed hazardous waste treatment, storage, or disposal unit(s) at a facility. The term "post-closure permit" includes both post-closure only permits and the post-closure care portions of operating permits.
- 208222. "Post-closure plan" as used in 335-14-5-.08 and 335-14-6-.08 means the plan for post-closure care prepared in accordance with the requirements of 335-14-5-.07(8) through (11) or 335-14-6-.07(8) through (11).
- 223. "Potentially creditable hazardous waste pharmaceutical" means a prescription hazardous waste pharmaceutical that has a reasonable expectation to receive manufacturer credit and is:
- (i) In original manufacturer packaging (except pharmaceuticals that were subject to a recall);
  - (ii) Undispensed; and
- (iii) Unexpired or less than one year past expiration date. The term does not include evaluated hazardous waste pharmaceuticals or nonprescription pharmaceuticals including, but not limited to, over-the-counter drugs, homeopathic drugs, and dietary supplements.
- 209224. "Privatized municipal waste treatment facility" means a facility which is operated to treat domestic and/or industrial wastewaters from a municipality or industrial park and which otherwise meets the definition of a publicly owned treatment works (POTW), but which is not publicly owned.
- 210225. "Processed scrap metal" for the purposes of 335-14-2-.01 means scrap metal which has been manually or physically altered to either separate it into distinct materials to enhance economic value or to improve the handling of materials. Processed scrap metal includes, but is not limited to scrap metal which has been baled, shredded, sheared, chopped, crushed, flattened, cut, melted, or separated by metal type (i.e., sorted), and, fines, drosses and related materials which have been agglomerated.

[**Note:** Shredded circuit boards being sent for recycling are not considered processed scrap metal. They are covered under the exclusion from the definition of solid waste for shredded circuit boards being recycled [335-14-2-.01(4)(a)14.].

- 211226. "Prompt scrap metal" for the purposes of 335-14-2-.01 means scrap metal as generated by the metal working/fabrication industries and includes such scrap metal as turnings, cuttings, punchings, and borings. Prompt scrap is also known as industrial or new scrap metal.
- 21227. "Publicly owned treatment works" or "POTW" means any device or system used in the treatment (including recycling and reclamation) of municipal sewage or industrial wastes of a liquid nature which is owned by the State of Alabama or municipality [as defined by section 502(4) of the Clean Water Act]. This definition includes sewers, pipes, or other conveyances only if they convey wastewater to a POTW providing treatment.
- 213228. "Qualified Groundwater Scientist" means a scientist or engineer who has received a baccalaureate or post-graduate degree in the natural sciences or engineering, and has sufficient training and experience in groundwater hydrology and related fields as may be demonstrated by State of Alabama registration, professional certifications, or completion of accredited university courses that enable that individual to make sound professional judgments regarding groundwater monitoring and contaminant fate and transport.
  - 214229. "Quarter" means a period of three consecutive months.
- 215230. "Quarterly" means once during each period of three consecutive months for a total of four times each calendar year.
- 216231. "RCRA" means the Federal Resource Conservation and Recovery Act of 1976, as amended, (42 U.S.C. §6901 et seq.).
- 217232. "Reactive acutely hazardous unwanted material" for the purposes of 335-14-3-.12 means an unwanted material that is one of the acutely hazardous commercial chemical products listed in 335-14-2-.04(4)(e) for reactivity.
- 218233. "Reclaimed" for the purposes of 335-14-2-.01 means a material that is processed to recover a usable product, or if it is regenerated. Examples are recovery of lead values from spent batteries and regeneration of spent solvents. In addition, for purposes of 335-14-2-.01(4)(a)23. and 335-14-2-.01(4)(a)24, smelting, melting, and refining furnaces are considered to be solely engaged in metals reclamation if the metal recovery from the hazardous secondary materials meets the same requirements as those specified for metals recovery from hazardous waste found in 335-14-7-.08, and if the residuals meet the requirements specified in 335-14-7-.08.
- 219234. "Recycled" for the purposes of 335-14-2-.01 means a material is used, reused, or reclaimed.
- 220235. "Regional Administrator" means the Regional Administrator for the EPA Region in which the facility is located, or his designee.

- 221236. "Release" means any spilling, leaking, pouring, emitting, emptying, discharging, injecting, escaping, leaching, pumping, or disposing into the environment of any hazardous waste or hazardous constituent.
- 222237. "Remanufacturing" means processing a higher-value hazardous secondary material in order to manufacture a product that serves a similar functional purpose as the original commercial-grade material. For the purpose of this definition, a hazardous secondary material is considered higher-value if it was generated from the use of a commercial-grade material in a manufacturing process and can be remanufactured into a similar commercial-grade material.
- 223238. "Remediation waste" means all solid and hazardous wastes, and all media (including groundwater, surface water, soils, and sediments) and debris that are managed for implementing cleanup, pursuant to the requirements of 335-14-5-.19(1), (2), and (3).
- 224239. "Remediation waste management site" means a facility where an owner or operator is or will be treating, storing, or disposing of hazardous remediation wastes. A remediation waste management site is not a facility that is subject to corrective action under 335-14-5-.06(12), but is subject to corrective action requirements if the site is located in such a facility.
- 225240. "Replacement unit" means a landfill, surface impoundment, or waste pile unit [1] from which all or substantially all of the waste is removed, and [2] that is subsequently reused to treat, store, or dispose of hazardous waste. "Replacement unit" does not apply to a unit from which waste is removed during closure, if the subsequent reuse solely involves the disposal of waste from that unit and other closing units or corrective action areas at the facility in accordance with an approved closure plan or EPA or State of Alabama approved corrective action.
- 226241. "Representative sample" means a sample of a universe or whole (e.g., waste pile, lagoon, groundwater) which can be expected to exhibit the average properties of the universe or whole.
- 227242. "Re-refining distillation bottoms" means the heavy fraction produced by vacuum distillation of filtered and dehydrated used oil. The composition of still bottoms varies with column operation and feedstock.
- 243. "Reverse distributor" means any person that receives and accumulates prescription pharmaceuticals that are potentially creditable hazardous waste pharmaceuticals for the purpose of facilitating or verifying manufacturer credit. Any person, including forward distributors, third-party logistics providers, and pharmaceutical manufacturers, that processes prescription pharmaceuticals for the facilitation or verification of manufacturer credit is considered a reverse distributor.
- 228244. "Rubber" means any of numerous synthetic elastic materials of varying chemical composition with properties similar to those of natural rubber.

- 229245. "Rubber battery chips" for the purposes of 335-14-7 means whole components and any pieces thereof which are constructed of rubber and utilized in a lead-acid battery.
- 230246. "Run-off" means any rainwater, leachate, or other liquid that drains over land from any part of a facility.
- 231247. "Run-on" means any rainwater, leachate, or other liquid that drains over land onto any part of a facility.
- 232248. "Satellite accumulation" means accumulation of as much as 55 gallons of hazardous waste or one quart of acutely hazardous waste as listed in 335-14-2-.04(4)(e) in containers at or near any point of generation where the wastes initially accumulates, provided the generator complies with 335-14-3-.01(5).
- 233249. "Saturated zone" or "zone of saturation" means that part of the earth's crust in which all voids are filled with water.
- 234250. "Schedule of compliance" for the purposes of 335-14-8 means a schedule of remedial measures included in a permit, including an enforceable sequence of interim requirements leading to compliance with the AHWMMA and Division 335-14.
- 235251. "Scrap metal" for the purposes of 335-14-2-.01 means bits and pieces of metal parts (e.g., bars, turnings, rods, sheets, wire) or metal pieces that may be combined together with bolts or soldering (e.g., radiators, scrap automobiles, railroad box cars) which when worn or superfluous can be recycled.
- 236252. "SDWA" or the "Safe Drinking Water Act" for the purposes of 335-14-8 means Code of Alabama 1975, §§ 22-23-30 to 22-23-54, as amended.
  - 237253. "Semi-annual" means a six month period.
- 238254. "Semi-annually" means once during each six month period for a total of two times each calendar year.
- 239255. "Site" means the land or water area where any facility, generator, or activity is physically located or conducted, including adjacent land used in connection with the facility, generator, or activity.
- 240256. "Sludge" means any solid, semi-solid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water treatment plant, or air pollution control facility, exclusive of the treated effluent from a wastewater treatment plant.
- 241257. "Sludge dryer" means any enclosed thermal treatment device that is used to dehydrate sludge and that has a maximum total thermal input, excluding the heating value of the sludge itself, of 2,500 Btu/lb. of sludge treated on a wet-weight basis.

- 242258. "Small Quantity Generator (SQG)" is a generator who generates the following amounts in a calendar month:
- (i) Greater than 100 kilograms (220 lbs) but less than 1,000 kilograms (2200 lbs) of non-acute hazardous waste; and
- (ii) Less than or equal to 1 kilogram (2.2 lbs) of acute hazardous waste listed in 335-14-2-.04(2) or 335-14-2-.04(4)(e); and
- (iii) Less than or equal to 100 kilograms (220 lbs) of any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous waste listed in 335-14-2-.04(2) or 335-14-2-.04(4)(e). The generator's twelve month period is assigned by county in the "specified month schedule" located at 335-14-1-.02(1)(a).
- 243259. "Small Quantity Handler of Universal Waste" means a universal waste handler (as defined in 335-14-1-.02) who does not accumulate 5,000 kilograms or more of universal waste (batteries, pesticides, mercury-containing equipment, or lamps, calculated collectively) at any time.
  - 244<u>260</u>. "Solid waste" means a waste as defined by 335-14-2-.01(2).
- 245261. "Solid waste management unit" or "SWMU" includes any unit which has been used for the treatment, storage, or disposal of solid waste at any time, irrespective of whether the unit is or ever was intended for the management of solid waste. Units subject to regulation under 335-14-5, 335-14-6, 335-14-7, or 335-14-8 are also solid waste management units. SWMU's include areas that have been contaminated by routine and systematic releases of hazardous waste or hazardous constituents, excluding one-time accidental spills that are immediately remediated and cannot be linked to solid waste management activities (e.g., product or process spills).
- 246262. "Solvent-contaminated wipe" means a wipe that, after the use or after cleaning up a spill, either (1) contains one or more of the F001 through F005 solvents listed in 335-14-2-.04(2) or the corresponding P- or U- listed solvents found in 335-14-2-.03 when that characteristic results from a solvent listed in 335-14-2; and/or (3) exhibits only the hazardous waste characteristic of ignitability found in 335-14-2-.03(2) due to the presence of one or more solvents that are not listed in 335-14-2. Solvent-contaminated wipes that contain listed hazardous waste other than solvents, or exhibit the characteristic of toxicity, corrosivity, or reactivity due to contaminants other than solvents, are not eligible for the exclusions in 335-14-2-.01(4)(a)26. and 335-14-2-.01(4)(b)18.
- 247263. "Sorbent" means a material that is used to soak up free liquids by either adsorption or absorption, or both. "Sorb" means to either adsorb or absorb, or both.
- 248264. "Specified month schedule" for the purposes of the "Annual Submission of ADEM Form 8700-12" is defined by the chart below according to the county in which the facility is located.

If your site of waste generation is located in the county of	Submit ADEM Form 8700-12 by the 15th of
Colbert, Fayette, Franklin, Greene, Hale,	
Lamar, Lauderdale, Lawrence, Limestone,	Folomogra
Marion, Morgan, Pickens, Sumter,	February
Tuscaloosa, Walker, Winston	
Blount, Cherokee, Cullman, DeKalb,	
Etowah, Jackson, Madison, Marshall, St.	April
Clair	_
Jefferson	June
Calhoun, Chambers, Clay, Cleburne,	
Coosa, Elmore, Lee, Macon, Montgomery,	August
Randolph, Shelby, Talladega, Tallapoosa	
Autauga, Baldwin, Barbour, Bibb, Bullock,	
Butler, Chilton, Choctaw, Clarke, Coffee,	
Conecuh, Covington, Crenshaw, Dale,	October
Dallas, Escambia, Geneva, Henry,	October
Houston, Lowndes, Marengo, Monroe,	
Perry, Pike, Russell, Washington, Wilcox	
Mobile	December

249265. "Spent materials" for the purposes of 335-14-2-.01 and 335-14-7 means those materials which have been used, and as a result of that use become contaminated by physical or chemical impurities, and can no longer serve the purpose for which they were produced without being regenerated, reclaimed, or otherwise reprocessed. For the purposes of 335-14-7, spent materials shall include all battery components, including but not limited to plates and groups, plastic and rubber battery chips, paper/cellulose materials and acid removed from a spent lead-acid battery.

- (i) Contamination means any impurity, factor, or circumstance that causes the material to be taken out of service for reprocessing.
- (ii) The portion of the definition stating a spent material "can no longer serve the purpose for which they were produced" is satisfied when the material is no longer serving its original purpose and is being reprocessed or being accumulated prior to reprocessing.

250266. "Spill" means the unplanned, accidental, or unpermitted discharge, deposit, injection, leaking, pumping, pouring, emitting, dumping, placing, or releasing of hazardous wastes, or materials which when spilled become hazardous wastes, into or on the land, the air, or the water.

251267. "Staging pile" means an accumulation of solid, non-flowing remediation waste (as defined in 335-14-1-.02) that is not a containment building and that is used only during remedial operations for temporary storage at a facility. Staging piles must be designated by the Department according to the requirements of 335-14-5-.19(3).

252268. "State" means any of the United States except the State of Alabama.

- 253269. "Storage" means the actual or intended containment of wastes, either on a temporary basis or for a period of years, in such a manner as not to constitute disposal of such wastes.
- 254270. "Storage facility" means any facility or part of a facility at which hazardous waste is placed in storage, exclusive of transfer facilities where waste is stored for ten days or less and on-site storage by generators in compliance with 335-14-3.
- 255271. "Storm event" means a 1-year, 24-hour storm event or rainfall which measures 1 inch or greater in 1 hour or less as determined by measurements taken at the facility, or the closest official weather monitoring station.
- 256272. "Substantial business relationship" means the extent of a business relationship necessary under applicable State of Alabama law to make a guarantee contract issued incident to that relationship valid and enforceable. A "substantial business relationship" must arise from a pattern of recent or ongoing business transactions, in addition to the guarantee itself, such that a currently existing business relationship between the guarantor and the owner or operator is demonstrated to the satisfaction of the Department.
- 257273. "Sump" means any pit or reservoir that meets the definition of tank and those troughs/trenches connected to it that serve to collect hazardous waste for transport to hazardous waste storage, treatment, or disposal facilities; except that as used in the landfill, surface impoundment, and waste pile rules, "sump" means any lined pit or reservoir that serves to collect liquids drained from a leachate collection and removal system or leak detection system for subsequent removal from the system.
- 258274. "Surface impoundment" or "impoundment" means a facility or part of a facility which is a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials) which is designed to hold an accumulation of liquid wastes or wastes containing free liquids, and which is not an injection well. Examples of surface impoundments are holding, storage, settling, and aeration pits, ponds, and lagoons.
- 259275. "SWMU corrective action facility" for the purposes of 335-14-5-.08 means a facility which is subject to the requirements of 335-14-5-.06(12) for the corrective action of Solid Waste Management Units, and has been issued a permit or an enforceable document (as defined in 335-14-8-.01(1)(c)7.) in accordance with 335-14-8 or an order pursuant to Section 3008(h) of RCRA.
- 260276. "Tank" means a stationary device, designed to contain an accumulation of hazardous waste which is constructed primarily of non-earthen materials (e.g., wood, concrete, steel, plastic) which provide structural support.
- 261277. "Tank system" means a hazardous waste storage or treatment tank and its associated ancillary equipment and containment system.

- 262278. "Teaching hospital" for the purposes of 335-14-3-.12 means a hospital that trains students to become physicians, nurses or other health or laboratory personnel.
- 263279. "TEQ" means toxicity equivalence, the international method of relating the toxicity of various dioxin/furan congeners to the toxicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin.
- 264280. "Thermal treatment" means the treatment of hazardous waste in a device which uses elevated temperatures as the primary means to change the chemical, physical, or biological character or composition of the hazardous waste. Examples of thermal treatment processes are incineration, molten salt, pyrolysis, calcination, wet air oxidation, and microwave discharge.
- $\frac{265281}{c}$ . "Thermostat" means a temperature control device that contains metallic mercury in an ampule attached to a bimetal sensing element, and mercury-containing ampules that have been removed from these temperature control devices in compliance with the requirements of 335-14-11-.02(4)(c)2. or 335-14-11-.03(4)(c)2.
- 266282. "Totally enclosed treatment facility" means a facility for the treatment of hazardous waste which is directly connected to an industrial production process and which is constructed and operated in a manner which prevents the release of any hazardous waste or any constituent thereof into the environment during treatment. An example is a pipe in which waste acid is neutralized. An owner or operator who removes hazardous waste from a totally enclosed treatment system must comply with the applicable standards set forth in 335-14-3 with respect to any hazardous waste removed from the totally enclosed treatment facility. An owner or operator who removes hazardous waste from a totally enclosed treatment facility may not reintroduce the waste into the totally enclosed treatment facility unless the owner/operator has first complied with the applicable standards and permit requirements set forth in 335-14-5, 335-14-6, 335-14-8, and 335-14-9.
- 267283. "Trade secret" includes, but is not limited to, any formula, plan, pattern, process, tool, mechanism, compound or procedure, as well as production data or compilation of information, financial and marketing data, which is not patented, which is known only to certain individuals within a commercial concern who are using it to fabricate, produce or compound an article of trade or a service having commercial value, and which gives its user an opportunity to obtain a business advantage over competitors who do not know of it.
- 268284. "Trained professional" for the purposes of 335-14-3-.12 means a person who has completed the applicable RCRA training requirements of 335-14-3-.01(7)(a)7. for large quantity generators, or is knowledgeable about normal operations and emergencies in accordance with 335-14-3-.01(6) for small quantity generators and very small quantity generators. A trained professional may be an employee of the eligible academic entity or may be a contractor or vendor who meets the requisite training requirements.

- 269285. "Transfer facility" means any transportation-related facilities including loading docks, parking areas, storage areas, and other related areas where shipments of hazardous waste or hazardous secondary materials are held for more than 24 hours and not longer than 10 days during the normal course of transportation. Transfer facilities that store hazardous waste for more than 10 days are subject to regulation as a storage facility under 335-14-5, 335-14-6, 335-14-8, and 335-14-9.
- 270286. "Transport vehicle" means a motor vehicle or railcar used for the transportation of cargo by any mode. Each cargo-carrying body (trailer, railroad freight car, etc.) is a separate transport vehicle.
- 271287. "Transportation" means the movement of wastes from the point of generation to any intermediate transfer points, and finally to the disposal site.
- 272288. "Transporter" means a person engaged in the off-site transportation of hazardous waste by air, rail, highway, or water.
- 273289. "Treatability study" means a study in which a hazardous waste is subjected to a treatment process to determine: [1] whether the waste is amenable to the treatment process, [2] what pretreatment (if any) is required, [3] the optimal process conditions needed to achieve the desired treatment, [4] the efficiency of a treatment process for a specific waste or wastes, or [5] the characteristics and volumes of residuals from a particular treatment process. Also included in this definition for the purpose of 335-14-2-.01(4)(e) and (f) exemptions are liner compatibility, corrosion, and other material compatibility studies and toxicological and health effects studies. A "treatability study" is not a means to commercially treat or dispose of hazardous waste.
- 274290. "Treatment" means any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize such waste, or so as to render such waste non-hazardous or less hazardous, safer for transport, amenable for recovery, amenable for storage, or reduced in volume. Such term includes any activity or processing designed to change the physical form or chemical composition of hazardous waste so as to render it non-hazardous or less hazardous.
- 275291. "Treatment facility" means a location at which wastes are subjected to treatment, and may include a facility where waste has been generated.
- 276292. "Treatment zone" means a soil area of the unsaturated zone of a land treatment unit within which hazardous constituents are degraded, transformed or immobilized.
- 277293. "Underground injection" means the injection of pollutants through a bored, drilled or driven shaft or dug hole.
- 278294. "Underground source of drinking water" or "USDW" for the purposes of 335-14-8 means an aquifer or its portion:
  - (i)(I) Which supplies any public water system; or

- (II) Which contains a sufficient quantity of groundwater to supply a public water system; and
  - (III) Currently supplies drinking water for human consumption; or
  - (IV) Contains fewer than 10,000 mg/liter total dissolved solids; and
  - (ii) Which is not an exempted aguifer.

279295. "Underground tank" means a device meeting the definition of "tank" in 335-14-1-.02 whose entire surface area is totally below the surface of and covered by the ground.

280296. "Unexploded ordnance (UXO)" for the purposes of 335-14-7-.13 means military munitions that have been primed, fused, armed, or otherwise prepared for action, and have been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations, installation, personnel, or material and remain unexploded either by malfunction, design, or any other cause.

281297. "Unfit-for-use tank system" means a tank system that has been determined through an integrity assessment or other inspection to be no longer capable of storing or treating hazardous waste without posing a threat of release of hazardous waste to the environment.

282298. "Universal waste" means any of the following hazardous wastes that are subject to the universal waste requirements of 335-14-11:

- (i) Batteries as described in 335-14-11-.01(2);
- (ii) Pesticides as described in 335-14-11-.01(3);
- (iii) Mercury-containing equipment as described in 335-14-11-.01(4); and
  - (iv) Lamps as described in 335-14-11-.01(5).

283299. "Universal waste handler":

- (i) Means:
- (I) A generator (as defined in 335-14-1-.02) of universal waste; or
- (II) The owner or operator of a facility, including all contiguous property, that receives universal waste from other universal waste handlers, accumulates universal waste, and sends universal waste to another universal waste handler, to a destination facility, or to a foreign destination.
  - (ii) Does not mean:

- (I) A person who treats [except under the provisions of 335-14-8-.01(1)(c)2.(ix), 335-14-11-.02(4)(a) or (c) and 335-14-11-.03(4)(a) or (c)], disposes of, or recycles universal waste; or
- (II) A person engaged in the off-site transportation of universal waste by air, rail, highway, or water, including a universal waste transfer facility.
- 284300. "Universal waste transfer facility" means any transportation-related facility including loading docks, parking areas, storage areas and other similar areas where shipments of universal waste are held during the normal course of transportation for ten days or less.
- 285301. "Universal waste transporter" means a person engaged in the off-site transportation of universal waste by air, rail, highway, or water.
- 286302. "Unsaturated zone" or "zone of aeration" means the zone between the land surface and the water table.
- 287303. "Unplanned episodic event" means an episodic event that the generator did not plan or reasonably did not expect to occur, including production process upsets, product recalls, accidental spills, or "acts of nature," such as tornado, hurricane, or flood.
- 288304. "Unwanted material" for the purposes of 335-14-3-.12 means any chemical, mixtures of chemicals, products of experiments or other material from a laboratory that is no longer needed, wanted or usable in the laboratory and that is destined for hazardous waste determination by a trained professional. Unwanted materials include reactive acutely hazardous unwanted materials and materials that may eventually be determined not to be solid waste pursuant to 335-14-2-.01(2), or a hazardous waste pursuant to 335-14-2-.01(3). If an eligible academic entity elects to use another equally effective term in lieu of "unwanted material," as allowed by 335-14-3-.12(7)(a)1.(i), the equally effective term has the same meaning and is subject to the same requirements as "unwanted material".
- 289305. "Uppermost aquifer" means the geologic formation nearest the natural ground surface that is an aquifer, as well as lower aquifers that are hydraulically interconnected with this aquifer within the facility's property boundary.
- 290306. "Used" or "reused" for the purposes of 335-14-2-.01 a material is used or reused if it is either:
- (i) Employed as an ingredient (including use as an intermediate) in an industrial process to make a product (for example, distillation bottoms from one process used as feedstock in another process). However, a material will not satisfy this condition if distinct components of the material are recovered as separate end products (as when metals are recovered from metal-containing secondary materials); or
- (ii) Employed in a particular function or application as an effective substitute for a commercial product (for example, spent pickle liquor used as phosphorous precipitant and sludge conditioner in wastewater treatment).

- 291307. "Used oil" means any oil that has been refined from crude oil, or any synthetic oil, that has been used and as a result of such use, is contaminated by physical or chemical impurities.
- 292308. "Used oil aggregation point" means any site or facility that accepts, aggregates, and/or stores used oil collected only from other used oil generation sites owned or operated by the owner or operator of the aggregation point, from which oil is transported to the aggregation point in shipments of no more than 55 gallons. Used oil aggregation points may also accept used oil from household do-it-yourselfers.
- 293309. "Used oil burner" means a facility where used oil not meeting the specification requirements in 335-14-17-.02(2) is burned for energy recovery in devices identified in 335-14-17-.07(2)(a).
- 294310. "Used oil collection center" means any site or facility that is recognized by the Department, in accordance with 335-14-17-.04(2)(b) and accepts/aggregates and stores used oil collected from used oil generators regulated under 335-14-17-.03 who bring used oil to the collection center in shipments of no more than 55 gallons under the provisions of 335-14-17-.03(6). Used oil collection centers may also accept used oil from household do-it-yourselfers.
- 295311. "Used oil fuel marketer" means any person who conducts either of the following activities:
- (i) Directs a shipment of off-specification used oil from their facility to a used oil burner; or
- (ii) First claims that used oil that is to be burned for energy recovery meets the used oil fuel specifications set forth in 335-14-17-.02(2).
- 296312. "Used oil generator" means any person, by individual generation site, whose act or process produces used oil or whose act first causes used oil to become subject to regulation.
- 297313. "Used oil processing" means chemical or physical operations designed to produce from used oil, or to make used oil more amenable for production of fuel oils, lubricants, or other used oil-derived products. Used oil processing includes, but is not limited to: blending used oil with virgin petroleum products, blending used oils to meet the fuel specification, filtration, simple distillation, chemical or physical separation and re-refining.
- 298<u>314</u>. "Used oil processor/re-refiner" means a facility that processes used oil.
- 299315. "Used oil tank" means any stationary device, designed to contain an accumulation of used oil which is constructed primarily of non-earthen materials, (e.g., wood, concrete, steel, plastic) which provides structural support.
- 300316. "Used oil transfer facility" means any transportation related facility including loading docks, parking areas, storage areas, and other areas where shipments

of used oil are held for more than 24 hours and not longer than 35 days during the normal course of transportation or prior to an activity performed pursuant to 335-14-17-.03(1)(b)2. Transfer facilities that store used oil for more than 35 days are subject to regulation under 335-14-17-.06.

- 301317. "Used oil transporter" means any person who transports used oil, any person who collects used oil from more than one generator and transports the collected oil, and owners and operators of used oil transfer facilities. Used oil transporters may consolidate or aggregate loads of used oil for purposes of transportation but, with the following exception, may not process used oil. Transporters may conduct incidental used oil processing operations that occur in the normal course of used oil transportation (e.g., settling and water separation), but that are not designed to produce (or make more amenable for production of) used oil derived products or used oil fuel.
- 302318. "User of the electronic manifest system" means a hazardous waste generator, a hazardous waste transporter, an owner or operator of a hazardous waste treatment, storage, recycling, or disposal facility, or any other person that:
  - (i) Is required to use a manifest to comply with:
- (I) Any federal or state requirement to track the shipment, transportation, and receipt of hazardous waste or other waste material that is shipped from the site of generation to an off-site designated facility for treatment, storage, recycling, or disposal; or
- (II) Any federal or state requirement to track the shipment, transportation, and receipt of rejected wastes or regulated container residues that are shipped from a designated facility to an alternative facility, or returned to the generator; and
- (ii) Elects to use the system to obtain, complete and transmit an electronic manifest format supplied by the EPA electronic manifest system, or
- (iii) Elects to use the paper manifest form and submits to the system for data processing purposes a paper copy of the manifest (or data from such a paper copy), in accordance with 335-14-5-.05(2)(a)1.(v) or 335-14-6-.05(2)(a)1.(v). These paper copies are submitted for data exchange purposes only and are not the official copies of record for legal purposes.
- 303319. "Very Small Quantity Generator (VSQG)" is a generator who generates less than or equal to the following amounts in a calendar month:
  - (i) 100 kilograms (220 lbs) of nonacute hazardous waste; and
- (ii) 1 kilogram (2.2 lbs) of acute hazardous waste listed in 335-14-2-.04(2) or 335-14-2-.04(4)(e); and

- (iii) 100 kilograms (220 lbs) of any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous waste listed in 335-14-2-.04(2) or 335-14-2-.04(4)(e).
- <u>304320</u>. "Vessel" means every description of watercraft, used or capable of being used as a means of transportation on the water.
- 305321. "Waste" means any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations and from community activities, including any material to be discarded by a generator, but such term does not include solid or dissolved material in domestic sewage, or solid or dissolved material in irrigation return flows or industrial discharges which are point sources subject to permits under 33 U.S.C. §1342 or source, special nuclear or by-product material as defined by the Atomic Energy Act of 1954.
- 306322. "Waste stream" for the purposes of 335-14-3-.08 means a waste of given characteristics that is unique to a particular process or individual generation site.
  - 307323. "Wastewater treatment unit" means a device which:
- (i) Is part of a wastewater treatment facility that is subject to regulation under either Section 402 or 307(b) of the Clean Water Act; and
- (ii) Receives and treats or stores an influent wastewater which is a hazardous waste as defined in 335-14-2-.01(3), or that generates and accumulates a wastewater treatment sludge that is a hazardous waste as defined in 335-14-2-.01(3), or treats or stores a wastewater treatment sludge which is a hazardous waste as defined in 335-14-2-.01(3); and
  - (iii) Meets the definition of tank or tank system in 335-14-1-.02.
- 308324. "Water (bulk shipment)" means the bulk transportation of hazardous waste which is loaded or carried on board a vessel without containers or labels.
  - 309325. "Week" means a calendar week (e.g., Sunday-Saturday).
  - 310326. "Weekly" means once during each calendar week.
- 311327. "Well" means any shaft or pit dug or bored into the earth, generally of a cylindrical form, and often walled with bricks or tubing to prevent the earth from caving in.
  - 312328. "Well injection" means "underground injection".
- 313329. "Wipe" means a woven or non-non-woven shop towel, rag, pad, or swab made of wood pulp, fabric, cotton, polyester blends, or other material.

- 314330. "Working container" for the purposes of 335-14-3-.12 means a small container (i.e., two gallons or less) that is in use at a laboratory bench, hood, or other work station, to collect unwanted material from a laboratory experiment or procedure.
- 315331. "Working day" for the purposes of 335-14-3-.08 means any day, Monday through Friday, on which the offices of the Alabama Department of Environmental Management are open for business, and shall not include weekends or any State of Alabama observed holiday.
- 316332. "Zone of engineering control" means an area under the control of the owner/operator that, upon detection of a hazardous waste release, can be readily cleaned up prior to the release of hazardous waste or hazardous constituents to groundwater or surface water.
- 317333. The following terms are used in the specifications for the financial tests for closure, post-closure care, and liability coverage. The definitions are intended to assist in the understanding of these regulations and are not intended to limit the meanings of terms in a way that conflicts with generally accepted accounting practices.
- (i) "Assets" means all existing and all probable future economic benefits obtained or controlled by a particular entity.
- (ii) "Current assets" means cash or other assets or resources commonly identified as those which are reasonably expected to be realized in cash or sold or consumed during the normal operating cycle of the business.
- (iii) "Current liabilities" means obligations whose liquidation is reasonably expected to require the use of existing resources properly classifiable as current assets or the creation of other current liabilities.
- (iv) "Current plugging and abandonment cost estimate" means the most recent of the estimates prepared in accordance with 40 CFR §144.62(a), (b), and (c) or any State equivalent.
- (v) "Independently audited" refers to an audit performed by an independent certified public accountant in accordance with generally accepted auditing standards.
- (vi) "Liabilities" means probable future sacrifices of economic benefits arising from present obligations to transfer assets or provide services to other entities in the future as a result of past transactions or events.
- (vii) "Net working capital" means current assets minus current liabilities.
- (viii) "Net worth" means total assets minus total liabilities and is equivalent to owner's equity.

- (ix) "Tangible net worth" means the tangible assets that remain after deducting liabilities; such assets would not include intangibles such as goodwill and rights to patents or royalties.
- 318334. In the liability insurance requirements the terms "bodily injury" and "property damage" shall have the meanings given these terms by applicable State of Alabama law. However, these terms do not include those liabilities which, consistent with standard industry practice, are excluded from coverage in liability policies for bodily injury and property damage. The Department intends the meanings of other terms used in the liability insurance requirements to be consistent with their common meanings within the insurance industry. The definitions given below of several of the terms are intended to assist in the understanding of these regulations and are not intended to limit their meanings in a way that conflicts with general insurance industry usage.
- (i) "Accidental occurrence" means an accident, including continuous or repeated exposure to conditions, which results in bodily injury or property damage neither expected nor intended from the standpoint of the insured.
- (ii) "Legal defense costs" means any expenses that an insurer incurs in defending against claims of third parties brought under the terms and conditions of an insurance policy.
- (iii) "Nonsudden accidental occurrence" means an occurrence which takes place over time and involves continuous or repeated exposure.
- (iv) "Sudden accidental occurrence" means an occurrence which is not continuous or repeated in nature.

## (2) References.

The Environmental Protection Agency Regulations as they exist as set forth in 40 CFR § 260.11(as published on June 14, 2005, and as amended on September 8, 2005; October 12, 2005; July 18, 2007; and May 18, 2012) are incorporated herein by reference.

A list of the publications and analytical testing methods incorporated by reference are available for purchase and inspection at the Department's offices at 1400 Coliseum Boulevard, Montgomery, Alabama 36110.

**Authors:** Stephen C. Maurer; Stephen A. Cobb; Steven O. Jenkins; Robert W. Barr; Lynn T. Roper; Edwin C. Johnston; Kelley Lockhart; Vernon H. Crockett; Bradley N. Curvin; Theresa A. Maines; Heather M. Jones; Corey S. Holmes; Metz P. Duites; Linda J. Knickerbocker; Sonja B. Favors; Brent A. Watson

**Statutory Authority:** Code of Alabama 1975, §§ 22-30-3 and 22-30-11.

**History:** November 19, 1980. **Amended:** Effective: April 9, 1986; **Amended:** Effective: September 29, 1986; **Amended:** Effective: February 15, 1988; **Amended:** Effective: August 24, 1989; **Amended:** Effective: December 6, 1990; **Amended:** Effective: April 2, 1991; **Amended:** Effective: January 25, 1992; **Amended:** Effective: January 1, 1993; **Amended:** Effective: January 5, 1995; **Amended:** Effective: January 12, 1996;

Amended: Effective: March 28, 1997; Amended: Effective: March 27, 1998; Amended: Effective: April 2, 1999; Amended: Effective: March 31, 2000; Amended: Effective: April 13, 2001; Amended: Effective: March 15, 2002; Amended: Effective: April 17, 2003; Amended: Effective: May 27, 2004; Amended: Effective: March 31, 2005; Amended: Effective: April 4, 2006; Amended: Effective: April 3, 2007; Amended: Effective: May 27, 2008; Amended: Effective: March 31, 2009; Amended: Effective: March 30, 2010; Amended: Effective: March 31, 2011; Amended: Effective: April 3, 2012; Amended: Effective: March 26, 2013; Amended: Effective: March 31, 2015; Amended: Effective: April 8, 2016; Amended: Effective: March 31, 2017; Amended: Effective: April 6, 2018; Amended: Filed: February 19, 2019; Effective: April 5, 2019; Amended: Proposed: October 21, 2019.

# 335-14-2-.01 General.

- (1) Purpose and scope.
- (a) 335-14-2 identifies those solid wastes which are subject to regulation as hazardous wastes under 335-14-3 through 335-14-6, 335-14-8, and 335-14-9 and which are subject to the notification requirements of Section 3010 of RCRA. In 335-14-2:
- 1. 335-14-2-.01 defines the terms "solid waste" and "hazardous waste", identifies those wastes which are excluded from regulation under 335-14-3 through 335-14-9, and establishes special management requirements for hazardous waste produced by very small quantity generators and hazardous waste which is recycled.
- 2. 335-14-2-.02 sets forth the criteria used by the Department to identify characteristics of hazardous waste and to list particular hazardous wastes.
  - 3. 335-14-2-.03 identifies characteristics of hazardous waste.
  - 4. 335-14-2-.04 lists particular hazardous wastes.
- (b)1. The definition of solid waste contained in 335-14-2 applies only to wastes that also are hazardous for purposes of the AHWMMA. For example, it does not apply to materials (such as non-hazardous scrap, paper, textiles, or rubber) that are not otherwise hazardous wastes and that are recycled.
- 2. 335-14-2 identifies only some of the materials which are solid wastes and hazardous wastes under AHWMMA. A material which is not defined as a solid waste in 335-14-2, or is not a hazardous waste identified or listed in 335-14-2, is still a solid waste and a hazardous waste for purposes of the applicable sections of the AHWMMA if the material may be a solid waste within the meaning of <a href="Code of Alabama 1975">Code of Alabama 1975</a>, §22-30-3(11), and a hazardous waste within the meaning of <a href="Code of Alabama 1975">Code of Alabama 1975</a>, §22-30-3(5).
  - (c) [Reserved].
  - (2) Definition of solid waste.
- (a) 1. A solid waste is any discarded material that is not excluded by 335-14-2-.01(4)(a) or that is not excluded by variance granted under 335-14-1-.03(10) or (11).
  - 2. A "discarded material" is any material which is:
  - (i) "Abandoned", as explained in 335-14-2-.01(2)(b); or
  - (ii) "Recycled", as explained in 335-14-2-.01(2)(c); or

- (iii) Considered "inherently waste-like", as explained in 335-14-2-.01(2)(d); or
  - (iv) A "military munition" identified as a solid waste in 335-14-7-.13(3).
  - (b) Materials are solid wastes if they are "abandoned" by being:
  - 1. Disposed of; or
  - 2. Burned or incinerated; or
- 3. Accumulated, stored, or treated (but not recycled) before or in lieu of being abandoned by being disposed of, burned, or incinerated; or
  - 4. Sham recycled, as explained in 335-14-2-.01(2)(g).
- (c) Materials are solid wastes if they are "recycled", or accumulated, stored, or treated before recycling, as specified in 335-14-2-.01(2)(c)1. through 4.:
  - 1. "Used in a manner constituting disposal".
- (i) Materials noted with a "\*" in column 1 of Table 1 are solid wastes when they are:
- (I) Applied to or placed on the land in a manner that constitutes disposal; or
- (II) Used to produce products that are applied to or placed on the land or are otherwise contained in products that are applied to or placed on the land (in which cases the product itself remains a solid waste).
- (ii) However, commercial chemical products listed in 335-14-2-.04(4) are not solid wastes if they are applied to the land and that is their ordinary manner of use;
  - 2. "Burning for energy recovery".
- (i) Materials noted with a "\*" in column 2 of Table 1 are solid wastes when they are:
  - (I) Burned to recover energy;
- (II) Used to produce a fuel or are otherwise contained in fuels (in which cases the fuel itself remains a solid waste);
- (III) Contained in fuels (in which case the fuel itself remains a solid waste);
- (ii) However, commercial chemical products listed in 335-14-2-.04(4) are not solid wastes if they are themselves fuels;

- 3. "Reclaimed". Materials noted with a "-" in column 3 of Table 1 are not solid wastes when reclaimed. Materials noted with a "\*" in column 3 of Table 1 are solid wastes when reclaimed unless they meet the requirements of 335-14-2-.01(4)(a)17, 335-14-2-.01(4)(a)23., 335-14-2-.01(4)(a)24., and 335-14-2-.01(4)(a)27.
- 4. "Accumulated speculatively". Materials noted with a "\*" in column 4 of Table 1 are solid wastes when accumulated speculatively.

Table 1

	Use constituting disposal 335-14-201 (2)(c)1.	Energy/ recovery fuel 335-14-20 1(2)(c)2.	Reclamation 335-14-201( 2)(c)3_, except as provided in 335-14-201( 4)(a)17_, 335- 14-2- .01(4)(a)23_, 335-14-2- .01(4)(a)24_, or 335-14-2- .01(4)(a)27.	Speculative accumulation 335-14-201(2) (c)4.
	1	2	3	4
Spent materials	(*)	(*)	(*)	(*)
Sludges (listed in 335-14-204(2) or (3))	(*)	(*)	(*)	(*)
Sludges exhibiting a characteristic of hazardous waste	(*)	(*)		(*)
By-products (listed in 335-14-204(2) or (3))	(*)	(*)	(*)	(*)
By-products exhibiting a characteristic of hazardous waste	(*)	(*)		(*)
Commercial chemical products listed in 335-14-204(4)	(*)	(*)		
Scrap metal that is not excluded under 335-14-201(4)(a)13.	(*)	(*)	(*)	(*)

[**Note:** The terms "spent materials", "sludges", "by-products", "scrap metal", and "processed scrap metal" are defined in 335-14-1-.02.]

- (d) "Inherently waste-like materials". The following materials are solid wastes when they are recycled in any manner:
- 1. Hazardous Waste Nos. F020, F021 (unless used as an ingredient to make a product at the site of generation), F022, F023, F026, and F028.
- 2. Secondary materials fed to a halogen acid furnace that exhibit a characteristic of a hazardous waste or are listed as a hazardous waste as defined in 335-14-2-.03 and 335-14-2-.04 except for brominated material that meets the following criteria:
- (i) The material must contain a bromine concentration of at least 45%; and
- (ii) The material must contain less than a total of 1% of toxic organic compounds listed in 335-14-2-Appendix VIII; and
- (iii) The material is processed continually on-site in the halogen acid furnace via direct conveyance (hard piping).
- 3. The Department will use the following criteria to add wastes to that list:
  - (i)(I) The materials are ordinarily disposed of, burned, or incinerated; or
- (II) The materials contain toxic constituents listed in 335-14-2-Appendix VIII and these constituents are not ordinarily found in raw materials or products for which the materials substitute (or are found in raw materials or products in smaller concentrations) and are not used or reused during the recycling process; and
- (ii) The material may pose a substantial hazard to human health and the environment when recycled.
  - (e) "Materials which are not solid wastes when recycled".
- 1. Materials are not solid wastes when they can be shown to be recycled by being:
- (i) Used or reused as ingredients in an industrial process to make a product, provided the materials are not being reclaimed; or
  - (ii) Used or reused as effective substitutes for commercial products.
- (iii) Returned to the original process from which they are generated, without first being reclaimed or land disposed. The material must be returned as a substitute for feed stock materials. In cases where the original process to which the

material is returned is a secondary process, the materials must be managed such that there is no placement on the land. In cases where the materials are generated and reclaimed within the primary mineral processing industry, the conditions of the exclusion found at 335-14-2-.01(4)(a)17. apply rather than this provision.

- 2. The following materials are solid wastes, even if the recycling involves use, reuse, or return to the original process (described in 335-14-2-.01(2)(e)1.(i) to (e)1.(iii)):
- (i) Materials used in a manner constituting disposal, or used to produce products that are applied to the land; or
- (ii) Materials burned for energy recovery, used to produce a fuel or contained in fuels; or
  - (iii) Materials accumulated speculatively; or
  - (iv) Materials listed in 335-14-2-.01(2)(d)1. and 2.
- (f) "Documentation of claims that materials are not solid wastes or are conditionally exempt from regulation". Respondents in actions to enforce rules and regulations implementing the AHWMMA who raise a claim that a certain material is not a solid waste, or is conditionally exempt from regulation, must demonstrate that there is a known market or disposition for the material, and that they meet the terms of the exclusion or exemption. In doing so, they must provide appropriate documentation (such as contracts showing that a second person uses the material as an ingredient in a production process) to demonstrate that the material is not a waste, or is exempt from regulation. In addition, owners or operators of facilities claiming that they actually are recycling materials must show that they have the necessary equipment to do so.
- (g) "Sham recycling". A hazardous secondary material found to be sham recycled is considered discarded and a solid waste. Sham recycling is recycling that is not legitimate recycling as defined in 335-14-1-.03(23).
  - (3) Definition of hazardous waste.
- (a) A solid waste, as defined in 335-14-2-.01(2), is a hazardous waste if:
- 1. It is not excluded from regulation as a hazardous waste under 335-14-2-.01(4)(b); and
  - 2. It meets any of the following criteria:
- (i) It exhibits any of the characteristics of hazardous waste identified in 335-14-2-.03. However, any mixture of a waste from the extraction, beneficiation, and processing of ores and minerals excluded under 335-14-2-.01(4)(b)7. and any other solid waste exhibiting a characteristic of hazardous waste under 335-14-2-.03 is a hazardous waste only if it exhibits a characteristic that would not have been exhibited by the excluded waste alone if such mixture had not occurred, or if it continues to

exhibit any of the characteristics exhibited by the non-excluded wastes prior to mixture. Further, for the purposes of applying the Toxicity Characteristic to such mixtures, the mixture is also a hazardous waste if it exceeds the maximum concentration for any contaminant listed in Table I of 335-14-2-.03(5) that would not have been exceeded by the excluded waste alone if the mixture had not occurred or if it continues to exceed the maximum concentration for any contaminant exceeded by the nonexempt waste prior to mixture.

- (ii) It is listed in 335-14-2-.04 and has not been excluded from the lists in 335-14-2-.04 under 335-14-1-.03(2);
  - (iii) Reserved.
- (iv) It is a mixture of solid waste and one or more hazardous wastes listed in 335-14-2-.04 and has not been excluded from 335-14-2-.01(3)(a)2. under 40 CFR 260.20 and 335-14-1-.03(2), 335-14-2-.01(3)(g), or 335-14-2-.01(3)(h); however, the following mixtures of solid wastes and hazardous wastes listed in 335-14-2-.04 are not hazardous wastes (except by application of 335-14-2-.01(3)(a)2.(i) or (a)2.(ii)) if the generator can demonstrate that the mixture consists of wastewater, the discharge of which is subject to regulation under either Section 402 or Section 307(b) of the Clean Water Act (including wastewater at generators which have eliminated the discharge of wastewater), and:
- One or more of the following spent solvents listed in 335-14-2-.04(2) — benzene, carbon tetrachloride, tetrachloroethylene, trichloroethylene or the scrubber waters derived-from the combustion of these spent solvents — provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pretreatment system does not exceed one part per million or the total measured concentration of these solvents entering the headworks of the facility's wastewater treatment system (at facilities subject to regulation under the Clean Air Act, as amended, at 40 CFR parts 60, 61, or 63, or at facilities subject to an enforceable limit in a federal operating permit that minimizes fugitive emissions), does not exceed 1 part per million on an average weekly basis. Any facility that uses benzene as a solvent and claims this exemption must use an aerated biological wastewater treatment system and must use only lined surface impoundments or tanks prior to secondary clarification in the wastewater treatment system. Facilities that choose to measure concentration levels must file a copy of their sampling and analysis plan with the State Director ("Director" as defined in 335-14-1-.02). A facility must file a copy of a revised sampling and analysis plan only if the initial plan is rendered inaccurate by changes in the facility's operations. The sampling and analysis plan must include the monitoring point location (headworks), the sampling frequency and methodology, and a list of constituents to be monitored. A facility is eligible for the direct monitoring option once they receive confirmation that the sampling and analysis plan has been received by the Director. The Director may reject the sampling and analysis plan if he/she finds that, the sampling and analysis plan fails to include the above information; or the plan parameters would not enable the facility to calculate the weekly average concentration of these chemicals accurately. If the Director rejects the sampling and analysis plan or if the Director finds that the facility is not following the sampling and analysis plan, the Director shall notify the

facility to cease the use of the direct monitoring option until such time as the bases for rejection are corrected; or

- One or more of the following spent solvents listed in (II)335-14-2-.04(2)—methylene chloride, 1,1,1-trichloroethane, chlorobenzene, o-dichlorobenzene, cresols, cresylic acid, nitrobenzene, toluene, methyl ethyl ketone, disulfide. isobutanol, pyridine, spent chlorofluorocarbon 2-ethoxyethanol, or the scrubber waters derived-from the combustion of these spent solvents — provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pretreatment system does not exceed 25 parts per million or the total measured concentration of these solvents entering the headworks of the facility's wastewater treatment system (at facilities subject to regulation under the Clean Air Act as amended, at 40 CFR parts 60, 61, or 63, or at facilities subject to an enforceable limit in a federal operating permit that minimizes fugitive emissions), does not exceed 25 parts per million on an average weekly basis. Facilities that choose to measure concentration levels must file a copy of their sampling and analysis plan with the State Director, ("Director" as defined in 335-14-1-.02). A facility must file a copy of a revised sampling and analysis plan only if the initial plan is rendered inaccurate by changes in the facility's operations. The sampling and analysis plan must include the monitoring point location (headworks), the sampling frequency and methodology, and a list of constituents to be monitored. A facility is eligible for the direct monitoring option once they receive confirmation that the sampling and analysis plan has been received by the Director. The Director may reject the sampling and analysis plan if he/she finds that, the sampling and analysis plan fails to include the above information; or the plan parameters would not enable the facility to calculate the weekly average concentration of these chemicals accurately. If the Director rejects the sampling and analysis plan or if the Director finds that the facility is not following the sampling and analysis plan, the Director shall notify the facility to cease the use of the direct monitoring option until such time as the bases for rejection are corrected; or
- (III) One of the following wastes listed in 335-14-2-.04(3), provided that the wastes are discharged to the refinery oil recovery sewer before primary oil/water/solids separation -- heat exchanger bundle cleaning sludge from the petroleum refining industry (EPA Hazardous Waste Number K050), crude oil storage tank sediment from petroleum refining operations (EPA Hazardous Waste Number K169), clarified slurry oil tank sediment and/or in-line filter/separation solids from petroleum refining operations (EPA Hazardous Waste Number K170), spent hydrotreating catalyst (EPA Hazardous Waste Number K171), and spent hydrorefining catalyst (EPA Hazardous Waste Number K172); or
- (IV) A discarded hazardous waste, commercial chemical product, or chemical intermediate listed in 335-14-2-.04(2) through (4), arising from de minimis losses of these materials. For purposes of 335-14-2-.04, "de minimis" losses are inadvertent releases to a wastewater treatment system, including those from normal material handling operations (e.g., spills from the unloading or transfer of materials from bins or other containers, leaks from pipes, valves or other devices used to transfer materials); minor leaks of process equipment, storage tanks or containers; leaks from well maintained pump packings and seals; sample purgings; relief device discharges,

discharges from safety showers and rinsing and cleaning of personal safety equipment; and rinsate from empty containers or from containers that are rendered empty by that rinsing. Any manufacturing facility that claims an exemption for de minimis quantities of wastes listed in 335-14-2-.04(2) through (3), or any nonmanufacturing facility that claims an exemption for de minimis quantities of wastes listed in 335-14-2-.04 must either have eliminated the discharge of wastewaters or have included in its Clean Water Act permit application or submission to its pretreatment control authority the constituents for which each waste was listed (335-14-2-Appendix VII); and the constituents in the table "Treatment Standards for Hazardous Wastes" in 335-14-9-.04(1) for which each waste has a treatment standard (i.e., Land Disposal Restriction constituents). A facility is eligible to claim the exemption once the permit writer or control authority has been notified of possible de minimis releases via the Clean Water Act permit application or the pretreatment control authority submission. A copy of the Clean Water permit application or the submission to the pretreatment control authority must be placed in the facility's on-site files; or

- (V) Wastewater resulting from laboratory operations containing toxic (T) wastes listed in 335-14-2-.04, provided that the annualized average flow of laboratory wastewater does not exceed one percent of total wastewater flow into the headworks of the facility's wastewater treatment or pretreatment system, or provided the wastes combined annualized average concentration does not exceed one part per million in the headworks of the facility's wastewater treatment or pretreatment facility. Toxic (T) wastes used in laboratories that are demonstrated not to be discharged to wastewater are not to be included in this calculation; or
- One or more of the following wastes listed in 335-14-2-.04(3) wastewaters from the production of carbamates and carbamoyl oximes (EPA Hazardous Waste No. K157) — provided that the maximum weekly usage of formaldehyde, methyl chloride, methylene chloride, and triethylamine (including all amounts that cannot be demonstrated to be reacted in the process, destroyed through treatment, or is recovered, i.e., what is discharged or volatilized) divided by the average weekly flow of process wastewater prior to any dilution into the headworks of the facility's wastewater treatment system does not exceed a total of 5 parts per million by weight or the total measured concentration of these chemicals entering the headworks of the facility's wastewater treatment system (at facilities subject to regulation under the Clean Air Act as amended, at 40 CFR parts 60, 61, or 63, or at facilities subject to an enforceable limit in a federal operating permit that minimizes fugitive emissions), does not exceed 5 parts per million on an average weekly basis. Facilities that choose to measure concentration levels must file a copy of their sampling and analysis plan with the State Director ("Director" as defined in 335-14-1-.02). A facility must file a copy of a revised sampling and analysis plan only if the initial plan is rendered inaccurate by changes in the facility's operations. The sampling and analysis plan must include the monitoring point location (headworks), the sampling frequency and methodology, and a list of constituents to be monitored. A facility is eligible for the direct monitoring option once they receive confirmation that the sampling and analysis plan has been received by the Director. The Director may reject the sampling and analysis plan if he/she finds that, the sampling and analysis plan fails to include the above information; or the plan parameters would not enable the facility to calculate the weekly average concentration of these chemicals accurately. If the Director rejects the sampling and analysis plan or if the Director finds that the facility is not following the sampling and analysis plan, the

Director shall notify the facility to cease the use of the direct monitoring option until such time as the bases for rejection are corrected; or

- Wastewaters derived from the treatment of one of more of the (VII) following wastes listed in 335-14-2-.04(3) — organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes (EPA Hazardous Waste No. K156) — provided, that the maximum concentration of formaldehyde, methyl chloride, methylene chloride, and triethylamine prior to any dilutions into the headworks of the facility's wastewater treatment system does not exceed a total of 5 milligrams per liter or the total measured concentration of these chemicals entering the headworks of the facility's wastewater treatment system (at facilities subject to regulation under the Clean Air Act as amended, at 40 CFR parts 60, 61, or 63, or at facilities subject to an enforceable limit in a federal operating permit that minimizes fugitive emissions), does not exceed 5 milligrams per liter on an average weekly basis. Facilities that choose to measure concentration levels must file a copy of their sampling and analysis plan with the State Director" as defined in 335-14-1-.02). A facility must file a copy of a revised sampling and analysis plan only if the initial plan is rendered inaccurate by changes in the facility's operations. The sampling and analysis plan must include the monitoring point location (headworks), the sampling frequency and methodology, and a list of constituents to be monitored. A facility is eligible for the direct monitoring option once they receive confirmation that the sampling and analysis plan has been received by the Director. The Director may reject the sampling and analysis plan if he/she finds that, the sampling and analysis plan fails to include the above information; or the plan parameters would not enable the facility to calculate the weekly average concentration of these chemicals accurately. If the Director rejects the sampling and analysis plan or if the Director finds that the facility is not following the sampling and analysis plan, the Director shall notify the facility to cease the use of the direct monitoring option until such time as the bases for rejection are corrected.
- (v) Rebuttable presumption for used oil. Used oil containing more than 1000 ppm total halogens is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in 335-14-2-.04. Persons may rebut this presumption by demonstrating that the used oil does not contain hazardous waste (for example, to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in 335-14-2-Appendix VIII.)
- (I) The rebuttable presumption does not apply to metalworking oils/fluids containing chlorinated paraffins, if they are processed, through a tolling agreement, to reclaim metalworking oils/fluids. The presumption does apply to metalworking oils/fluids if such oils/fluids are recycled in any other manner, or disposed.
- (II) The rebuttable presumption does not apply to used oils contaminated with chlorofluorocarbons (CFCs) removed from refrigeration units where the CFCs are destined for reclamation. The rebuttable presumption does apply to used oils contaminated with CFCs that have been mixed with used oil from sources other than refrigeration units.

- (b) A solid waste which is not excluded from regulation under 335-14-2-.01(3)(a)1. becomes a hazardous waste when any of the following events occur:
- 1. In the case of a waste listed in 335-14-2-.04, when the waste first meets the listing description set forth in 335-14-2-.04;
- 2. In the case of a mixture of solid waste and one or more listed hazardous wastes, when a hazardous waste listed in 335-14-2-.04 is first added to the solid waste;
- 3. In the case of any other waste (including a waste mixture), when the waste exhibits any of the characteristics identified in 335-14-2-.03.
  - (c) Unless or until it meets the criteria of 335-14-2-.01(3)(d):
  - 1. A hazardous waste will remain a hazardous waste;
- 2.(i) Except as otherwise provided in 335-14-2-.01(2)(c)2.(ii), 335-14-2-.01(3)(g), or 335-14-2-.01(3)(h), any solid waste generated from the treatment, storage, or disposal of a hazardous waste, including any sludge, spill residue, ash, emission control dust, or leachate (but not including precipitation run-off) is a hazardous waste (However, materials that are reclaimed from solid wastes and that are used beneficially are not solid wastes and hence are not hazardous wastes under this provision unless the reclaimed material is burned for energy recovery or used in a manner constituting disposal.);
- (ii) The following solid wastes are not hazardous even though they are generated from the treatment, storage, or disposal of hazardous waste, unless they exhibit one or more of the characteristics of hazardous waste:
- (I) Waste pickle liquor sludge generated by lime stabilization of spent pickle liquor from the iron and steel industry (SIC codes 331 and 332).
- (II) Waste from burning any of the materials exempted from regulation by 335-14-2-.01(6)(a)3.(iii) through (iv).
- (III)(1) Nonwastewater residues, such as slag, resulting from high temperature metals recovery (HTMR) processing of K061, K062 or F006 waste, in units identified as rotary kilns, flame reactors, electric furnaces, plasma arc furnaces, slag reactors, rotary hearth furnace/electric furnace combinations or industrial furnaces [as defined in 335-14-1-.02(1)], that are disposed in Subtitle D unit(s) (which are in compliance with the applicable requirements of ADEM Administrative Code Division 335-13, Solid Waste Program Rules, and which are authorized to receive such wastes), provided that these residues meet the generic exclusion levels identified in the tables in 335-14-2-.01(3)(c) for all constituents, and exhibit no characteristics of hazardous waste. Testing requirements must be incorporated in a facility's waste analysis plan or a generator's self-implementing waste analysis plan; at a minimum, composite samples of residues must be collected and analyzed quarterly and/or when the process or operation generating the waste changes. Persons claiming this exclusion in an

enforcement action will have the burden of proving by clear and convincing evidence that the material meets all of the exclusion requirements.

Constituent	Maximum for any single composite sampleTCLP (mg/L)			
Generic exclusion levels for K061 and K062 nonwastewater HTMR residues				
Antimony	0.10			
Arsenic	0.50			
Barium	7.6			
Beryllium	0.010			
Cadmium	0.050			
Chromium (total)	0.33			
Lead	0.15			
Mercury	0.009			
Nickel	1.0			
Selenium	0.16			
Silver	0.30			
Thallium	0.020			
Zinc	70			
Generic exclusion levels for F006 nonwas	stewater HTMR residues			
Antimony	0.10			
Arsenic	0.50			
Barium	7.6			
Beryllium	0.010			
Cadmium	0.050			
Chromium (total)	0.33			
Cyanide (total) (mg/kg)	1.8			
Lead	0.15			
Mercury	0.009			
Nickel	1.0			
Selenium	0.16			
Silver	0.30			
Thallium	0.020			
Zinc	70			

(III)(2) A one-time notification and certification must be placed in the facility's files and sent to EPA Region 4 and to the Department for K061, K062 or F006 HTMR residues that meet the generic exclusion levels for all constituents and do not exhibit any characteristics that are sent to Subtitle D unit(s) regulated pursuant to Division 335-13 Rules. The notification and certification that is placed in the generator's or treater's files must be updated if the process or operation generating the waste changes and/or if the Subtitle D unit receiving the waste changes. However, the generator or treater need only notify EPA Region 4 and the Department on an annual basis if such changes occur. Such notification and certification should be sent to EPA Region 4 and the Department by the end of the calendar year, but no later than December 31. The notification must include the following information: The name and address of the Subtitle D unit(s) regulated pursuant to Division 335-13 Rules receiving

the waste shipments; the EPA Hazardous Waste Number(s) and treatability group(s) at the initial point of generation; and, the treatment standards applicable to the waste at the initial point of generation. The certification must be signed by an authorized representative and must state as follows: "I certify under penalty of law that the generic exclusion levels for all constituents have been met without impermissible dilution and that no characteristic of hazardous waste is exhibited. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

- (IV) Biological treatment sludge from the treatment of one of the following wastes listed in 335-14-2-.04(3) organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes (EPA Hazardous Waste No. K156), and wastewaters from the production of carbamates and carbamoyl oximes (EPA Hazardous Waste No. K157).
- (V) Catalyst inert support media separated from one of the following wastes listed in 335-14-2-.04(3)--Spent hydrotreating catalyst (EPA Hazardous Waste Number K171), and spent hydrorefining catalyst (EPA Hazardous Waste Number K172).
- (d) Any solid waste described in 335-14-2-.01(3)(c) is not a hazardous waste if it meets the following criteria:
- 1. In the case of any solid waste, it does not exhibit any of the characteristics of hazardous waste identified in 335-14-2-.03. (However, wastes that exhibit a characteristic at the point of generation may still be subject to the requirements of 335-14-9, even if they no longer exhibit a characteristic at the point of land disposal.)
- 2. In the case of a waste which is a listed waste under 335-14-2-.04, contains a waste listed under 335-14-2-.04 or is derived from a waste listed in 335-14-2-.04, it also has been excluded from 335-14-2-.01(3)(c) under 335-14-1-.03(2).

## (e) [Reserved]

- (f) Notwithstanding 335-14-2-.01(3)(a) through (d) and provided the debris as defined in 335-14-9 does not exhibit a characteristic identified in 335-14-2-.03, the following materials are not subject to regulation under 335-14-1 through 335-14-9:
- 1. Hazardous debris as defined in 335-14-9 that has been treated using one of the required extraction or destruction technologies specified in 335-14-9-.04(6) [see Table 1, 40 CFR 268.45]; persons claiming this exclusion in an enforcement action will have the burden of proving by clear and convincing evidence that the material meets all of the exclusion requirements; or
- 2. Debris as defined in 335-14-9 that the Department, considering the extent of contamination, has determined is no longer contaminated with hazardous waste.

- (g)1. A hazardous waste that is listed in 335-14-2-.04 solely because it exhibits one or more characteristics of ignitability as defined under 35-14-2-.03(2), corrosivity as defined under 335-14-2-.03(3), or reactivity as defined under 335-14-2-.03(4) is not a hazardous waste, if the waste no longer exhibits any characteristic of hazardous waste identified in 335-14-2-.03.
  - 2. The exclusion described in 335-14-2-.01(3)(g)1. also pertains to:
- (i) Any mixture of a solid waste and a hazardous waste listed in 335-14-2-.04 solely because it exhibits the characteristics of ignitability, corrosivity, or reactivity as regulated under 335-14-2-.01(3)(a)2.(iv); and
- (ii) Any solid waste generated from treating, storing, or disposing of a hazardous waste listed in 335-14-2-.04 solely because it exhibits the characteristics of ignitability, corrosivity, or reactivity as regulated under 335-14-2-.01(3)(c)2.(i).
- 3. Wastes excluded under 335-14-2-.01(3) are subject to 335-14-9 (as applicable), even if they no longer exhibit a characteristic at the point of land disposal.
- 4. Any mixture of a solid waste excluded from regulation under 335-14-2-.01(4)(b)7. and a hazardous waste listed in 335-14-2-.04 solely because it exhibits one or more of the characteristics of ignitability, corrosivity, or reactivity as regulated under 335-14-2-.01(3)(a)2.(iv) is not a hazardous waste, if the mixture no longer exhibits any characteristic of hazardous waste identified in 335-14-2-.03 for which the hazardous waste listed in 335-14-2-.04 was listed.
- (h)1. Hazardous waste containing radioactive waste is no longer a hazardous waste when it meets the eligibility criteria and conditions of 335-14-7-.14 ("eligible radioactive mixed waste").
  - 2. The exemption described in 335-14-2-.01(3)(h)1. also pertains to:
- (i) Any mixture of a solid waste and an eligible radioactive mixed waste; and
- (ii) Any solid waste generated from treating, storing, or disposing of an eligible radioactive mixed waste.
- 3. Waste exempted under 335-14-2-.01(3) must meet the eligibility criteria and specified conditions in 335-14-7-.14(3) and 335-14-7-.14(4) (for storage and treatment) and in 335-14-7-.14(12) and 335-14-7-.14(13) (for transportation and disposal). Waste that fails to satisfy these eligibility criteria and conditions is regulated as hazardous waste.

## (4) <u>Exclusions</u>.

- (a) "Materials which are not solid wastes". The following materials are not solid wastes for the purpose of 335-14-2:
  - 1. (i) Domestic sewage; and

- (ii) Any mixture of domestic sewage and other wastes that passes through a sewer system to a publicly-owned treatment works for treatment, except as prohibited by 335-14-7-.16(5) and Clean Water Act requirements at 40 CFR 403.5(b)- "Domestic sewage" means untreated sanitary wastes that pass through a sewer system;
- 2. Industrial wastewater discharges that are point source discharges subject to regulation under Section 402 of the federal Clean Water Act, as amended. This exclusion applies only to the actual point source discharge. It does not exclude industrial wastewaters while they are being collected, stored, or treated before discharge, nor does it exclude sludges that are generated by industrial wastewater treatment;
  - 3. Irrigation return flows;
- 4. Source, special nuclear or by-product material as defined by the Atomic Energy Act of 1954, as amended, 42 U.S.C. 2011 et seq.;
- 5. Materials subjected to in-situ mining techniques which are not removed from the ground as part of the extraction process;
- 6. Pulping liquors (i.e., black liquor) that are reclaimed in a pulping liquor recovery furnace and then reused in the pulping process, unless it is accumulated speculatively as defined in 335-14-1-.02;
- 7. Spent sulfuric acid used to produce virgin sulfuric acid provided it is not accumulated speculatively as defined in 335-14-1-.02;
- 8. Secondary materials that are reclaimed and returned to the original process or processes in which they were generated where they are reused in the production process provided:
- (i) Only tank storage is involved, and the entire process through completion of reclamation is closed by being entirely connected with pipes or other comparable enclosed means of conveyance;
- (ii) Reclamation does not involve controlled flame combustion (such as occurs in boilers, industrial furnaces, or incinerators);
- (iii) The secondary materials are never accumulated in such tanks for over twelve months without being reclaimed; and
- (iv) The reclaimed material is not used to produce a fuel, or used to produce products that are used in a manner constituting disposal.
- 9. (i) Spent wood preserving solutions that have been reclaimed and are reused for their original intended purpose; and
- (ii) Wastewaters from the wood preserving process that have been reclaimed and are reused to treat wood.

- (iii) Prior to reuse, the wood preserving wastewaters and spent wood preserving solutions described in 335-14-2-.01(4)(a)9.(i) and (a)9.(ii), so long as they meet all of the following conditions:
- (I) The wood preserving wastewaters and spent wood preserving solutions are reused on-site at water borne plants in the production process for their original intended purpose;
- (II) Prior to reuse, the wastewaters and spent wood preserving solutions are managed to prevent release to either land or ground water or both;
- (III) Any unit used to manage wastewaters and/or spent wood preserving solutions prior to reuse can be visually or otherwise determined to prevent such releases;
- (IV) Any drip pad used to manage the wastewaters and/or spent wood preserving solutions prior to reuse complies with the standards in 335-14-6-.23, regardless of whether the plant generates a total of less than 100 kg/month of hazardous waste; and
- (V) Prior to operating pursuant to this exclusion, the facility owner or operator prepares a one-time notification stating that the facility intends to claim the exclusion, giving the date on which the facility intends to begin operating under the exclusion, and containing the following language: "I have read the applicable regulation establishing an exclusion for wood preserving wastewaters and spent wood preserving solutions and understand it requires me to comply at all times with the conditions set out in the regulation." The facility must maintain a copy of that document in its on-site records until closure of the facility. The exclusion applies so long as the facility meets all of the conditions. If the facility goes out of compliance with any condition, it may apply to the Director for reinstatement. Director may reinstate the exclusion upon finding that the facility has returned to compliance with all conditions and that the violations are not likely to recur.
- 10. EPA Hazardous Waste Nos. K060, K087, K141, K142, K143, K144, K145, K147, and K148 and any wastes from the coke by-products processes that are hazardous only because they exhibit the Toxicity Characteristic specified in 335-14-2-.03(5), when, subsequent to generation, these materials are recycled to coke ovens, to the tar recovery process as a feedstock to produce coal tar or are mixed with coal tar prior to the tar's sale or refining. This exclusion is conditioned on there being no land disposal of the wastes from the point they are generated to the point they are recycled to coke ovens or tar recovery or refining processes, or mixed with coal tar.
- 11. Nonwastewater splash condenser dross residue from the treatment of K061 in high temperature metals recovery units, provided it is shipped in drums (if shipped) and not land disposed before recovery.
- 12.(i) Oil-bearing hazardous secondary materials (i.e., sludges, by-products, or spent materials) that are generated at a petroleum refinery (SIC code 2911) and are inserted into the petroleum refining process (SIC code 2911—including,

but not limited to, distillation, catalytic cracking, fractionation, or thermal cracking units (i.e., cokers)) unless the material is placed on the land, or speculatively accumulated before being so recycled. Materials inserted into thermal cracking units are excluded under 335-14-2-.01(4), provided that the coke product also does not exhibit a characteristic of hazardous waste. Oil-bearing hazardous secondary materials may be inserted into the same petroleum refinery where they are generated, or sent directly to another petroleum refinery, and still be excluded under this provision. Except as provided in 335-14-2-.01(4)(a)12.(ii), oil-bearing hazardous secondary materials generated elsewhere in the petroleum industry (i.e., from sources other than petroleum refineries) are not excluded under 335-14-2-.01(4). Residuals generated from processing or recycling materials excluded under 335-14-2-.01(4)(a)12.(i), where such materials as generated would have otherwise met a listing under 335-14-2-.04, are designated as F037 listed wastes when disposed of or intended for disposal.

- (ii) Recovered oil that is recycled in the same manner and with the same conditions as described in 335-14-2-.01(4)(a)12.(i). Recovered oil is oil that has been reclaimed from secondary materials (including wastewater) generated from normal petroleum industry practices, including refining, exploration and production, bulk storage, and transportation incident thereto (SIC codes 1311, 1321, 1381, 1382, 1389, 2911, 4612, 4613, 4922, 4923, 4789, 5171, and 5172.) Recovered oil does not include oil-bearing hazardous wastes listed in 335-14-2-.04; however, oil recovered from such wastes may be considered recovered oil. Recovered oil does not include used oil as defined in 335-14-1-.02.
- 13. Excluded scrap metal (processed scrap metal, unprocessed home scrap metal, and unprocessed prompt scrap metal) being recycled.
  - 14. Shredded circuit boards being recycled provided that they are:
- (i) Stored in containers sufficient to prevent a release to the environment prior to recovery; and
- (ii) Free of mercury switches, mercury relays and nickel-cadmium batteries and lithium batteries.
- 15. Condensates derived from the overhead gases from kraft mill steam strippers that are used to comply with 40 CFR 63.446(e). The exemption applies only to combustion at the mill generating the condensates.

## 16. [Reserved].

- 17. Spent materials (as defined in 335-14-2-.01(1)) (other than hazardous wastes listed in 335-14-2-.04) generated within the primary mineral processing industry from which minerals, acids, cyanide, water, or other values are recovered by mineral processing or by beneficiation, provided that:
- (i) The spent material is legitimately recycled to recover minerals, acids, cyanide, water or other values;
  - (ii) The spent material is not accumulated speculatively;

- (iii) Except as provided in 335-14-2-.01(4)(a)17.(iv), the spent material is stored in tanks, containers, or buildings meeting the following minimum integrity standards: a building must be an engineered structure with a floor, walls, and a roof all of which are made of non-earthen materials providing structural support (except smelter buildings may have partially earthen floors provided the spent material is stored on the non-earthen portion), and have a roof suitable for diverting rainwater away from the foundation; a tank must be free standing, not be a surface impoundment (as defined in 335-14-1-.02), and be manufactured of a material suitable for containment of its contents; a container must be free standing and be manufactured of a material suitable for containment of its contents. If tanks or containers contain any particulate which may be subject to wind dispersal, the owner/operator must operate these units in a manner which controls fugitive dust. Tanks, containers, and buildings must be designed, constructed and operated to prevent significant releases to the environment of these materials.
- (iv) The Department may make a site-specific determination, after public review and comment, that only solid mineral processing spent materials may be placed on pads rather than in tanks, containers, or buildings. Solid mineral processing spent materials do not contain any free liquid. The Department must affirm that pads are designed, constructed and operated to prevent significant releases of the secondary material into the environment. Pads must provide the same degree of containment afforded by the non-RCRA tanks, containers and buildings eligible for exclusion.
- (I) The Department must also consider if storage on pads poses the potential for significant releases via groundwater, surface water, and air exposure pathways. Factors to be considered for assessing the groundwater, surface water, and air exposure pathways are: the volume and physical and chemical properties of the spent material, including its potential for migration off the pad; the potential for human or environmental exposure to hazardous constituents migrating from the pad via each exposure pathway, and the possibility and extent of harm to human and environmental receptors via each exposure pathway.
- (II) Pads must meet the following minimum standards: be designed of non-earthen material that is compatible with the chemical nature of the mineral processing spent material, capable of withstanding physical stresses associated with placement and removal, have run on/runoff controls, be operated in a manner which controls fugitive dust, and have integrity assurance through inspections and maintenance programs.
- (III) Before making a determination under 335-14-2-.01(4), the Department must provide notice and the opportunity for comment to all persons potentially interested in the determination. This can be accomplished by placing notice of this action in major local newspapers, or broadcasting notice over local radio stations.
- (v) The owner or operator provides a notice to the Department, identifying the following information: the types of materials to be recycled; the type and location of the storage units and recycling processes; and the annual quantities expected to be placed in non land-based units. This notification must be updated when there is a change in the type of materials recycled or the location of the recycling process.

- (vi) For purposes of 335-14-2-.01(4)(b)7., mineral processing spent materials must be the result of mineral processing and may not include any listed hazardous wastes. Listed hazardous wastes and characteristic hazardous wastes generated by non-mineral processing industries are not eligible for the conditional exclusion from the definition of solid waste.
- 18. Petrochemical recovered oil from an associated organic chemical manufacturing facility, where the oil is to be inserted into the petroleum refining process (SIC code 2911) along with normal petroleum refinery process streams, provided:
- (i) The oil is hazardous only because it exhibits the characteristic of ignitability (as defined in 335-14-2-.03(2) and/or toxicity for benzene (335-14-2-.03(5), hazardous waste number D018); and
- (ii) The oil generated by the organic chemical manufacturing facility is not placed on the land, or speculatively accumulated before being recycled into the petroleum refining process. An "associated organic chemical manufacturing facility" is a facility where the primary SIC code is 2869, but where operations may also include SIC codes 2821, 2822, and 2865; and is physically co-located with a petroleum refinery; and where the petroleum refinery to which the oil being recycled is returned also provides hydrocarbon feedstocks to the organic chemical manufacturing facility. "Petrochemical recovered oil" is oil that has been reclaimed from secondary materials (i.e., sludges, byproducts, or spent materials, including wastewater) from normal organic chemical manufacturing operations, as well as oil recovered from organic chemical manufacturing processes.
- 19. Spent caustic solutions from petroleum refining liquid treating processes used as a feedstock to produce cresylic or naphthenic acid unless the material is placed on the land, or accumulated speculatively as defined in 335-14-1-.02.
- 20. Hazardous secondary materials used to make zinc fertilizers, provided that the following conditions specified are satisfied:
- (i) Hazardous secondary materials used to make zinc micronutrient fertilizers must not be accumulated speculatively, as defined in 335-14-1-.02.
- (ii) Generators and intermediate handlers of zinc-bearing hazardous secondary materials that are to be incorporated into zinc fertilizers must:
- (I) Submit a one-time notice to the Department, which contains the name, address and EPA ID number of the generator or intermediate handler facility, provides a brief description of the secondary material that will be subject to the exclusion, and identifies when the manufacturer intends to begin managing excluded, zinc-bearing hazardous secondary materials under the conditions specified in 335-14-2-.01(4)(a)20.
- (II) Store the excluded secondary material in tanks, containers, or buildings that are constructed and maintained in a way that prevents releases of the secondary materials into the environment. At a minimum, any building used for this

purpose must be an engineered structure made of non-earthen materials that provide structural support, and must have a floor, walls and a roof that prevent wind dispersal and contact with rainwater. Tanks used for this purpose must be structurally sound and, if outdoors, must have roofs or covers that prevent contact with wind and rain. Containers used for this purpose must be kept closed except when it is necessary to add or remove material, and must be in sound condition. Containers that are stored outdoors must be managed within storage areas that:

- I. Have containment structures or systems sufficiently impervious to contain leaks, spills and accumulated precipitation; and
- II. Provide for effective drainage and removal of leaks, spills and accumulated precipitation; and
  - III. Prevent run-on into the containment system.
- (III) With each off-site shipment of excluded hazardous secondary materials, provide written notice to the receiving facility that the material is subject to the conditions of 335-14-2-.01(4)(a)20.
- (IV) Maintain at the generator's or intermediate handlers's facility for no less than three years records of all shipments of excluded hazardous secondary materials. For each shipment these records must at a minimum contain the following information:
  - I. Name of the transporter and date of the shipment;
- II. Name and address of the facility that received the excluded material, and documentation confirming receipt of the shipment; and
- III. Type and quantity of excluded secondary material in each shipment.
- (iii) Manufacturers of zinc fertilizers or zinc fertilizer ingredients made from excluded hazardous secondary materials must:
- (I) Store excluded hazardous secondary materials in accordance with the storage requirements for generators and intermediate handlers, as specified in 335-14-2-.01(4)(a)20(ii)(II).
- (II) Submit a one-time notification to the Department that, at a minimum, specifies the name, address and EPA ID number of the manufacturing facility, and identifies when the manufacturer intends to begin managing excluded, zinc-bearing hazardous secondary materials under the conditions specified in 335-14-2-.01(4)(a)20.
- (III) Maintain for a minimum of three years records of all shipments of excluded hazardous secondary materials received by the manufacturer, which must at a minimum identify for each shipment the name and address of the generating facility,

name of transporter and date the materials were received, the quantity received, and a brief description of the industrial process that generated the material.

- (IV) Submit to the Department an annual report that identifies the total quantities of all excluded hazardous secondary materials that were used to manufacture zinc fertilizers or zinc fertilizer ingredients in the previous year, the name and address of each generating facility, and the industrial process(s) from which they were generated.
- (iv) Nothing in this section preempts, overrides or otherwise negates the provision in 335-14-3-.01(2), which requires any person who generates a solid waste to determine if that waste is a hazardous waste.
- (v) Interim status and permitted storage units that have been used to store only zinc-bearing hazardous wastes prior to the submission of the one-time notice described in 335-14-2-.01(4)(a)20.(ii)(I), and that afterward will be used only to store hazardous secondary materials excluded under this paragraph, are not subject to the closure requirements of 335-14-5 or 335-14-6.
- 21. Zinc fertilizers made from hazardous wastes, or hazardous secondary materials that are excluded under 335-14-2-.01(4)(a)20., provided that:
  - (i) The fertilizers meet the following contaminant limits:
  - (I) For metal contaminants:

Table 1. – Limits on Metal Contaminants

Constituent	Maximum Allowable Total Concentration in Fertilizer, per Unit (1%) of Zinc (ppm)		
Arsenic	0.3		
Cadmium	1.4		
Chromium	0.6		
Lead	2.8		
Mercury	0.3		

- (II) For dioxin contaminants the fertilizer must contain no more than eight (8) parts per trillion of dioxin, measured as toxic equivalent (TEQ).
- (ii) The manufacturer performs sampling and analysis of the fertilizer product to determine compliance with the contaminant limits for metals no less than every six months, and for dioxins no less than every twelve months. Testing must also be performed whenever changes occur to manufacturing processes or ingredients that could significantly affect the amounts of contaminants in the fertilizer product. The manufacturer may use any reliable analytical method to demonstrate that no constituent of concern is present in the product at concentrations above the applicable limits. It is the responsibility of the manufacturer to ensure that the sampling and

analysis are unbiased, precise, and representative of the product(s) introduced into commerce.

- (iii) The manufacturer maintains for no less than three years records of all sampling and analyses performed for purposes of determining compliance with the requirements of 335-14-2-.01(4)(a)21(ii). Such records must at a minimum include:
- (I) The dates and times product samples were taken, and the dates the samples were analyzed;
  - (II) The names and qualifications of the person(s) taking the samples;
- (III) A description of the methods and equipment used to take the samples;
- (IV) The name and address of the laboratory facility at which analyses of the samples were performed;
- (V) A description of the analytical methods used, including any cleanup and sample preparation methods; and
- (VI) All laboratory analytical results used to determine compliance with the contaminant limits specified in 335-14-2-.01(4)(a)21.
  - 22. Used cathode ray tubes (CRTs).
- (i) Used, intact CRTs as described in 335-14-1-.02 are not solid wastes within the United States unless they are disposed, or unless they are speculatively accumulated as defined in 335-14-1-.02 by CRT collectors or glass processors.
- (ii) Used, intact CRTs as described in 335-14-1-.02 are not solid wastes when exported for recycling provided that they meet the requirements of 335-14-2-.05(2).
- (iii) Used, broken CRTs as described in 335-14-1-.02 are not solid wastes provided that they meet the requirements of 335-14-2-.05(1).
- (iv) Glass removed from CRTs is not a solid waste provided that it meets the requirements of 335-14-2-.05(1)(c).
- 23. Hazardous secondary material generated and legitimately reclaimed within the United States or its territories and under the control of the generator, provided that the material complies with paragraphs 335-14-2-.01(4)(a)23.(i) and (ii) of this section:
- (i)(I) The hazardous secondary material is generated and reclaimed at the generating facility (for purposes of this definition, generating facility means all contiguous property owned, leased, or otherwise controlled by the hazardous secondary material generator); or

- The hazardous secondary material is generated and reclaimed at different facilities, if the reclaiming facility is controlled by the generator or if both the generating facility and the reclaiming facility are controlled by a person as defined in 335-14-1-.02, and if the generator provides one of the following certifications: "on behalf of [insert generator facility name], I certify that this facility will send the indicated hazardous secondary material to [insert reclaimer facility name], which is controlled by [insert generator facility name] and that [insert name of either facility] has acknowledged full responsibility for the safe management of the hazardous secondary material," or "on behalf of [insert generator facility name], I certify that this facility will send the indicated hazardous secondary material to [insert reclaimer facility name], that both facilities are under common control, and that [insert name of either facility] has acknowledged full responsibility for the safe management of the hazardous secondary material." For purposes of this paragraph, "control" means the power to direct the policies of the facility, whether by the ownership of stock, voting rights, or otherwise, except that contractors who operate facilities on behalf of a different person as defined in 335-14-1-.02 shall not be deemed to "control" such facilities. The generating and receiving facilities must both maintain at their facilities for no less than three years records of hazardous secondary materials sent or received under this exclusion. In both cases, the records must contain the name of the transporter, the date of the shipment, and the type and quantity of the hazardous secondary material shipped or received under the exclusion. These requirements may be satisfied by routine business records (e.g., financial records, bills of lading, copies of DOT shipping papers, or electronic confirmations); or
- The hazardous secondary material is generated pursuant to a (III) written contract between a tolling contractor and a toll manufacturer and is reclaimed by the tolling contractor, if the tolling contractor certifies the following: "On behalf of [insert tolling contractor name], I certify that [insert tolling contractor name] has a written contract with [insert toll manufacturer name] to manufacture [insert name of product or intermediate] which is made from specified unused materials, and that [insert tolling contractor name] will reclaim the hazardous secondary materials generated during this manufacture. On behalf of [insert tolling contractor name], I also certify that [insert tolling contractor name] retains ownership of, and responsibility for, the hazardous secondary materials that are generated during the course of the manufacture, including any releases of hazardous secondary materials that occur during the manufacturing process". The tolling contractor must maintain at its facility for no less than three years records of hazardous secondary materials received pursuant to its written contract with the tolling manufacturer, and the tolling manufacturer must maintain at its facility for no less than three years records of hazardous secondary materials shipped pursuant to its written contract with the tolling contractor. In both cases, the records must contain the name of the transporter, the date of the shipment, and the type and quantity of the hazardous secondary material shipped or received pursuant to the written contract. These requirements may be satisfied by routine business records (e.g., financial records, bills of lading, copies of DOT shipping papers, or electronic confirmations). For purposes of this paragraph, tolling contractor means a person who arranges for the production of a product or intermediate made from specified unused materials through a written contract with a toll manufacturer. Toll manufacturer means a person who produces a product or intermediate made from specified unused materials pursuant to a written contract with a tolling contractor.

- (ii)(I) The hazardous secondary material is contained as defined in 335-14-1-.02. A hazardous secondary material released to the environment is discarded and a solid waste unless it is immediately recovered for the purpose of reclamation. Hazardous secondary material managed in a unit with leaks or other continuing or intermittent unpermitted releases is discarded and a solid waste.
- (II) The hazardous secondary material is not speculatively accumulated, as defined in 335-14-1-.02.
  - (III) Notice is provided as required by 335-14-1-.03(22).
- (IV) The material is not otherwise subject to material-specific management conditions under paragraph (a) of this section when reclaimed, and it is not a spent lead-acid battery (see 335-14-7-.07(1) and 335-14-11-.01(2)).
- (V) Persons performing the recycling of hazardous secondary materials under this exclusion must maintain documentation of their legitimacy determination on-site. Documentation must be a written description of how the recycling meets all four factors in 335-14-1-.03(23). Documentation must be maintained for three years after the recycling operation has ceased.
- (VI) The emergency preparedness and response requirements found in 335-14-2-.13 are met.
- 24. Hazardous secondary material that is generated and then transferred to another person for the purpose of reclamation is not a solid waste, provided that:
- (i) The material is not speculatively accumulated, as defined in 335-14-1-.02;
- (ii) The material is not handled by any person or facility other than the hazardous secondary material generator, the transporter, an intermediate facility or a reclaimer, and, while in transport, is not stored for more than 10 days at a transfer facility, as defined in 335-14-1-.02(1), and is packaged according to applicable Department of Transportation regulations at 49 CFR parts 173, 178, and 179 while in transport;
- (iii) The material is not otherwise subject to material-specific management conditions under this paragraph (a) when reclaimed, and it is not a spent lead-acid battery (see 335-14-7-.07(1) and 335-14-11-.01(2));
- (iv) The reclamation of the material is legitimate, as specified under 335-14-1-.03(23);
- (v) The hazardous secondary material generator satisfies all of the following conditions:

- (I) The material must be contained as defined in 335-14-1-.02(1). A hazardous secondary material released to the environment is discarded and a solid waste unless it is immediately recovered for the purpose of recycling. Hazardous secondary material managed in a unit with leaks or other continuing releases is discarded and a solid waste.
- Prior to arranging for transport of hazardous secondary materials to a reclamation facility (or facilities) where the management of the hazardous secondary materials is not addressed under a RCRA Part B permit or interim status standards, the hazardous secondary material generator must make reasonable efforts to ensure that each reclaimer intends to properly and legitimately reclaim the hazardous secondary material and not discard it, and that each reclaimer will manage the hazardous secondary material in a manner that is protective of human health and the environment. If the hazardous secondary material will be passing through an intermediate facility where the management of the hazardous secondary materials is not addressed under a RCRA Part B permit or interim status standards, the hazardous secondary material generator must make contractual arrangements with the intermediate facility to ensure that the hazardous secondary material is sent to the reclamation facility identified by the hazardous secondary material generator, and the hazardous secondary material generator must perform reasonable efforts to ensure that the intermediate facility will manage the hazardous secondary material in a manner that is protective of human health and the environment. Reasonable efforts must be repeated at a minimum of every three years for the hazardous secondary material generator to claim the exclusion and to send the hazardous secondary materials to each reclaimer and any intermediate facility. In making these reasonable efforts, the generator may use any credible evidence available, including information gathered by the hazardous secondary material generator, provided by the reclaimer or intermediate facility, and/or provided by a third party. The hazardous secondary material generator must affirmatively answer all of the following questions for each reclamation facility and any intermediate facility:
- I. Does the available information indicate that the reclamation process is legitimate pursuant to 335-14-1-.03(23). In answering this question, the hazardous secondary material generator can rely on their existing knowledge of the physical and chemical properties of the hazardous secondary material, as well as information from other sources (e.g., the reclamation facility, audit reports, etc.) about the reclamation process.
- II. Does the publicly available information indicate that the reclamation facility and any intermediate facility that is used by the hazardous secondary material generator notified the appropriate authorities of hazardous secondary materials reclamation activities pursuant to 335-14-1-.03(22) of this chapter and have they notified the appropriate authorities that the financial assurance condition is satisfied 335-14-2-.08? In answering these questions, the hazardous secondary material generator can rely on the available information documenting the reclamation facility's and any intermediate facility's compliance with the notification requirements per 335-14-1-.03(22), including the requirement in 335-14-1-.03(22)(a)(5) to notify the Department whether the reclaimer or intermediate facility has financial assurance.
- III. Does publicly available information indicate that the reclamation facility or any intermediate facility that is used by the hazardous secondary material

generator has not had any formal enforcement actions taken against the facility in the previous three years for violations of RCRA or state hazardous waste regulations and has not been classified as a significant non-complier with RCRA Subtitle C or equivalent State regulations? In answering this question, the hazardous secondary material generator can rely on the publicly available information from EPA or the state. If the reclamation facility or any intermediate facility that is used by the hazardous secondary material generator has had a formal enforcement action taken against the facility in the previous three years for violations of RCRA or state hazardous waste regulations and has been classified as a significant non-complier with RCRA Subtitle C or equivalent state regulations, does the hazardous secondary material generator have credible evidence that the facilities will manage the hazardous secondary materials properly? In answering this question, the hazardous secondary material generator can obtain additional information from EPA, the state, or the facility itself that the facility has addressed the violations, taken remedial steps to address the violations and prevent future violations, or that the violations are not relevant to the proper management of the hazardous secondary materials.

- IV. Does the available information indicate that the reclamation facility and any intermediate facility that is used by the hazardous secondary material generator have the equipment and trained personnel to safely recycle the hazardous secondary material? In answering this question, the generator may rely on a description by the reclamation facility or by an independent third party of the equipment and trained personnel to be used to recycle the generator's hazardous secondary material.
- V. If residuals are generated from the reclamation of the excluded hazardous secondary materials, does the reclamation facility have the permits required (if any) to manage the residuals? If not, does the reclamation facility have a contract with an appropriately permitted facility to dispose of the residuals? If not, does the hazardous secondary material generator have credible evidence that the residuals will be managed in a manner that is protective of human health and the environment? In answering these questions, the hazardous secondary material generator can rely on publicly available information from EPA or the state, or information provided by the facility itself.
- (III) The hazardous secondary material generator must maintain for a minimum of three years documentation and certification that reasonable efforts were made for each reclamation facility and, if applicable, intermediate facility where the management of the hazardous secondary materials is not addressed under a RCRA Part B permit or interim status standards prior to transferring hazardous secondary material. Documentation and certification must be made available upon request by a regulatory authority within 72 hours, or within a longer period of time as specified by the regulatory authority. The certification statement must:
- I. Include the printed name and official title of an authorized representative of the hazardous secondary material generator company, the authorized representative's signature, and the date signed;
- II. Incorporate the following language: "I hereby certify in good faith and to the best of my knowledge that, prior to arranging for transport of excluded hazardous secondary materials to [insert name(s) of reclamation facility and any

intermediate facility], reasonable efforts were made in accordance with 335-14-2-.01(4)(a)24.(v)(II) to ensure that the hazardous secondary materials would be recycled legitimately, and otherwise managed in a manner that is protective of human health and the environment, and that such efforts were based on current and accurate information."

- (IV) The hazardous secondary material generator must maintain at the generating facility for no less than three (3) years records of all off-site shipments of hazardous secondary materials. For each shipment, these records must, at a minimum, contain the following information:
  - I. Name of the transporter and date of the shipment;
- II. Name and address of each reclaimer and, if applicable, the name and address of each intermediate facility to which the hazardous secondary material was sent;
- III. The type and quantity of hazardous secondary material in the shipment.
- (V) The hazardous secondary material generator must maintain at the generating facility for no less than three (3) years confirmations of receipt from each reclaimer and, if applicable, each intermediate facility for all off-site shipments of hazardous secondary materials. Confirmations of receipt must include the name and address of the reclaimer (or intermediate facility), the type and quantity of the hazardous secondary materials received and the date which the hazardous secondary materials were received. This requirement may be satisfied by routine business records (e.g., financial records, bills of lading, copies of DOT shipping papers, or electronic confirmations of receipt);
- (VI) The hazardous secondary material generator must comply with the emergency preparedness and response conditions in 335-14-2-.13.
- (vi) Reclaimers of hazardous secondary material excluded from regulation under this exclusion and intermediate facilities as defined in 335-14-1-.02(1) satisfy all of the following conditions:
- (I) The reclaimer and intermediate facility must maintain at its facility for no less than three (3) years records of all shipments of hazardous secondary material that were received at the facility and, if applicable, for all shipments of hazardous secondary materials that were received and subsequently sent off-site from the facility for further reclamation. For each shipment, these records must at a minimum contain the following information:
  - I. Name of the transporter and date of the shipment;
- II. Name and address of the hazardous secondary material generator and, if applicable, the name and address of the reclaimer or intermediate facility which the hazardous secondary materials were received from;

- III. The type and quantity of hazardous secondary material in the shipment; and
- IV. For hazardous secondary materials that, after being received by the reclaimer or intermediate facility, were subsequently transferred off-site for further reclamation, the name and address of the (subsequent) reclaimer and, if applicable, the name and address of each intermediate facility to which the hazardous secondary material was sent.
- (II) The intermediate facility must send the hazardous secondary material to the reclaimer(s) designated by the hazardous secondary materials generator.
- (III) The reclaimer and intermediate facility must send to the hazardous secondary material generator confirmations of receipt for all off-site shipments of hazardous secondary materials. Confirmations of receipt must include the name and address of the reclaimer (or intermediate facility), the type and quantity of the hazardous secondary materials received and the date which the hazardous secondary materials were received. This requirement may be satisfied by routine business records (e.g., financial records, bills of lading, copies of DOT shipping papers, or electronic confirmations of receipt).
- (IV) The reclaimer and intermediate facility must manage the hazardous secondary material in a manner that is at least as protective as that employed for analogous raw material and must be contained. An "analogous raw material" is a raw material for which a hazardous secondary material is a substitute and serves the same function and has similar physical and chemical properties as the hazardous secondary material.
- (V) Any residuals that are generated from reclamation processes will be managed in a manner that is protective of human health and the environment. If any residuals exhibit a hazardous characteristic according to 335-14-2-.03, or if they themselves are specifically listed in 335-14-2-.04, such residuals are hazardous wastes and must be managed in accordance with the applicable requirements of 335-14-1 through 9.
- (VI) The reclaimer and intermediate facility have financial assurance as required under 335-14-2-.08,
- (vii) All persons claiming the exclusion under 335-14-2-.01(4)(a)24. of this section provide notification as required under 335-14-1-.03(22).
- 25. The Environmental Protection Agency Regulations as they exist as set forth in 40 CFR § 261.4(a)(25) (as published on May 30, 2018) are incorporated herein by reference.
- 26. Solvent-contaminated reusable wipes that are sent for cleaning and reuse are not solid wastes from the point of generation, provided that:
- (i) The solvent-contaminated wipes, when accumulated, stored, and transported, are contained in non-leaking, closed containers that are labeled "Excluded

Solvent-Contaminated Wipes." The containers must be able to contain free liquids, should free liquids occur. During accumulation, a container should be closed in accordance with 335-14-1-.02, except when necessary to add or remove solvent-contaminated wipes;

- (ii) The solvent-contaminated wipes may be accumulated by the generator for up to 180 days from the start date of accumulation for each container prior to being sent for cleaning;
- (iii) At the point of being sent for cleaning on-site or at the point of being transported off-site for cleaning, the solvent-contaminated wipes must contain no free liquids as defined in 335-14-1-.02;
- (iv) Free liquids removed from the solvent-contaminated wipes or from the container holding the wipes must be managed according to the applicable regulations found in 335-14-1 through 335-14-9;
- (v) Generators must maintain at their site the following documentation:
- (I) Name and address of the laundry or dry cleaner that is receiving the solvent-contaminated wipes;
- (II) Documentation that the 180-day accumulation time limit in 335-14-2-.01(4)(a)26.(ii) is being met;
- (III) Description of the process the generator is using to ensure the solvent-contaminated wipes contain no free liquids at the point of being laundered or dry cleaned on-site or at the point of being transported off-site for laundering or dry cleaning;
- (IV) The generator must maintain in their onsite records, documentation that verifies that "no free liquids" were present in the container, prior to shipment. These records must be kept for at least three years from the date of shipment. At a minimum, these records must include the date and time of the verification, the name of the person verifying and a notation of the volume of free liquids removed from the container, if present.
- (vi) The solvent-contaminated wipes are sent to a laundry or dry cleaner whose discharge, if any, is regulated under sections 301 and 402 or section 307 of the Clean Water Act.
- 27. Hazardous secondary material that is generated and then transferred to another person for the purpose of remanufacturing is not a solid waste, provided that:
- (i) The hazardous secondary material consists of one or more of the following spent solvents: toluene, xylenes, ethylbenzene, 1,2,4-trimethylbenzene, chlorobenzene, n-hexane, cyclohexane, methyl tert-butyl ether, acetonitrile, chloroform,

chloromethane, dichloromethane, methyl isobutyl ketone, NN-dimethylformamide, tetrahydrofuran, n-butyl alcohol, ethanol, and/or methanol;

- (ii) The hazardous secondary material originated from using one or more of the solvents listed in 335-14-2-.01(4)(a)27.(i) of this section in a commercial grade for reacting, extracting, purifying, or blending chemicals (or for rinsing out the process lines associated with these functions) in the pharmaceutical manufacturing (NAICS 325412), basic organic chemical manufacturing (NAICS 325199), plastics and resins manufacturing (NAICS 325211), and/or the paints and coatings manufacturing sectors (NAICS 325510).
- (iii) The hazardous secondary material generator sends the hazardous secondary material spent solvents listed in 335-14-2-.01(4)(a)27.(i) of this section to a remanufacturer in the pharmaceutical manufacturing (NAICS 325412), basic organic chemical manufacturing (NAICS 325199), plastics and resins manufacturing (NAICS 325211), and/or the paints and coatings manufacturing sectors (NAICS 325510).
- (iv) After remanufacturing one or more of the solvents listed in 335-14-2-.01(4)(a)27.(i) of this section, the use of the remanufactured solvent shall be limited to reacting, extracting, purifying, or blending chemicals (or for rinsing out the process lines associated with these functions) in the pharmaceutical manufacturing (NAICS 325412), basic organic chemical manufacturing (NAICS 325199), plastics and resins manufacturing (NAICS 325211), and the paints and coatings manufacturing sectors (NAICS 325510) or to using them as ingredients in a product. These allowed uses correspond to chemical functional uses enumerated under the Chemical Data Reporting Rule of the Toxic Substances Control Act (40 CFR Parts 704, 710–711), including Industrial Function Codes U015 (solvents consumed in a reaction to produce other chemicals) and U030 (solvents become part of the mixture);
- (v) After remanufacturing one or more of the solvents listed in 335-14-2-.01(4)(a)27.(i) of this section, the use of the remanufactured solvent does not involve cleaning or degreasing oil, grease, or similar material from textiles, glassware, metal surfaces, or other articles. (These disallowed continuing uses correspond to chemical functional uses in Industrial Function Code U029 under the Chemical Data Reporting Rule of the Toxics Substances Control Act.); and
- (vi) Both the hazardous secondary material generator and the remanufacturer must:
- (I) Notify the Director and update the notification annually in accordance with 335-14-1-.03(22);
- (II) Develop and maintain an up-to-date remanufacturing plan which identifies:
  - I. The name, address and EPA ID number of the generator(s) and the remanufacturer(s),

- II. The types and estimated annual volumes of spent solvents to be remanufactured,
- III. The processes and industry sectors that generate the spent solvents,
- IV. The specific uses and industry sectors for the remanufactured solvents, and
- V. A certification from the remanufacturer stating "on behalf of [insert remanufacturer facility name], I certify that this facility is a remanufacturer under pharmaceutical manufacturing (NAICS 325412), basic organic chemical manufacturing (NAICS 325199), plastics and resins manufacturing (NAICS 325211), and/or the paints and coatings manufacturing sectors (NAICS 325510), and will accept the spent solvent(s) for the sole purpose of remanufacturing into commercial-grade solvent(s) that will be used for reacting, extracting, purifying, or blending chemicals (or for rinsing out the process lines associated with these functions) or for use as product ingredient(s). I also certify that the remanufacturing equipment, vents, and tanks are equipped with and are operating air emission controls in compliance with the appropriate Clean Air Act regulations under 40 CFR part 60, part 61 or part 63, or, absent such Clean Air Act standards for the particular operation or piece of equipment covered by the remanufacturing exclusion, are in compliance with the appropriate standards in 335-14-6-.27 (vents), 335-14-6-.28 (equipment) and 335-14-6-.29 (tank storage)";
- (III) Maintain records of shipments and confirmations of receipts for a period of three years from the dates of the shipments;
- (IV) Prior to remanufacturing, store the hazardous spent solvents in tanks or containers that meet technical standards found in 335-14-2-.09 and 335-14-2-.10, with the tanks and containers being labeled or otherwise having an immediately available record of the material being stored;
- (V) During remanufacturing, and during storage of the hazardous secondary materials prior to remanufacturing, the remanufacturer certifies that the remanufacturing equipment, vents, and tanks are equipped with and are operating air emission controls in compliance with the appropriate Clean Air Act regulations under 40 CFR part 60, part 61 or part 63; or, absent such Clean Air Act standards for the particular operation or piece of equipment covered by the remanufacturing exclusion, are in compliance with the appropriate standards in 335-14-6-.27 (vents), 335-14-6-.28 (equipment) and 335-14-6-.29 (tank storage); and
- (VI) Ensure that no hazardous secondary materials are speculatively accumulated.
- (b) "Solid wastes which are not hazardous wastes". The following solid wastes are not hazardous wastes:
- 1. Household waste, including household waste that has been collected, transported, stored, treated, disposed, recovered (e.g., refuse-derived fuel), or reused. "Household waste" means any material (including garbage, trash, and sanitary

wastes in septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas). A resource recovery facility managing municipal solid waste shall not be deemed to be treating, storing, disposing of, or otherwise managing hazardous waste for the purposes of regulation under 335-14-2-.01, if:

- (i) Such facility receives and burns only:
- (I) Household waste (from single and multiple dwellings, hotels, motels, and other residential sources); and
- (II) Solid waste from commercial or industrial sources that does not contain hazardous waste.
- (ii) Such facility does not accept hazardous wastes and the owner or operator of such facility has established contractual requirements or other appropriate notification or inspection procedures to assure that hazardous wastes are not received at or burned in such facility.
- 2. Solid wastes generated by the following and which are returned to the soils as fertilizers:
  - (i) The growing and harvesting of agricultural crops;
  - (ii) The raising of animals, including animal manures.
  - 3. Mining overburden returned to the mine site.
- 4. Fly ash waste, bottom ash waste, slag waste, and flue gas emission control waste generated primarily from the combustion of coal or other fossil fuels, except as provided by 335-14-7-.08(13) for facilities that burn or process hazardous waste.
- 5. Drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil, natural gas, or geothermal energy;
- 6.(i) Wastes which fail the test for the characteristic of toxicity because chromium is present or are listed in 335-14-2-.04 due to the presence of chromium, which do not fail the test for the characteristic of toxicity for any other constituent or are not listed due to the presence of any other constituent, and which do not fail the test for any other characteristic, if it is shown by a waste generator or by waste generators that:
  - (I) The chromium in the waste is exclusively (or nearly exclusively) trivalent chromium; and

- (II) The waste is generated from an industrial process which uses trivalent chromium exclusively (or nearly exclusively) and the process does not generate hexavalent chromium; and
- (III) The waste is typically and frequently managed in non-oxidizing environments.
- (ii) Specific wastes which meet the standard in 335-14-2-.01(4)(b)6.(i)(I) through (III) (so long as they do not fail the test for the toxicity characteristic for any other constituent, and do not exhibit any other characteristic) are:
- (I) Chrome (blue) trimmings generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.
- (II) Chrome (blue) shavings generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.
- (III) Buffing dust generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.
- (IV) Sewer screenings generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.
- (V) Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.
- (VI) Waste scrap leather from the leather tanning industry, the shoe manufacturing industry and other leather product manufacturing industries.
- (VII) Wastewater treatment sludges from the production of TiO<sub>2</sub> pigment using chromium-bearing ores by the chloride process.
- (iii) For waste meeting the criteria described in 335-14-2-.01(4)(b)6.(i) but not specifically listed in 335-14-2-.01(4)(b)6.(ii), the generator may petition the Department in accordance with 335-14-1-.03(2)(f) to have the waste excluded from regulation as a hazardous waste.
- 7. Solid waste from the extraction, beneficiation, and processing of ores and minerals (including coal, phosphate rock and overburden from the mining of

uranium ore), except as provided by 335-14-7-.08(13) for facilities that burn or process hazardous waste.

- (i) For the purposes of 335-14-2-.01(4)(b)7., beneficiation of ores and minerals is restricted to the following activities: crushing; grinding; washing; dissolution; crystallization; filtration; sorting; sizing; drying; sintering; pelletizing; briquetting; calcining to remove water and/or carbon dioxide; roasting, autoclaving, and/or chlorination in preparation for leaching (except where the roasting (and/or autoclaving and/or chlorination)/leaching sequence produces a final or intermediate product that does not undergo further beneficiation or processing); gravity concentration; magnetic separation; electrostatic separation; flotation; ion exchange; solvent extraction; electrowinning; precipitation; amalgamation; and heap, dump, vat, tank, and in-situ leaching.
- (ii) For the purposes of 335-14-2-.01(4)(b)7., solid waste from the processing of ores and minerals includes only the following wastes as generated:
  - (I) Slag from primary copper processing;
  - (II) Slag from primary lead processing;
  - (III) Red and brown muds from bauxite refining;
  - (IV) Phosphogypsum from phosphoric acid production;
  - (V) Slag from elemental phosphorus production;
  - (VI) Gasifier ash from coal gasification;
  - (VII) Process wastewater from coal gasification;
- (VIII) Calcium sulfate wastewater treatment plant sludge from primary copper processing;
  - (IX) Slag tailings from primary copper processing;
  - (X) Fluorogypsum from hydrofluoric acid production;
  - (XI) Process wastewater from hydrofluoric acid production;
  - (XII) Air pollution control dust/sludge from iron blast furnaces;
  - (XIII) Iron blast furnace slag;
  - (XIV) Treated residue from roasting/leaching of chrome ore;
- (XV) Process wastewater from primary magnesium processing by the anhydrous process;
  - (XVI) Process wastewater from phosphoric acid production;

- (XVII) Basic oxygen furnace and open hearth furnace air pollution control dust/sludge from carbon steel production;
- (XVIII) Basic oxygen furnace and open hearth furnace slag from carbon steel production;
- (XIX) Chloride process waste solids from titanium tetrachloride production;
  - (XX) Slag from primary zinc processing.
- (iii) A residue derived from co-processing mineral processing secondary materials with normal beneficiation raw materials or with normal mineral processing raw materials remains excluded under 335-14-2-.01(4)(b) if the owner or operator:
- (I) Processes at least 50 percent by weight normal beneficiation raw materials or normal mineral processing raw materials; and,
  - (II) Legitimately reclaims the secondary mineral processing materials.
- 8. Cement kiln dust waste, except as provided by 335-14-7-.08(13) for facilities that burn or process hazardous waste.
- 9. Solid waste which consists of discarded arsenical-treated wood or wood products which fails the test for the Characteristic of Toxicity for Hazardous Waste Codes D004 through D017 and which is not a hazardous waste for any other reason or reasons, if the waste is generated by persons who utilize the arsenical-treated wood and wood products for these materials' intended end use.
- 10. Petroleum-contaminated media and debris that fail the test for the Characteristic of Toxicity of 335-14-2-.03(5) (Hazardous Waste Codes D018 through D043 only) and are subject to the corrective action regulations under Part 280 of 40 CFR.
- 11. Injected groundwater that is hazardous only because it exhibits the Toxicity Characteristic (Hazardous Waste Codes D018 through D043 only) in 335-14-2-.03(5) that is reinjected through an underground injection well pursuant to free phase hydrocarbon recovery operations undertaken at petroleum refineries, petroleum marketing terminals, petroleum bulk plants, petroleum pipelines, and petroleum transportation spill sites until January 25, 1993. This extension applies to recovery operations in existence, or for which contracts have been issued, on or before March 25, 1991. For groundwater returned through infiltration galleries from such operations at petroleum refineries, marketing terminals, and bulk plants, until October 2, 1991. New operations involving injection wells (beginning after March 25, 1991) will qualify for this compliance date extension (until January 25, 1993) only if:
  - (i) Operations are performed pursuant to a written State of Alabama agreement that includes a provision to assess the groundwater and

the need for further remediation once the free phase recovery is completed; and

- (ii) A copy of the written agreement has been submitted to: Waste Identification Branch (5304), U.S. Environmental Protection Agency, 1200 Pennsylvania Ave. NW., Washington, DC 20460.
- 12. Used chlorofluorocarbon refrigerants from totally enclosed heat transfer equipment, including mobile air conditioning systems, mobile refrigeration, and commercial and industrial air conditioning and refrigeration systems that use chlorofluorocarbons as the heat transfer fluid in a refrigeration cycle, provided the refrigerant is reclaimed for further use.
- 13. Non-terne plated used oil filters that are not mixed with wastes listed in 335-14-2-.04 if these oil filters have been gravity hot-drained using one of the following methods:
- (i) Puncturing the filter anti-drain back valve or the filter dome end and hot-draining;
  - (ii) Hot-draining and crushing;
  - (iii) Dismantling and hot-draining; or
- (iv) Any other equivalent hot-draining method which will remove the free-flowing used oil.
- 14. Used oil re-refining distillation bottoms that are used as feedstock to manufacture asphalt products.
- 15. Leachate or gas condensate collected from landfills where certain solid wastes have been disposed, provided that:
- (i) The solid wastes disposed would meet one or more of the listing descriptions for Hazardous Waste Codes K169, K170, K171, K172, K174, K175, K176, K177, K178, and K181, if these wastes had been generated after the effective date of the listing;
- (ii) The solid wastes described in 335-14-2-.01(4)(b)15.(i) of this section were disposed prior to the effective date of the listing;
- (iii) The leachate or gas condensate does not exhibit any characteristic of hazardous waste nor are derived from any other listed hazardous waste;
- (iv) Discharge of the leachate or gas condensate, including leachate or gas condensate transferred from the landfill to a POTW by truck, rail, or dedicated pipe, is subject to regulation under sections 307(b) or 402 of the Clean Water Act.
- (v) After February 13, 2001, leachate or gas condensate derived from K169-K172 will no longer be exempt if it is stored or managed in a surface impoundment

prior to discharge. After February 26, 2007, leachate or gas condensate derived from K181 will no longer be exempt if it is stored or managed in a surface impoundment prior to discharge. After November 21, 2003, leachate or gas condensate derived from K176, K177, and K178 will no longer be exempt if it is stored or managed in a surface impoundment prior to discharge. There is one exception: if the surface impoundment is used to temporarily store leachate or gas condensate in response to an emergency situation (e.g., shutdown of wastewater treatment system), provided the impoundment has a double liner, and provided the leachate or gas condensate is removed from the impoundment and continues to be managed in compliance with the conditions of 335-14-2-.01(4)(b)15.(v) after the emergency ends.

### 16. [Reserved].

### 17. [Reserved].

- 18. Solvent-contaminated disposable wipes, except for wipes that are hazardous waste due to the presence of trichloroethylene, that are sent for disposal are not hazardous wastes from the point of generation provided that:
- (i) The solvent-contaminated wipes, when accumulated, stored, and transported, are contained in non-leaking, closed containers that are labeled "Excluded Solvent-Contaminated Wipes." The containers must be able to contain free liquids, should free liquids occur. During accumulation, a container should be closed in accordance with 335-14-1-.02, except when necessary to add or remove solvent contaminated wipes;
- (ii) The solvent-contaminated wipes may be accumulated by the generator for up to 180 days from the start date of accumulation for each container prior to being sent for disposal;
- (iii) At the point of being transported for disposal, the solvent-contaminated wipes must contain no free liquids as defined in 335-14-1-.02;
- (iv) Free liquids removed from the solvent-contaminated wipes or from the container holding the wipes must be managed according to the applicable regulations found in 335-14-1 through 335-14-9;
- (v) Generators must maintain at their site the following documentation:
- (I) Name and address of the landfill or combustor that is receiving the solvent-contaminated wipes;
- (II) Documentation that the 180 day accumulation time limit in accordance with 335-14-2-.01(4)(b)18.(ii) is being met;
- (III) Description of the process the generator is using to ensure solvent-contaminated wipes contain no free liquids at the point of being transported for disposal;

- (IV) The generator must maintain in their onsite records, Documentation that verifies that "no free liquids" were present in the container, prior to shipment. These records must be kept for at least three years from the date of shipment. At a minimum, these records must include the date and time of the verification, the name of the person verifying and a notation of the volume of free liquids removed from the container, if present.
  - (vi) The solvent-contaminated wipes are sent for disposal:
- (I) To a municipal solid waste landfill regulated under Division 335-13 rules including 335-13-4-.11 and meets the municipal solid waste landfill standards of 40 CFR 258, or to a hazardous waste landfill regulated under 335-14-5, 335-14-6, and 335-14-8; or
- (II) To a municipal waste combustor or other combustion facility regulated under section 129 of the Clean Air Act or to a hazardous waste combustor, boiler, or industrial furnace regulated under 335-14-5, 335-14-6, and 335-14-7.
- (c) "Hazardous wastes which are exempted from certain regulations". A hazardous waste which is generated in a product or raw material storage tank, a product or raw material transport vehicle or vessel, a product or raw material pipeline, or in a manufacturing process unit or an associated unit, is not subject to regulation under 335-14-3 through 335-14-6, 335-14-8, 335-14-9 or to the notification requirements of Section 3010 of RCRA until it exits the unit in which it was generated, unless the unit is a surface impoundment, or unless the hazardous waste remains in the unit more than 90 days after the unit ceases to be operated for manufacturing, or for storage or transportation of product or raw materials.

# (d) <u>Samples</u>.

- 1. Except as provided in 335-14-2-.01(4)(d)2., a sample of solid waste or a sample of water, tested to determine its characteristics or composition, is not subject to any requirements of 335-14-2 or 335-14-3 through 335-14-9 or to the notification requirements of Section 3010 of RCRA, when:
- (i) The sample is being transported to a laboratory for the purpose of testing; or
- (ii) The sample is being transported back to the sample collector after testing; or
- (iii) The sample is being stored by the sample collector before transport to a laboratory for testing; or
  - (iv) The sample is being stored in a laboratory before testing; or
- (v) The sample is being stored in a laboratory after testing but before it is returned to the sample collector; or

- (vi) The sample is being stored temporarily in the laboratory after testing for a specific purpose (for example, until conclusion of a court case or enforcement action where further testing of the sample may be necessary).
- 2. In order to qualify for the exemption in 335-14-2-.01(4)(d)1.(i) and (ii), a sample collector shipping samples to a laboratory and a laboratory returning samples to a sample collector must:
- (i) Comply with United States Department of Transportation (DOT), United States Postal Service (USPS), or any other applicable shipping requirements; or
- (ii) Comply with the following requirements if the sample collector determines that DOT, USPS, or other shipping requirements do not apply to the shipment of the sample:
  - (I) Assure that the following information accompanies the sample:
- I. The sample collector's name, mailing address, and telephone number;
  - II. The laboratory's name, mailing address, and telephone number;
  - III. The quantity of the sample;
  - IV. The date of shipment; and
  - V. A description of the sample; and
- (II) Package the sample so that it does not leak, spill, or vaporize from its packaging.
- 3. This exemption does not apply if the laboratory determines that the waste is hazardous but the laboratory is no longer meeting any of the conditions stated in 335-14-2-.01(4)(d)1.
  - (e) "Treatability Study Samples".
- 1. Except as provided in 335-14-2-.01(4)(e)2., persons who generate or collect samples for the purpose of conducting treatability studies as defined in 335-14-1-.02(1), are not subject to any requirement of 335-14-2 through 335-14-4 or to the notification requirements of Section 3010 of RCRA, nor are such samples included in the quantity determinations of 335-14-3-.01(3) when:
- (i) The sample is being collected and prepared for transportation by the generator or sample collector; or
- (ii) The sample is being accumulated or stored by the generator or sample collector prior to transportation to a laboratory or testing facility; or

- (iii) The sample is being transported to the laboratory or testing facility for the purpose of conducting a treatability study.
- 2. The exemption in 335-14-2-.01(4)(e)1. is applicable to samples of hazardous waste being collected and shipped for the purpose of conducting treatability studies provided that:
- (i) The generator or sample collector uses (in "treatability studies") no more than 10,000 kg of media contaminated with non-acute hazardous waste, 1000 kg of non-acute hazardous waste other than contaminated media, 1 kg of acute hazardous waste, or 2500 kg of media contaminated with acute hazardous waste for each process being evaluated for each generated waste stream; and
- (ii) The mass of each sample shipment does not exceed 10,000 kg; the 10,000 kg quantity may be all media contaminated with non-acute hazardous waste, or may include 2500 kg of media contaminated with acute hazardous waste, 1000 kg of hazardous waste, and 1 kg of acute hazardous waste; and
- (iii) The sample must be packaged so that it will not leak, spill, or vaporize from its packaging during shipment and the requirements of 335-14-2-.01(4)(e)2.(iii)(I) or (II) are met.
- (I) The transportation of each sample shipment complies with U.S. Department of Transportation (DOT), U.S. Postal Service (USPS), or any other applicable shipping requirements; or
- (II) If the DOT, USPS, or other shipping requirements do not apply to the shipment of the sample, the following information must accompany the sample:
- I. The name, mailing address, and telephone number of the originator of the sample;
- II. The name, address, and telephone number of the facility that will perform the treatability study;
  - III. The quantity of the sample;
  - IV. The date of shipment; and
- V. A description of the sample, including its EPA Hazardous Waste Number.
- (iv) The sample is shipped to a laboratory or testing facility which is exempt under 335-14-2-.01(4)(f) or has an appropriate RCRA permit or interim status.
- (v) The generator or sample collector maintains the following records for a period ending 3 years after completion of the treatability study:
  - (I) Copies of the shipping documents;

- (II) A copy of the contract with the facility conducting the treatability study;
- (III) Documentation showing:
- I. The amount of waste shipped under this exemption;
- II. The name, address, and EPA identification number of the laboratory or testing facility that received the waste;
  - III. The date the shipment was made; and
- IV. Whether or not unused samples and residues were returned to the generator.
- (vi) The generator reports the information required under 335-14-2-.01(4)(e)2.(v)(III) in its biennial report.
- 3. The Department may grant requests on a case-by-case basis for up to an additional two years for treatability studies involving bioremediation. The Department may grant requests on a case-by-case basis for quantity limits in excess of those specified in 335-14-2-.01(4)(e)2.(i) and (ii) and 335-14-2-.01(4)(f)4., for up to an additional 5000 kg of media contaminated with non-acute hazardous waste, 500 kg of non-acute hazardous waste, 2500 kg of media contaminated with acute hazardous waste and 1 kg of acute hazardous waste:
- (i) In response to requests for authorization to ship, store and conduct treatability studies on additional quantities in advance of commencing treatability studies. Factors to be considered in reviewing such requests include the nature of the technology, the type of process (e.g., batch versus continuous), size of unit undergoing testing (particularly in relation to scale-up considerations), the time/quantity of material required to reach steady state operating conditions, or test design considerations such as mass balance calculations.
- (ii) In response to requests for authorization to ship, store and conduct treatability studies on additional quantities after initiation or completion of initial treatability studies, when: There has been an equipment or mechanical failure during the conduct of a treatability study; there is a need to verify the results of a previously conducted treatability study; there is a need to study and analyze alternative techniques within a previously evaluated treatment process; or there is a need to do further evaluation of an ongoing treatability study to determine final specifications for treatment.
- (iii) The additional quantities and timeframes allowed in 335-14-2-.01(4)(e)3.(i) and (ii) are subject to all the provisions in 335-14-2-.01(4)(e)1. and 2.(iii) through (vi). The generator or sample collector must apply to the Department and provide in writing the following information:

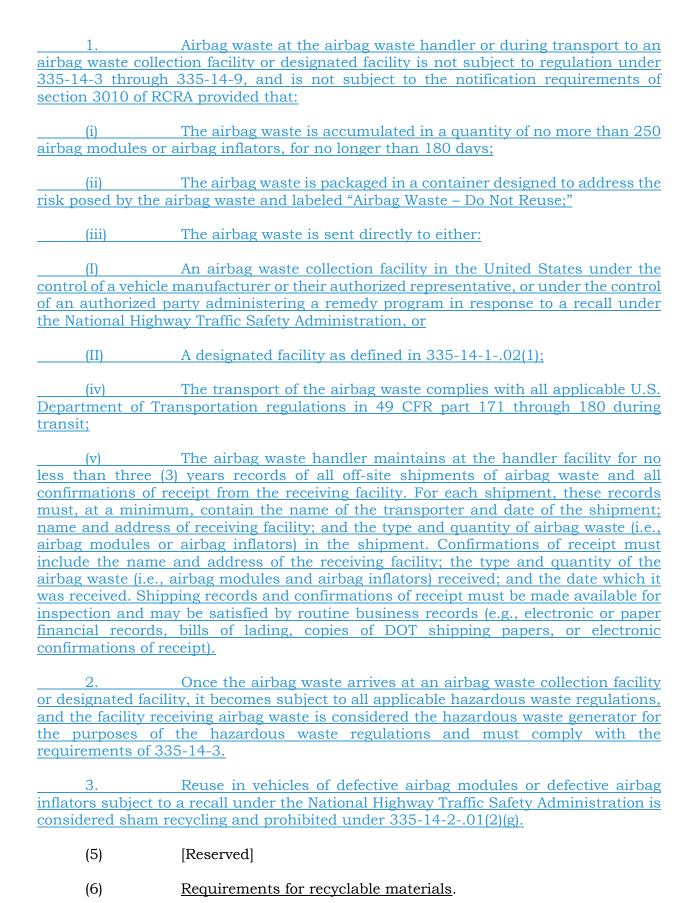
- (I) The reason why the generator or sample collector requires additional time or quantity of sample for the treatability study evaluation and the additional quantity needed;
- (II) Documentation accounting for all samples of hazardous waste from the waste stream which have been sent for or undergone treatability studies including the date each previous sample from the waste stream was shipped, the quantity of each previous shipment, the laboratory or testing facility to which it was shipped, what treatability study processes were conducted on each sample shipped, and the available results of each treatability study;
- (III) A description of the technical modifications or change in specifications which will be evaluated and the expected results;
- (IV) If such further study is being required due to equipment or mechanical failure, the applicant must include information regarding the reason for the failure or breakdown and also include what procedures or equipment improvements have been made to protect against further breakdowns; and
  - (V) Such other information that the Department considers necessary.
- (f) Samples Undergoing Treatability Studies at Laboratories and Testing Facilities. Samples undergoing treatability studies and the laboratory or testing facility conducting such treatability studies (to the extent such facilities are not otherwise subject to AHWMMA or RCRA requirements) are not subject to any requirement of 335-14-2, and 335-14-3 through 335-14-9, or to the notification requirements of Section 3010 of RCRA provided that the conditions of 335-14-2-.01(4)(f)1. through 11. are met. A mobile treatment unit (MTU) may qualify as a testing facility subject to 335-14-2-.01(4)(f)1. through (f)11. Where a group of MTUs are located at the same site, the limitations specified in 335-14-2-.01(4)(f)1. through 11. apply to the entire group of MTUs collectively as if the group were one MTU.
- 1. No less than 45 days before conducting treatability studies, the facility notifies the State Director in writing that it intends to conduct treatability studies under 335-14-2-.01(4)(f).
- 2. The laboratory or testing facility conducting the treatability study has an EPA identification number.
- 3. No more than a total of 10,000 kg of "as received" media contaminated with non-acute hazardous waste, 2500 kg of media contaminated with acute hazardous waste or 250 kg of other "as received" hazardous waste is subjected to initiation of treatment in all treatability studies in any single day. "As received" waste refers to the waste as received in the shipment from the generator or sample collector.
- 4. The quantity of "as received" hazardous waste stored at the facility for the purpose of evaluation in treatability studies does not exceed 10,000 kg, the total of which can include 10,000 kg of media contaminated with non-acute hazardous waste, 2500 kg of media contaminated with acute hazardous waste, 1000 kg of non-acute hazardous wastes other than contaminated media, and 1 kg of acute hazardous waste.

This quantity limitation does not include treatment materials (including nonhazardous solid waste) added to "as received" hazardous waste.

- 5. No more than 90 days have elapsed since the treatability study for the sample was completed, or no more than one year (two years for treatability studies involving bioremediation) has elapsed since the generator or sample collector shipped the sample to the laboratory or testing facility, whichever date first occurs. Up to 500 kg of treated material from a particular waste stream from treatability studies may be archived for future evaluation up to five years from the date of initial receipt. Quantities of materials archived are counted against the total storage limit for the facility.
- 6. The treatability study does not involve the placement of hazardous waste on the land or open burning of hazardous waste.
- 7. The facility maintains records for 3 years following completion of each study that show compliance with the treatment rate limits and the storage time and quantity limits. The following specific information must be included for each treatability study conducted:
- (i) The name, address, and EPA identification number of the generator or sample collector of each waste sample;
  - (ii) The date the shipment was received;
  - (iii) The quantity of waste accepted;
  - (iv) The quantity of "as received" waste in storage each day;
- (v) The date the treatment study was initiated and the amount of "as received" waste introduced to treatment each day;
  - (vi) The date the treatability study was concluded;
- (vii) The date any unused sample or residues generated from the treatability study were returned to the generator or sample collector or, if sent to a designated facility, the name of the facility and the EPA identification number.
- 8. The facility keeps, on-site, a copy of the treatability study contract and all shipping papers associated with the transport of treatability study samples to and from the facility for a period ending 3 years from the completion date of each treatability study.
- 9. The facility prepares and submits a report to the Director by March 15 of each <u>year</u>, that includes the following information for the previous calendar year:
- (i) The name, address, and EPA identification number of the facility conducting the treatability studies;
  - (ii) The types (by process) of treatability studies conducted;

(ii)	The names and addresses of persons for whom studies have been conducted (including their EPA identification numbers);
(iv)	The total quantity of waste in storage each day;
(v)	The quantity and types of waste subjected to treatability studies;
(vi)	When each treatability study was conducted;
(vii) treatability study.	The final disposition of residues and unused sample from each
so, are subject to 33	The facility determines whether any unused sample or residues eatability study are hazardous waste under 335-14-201(3) and, if 35-14-2 through 335-14-9, unless the residues and unused samples sample originator under the 335-14-201(4)(e) exemption.
11. no longer planning	The facility notifies the State Director by letter when the facility is to conduct any treatability studies at the site.
Federal Water Polls Protection, Research	"Dredged material that is not a hazardous waste." Dredged material he requirements of a permit that has been issued under §404 of the lution Control Act (33 U.S.C. 1344) or section 103 of the Marine h, and Sanctuaries Act of 1972 (33 U.S.C. 1413) is not a hazardous 201(4)(g), the following definitions apply:
1. CFR 232.2;	The term "dredged material" has the same meaning as defined in 40
2.	The term "permit" means:
(i) approved State und 1344);	A permit issued by the U.S. Army Corps of Engineers (Corps) or an er section 404 of the Federal Water Pollution Control Act (33 U.S.C.
(ii) Protection, Researc	A permit issued by the Corps under section 103 of the Marine h, and Sanctuaries Act of 1972 (33 U.S.C. 1413); or
	In the case of Corps civil works projects, the administrative rmits referred to in 335-14-201(4)(g)2.(i) and (ii), as provided for in example, see 33 CFR 336.1, 336.2, and 337.6)
<u>(h)</u>	[Reserved]
(i)	[Reserved]

Airbag waste.



- (a)1. Hazardous wastes that are recycled are subject to the requirements for generators, transporters, and storage facilities of 335-14-2-.01(6)(b) and (c), except for the materials listed in 335-14-2-.01(6)(a)2. and (a)3. Hazardous wastes that are recycled will be known as "recyclable materials".
- 2. The following recyclable materials are not subject to the requirements of 335-14-2-.01(6) but are regulated under 335-14-7-.03 through 335-14-7-.14 and all applicable provisions of 335-14-8 and 335-14-9.
- (i) Recyclable materials used in a manner constituting disposal (335-14-7-.03);
- (ii) Hazardous wastes burned [the definition of which is incorporated by reference in rule 335-14-7-.08(1)] for energy recovery in boilers and industrial furnaces that are not regulated under 335-14-5-.15 and 335-14-6-.15 (335-14-7-.08);
- (iii) Recyclable materials from which precious metals are reclaimed (335-14-7-.06).
  - (iv) Spent lead-acid batteries that are being reclaimed (335-14-7-.07).
- 3. The following recyclable materials are not subject to regulation under 335-14-3 through 335-14-9, and are not subject to the notification requirements of Section 3010 of RCRA:
- (i) Industrial ethyl alcohol that is reclaimed except that exports and imports of such recyclable materials must comply with the requirements of 335-14-3-.09:
- (I) A person initiating a shipment for reclamation in a foreign country, and any intermediary arranging for the shipment, must comply with the requirements applicable to a primary exporter in 335-14-3-.05(4), 335-14-3-.05(7)(a)1. through 4., 6., and 335-14-3-.05(7)(b), and 335-14-3-.05(8), export such materials only upon consent of the receiving country and in conformance with the EPA Acknowledgment of Consent as defined in 335-14-1-.02, and provide a copy of the EPA Acknowledgment of Consent to the shipment to the transporter transporting the shipment for export;
- (II) Transporters transporting a shipment for export may not accept a shipment if he knows the shipment does not conform to the EPA Acknowledgment of Consent, must ensure that a copy of the EPA Acknowledgment of Consent accompanies the shipment and must ensure that it is delivered to the facility designated by the person initiating the shipment.
  - (ii) Scrap metal that is not excluded under 335-14-2-.01(4)(a)13.;
- (iii) Fuels produced from the refining of oil-bearing hazardous wastes along with normal process streams at a petroleum refining facility if such wastes result from normal petroleum refining, production, and transportation practices (this exemption does not apply to fuels produced from oil recovered from oil-bearing

hazardous waste, where such recovered oil is already excluded under 335-14-2-.01(4)(a)12.);

- (iv)(I) Hazardous waste fuel produced from oil-bearing hazardous wastes from petroleum refining, production, or transportation practices, or produced from oil reclaimed from such hazardous wastes, where such hazardous wastes are reintroduced into a process that does not use distillation or does not produce products from crude oil so long as the resulting fuel meets the used oil specification under 335-14-17-.02(2) and so long as no other hazardous wastes are used to produce the hazardous waste fuel;
- (II) Hazardous waste fuel produced from oil-bearing hazardous waste from petroleum refining production, and transportation practices, where such hazardous wastes are reintroduced into a refining process after a point at which contaminants are removed, so long as the fuel meets the used oil fuel specification under 335-14-17-.02(2); and
- (III) Oil reclaimed from oil-bearing hazardous wastes from petroleum refining, production, and transportation practices, which reclaimed oil is burned as a fuel without reintroduction to a refining process, so long as the reclaimed oil meets the used oil fuel specifications under 335-14-17-.02(2).
- 4. Used oil that is recycled and is also a hazardous waste solely because it exhibits a hazardous characteristic is not subject to the requirements of 335-14-1 through 335-14-7 and 335-14-9, but is regulated under 335-14-17. Used oil that is recycled includes any used oil which is reused, following its original use, for any purpose (including the purpose for which the oil was originally used). Such term includes, but is not limited to, oil which is re-refined, reclaimed, burned for energy recovery, or reprocessed.
- 5. Hazardous waste that is exported to or imported for the purpose of recovery is subject to the requirements of 335-14-3-.09.
- (b) Generators and transporters of recyclable materials are subject to the applicable requirements of 335-14-3 and 335-14-4 and the notification requirements under Section 3010 of RCRA, except as provided in 335-14-2-.01(6)(a).
- (c)1. Owners or operators of facilities that store recyclable materials before they are recycled are regulated under all applicable provisions of 335-14-5-.01 through 335-14-5-.12, 335-14-5-.27, 335-14-5-.28, 335-14-5-.29, 335-14-6-.01 through 335-14-6-.12, 335-14-6-.27, 335-14-6-.28, 335-14-6-.29, and under 335-14-7, 335-14-8 (except as provided in 335-14-8-.01(1)(c)3.(v)), 335-14-9, and the notification requirements under Section 3010 of RCRA, except as provided in 335-14-2-.01(6)(a). [The recycling process itself is exempt from regulation except as provided in 335-14-2-.01(6)(d).]
- 2. Owners or operators of facilities that recycle recyclable materials without storing them before they are recycled are subject to the following requirements, except as provided in 335-14-2-.01(6)(a):

- (i) Notification requirements for small and large quantity generators under 335-14-3-.01(8);
- (ii) 335-14-6-.05(2) and (3) (dealing with the use of the manifest and manifest discrepancies);
  - (iii) 335-14-2-.01(6)(d);
  - (iv) 334335-14-6-.05(6) (biennial reporting requirements).
- (d) Owners or operators of facilities subject to RCRA or AHWMMA permitting requirements with hazardous waste management units that recycle hazardous wastes are subject to the requirements of 335-14-5-.27, 335-14-5-.28, 335-14-6-.27, and 335-14-6-.28.
  - (7) Residues of hazardous waste in empty containers.
  - (a)1. Any hazardous waste remaining in either:
  - (i) An empty container or
- (ii) An inner liner removed from an empty container, as defined in 335-14-2-.01(7)(b), is not subject to regulation under 335-14-2 through 335-14-9 or to the notification requirements of Section 3010 of RCRA.
  - 2. Any hazardous waste in either:
  - (i) A container that is not empty or
- (ii) An inner liner removed from a container that is not empty, as defined in 335-14-2-.01(7)(b) is subject to regulation under 335-14-2 through 335-14-9 and to the notification requirements of Section 3010 of RCRA.
- 3. Residues removed from an empty container are solid wastes subject to the requirements of 335-14-3-.01(2).
- (b)1. A container or an inner liner removed from a container that has held any hazardous waste, except a waste that is a compressed gas or that is identified as an acute hazardous waste listed in 335-14-2-.04(2), or (4)(e) is empty if:
- (i) All wastes have been removed that can be removed using the practices commonly employed to remove materials from that type of container (e.g., pouring, pumping, and aspirating); and
- (ii) No more than 2.5 centimeters (one inch) of residue remain on the bottom of the container or inner liner; or
- (iii)(I) No more than 3 percent by weight of the total capacity of the container remains in the container or inner liner if the container is less than or equal to 119 gallons in size, or

- (II) No more than 0.3 percent by weight of the total capacity of the container remains in the container or inner liner if the container is greater than 119 gallons in size.
- 2. A container that has held a hazardous waste that is a compressed gas is empty when the pressure in the container approaches atmospheric.
- 3. A container or an inner liner removed from a container that has held an acute hazardous waste listed in 335-14-2-.04(2), or (4)(e) is empty if:
- (i) All visible residues have been removed and the container or inner liner has been triple rinsed using a solvent capable of removing the commercial chemical product or manufacturing chemical intermediate;
- (ii) The container or inner liner has been cleaned by another method that has been shown in the scientific literature, or by tests conducted by the generator, to achieve equivalent removal; or
- (iii) In the case of a container, the inner liner that prevented contact of the commercial chemical product or manufacturing chemical intermediate with the container, has been removed.
- (c) Containers of hazardous waste pharmaceuticals are subject to 335-14-7-.16(7) for determining when they are considered empty, in lieu of this section, except as provided by 335-14-7-.16(7)(c) and (d).
- (8) PCB wastes regulated under Toxic Substance Control Act. The disposal of PCB-containing dielectric fluid and electric equipment containing such fluid authorized for use and regulated under Part 761 of 40 CFR and that are hazardous only because they fail the test for the Toxicity Characteristic (Hazardous Waste Codes D018 through D043 only) are exempt, except for the provisions of Rules 335-14-5-.25 and 335-14-6-.21, from regulation under 335-14-2 through 335-14-6, and 335-14-9, Parts 270 and 124 of 40 CFR, and the notification requirements of Section 3010 of RCRA.
- (9) Requirements for Universal Waste. The wastes listed in 335-14-2-.01(9) are exempt from regulation under 335-14-3 through 335-14-9, except as specified in 335-14-11 and, therefore are not fully regulated as hazardous waste. The wastes listed in 335-14-2-.01(9) are subject to regulation under 335-14-11:
  - (a) Batteries as described in 335-14-11-.01(2);
  - (b) Pesticides as described in 335-14-11-.01(3);
- (c) Mercury-containing equipment as described in 335-14-11-.01(4); and
  - (d) Lamps as described in 335-14-11-.01(5).
  - (10) Residues of hazardous waste in empty tanks.

- (a) 335-14-2-.01(10) only applies to hazardous waste accumulated or stored in tanks. Tanks remain subject to applicable closure standards in 335-14-3, 335-14-5, and 335-14-6 for all hazardous waste numbers placed into the tank since it was last decontaminated, in accordance with 335-14-5-.07 or 335-14-6-.07.
- (b) A tank that has held any hazardous waste, except a waste that is a compressed gas or that is identified as an acute hazardous waste listed in 335-14-2-.04(2), (3), or (4)(e), is empty if:
- 1. All wastes have been removed that can be removed using the practices commonly employed to remove materials from that type of tank (e.g., draining, pumping, and aspirating);
- 2. No more than 0.3 percent by volume of the total capacity of the tank or 100 gallons, whichever is less, remains in the tank; and
- 3. The removal of waste in accordance with 335-14-2-.01(10)(b)1. and volume and percent of total capacity remaining in the tank in accordance with 335-14-2-.01(10)(b)2. has been certified with the date, time and name of the person making the certification.
- (c)1. Hazardous waste subsequently placed into a tank which has been emptied in accordance with 335-14-2-.01(10)(b) will be identified only by those hazardous waste numbers which are applicable to the waste prior to entering the tank. Any residue remaining in an empty tank system will not cause waste subsequently placed into the tank to be identified pursuant to 335-14-2-.01(3)(a)2.(iv). All hazardous waste numbers applicable to waste placed in the tank since it was last decontaminated will apply to the tank system upon closure.
- 2. Residues removed from an empty tank are solid wastes subject to the requirements of 335-14-3-.01(2).
- (d) Respondents in actions to enforce rules and regulations implementing the AHWMMA, who raise a claim that a tank or tank system was empty in accordance with 335-14-2-.01(10), must demonstrate compliance with 335-14-2-.01(10) by providing appropriate documentation.

[**Note:** Rule 335-14-2-.01(10) is only mandatory when a generator or owner/operator wishes to break the continuing chain of previous hazardous waste numbers. It is not required for demonstrating compliance with the accumulation time limits of Chapter 335-14-3.]

**Authors:** Stephen C. Maurer; Steven O. Jenkins; Michael B. Jones; Stephen A. Cobb; Ron Shell; Michael Champion; Amy P. Zachry; Lynn T. Roper; C. Edwin Johnston; Robert W. Barr; Bradley N. Curvin; Jonah Harris; Theresa A. Maines; Heather M. Jones; Clethes Stallworth; Metz P. Duites; Vernon H. Crockett; Linda J. Knickerbocker; Sonja B. Favors; Brent A. Watson

**Statutory Authority:** Code of Alabama 1975, §§ 22-30-10, 22-30-11, 22-30-14, 22-30-15, 22-30-16.

History: November 19, 1980.

Amended: Effective: April 9, 1986; Amended: Effective: September 29, 1986; Amended: Effective: February 15, 1988; Amended: Effective: August 24, 1989; Amended: Effective: December 6, 1990; Amended: Effective: January 25, 1992; Amended: Effective: January 1, 1993; Amended: Effective: January 5, 1995; Amended: Effective: April 28, 1995; Amended: Effective: January 12, 1996; Amended: Effective: March 8, 1996; Amended: Effective: March 28, 1997; Amended: Effective: March 27, 1998; Amended: Effective: April 2, 1999; Amended: Effective: March 31, 2000; Amended: Effective: April 13, 2001; Amended: Effective: March 15, 2002; Amended: Effective: April 17, 2003; Amended: Effective: May 27, 2004; Amended: Effective: March 31, 2005; Amended: Effective: April 4, 2006; Amended: Effective: April 3, 2007; Amended: Effective: March 30, 2010; Amended: Effective: March 30, 2011; Amended: Effective: April 3, 2012; Amended: Effective: March 31, 2015; Amended: Effective: April 8, 2016; Amended: Effective: March 31, 2017; Amended: Effective: April 6, 2018; Amended: Filed: February 19, 2019; Effective: April 5, 2019; Amended: Proposed: October 21, 2019.

# 335-14-2-.04 Lists of Hazardous Wastes.

- (1) General.
- (a) A solid waste is a hazardous waste if it is listed in 335-14-2-.04, unless it has been excluded from this list under 335-14-1-.03(2).
- (b) The Department will indicate its basis for listing the classes or types of wastes listed in 335-14-2-.04 by employing one or more of the following Hazard Codes:

Ignitable Waste	(I)
Corrosive Waste	(C)
Reactive Waste	(R)
Toxicity Characteristic Waste	(E)
Acute Hazardous Waste	(H)
Toxic Waste	(T)

335-14-2-Appendix VII identifies the constituent which caused the Department to list the waste as a Toxicity Characteristic Waste (E) or Toxic Waste (T) in 335-14-2-.04(2) and (3).

- (c) Each hazardous waste listed in 335-14-2-.04 is assigned an EPA or Alabama Hazardous Waste Number which precedes the name of the waste. This number must be used in complying with the notification requirements of Section 3010 of the RCRA and certain recordkeeping and reporting requirements under 335-14-3 through 335-14-6, 335-14-8, and 335-14-9.
- (d) The following hazardous wastes listed in 335-14-2-.04(2) are subject to the exclusion limits for acutely hazardous wastes established in 335-14-2-.01(5): EPA Hazardous Wastes Nos. F020, F021, F022, F023, F026, and F027.
  - (2) Hazardous wastes from non-specific sources.
- (a) The following solid wastes are listed hazardous waste from non-specific sources unless they are excluded under §260.20 of 40 CFR and ADEM Admin. Code Rule 335-14-1-.03(2) and listed in 335-14-2 Appendix IX.

Hazardous Waste Number	Hazardous Waste	Hazard Code
Generic:		
F001	The following spent halogenated solvents used in degreasing: tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, and chlorinated fluorocarbons; all spent solvent mixtures/blends used in degreasing containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(T)
F002	The following spent halogenated solvents: tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane, and 1,1,2-trichloroethane; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those listed in F001, F004, or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(T)
F003	The following spent non-halogenated solvents: xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol; all spent solvent mixtures/blends containing, before use, only the above spent non-halogenated solvents; and all spent solvent mixtures/blends containing, before use, one or more of the above non-halogenated solvents, and a total of ten percent or more (by volume) of one or more of those solvents listed in F001, F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(I)*
F004	The following spent non-halogenated solvents: cresols and cresylic acid, and nitrobenzene; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(T)
F005	The following spent non-halogenated solvents: toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2-ethoxyethanol, and 2-nitropropane; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002, or F004; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(I,T)
F006	Wastewater treatment sludges from electroplating operations except from the following processes: (1) sulfuric acid anodizing	(T)

Hazardous Waste Number	Hazardous Waste	Hazard Code
	of aluminum; (2) tin plating on carbon steel; (3) zinc plating	
	(segregated basis) on carbon steel; (4) aluminum or	
	zinc-aluminum plating on carbon steel; (5) cleaning/stripping	
	associated with tin, zinc and aluminum plating on carbon	
D007	steel; and (6) chemical etching and milling of aluminum.	(D, (T))
F007	Spent cyanide plating bath solutions from electroplating	(R,T)
F008	operations.  Plating bath residues from the bottom of plating baths from	(R,T)
1.000	electroplating operations where cyanides are used in the	(1X, 1)
	process.	
F009	Spent stripping and cleaning bath solutions from electroplating	(R,T)
1009	operations where cyanides are used in the process.	(1x, 1)
F010		(D T)
1.010	Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process.	(R,T)
EO 1 1	9 I	(D T)
F011	Spent cyanide solutions from salt bath pot cleaning from metal	(R,T)
EO10	heat treating operations.	(T)
F012	Quenching wastewater treatment sludges from metal heat	(T)
E010	treating operations where cyanides are used in the process.	(T)
F019	Wastewater treatment sludges from the chemical conversion	(T)
	coating of aluminum except from zirconium phosphating in	
	aluminum-can washing when such phosphating is an exclusive	
	conversion coating process. Wastewater treatment sludges	
	from the manufacturing of motor vehicles using a zinc	
	phosphating process will not be subject to this listing at the	
	point of generation if the wastes are not placed outside on the	
	land prior to shipment to a landfill for disposal and are either:	
	disposed in a Subtitle D municipal or industrial landfill unit	
	that is equipped with a single clay liner and is permitted,	
	licensed or otherwise authorized by the state; or disposed in a	
	landfill unit subject to, or otherwise meeting, the landfill	
	requirements in CFR § 258.40 and ADEM Administrative Code	
	Rule 335-14-514(2) or 335-14-614(2). For the purposes of	
	this listing, motor vehicle manufacturing as defined in	
	335-14-102 and 335-14-204(2)(b)4.(i) describes the	
	recordkeeping requirements for motor vehicle manufacturing	
FOOO	facilities.	(LI)
F020	Wastes (except wastewater and spent carbon from hydrogen	(H)
	chloride purification) from the production or manufacturing	
	use (as a reactant, chemical intermediate, or component in a	
	formulating process) of tri- or tetrachlorophenol, or of	
	intermediates used to produce their pesticide derivatives. (This	
	listing does not include wastes from the production of	
E001	Hexachlorophene from highly purified 2,4,5-trichlorophenol.)	/T T\
F021	Wastes (except wastewater and spent carbon from hydrogen	(H)
	chloride purification) from the production or manufacturing	
	use (as a reactant, chemical intermediate, or component in a	

Hazardous Waste Number	Hazardous Waste	Hazard Code
	formulating process) of pentachlorophenol, or of intermediates	
F022	used to produce its derivatives.  Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical intermediate, or component in a formulating	(H)
	process) of tetra-, penta-, or hexachlorobenzenes under	
F023	alkaline conditions.  Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on	(H)
F024	equipment previously used for the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- and tetrachlorophenols. (This listing does not include wastes from equipment used only for the production or use of Hexachlorophene from highly purified 2,4,5-trichlorophenol.) Process wastes, including but not limited to, distillation residues, heavy ends, tars, and reactor clean-out wastes from the production of certain chlorinated aliphatic hydrocarbons by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to, and including, five with varying amounts and positions of chlorine substitution. (This listing does not include wastewaters, wastewater treatment sludges, spent	(T)
F025	catalysts, and wastes listed in 335-14-204(2) or 335-14-204(3).) Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated	(T)
	aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.	
F026	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the manufacturing use (as a reactant, chemical intermediate or component in a formulating process) of tetra-, penta-, or hexachlorobenzene under alkaline conditions.	(H)
F027	Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. (This listing does not include formulations containing Hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component.)	(H)
F028	Residues resulting from the incineration or thermal treatment of soil contaminated with EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, and F027.	(T)

F032 Wastewaters (except those that have not come into contact with (T) process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations (except potentially cross-contaminated wastes that have had the F032 waste number deleted in accordance with 335-14-2-.04(6), or potentially cross-contaminated wastes that are otherwise currently regulated as hazardous wastes (i.e., F034 or F035), and where the generator does not resume or initiate use of chlorophenolic formulations). This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol. F034 Wastewaters (except those that have not come into contact with (T) process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use cresote formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol. F035 Wastewaters (except those that have not come into contact with (T) process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use inorganic preservatives, containing arsenic or chromium. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol. F037 Petroleum refinery primary oil/water/solids separation (T) sludge - Any sludge generated from the gravitational separation of oil/water/solids during the storage or treatment of process wastewaters and oil cooling wastewaters from petroleum refineries. Such sludges include, but are not limited to, those generated in oil/water/solid separators; tanks and impoundments; ditches and other conveyances; sumps; and stormwater units receiving dry weather flow. Sludges generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges generated in aggressive biological treatment units as defined in 335-14-2-.04(2)(b)2. (including sludges generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and K051 wastes are not included in this listing. This listing does include residuals generated from processing or recycling oil-bearing hazardous secondary materials excluded under 335-14-2-.01(4)(a)12.(i), if those residuals are to be disposed of.

F038 Petroleum refinery secondary (emulsified) oil/water/solids (T) separation sludge - Any sludge and/or float generated from the physical and/or chemical separation of oil/water/ solids in process wastewaters and oily cooling wastewaters from petroleum refineries. Such wastes include, but are not limited to, all sludges and floats generated in: induced air flotation (IAF) units, tanks and impoundments, and all sludges generated in dissolved air flotation (DAF) units. Sludges generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges and floats generated in aggressive biological treatment units as defined in 335-14-2-.04(2)(b)2. (including sludges and floats generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and F037, K048, and K051 wastes are not included in this listing. F039 Leachate (liquids that have percolated through land disposed (T) wastes) resulting from the disposal of more than one restricted waste classified as hazardous under 335-14-2-.04. (Leachate resulting from the disposal of one or more of the following EPA hazardous wastes and no other hazardous wastes retains its hazardous waste number(s): F020, F021, F022, F026, F027, and/or F028.)

- \* (I,T) should be used to specify mixtures that are ignitable and contain toxic constituents.
  - (b) Listing Specific Definitions:
- 1. For the purposes of the F037 and F038 listings, oil/water/solids is defined as oil and/or water and or/solids.
- 2.(i) For the purposes of the F037 and F038 listings, aggressive biological treatment units are defined as units which employ one of the following four treatment methods: activated sludge; trickling filter; rotating biological contactor for the continuous accelerated biological oxidation of wastewaters; or high-rate aeration. High-rate aeration is a system of surface impoundments or tanks in which intense mechanical aeration is used to completely mix the wastes and enhance biological activity, and
- (I) The unit employs a minimum of 6 hp per million gallons of treatment volume; and either
  - (II) The hydraulic retention time of the unit is no longer than 5 days; or
- (III) The hydraulic retention time is no longer than 30 days and the unit does not generate a sludge that is a hazardous waste by the Toxicity Characteristic;

- (ii) Generators and treatment, storage and disposal facilities have the burden of proving that their sludges are exempt from listings as F037 and F038 wastes under this definition. Generators and treatment, storage and disposal facilities must maintain, in their operating or other on-site records, documents and data sufficient to prove that:
- (I) The unit is an aggressive biological treatment unit as defined in 335-14-2-.04(2)(b); and
- (II) The sludges sought to be exempted from the definitions of F037 and/or F038 were actually generated in the aggressive biological treatment unit.
- 3.(i) For the purposes of the F037 listing, sludges are considered to be generated at the moment of deposition in the unit, where deposition is defined as at least a temporary cessation of lateral particle movement.
  - (ii) For the purposes of the F038 listing,
- (I) Sludges are considered to be generated at the moment of deposition in the unit, where deposition is defined as at least a temporary cessation of lateral particle movement, and
- (II) Floats are considered to be generated at the moment they are formed in the top of the unit.
- 4. For the purposes of the F019 listing, the following apply to wastewater treatment sludges from the manufacturing of motor vehicles using a zinc phosphating process.
- (i) Generators must maintain in their on-site records documentation and information sufficient to prove that the wastewater treatment sludges to be exempted from the F019 listing meet the conditions of the listing. These records must include: the volume of waste generated and disposed of off site; documentation showing when the waste volumes were generated and sent off site; the name and address of the receiving facility, and documentation confirming receipt of the waste by the receiving facility. Generators must maintain these documents on site for no less than three years. The retention period for the documentation is automatically extended during the course of any enforcement action or as requested by the Regional Administrator or ADEM.

### (3) Hazardous wastes from specific sources.

(a) The following solid wastes are listed hazardous wastes from specific sources unless they are excluded under §260.20 of 40 CFR and ADEM Admin. Code Rule 335-14-1-.03(2) and listed in 335-14-2-Appendix IX.

Hazardous Waste Number	Hazardous Waste	Hazard Code
Wood preser	vation:	
K001	Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or penta-chlorophenol.	(T)
Inorganic pig	gments:	
K002	Wastewater treatment sludge from the production of chrome yellow and orange pigments.	(T)
K003	Wastewater treatment sludge from the production of molybdate orange pigments.	(T)
K004	Wastewater treatment sludge from the production of zinc yellow	(T)
K005	pigments.  Wastewater treatment sludge from the production of chrome	(T)
K006	green pigments.  Wastewater treatment sludge from the production of chrome	(T)
K007	oxide green pigments (anhydrous and hydrated). Wastewater treatment sludge from the production of iron blue	(T)
K008	pigments.  Oven residue from the production of chrome oxide green pigments.	(T)
Organic cher		
K009	Distillation bottoms from the production of acetaldehyde from	(T)
K010	ethylene.  Distillation side cuts from the production of acetaldehyde from ethylene.	(T)
K011	Bottom stream from the wastewater stripper in the production of acrylonitrile.	(R,T)
K013	Bottom stream from the acetonitrile column in production of acrylonitrile.	(R,T)
K014	Bottoms from the acetonitrile purification column in the production of acrylonitrile.	(T)
K015	Still bottoms from the distillation of benzyl chloride.	(T)
K016	Heavy ends or distillation residues from the production of carbon tetrachloride.	(T)
K017	Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin.	(T)
K018	Heavy ends from the fractionation column in ethyl chloride production.	(T)
K019	Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production.	(T)
K020	Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production.	(T)
K021	Aqueous spent antimony catalyst waste from fluoromethanes production.	(T)

K022	Distillation bottom tars from the production of phenol/acetone	(T)
K023	from cumene.  Distillation light ends from the production of phthalic anhydride	(T)
K024	from naphthalene.  Distillation bottoms from the production of phthalic anhydride	(T)
	from naphthalene.	` ,
K025	Distillation bottoms from the production of nitrobenzene by the nitration of benzene.	(T)
K026	Stripping still tails from the production of methyl ethyl pyridines.	(T)
K027	Centrifuge and distillation residues from toluene diisocyanate production.	(R,T)
K028	Spent catalyst from the hydrochlorinator reactor in the	(T)
17000	production of 1,1,1-trichloroethane.	(/T)\
K029	Waste from the product steam stripper in the production of 1,1,1-trichloroethane.	(T)
K030	Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene.	(T)
K083	Distillation bottoms from aniline production.	(T)
K085	Distillation or fractionation column bottoms from the	(T)
	production of chlorobenzenes.	
K093	Distillation light ends from the production of phthalic anhydride	(T)
*****	from ortho-xylene.	(T)
K094	Distillation bottoms from the production of phthalic anhydride	(T)
K095	from ortho-xylene.  Distillation bottoms from the production of	(T)
K093	Distillation bottoms from the production of 1,1,1-trichloroethane.	(T)
K096	Heavy ends from the heavy ends column from the production of	(T)
11000	1,1,1-trichloroethane.	(1)
K103	Process residues from aniline extraction from the production of	(T)
	aniline.	(-)
K104	Combined wastewater streams generated from	(T)
	nitrobenzene/aniline production.	` ,
K105	Separated aqueous stream from the reactor product washing	(T)
	step in the production of chlorobenzenes.	
K107	Column bottoms from product separation from the production	(C,T)
	of 1,1-dimethylhydrazine (UDMH) from carboxylic acid	
771.00	hydrazides.	(T. (T))
K108	Condensed column overheads from product separation and	(I,T)
	condensed reactor vent gases from the production of	
	1-1-dimethylhydrazine (UDMH) from carboxylic acid	
V100	hydrazides.	(T)
K109	Spent filter cartridges from product purification from the production of 1,1-dimethyl-hydrazine (UDMH) from carboxylic	(T)
	acid hydrazides.	
K110	Condensed column overheads from intermediate separation	(T)
17110	from the production of 1,1-dimethylhydrazine (UDMH) from	( + )
	carboxylic acid hydrazides.	
	car boryine acia fryaraziaco.	

K111	Product washwaters from the production of dinitrotoluene via nitration of toluene.	(C,T)
K112	Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
K113	Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
K114	Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
K115	Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
K116	Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine.	(T)
K117	Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethene.	(T)
K118	Spent adsorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.	(T)
K136	Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.	(T)
K149	Distillation bottoms from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups, (This waste does not include still bottoms from the distillation of benzyl chloride.).	(T)
K150	Organic residuals, excluding spent carbon adsorbent, from the spent chlorine gas and hydrochloric acid recovery processes associated with the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.	(T)
K151	Wastewater treatment sludges, excluding neutralization and biological sludges, generated during the treatment of wastewaters from the production of alpha- (or methyl-) chlorinated toluenes, ring- chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.	(T)
K156	Organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.).	(T)

K157	Wastewaters (including scrubber waters, condenser waters, washwaters, and separation waters) from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.).	(T)
K158	Bag house dusts and filter/separation solids from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.).	(T)
K159 K161	Organics from the treatment of thiocarbamate wastes. Purification solids (including filtration, evaporation, and centrifugation solids), bag house dust and floor sweepings from the production of dithiocarbamate acids and their salts. (This	(T) (R,T)
K174	listing does not include K125 or K126.  Wastewater treatment sludges from the production of ethylene dichloride or vinyl chloride monomer (including sludges that result from commingled ethylene dichloride or vinyl chloride monomer wastewater and other wastewater), unless the sludges meet the following conditions: (i) they are disposed of in a subtitle C or nonhazardous landfill licensed or permitted by the State of Alabama or federal government; (ii) they are not otherwise placed on the land prior to final disposal; and (iii) the generator maintains documentation demonstrating that the waste was either disposed of in an on-site landfill or consigned to a transporter or disposal facility that provided a written commitment to dispose of the waste in an off-site landfill. Respondents in any action brought to enforce the requirements of Subtitle C must, upon a showing by the government that the respondent managed wastewater treatment sludges from the production of vinyl chloride monomer or ethylene dichloride, demonstrate that they meet the terms of the exclusion set forth above. In doing so, they must provide appropriate documentation (e.g., contracts between the generator and the landfill owner/operator, invoices documenting delivery of waste to landfill, etc.) that the terms of the exclusion were met.	(T)
K175	Wastewater treatment sludges from the production of vinyl chloride monomer using mercuric chloride catalyst in an acetylene-based process.	(T)
Inorganic c	hemicals:	
K071	Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used.	(T)
K073	Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production.	(T)
K106	Wastewater treatment sludge from the mercury cell process in chlorine production.	(T)

K176	Baghouse filters from the production of antimony oxide, including filters from the production of intermediates (e.g., antimony metal or crude antimony oxide).	(E)
K177	Slag from the production of antimony oxide that is speculatively accumulated or disposed, including slag from the production of intermediates (e.g., antimony metal or crude antimony oxide).	(T)
K178	Residues from manufacturing and manufacturing-site storage of ferric chloride from acids formed during the production of titanium dioxide using the chloride-ilemite process.	(T)
K181	Nonwastewaters from the production of dyes and/or pigments (including nonwastewaters commingled at the point of generation with nonwastewaters from other processes) that, at the point of generation, contain mass loadings of any of the constituents identified in 335-14-204(3)(c) of this section that are equal to or greater than the corresponding 335-14-204(3)(c) levels, as determined on a calendar year basis. These wastes will not be hazardous if the nonwastewaters are: (i) disposed in a Subtitle D landfill unit subject to the design criteria in 335-13-411, (ii) disposed in a Subtitle C landfill unit subject to either 335-14-514(2) or 335-14-614(2), (iii) disposed in other Subtitle D landfill units that meet the design criteria in 335-13-411, 335-14-514(2), or 335-14-614(2), or (iv) treated in a combustion unit that is permitted under Subtitle C, or an on-site combustion unit that is permitted under the Clean Air Act. For the purposes of this listing, dyes and/or pigments production is defined in 335-14-203(3)(b). 335-14-203(3)(d) describes the process for demonstrating that a facility's nonwastewaters are not K181. This listing does not apply to wastes that are otherwise identified as hazardous waste under 335-14-203(2) through 335-14-203(5) and 335-14-204(2) through 335-14-204(4) at the point of generation. Also, the listing does not apply to wastes generated before any annual mass loading limit is met.	(T)
Pesticides:		
K031	By-product salts generated in the production of MSMA and cacodylic acid.	(T)
K032	Wastewater treatment sludge from the production of chlordane.	(T)
K033	Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane.	(T)
K034	Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane.	(T)
K035	Wastewater treatment sludges generated in the production of creosote.	(T)
K036	Still bottoms from toluene reclamation distillation in the production of disulfoton.	(T)
K037	——————————————————————————————————————	(T)

disulfoton.

K038	Wastewater from the washing and stripping of phorate production.	(T)
K039	Filter cake from the filtration of diethylphosphorodithioic acid	(T)
K040	in the production of phorate.  Wastewater treatment sludge from the production of phorate.	(T)
K040 K041	Wastewater treatment sludge from the production of toxaphene.	(T)
K041 K042	Heavy ends or distillation residues from the distillation of	(T)
K0+2	tetrachlorobenzene in the production of 2,4,5-T.	(1)
K043	2,6-Dichlorophenol waste from the production of 2,4-D.	(T)
K097	Vacuum stripper discharge from the chlordane chlorinator in	(T)
	the production of chlordane.	( )
K098	Untreated process wastewater from the production of	(T)
	toxaphene.	( )
K099	Untreated wastewater from the production of 2,4-D.	(T)
K123	Process wastewater (including supernates, filtrates, and	(T)
	washwaters) from the production of ethylenebisdithiocarbamic	(-)
	acid and its salts.	
K124	Reactor vent scrubber water from the production of	(C, T)
1112	ethylenebisdithiocarbamic acid and its salts.	(0,1)
K125	Filtration, evaporation, and centrifugation solids from the	(T)
11120	production of ethylenebisdithiocarbamic acid and its salts.	(1)
K126	Baghouse dust and floor sweepings in milling and packaging	(T)
K120		(1)
	<u>.</u>	
V101	ethylenebisdithiocarbamic acid and its salts.	(C T)
K131	Wastewater from the reactor and spent sulfuric acid from the	(C,T)
V120	acid dryer from the production of methyl bromide.	(T)
K132	Spent absorbent and wastewater separator solids from the	(T)
D1:	production of methyl bromide.	
Explosives:	YY	(D)
K044	Wastewater treatment sludges from the manufacturing and	(R)
TZO 4 F	processing of explosives.	(D)
K045	Spent carbon from the treatment of wastewater containing	1121
	1 •	(R)
T70 4 6	explosives.	, ,
K046	Wastewater treatment sludges from the manufacturing,	(T)
	Wastewater treatment sludges from the manufacturing, formulation, and loading of lead-based initiating compounds.	(T)
K047	Wastewater treatment sludges from the manufacturing, formulation, and loading of lead-based initiating compounds. Pink/red water from TNT operations.	, ,
K047 Petroleum re	Wastewater treatment sludges from the manufacturing, formulation, and loading of lead-based initiating compounds.  Pink/red water from TNT operations.  efining:	(T) (R)
K047	Wastewater treatment sludges from the manufacturing, formulation, and loading of lead-based initiating compounds.  Pink/red water from TNT operations.  efining:  Dissolved air flotation (DAF) float from the petroleum refining	(T)
K047 Petroleum re K048	Wastewater treatment sludges from the manufacturing, formulation, and loading of lead-based initiating compounds.  Pink/red water from TNT operations.  efining:  Dissolved air flotation (DAF) float from the petroleum refining industry.	(T) (R)
K047 Petroleum re K048 K049	Wastewater treatment sludges from the manufacturing, formulation, and loading of lead-based initiating compounds.  Pink/red water from TNT operations.  efining:  Dissolved air flotation (DAF) float from the petroleum refining industry.  Slop oil emulsion solids from the petroleum refining industry.	(T) (R)
K047 Petroleum re K048	Wastewater treatment sludges from the manufacturing, formulation, and loading of lead-based initiating compounds.  Pink/red water from TNT operations.  efining:  Dissolved air flotation (DAF) float from the petroleum refining industry.  Slop oil emulsion solids from the petroleum refining industry.  Heat exchanger bundle cleaning sludge from the petroleum	(T) (R) (T)
K047 Petroleum re K048 K049	Wastewater treatment sludges from the manufacturing, formulation, and loading of lead-based initiating compounds.  Pink/red water from TNT operations.  efining:  Dissolved air flotation (DAF) float from the petroleum refining industry.  Slop oil emulsion solids from the petroleum refining industry.  Heat exchanger bundle cleaning sludge from the petroleum refining industry.	(T) (R) (T) (T)
K047 Petroleum re K048 K049	Wastewater treatment sludges from the manufacturing, formulation, and loading of lead-based initiating compounds.  Pink/red water from TNT operations.  efining:  Dissolved air flotation (DAF) float from the petroleum refining industry.  Slop oil emulsion solids from the petroleum refining industry.  Heat exchanger bundle cleaning sludge from the petroleum	(T) (R) (T) (T)
K047 Petroleum re K048 K049 K050	Wastewater treatment sludges from the manufacturing, formulation, and loading of lead-based initiating compounds.  Pink/red water from TNT operations.  efining:  Dissolved air flotation (DAF) float from the petroleum refining industry.  Slop oil emulsion solids from the petroleum refining industry.  Heat exchanger bundle cleaning sludge from the petroleum refining industry.	(T) (R) (T) (T) (T)
K047 Petroleum re K048  K049 K050	Wastewater treatment sludges from the manufacturing, formulation, and loading of lead-based initiating compounds.  Pink/red water from TNT operations.  efining:  Dissolved air flotation (DAF) float from the petroleum refining industry.  Slop oil emulsion solids from the petroleum refining industry.  Heat exchanger bundle cleaning sludge from the petroleum refining industry.  API separator sludge from the petroleum refining industry.	(T) (R) (T) (T) (T) (T)

K170	Clarified slurry oil tank sediment and/or in-line filter/separation solids from petroleum refining operations	(T)	
K171	Spent hydrotreating catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert	(I,T)	
K172	support media).  Spent hydrorefining catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert support media).	(I,T)	
Iron and Ste	el:		
K061	Emission control dust/sludge from the primary production of steel in electric furnaces.	(T)	
K062	Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel industry (SIC Codes 331 and 332).	(C,T)	
Primary alui	minum:		
K088	Spent potliners from primary aluminum reduction.	(T)	
Secondary le	ead:		
K069	Emission control dust/sludge from secondary lead smelting. <b>NOTE</b> : This listing does not include sludge generated from secondary acid scrubber systems provided the primary air pollution control system is properly operated and maintained.	(T)	
	Exempt sludge must be evaluated to determine if it exhibits a characteristic of a hazardous waste.		
K100	Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting.	(T)	
Veterinary p	harmaceuticals:		
K084	Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.	(T)	
K101	Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals	(T)	
K102	from arsenic or organo-arsenic compounds.  Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.	(T)	
	Ink formulation:		
K086	Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead.	(T)	
Coking:			
K060	Ammonia still lime sludge from coking operations.	(T)	
K087	Decanter tank tar sludge from coking operations.	(T)	

K141 Process residues from the recovery of coal tar, including, but (T) not limited to, collecting sump residues from the production of coke from coal or the recovery of coke by-products produced from coal. This listing does not include K087 (decanter tank tar sludges from coking operations). K142 Tar storage tank residues from the production of coke from coal (T) or from the recovery of coke by-products produced from coal. Process residues from the recovery of light oil, including, but (T) K143 not limited to, those generated in stills, decanters, and wash oil recovery units from the recovery of coke by-products produced from coal. K144 Wastewater sump residues from light oil refining, including, but (T) not limited to, intercepting or contamination sump sludges from the recovery of coke by-products produced from coal. K145 Residues from naphthalene collection and recovery operations (T) from the recovery of coke by-products produced from coal. K147 Tar storage tank residues from coal tar refining. (T) Residues from coal tar distillation, including but not limited to, K148 still bottoms.

### (b) Listing Specific Definitions:

1. For the purposes of the K181 listing, dyes and/or pigments production is defined to include manufacture of the following product classes: dyes, pigments, or FDA certified colors that are classified as azo, triarylmethane, perylene or anthraquinone classes. Azo products include azo, monoazo, diazo, triazo, polyazo, azoic, benzidine, and pyrazolone products. Triarylmethane products include both triarylmethane and triphenylmethane products. Wastes that are not generated at a dyes and/or pigments manufacturing site, such as wastes from the offsite use, formulation, and packaging of dyes and/or pigments, are not included in the K181 listing.

#### (c) K181 Listing Levels.

1. Nonwastewaters containing constituents in amounts equal to or exceeding the following levels during any calendar year are subject to the K181 listing, unless the conditions in the K181 listing are met.

Constituent	Chemical abstracts No.	Mass levels (kg/yr)
Aniline	62-53-3	9,300
o-Anisidine	90-04-0	110
4-Chloroaniline	106-47-8	4,800
p-Cresidine	120-71-8	660
2,4-Dimethylaniline	95-68-1	100
1,2-Phenylenediamine	95-54-5	710
1,3-Phenylenediamine	108-45-2	1,200

(d) <u>Procedures for demonstrating that dyes and/or pigment nonwastewaters are not K181</u>. The procedures described in sections

- 335-14-2-.04(3)(d)1-3 and 5 establish when nonwastewaters from the production of dyes/pigments would not be hazardous (these procedures apply to wastes that are not disposed in landfill units or treated in combustion units as specified in 335-14-2-.04(3)(a). If the nonwastewaters are disposed in landfill units or treated in combustion units as described in 335-14-2-.04(3)(a), then the nonwastewaters are not hazardous. In order to demonstrate that it is meeting the landfill disposal or combustion conditions contained in the K181 listing description, the generator must maintain documentation as described in 335-14-2-.04(3)(d)4.
- 1. <u>Determination based on no K181 constituents</u>. Generators that have knowledge (e.g., knowledge of constituents in wastes based on prior sampling and analysis data and/or information about raw materials used, production processes used, and reaction and degradation products formed) that their wastes contain none of the K181 constituents (see 335-14-2-.04(3)(c) of this section) can use their knowledge to determine that their waste is not K181. The generator must document the basis for all such determinations on an annual basis and keep each annual documentation for three years.
- 2. <u>Determination for generated quantities of 1,000 MT/yr or less for wastes that contain K181 constituents</u>. If the total annual quantity of dyes and/or pigment nonwastewaters generated is 1,000 metric tons or less, the generator can use knowledge of the wastes (e.g., knowledge of constituents in wastes based on prior analytical data and/or information about raw materials used, production processes used, and reaction and degradation products formed) to conclude that annual mass loadings for the K181 constituents are below the 335-14-2-.04(3)(c) listing levels. To make this determination, the generator must:
- (i) Each year document the basis for determining that the annual quantity of nonwastewaters expected to be generated will be less than 1,000 metric tons.
- (ii) Track the actual quantity of nonwastewaters generated from January 1 through December 31 of each year. If, at any time within the year, the actual waste quantity exceeds 1,000 metric tons, the generator must comply with the requirements of 335-14-2-.04(3)(d)3 for the remainder of the year.
- (iii) Keep a running total of the K181 constituent mass loadings over the course of the calendar year.
- (iv) Keep the following records on site for the three most recent calendar years in which the hazardous waste determinations are made:
  - (I) The quantity of dyes and/or pigment nonwastewaters generated.
  - (II) The relevant process information used.
- (III) The calculations performed to determine annual total mass loadings for each K181 constituent in the nonwastewaters during the year.
- 3. <u>Determination for generated quantities greater than 1,000 MT/yr for wastes that contain K181 constituents</u>. If the total annual quantity of dyes and/or

pigment nonwastewaters generated is greater than 1,000 metric tons, the generator must perform all of the steps described in 335-14-2-.04(3)(d)3(i)—) through 3(xi) in order to make a determination that its waste is not K181.

- (i) Determine which K181 constituents (see 335-14-2-.04(3)(c)) are reasonably expected to be present in the wastes based on knowledge of the wastes (e.g., based on prior sampling and analysis data and/or information about raw materials used, production processes used, and reaction and degradation products formed).
- (ii) If 1,2-phenylenediamine is present in the wastes, the generator can use either knowledge or sampling and analysis procedures to determine the level of this constituent in the wastes. For determinations based on use of knowledge, the generator must comply with the procedures for using knowledge described in 335-14-2-.04(3)(d)2 and keep the records described in 335-14-2-.04(3)(d)2 (iv). For determinations based on sampling and analysis, the generator must comply with the sampling and analysis and recordkeeping requirements described below.
- (iii) Develop a waste sampling and analysis plan (or modify an existing plan) to collect and analyze representative waste samples for the K181 constituents reasonably expected to be present in the wastes. At a minimum, the plan must include:
- (I) A discussion of the number of samples needed to characterize the wastes fully;
- (II) The planned sample collection method to obtain representative waste samples;
- (III) A discussion of how the sampling plan accounts for potential temporal and spatial variability of the wastes.
- (IV) A detailed description of the test methods to be used, including sample preparation, clean up (if necessary), and determinative methods.
- (iv) Collect and analyze samples in accordance with the waste sampling and analysis plan.
- (I) The sampling and analysis must be unbiased, precise, and representative of the wastes.
- (II) The analytical measurements must be sufficiently sensitive, accurate and precise to support any claim that the constituent mass loadings are below the listing levels of 335-14-2-.04(3)(c).
  - (v) Record the analytical results.
- (vi) Record the waste quantity represented by the sampling and analysis results.
- (vii) Calculate constituent-specific mass loadings (product of concentrations and waste quantity).

- (viii) Keep a running total of the K181 constituent mass loadings over the course of the calendar year.
- (ix) Determine whether the mass of any of the K181 constituents listed in 335-14-2-.04(3)(c) generated between January 1 and December 31 of any year is below the K181 listing levels.
- (x) Keep the following records on site for the three most recent calendar years in which the hazardous waste determinations are made:
  - (I) The sampling and analysis plan.
  - (II) The sampling and analysis results (including QA/QC data).
  - (III) The quantity of dyes and/or pigment nonwastewaters generated.
  - (IV) The calculations performed to determine annual mass loadings.
- (xi) Nonhazardous waste determinations must be conducted annually to verify that the wastes remain nonhazardous.
- (I) The annual testing requirements are suspended after three consecutive successful annual demonstrations that the wastes are nonhazardous. The generator can then use knowledge of the wastes to support subsequent annual determinations.
- (II) The annual testing requirements are reinstated if the manufacturing or waste treatment processes generating the wastes are significantly altered, resulting in an increase of the potential for the wastes to exceed the listing levels.
- (III) If the annual testing requirements are suspended, the generator must keep records of the process knowledge information used to support a nonhazardous determination. If testing is reinstated, a description of the process change must be retained.
- 4. Recordkeeping for the landfill disposal and combustion exemptions. For the purposes of meeting the landfill disposal and combustion condition set out in the K181 listing description, the generator must maintain on site for three years documentation demonstrating that each shipment of waste was received by a landfill unit that is subject to or meets the landfill design standards set out in the listing description, or was treated in combustion units as specified in the listing description.
- 5. <u>Waste holding and handling</u>. During the interim period, from the point of generation to completion of the hazardous waste determination, the generator is responsible for storing the wastes appropriately. If the wastes are determined to be hazardous and the generator has not complied with the 335-14 requirements during the interim period, the generator could be subject to an enforcement action for improper management.

- (4) <u>Discarded commercial chemical product, off-specification species, container residues, and spill residues thereof.</u> The following materials or items are hazardous wastes if and when they are discarded or intended to be discarded as described in 335-14-2-.01(2)(a)2., when they are mixed with waste oil or used oil or other material and applied to the land for dust suppression or road treatment, when they are otherwise applied to the land in lieu of their original intended use or when they are contained in products that are applied to the land in lieu of their original intended use, or when, in lieu of their original intended use, they are produced for use as (or as a component of) a fuel, distributed for use as a fuel, or burned as a fuel.
- (a) Any commercial chemical product, or manufacturing chemical intermediate having the generic name listed in 335-14-2-.04(4)(e) or (f).
- (b) Any off-specification commercial chemical product or manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in 335-14-2-.04(4)(e) or (f).
- (c) Any residue remaining in a container or in an inner liner removed from a container that has held any commercial chemical product or manufacturing chemical intermediate having the generic name listed in 335-14-2-.04(4)(e) or (f) unless the container is empty as defined in 335-14-2-.01(7)(b) or 335-14-7-.16(7).

[Comment: Unless the residue is being beneficially used or reused, or legitimately recycled or reclaimed; or being accumulated, stored, transported or treated prior to such use, re-use, recycling or reclamation, ADEM considers the residue to be intended for discard, and thus, a hazardous waste. An example of a legitimate re-use of the residue would be where the residue remains in the container and the container is used to hold the same commercial chemical product or manufacturing chemical intermediate it previously held. An example of the discard of the residue would be where the drum is sent to a drum reconditioner who reconditions the drum but discards the residue.]

(d) Any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill into or on any land or water of any commercial chemical product or manufacturing chemical intermediate having the generic name listed in 335-14-2-.04(4)(e) or (f), or any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill, into or on any land or water, of any off-specification chemical product and manufacturing chemical intermediate which, if it met specifications, would have the generic name listed in 335-14-2-.04(4)(e) or (f).

[Comment: The phrase "commercial chemical product or manufacturing chemical intermediate having the generic name listed in..." refers to a chemical substance which is manufactured or formulated for commercial or manufacturing use which consists of the commercially pure grade of the chemical, any technical grades of the chemical that are produced or marketed, and all formulations in which the chemical is the sole active ingredient. It does not refer to a material, such as a manufacturing process waste, that contains any of the substances listed in 335-14-2-.04(4)(e) or (f). Where a manufacturing process waste is deemed to be a hazardous waste because it contains a substance listed in 335-14-2-.04(4)(e) or (f), such waste will be listed in either 335-14-2-.04(2) or

335-14-2-.04(3), or will be identified as a hazardous waste by the characteristics set forth in 335-14-2-.03.]

(e) The commercial chemical products, manufacturing chemical intermediates or off-specification commercial chemical products or manufacturing chemical intermediates referred to in 335-14-2-.04(4)(a) through (d), are identified as acute hazardous wastes (H).

[Comment: For the convenience of the regulated community, the primary hazardous properties of these materials have been indicated by the letters T (Toxicity) and R (Reactivity). Absence of a letter indicates that the compound only is listed for acute toxicity.]

These wastes and their corresponding EPA Hazardous Waste Numbers are:

	Chemical	
Hazardous	Abstracts	Substance
Waste No.	No.	
P023	107-20-0	Acetaldehyde, chloro-
P002	591-08-2	Acetamide, N-(aminothioxomethyl)-
P057	640-19-7	Acetamide, 2-fluoro-
P058	62-74-8	Acetic acid, fluoro-, sodium salt
P002	591-08-2	1-Acetyl-2-thiourea
P003	107-02-8	Acrolein
P070	116-06-3	Aldicarb
P203	1646-88-4	Aldicarb sulfone
P004	309-00-2	Aldrin
P005	107-18-6	Allyl alcohol
P006	20859-73-8	Aluminum phosphide (R,T)
P007	2763-96-4	5-(Aminomethyl)-3-isoxazolol
P008	504-24-5	4-Aminopyridine
P009	131-74-8	Ammonium picrate (R)
P119	7803-55-6	Ammonium vanadate
P099	506-61-6	Argentate(l-), bis(cyano-C)-, potassium
P010	7778-39-4	Arsenic acid H <sub>3</sub> AsO <sub>4</sub>
P012	1327-53-3	Arsenic oxide As <sub>2</sub> O <sub>3</sub>
P011	1303-28-2	Arsenic oxide As <sub>2</sub> O <sub>5</sub>
P011	1303-28-2	Arsenic pentoxide
P012	1327-53-3	Arsenic trioxide
P038	692-42-2	Arsine, diethyl-
P036	696-28-6	Arsonous dichloride, phenyl-
P054	151-56-4	Aziridine
P067	75-55-8	Aziridine, 2-methyl-
P013	542-62-1	Barium cyanide
P024	106-47-8	Benzenamine, 4-chloro-
P077	100-01-6	Benzenamine, 4-nitro-
P028	100-44-7	Benzene, (chloromethyl)-
P042	51-43-4	1,2-Benzenediol,
		4-[1-hydroxy-2-(methyl- amino)ethyl]-, (R)-

	Chaminal	
Hazardous	Chemical Abstracts	Substance
Waste No.	No.	Donner ooth on oning of the office dimethral
P046	122-09-8	Benzeneethanamine, alpha,alpha-dimethyl-
P014	108-98-5	Benzenethiol
P127	1563-66-2	7-Benzofuranol,2,3-dihydro-2,2-dimethyl-, methylcarbamate
P188	57-64-7	Benzoic acid, 2-hydroxy-, compound with (3aS- cis)-1,2,3,3a,8,8a-hexahydro-1,3a,8- trimeth ylphyrolo[2,3-b]indol-5-yl methylcarbamate ester (1:1)
P001	<sup>1</sup> 81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3- (3-oso-1-phenylbutyl)-, & salts, when present at concentrations greater than 0.3%
P028	100-44-7	Benzyl chloride
P015	7440-41-7	Beryllium powder
P017	598-31-2	Bromoacetone
P018	357-57-3	Brucine
P045	39196-18-4	2-Butanone, 3,3-dimethyl-1-(methylthio)-, 0-[methylamino)carbonyl] oxime
P021	592-01-8	Calcium cyanide
P021	592-01-8	Calcium cyanide Ca(CN)2
P0189	55285-14-8	Carbamic acid,
		[(dibutylamino)-thio]methyl- 2,3-dihydro-2,2-dimet hyl-7-benzofuranyl ester
P191	644-64-4	Carbamic acid, dimethyl-,1-[(dimethyl- amino) carbonyl]-5-methyl-1H-pyrozol- 3-yl ester
P192	119-38-0	Carbamic acid, dimethyl-, 3-methyl-1(1- methylethyl)-1H-pryrazol-5yl ester
P190	1129-41-5	Carbamic acid, methyl-, 3-methylphenyl ester
P127	1563-66-2	Carbofuran
P022	75-15-0	Carbon disulfide
P095	75-44-5	Carbonic dichloride
P189	55285-14-8	Carbosulfan
P023	107-20-0	Chloroacetaldehyde
P024	106-47-8	p-Chloroaniline
P026	5344-82-1	1-(o-Chlorophenyl)thiourea
P027	542-76-7	3-Chloropropionitrile
P029	544-92-3	Copper cyanide
P029	544-92-3	Copper cyanide Cu(CN)
P202	64-00-6	m-Cumenyl methylcarbamate
P030		Cyanides (soluble cyanide salts), not otherwise specified
P031	460-19-5	Cyanogen
P033	506-77-4	Cyanogen chloride
P033	506-77-4	Cyanogen chloride (CN)Cl
P034	131-89-5	2-Cyclohesyl-4,6-dinitrophenol
P016	542-88-1	Dichloromethyl ether
P036	696-28-6	Dichlorophenylarsine

	Chamical	
Hazardous	Chemical Abstracts	Substance
Waste No.	No.	
P037	60-57-1	Dieldrin
P038	692-42-2	Diethylarsine
P041	311-45-5	Diethyl-p-nitrophenyl phosphate
P040	297-97-2	O,O-Diethyl O-pyrazinyl phosphorothioate
P043	55-91-4	Diisopropylfluorophosphate (DFP)
P004	309-00-2	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10, 10-hexachloro-1,4,4a,5,8,8a- hexahydro-,(1alpha,4 alpha,4abeta,5alpha,8alpha,8abeta)-
P060	465-73-6	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa- chloro-1,4,4a,5,8,8a- hexahydr o-, (lalpha,4alpha,4abeta,5beta, 8beta,8abeta)-
P037	60-57-1	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-la,2,2a, 3,6,6a, 7,7a-octahydro-,(1alpha, 2beta,2alpha,
P051	<sup>1</sup> 72-20-8	3beta,6beta,6alpha,7beta,7alpha)- 2,7:3,6-Dimethanonaphth [2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-la,2,2a,3,6, 6a,7,7a-octahydro-,(1alpha,2beta, 2beta,3alpha,6alpha,6beta,7beta, 7alpha)-, &
DO44	60 E1 E	metabolites
P044	60-51-5	Dimethoate
P046	122-09-8	alpha, alpha-Dimethylphenethylamine
P191	644-64-4	Dimetilan
P047	<sup>1</sup> 534-52-1	4,6-Dinitro-o-cresol, & salts
P048	51-28-5	2,4-Dinitrophenol
P020	88-85-7	Dinoseb
P085	152-16-9	Diphosphoramide, octamethyl-
P111	107-49-3	Diphosphoric acid, tetraethyl ester
P039	298-04-4	Disulfoton
P049	541-53-7	Dithiobiuret
P185	26419-73-8	1,3-Dithiolane-2-carboxaldehyde,2,4- dimethyl-,o-[(methylamino)- carbonyl]oxime
P050	115-29-7	Endosulfan
P088	145-73-3	Endothall
P051	72-20-8	Endrin
P051	72-20-8	Endrin, & metabolites
P042	51-43-4	Epinephrine
P031	460-19-5	Ethanedinitrile
P194	23135-22-0	Ethanimidothioc acid, 2-(dimethylamino)-N-[[(methylamino) carbonyl]-2-oxo]-, methyl ester
P066	16752-77-5	Ethanimidothioic acid, N-[[(methylamino) carbonyl]oxy]-,ethyl ester
P101	107-12-0	Ethyl cyanide
P054	151-56-4	Ethyleneimine

	Chemical	
Hazardous	Abstracts	Substance
Waste No.	No.	<b>343341100</b>
P097	52-85-7	Famphur
P056	7782-41-4	Fluorine
P057	640-19-7	Fluoroacetamide
P058	62-74-8	Fluoroacetic acid, sodium salt
P198	23422-53-9	Formetanate hydrochloride
P198	17702-57-7	Formparante
P065	628-86-4	Fulminic acid, mercury(2+) salt(R,T)
P059	76-44-8	Heptachlor
P062	757-58-4	•
		Hesaethyl tetraphosphate
P116	79-19-6	Hydrazinecarbothioamide
P068	60-34-4	Hydrazine, methyl-
P063	74-90-8	Hydrocyanic acid
P063	74-90-8	Hydrogen cyanide
P096	7803-51-2	Hydrogen phosphide
P060	465-73-6	Isodrin
P192	119-38-0	Isolan
P202	64-00-6	3-Isopropylphenyl N-methylcarbamate
P007	2763-96-4	3(2H)-Isoxazolone, 5-(aminomethyl)-
P196	15339-36-3	Manganese, bis(dimethylcarbamodithioato-S,S')-,
P196	15339-36-3	Manganese dimethyldithiocarbamate
P092	62-38-4	Mercury, (acetato-O)phenyl-
P065	628-86-4	Mercury fulminate (R,T)
P082	62-75-9	Methanamine, N-methyl-N-nitroso-
P064	624-83-9	Methane, isocyanato-
P016	542-88-1	Methane, oxybis[chloro-
P112	509-14-8	Methane, tetranitro-(R)
P118	75-70-7	Methanethiol, trichloro-
P198	23422-53-9	Methanimidamide,
		N,N-dimethyl-N'-[3- [[(methylamino)-cargonyl]oxy]p
		henyl]- monohydrochloride
P197	17702-57-7	Methanimidamide,
		N,N-dimethyl-N'-[2- methyl-4-[[(methylamino)carbo
		nyl] oxl]phenyl]-
P050	115-29-7	6,9-Methano-2,4,3- benzodioxathiepin,
		6,7,8,9,10,10- hexachloro-1,5,5a,
		6,9,9a-hexahydro-, 3-oxide
P059	76-44-8	4,7-Methano-lH-indene,1,4,5, 6,7,8,
1005	70 11 0	8-heptachloro-3a,4,7,7a-tetrahydro-
P199	2032-65-7	Methiocarb
P066	16752-77-5	Methomyl
P068	60-34-4	Methyl hydrazine
P064	624-83-9	Methyl isocyanate
P069	75-86-5	2-Methyllactonitrile
P071	298-00-0	Methyl parathion
P190	1129-41-5	Metolcarb
P128	315-8-4	Mexacarbate

	Chemical	
Hazardous	Abstracts	Substance
Waste No.	No.	
P072	86-88-4	alpha-Naphthylthiourea
P073	13463-39-3	Nickel carbonyl
P073	13463-39-3	Nickel carbonyl Ni(C0) <sub>4</sub> , (T-4)-
P074	557-19-7	Nickel cyanide
P074	557-19-7	Nickel cyanide Ni(CN) <sub>2</sub>
P075	<sup>1</sup> 54-11-5	Nicotine, & salts (this listing does not include
		patches, gums and lozenges that are FDA-approved
		over-the-counter nicotine replacement therapies)
P076	10102-43-9	Nitric oxide
P077	100-01-6	p-Nitroaniline
P078	10102-44-0	Nitrogen dioxide
P076	10102-43-9	Nitrogen oxide NO
P078	10102-44-0	Nitrogen oxide NO <sub>2</sub>
P081	55-63-0	Nitroglycerine(R)
P082	62-75-9	N-Nitrosodimethylamine
P084	4549-40-0	N-Nitrosomethylvinylamine
P085	152-16-9	Octamethylpyrophosphoramide
P087	20816-12-0	Osmium oxide OsO <sub>4</sub> , (T-4)-
P087	20816-12-0	Osmium tetroxide
P088	145-73-3	7-Oxabicyclo[2.2.1]heptane-2,3- dicarboxylic acid
P194	23135-22-0	Oxamyl
P089	56-38-2	Parathion
P034	131-89-5	Phenol, 2-cyclohexyl-4,6-dinitro-
P048	51-28-5	Phenol, 2,4-dinitro-
P047	<sup>1</sup> 534-52-1	Phenol, 2-methyl-4,6-dinitro, & salts
P020	88-85-7	Phenol, 2-(1-methylpropyl)-4,6- dinitro-
P009	131-74-8	Phenol, 2,4,6-trinitro-, ammonium salt (R)
P128	315-18-4	Phenol, 4-(dimethylamino)-3,5-dimethyl-,
		methylcarbamate (ester)
P199	2032-65-7	Phenol, (3,5-dimethyl-4-(methylthio)-,
		methylcarbamate
P202	64-00-6	Phenol, 3-(1-methylethyl)-,methyl carbamate
P201	2631-37-0	Phenol, 3-methyl-5-(1-methylethyl)-,methyl
		carbamate
P092	62-38-4	Phenylmercury acetate
P093	103-85-5	Phenylthiourea
P094	298-02-2	Phorate
P095	75-44-5	Phosgene
P096	803-51-2	Phosphine
P041	311-45-5	Phosphoric acid, diethyl 4- nitrophenyl ester
P039	298-04-4	Phosphorodithioic acid,
		0,0-diethyl-S-[2-(ethylthio)ethyl] ester
P094	298-02-2	Phosphorodithioic acid, 0,0-diethyl
		S-[(ethylthio)methyl] ester
P044	60-51-5	Phosphorodithioic acid, 0,0- dimethyl
		S-[2-(methylamino)-2- oxoethyl] ester

	Oh a maile e 1	
Hazardous	Chemical	Substance
Waste No.	Abstracts No.	Substance
P043	55-91-4	Phosphorofluoridic acid, bis(l- methylethyl) ester
P089	56-38-2	Phosphorothioic acid, 0,0-diethyl 0-(4-nitrophenyl)
FU09	30-36-2	ester
P040	297-97-2	Phosphorothioic acid, 0,0-diethyl 0-pyrazinyl ester
P097	52-85-7	Phosphorothioic acid,
		0-[4-[(dimethylamino)sulfonyl] phenyl]
		0,0-dimethyl ester
P071	298-00-0	Phosphorothioic acid, 0,0,-dimethyl
		0-(4-nitrophenyl) ester
P204	57-47-6	Physostigmine
P188	57-64-7	Physostigmine salicylate
P110	78-00-2	Plumbane, tetraethyl-
P098	151-50-8	Potassium cyanide
P098	151-50-8	Potassium cyanide K(CN)
P099	506-61-6	Potassium silver cyanide
P201	2631-37-0	Promecarb
P070	116-06-3	Propanal, 2-methyl-2-(methylthio)-,
		O-[(methylamino)carbonyl]oxime
P203	1646-88-4	Propanal, 2-, methyl-2-(methyl-sulfonyl)-,
		O-[(methylamino)carbonyl] oxime
P101	107-12-0	Propanenitrile
P027	542-76-7	Propanenitrile, 3-chloro-
P069	75-86-5	Propanenitrile, 2-hydroxy-2-methyl-
P081	55-63-0	1,2,3-Propanetriol, trinitrate (R)
P017	598-31-2	2-Propanone, 1-bromo-
P102	107-19-7	Propargyl alcohol
P003	107-02-8	2-Propenal
P005	107-18-6	2-Propen-l-ol
P067	75-55-8	1,2-Propylenimine
P102	107-19-7	2-Propyn-1-ol
P008	504-24-5	4-Pyridinamine
P075	<sup>1</sup> 54-11-5	Pyridine, 3-(1-methyl-2- pyrrolidinyl)-, (S)-, and
		salts (this listing does not include patches, gums
		and lozenges that are FDA-approved over-the-
D004	E7 47 6	counter nicotine replacement therapies)
P204	57-47-6	Pyrrolo[2,3-b]indol-5-ol,1,2,3,3a,8,8a- hexahydro-1
P114	12039-52-0	,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)-
P114 P103	630-10-4	Selenious acid, dithallium(l+) salt Selenourea
P103 P104	506-64-9	
P104 P104	506-64-9	Silver cyanide Silver cyanide (Ag(CN)
P104 P105	26628-22-8	Sodium azide
P105 P106	143-33-9	Sodium cyanide
P106	143-33-9	Sodium cyanide Sodium cyanide Na(CN)
P108	<sup>1</sup> 57-24-9	Strychnidin-10-one, and salts
		•
P018	357-57-3	Strychnidin-10-one, 2,3-dimethoxy-

Hazardous Waste No.	Chemical Abstracts No.	Substance
P108	<sup>1</sup> 57-24-9	Strychnine, & salts
P115	7446-18-6	Sulfuric acid, dithallium(l+) salt
P109	3689-24-5	Tetraethyldithiopyrophosphate
P110	78-00-2	Tetraethyl lead
P111	107-49-3	Tetraethyl pyrophosphate
P112	509-14-8	Tetranitromethane (R)
P062	757-58-4	Tetraphosphoric acid, hexaethyl ester
P113	1314-32-5	Thallic oxide
P113	1314-32-5	Thallium oxide Tl <sub>2</sub> O <sub>3</sub>
P114	12039-52-0	Thallium(l) selenite
P115	7446-18-6	Thallium(l) sulfate
P109	3689-24-5	Thiodiphosphoric acid, tetraethyl ester
P045	39196-18-4	Thiofanox
P049	541-53-7	Thioimidodicarbonic diamide [(H <sub>2</sub> N)C(S)] <sub>2</sub> NH
P014	108-98-5	Thiophenol
P116	79-19-6	Thiosemicarbazide
P026	5344-82-1	Thiourea, (2-chlorophenyl)-
P072	86-88-4	Thiourea, l-naphthalenyl-
P093	103-85-5	Thiourea, phenyl-
P185	26419-73-8	Tirpate
P123	8001-35-2	Toxaphene
P118	75-70-7	Trichloromethanethiol
P119	7803-55-6	Vanadic acid, ammonium salt
P120	1314-62-1	Vanadium oxide V <sub>2</sub> O <sub>5</sub>
P120	1314-62-1	Vanadium pentoxide
P084	4549-40-0	Vinylamine, N-methyl-N-nitroso-
P001	<sup>1</sup> 81-81-2	Warfarin, & salts, when present at concentrations greater than 0.3%
P205	137-30-4	Zinc, bis(dimethylcarbamodithioato-S,S')-,
P121	557-21-1	Zinc cyanide
P121	557-21-1	Zinc cyanide Zn(CN) <sub>2</sub>
P122	1314-84-7	Zinc phosphide Zn <sub>3</sub> P <sub>2</sub> , when present at
		concentrations greater than 10% (R,T)
P205	137-30-4	Ziram

<sup>&</sup>lt;sup>1</sup>CAS Number given for parent compound only.

These wastes and their corresponding EPA Hazardous Waste Numbers are:

<sup>(</sup>f) The commercial chemical products, manufacturing chemical intermediates, or off-specification commercial chemical products referred to in 335-14-2-.04(4)(a) through (d), are identified as toxic wastes (T) unless otherwise designated.

Hazardous	Chemical	0.1.4
Waste No.	Abstracts No.	Substance
U394	30558-43-1	A2213
U001	75-07-0	Acetaldehyde(I)
U034	75-87-6	Acetaldehyde,trichloro-
U187	62-44-2	Acetamide,N-(4-ethoxyphenyl)-
U005	53-96-3	Acetamide,N-9H-fluoren-2-yl-
U240	<sup>1</sup> 94-75-7	Acetic acid,(2,4-dichlorophenoxy)-, salts & esters
U112	141-78-6	Acetic acid ethylester(I)
U144	301-04-2	Acetic acid, lead(2+)salt
U214	563-68-8	Acetic acid,thallium(l+)salt
See F027	93-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-
U002	67-64-1	Acetone(I)
U003	75-05-8	Acetonitrile(I,T)
U004	98-86-2	Acetophenone
U005	53-96-3	2-Acetylaminofluorene
U006	75-36-5	Acetylchloride(C,R,T)
U007	79-06-1	Acrylamide
U008	79-10-7	Acrylic acid(I)
U009	107-13-1	Acrylonitrile
U011	61-82-5	Amitrole
U012	62-53-3	Aniline(I,T)
U136	75-60-5	Arsinicacid,dimethyl-
U014	492-80-8	Auramine
U015	115-02-6	Azaserine
U010	50-07-7	Azirino[2,3:3,4]pyrrolo[1,2-a] indole-4,7-dione,6-amino-8-[[(aminocarbonyl) oxy]methyl]-1,la,2,8,8a,8b-hexahydro-8a-met hoxy-5-methyl-,[laS-(laalpha,8beta,8aalpha,8 balpha)]-
U280	101-27-9	Barban
J278	22781-23-3	Bendiocarb
U364	22961-82-6	Bendiocarbphenol
U271	17804-35-2	Benomyl
U157	56-49-5	Benz[j]aceanthrylene,1,2-dihydro-3- methyl-
U016	225-51-4	Benz[c]acridine
U017	98-87-3	Benzalchloride
U192	23950-58-5	Benzamide,3,5-dichloro-N-(l,l-dimethyl-2-propynyl)-
U018	56-55-3	Benz[a]anthracene
U094	57-97-6	Benz[a]anthracene,7,12-dimethyl-
U012	62-53-3	Benzenamine(I,T)
U014	492-80-8	Benzenamine,4,4-carbonimidoylbis[N,N-dimet hyl-
U049	3165-93-3	Benzenamine,4-chloro-2-methyl-, hydrochloride
U093	60-11-7	Benzenamine, N, N-dimethyl-4-(phenylazo)-
U328	95-53-4	Benzenamine,2-methyl-

Hazardous Waste No.	Chemical Abstracts No.	Substance
U353	106-49-0	Benzenamine,4-methyl-
U158	101-14-4	Benzenamine, 4, 4-methylenebis [2-chloro-
U222	636-21-5	Benzenamine,2-methyl-, hydrochloride
U181	99-55-8	Benzenamine,2-methyl-5-nitro-
U019	71-43-2	Benzene $(I,T)$
U038	510-15-6	Benzeneaceticacid,4-chloro-alpha-(4-chloroph
U030	101-55-3	enyl)-alpha-hydroxy-, ethylester
U035	305-03-3	Benzene,l-bromo-4-phenoxy- Benzenebutanoic
		acid,4-[bis(2- chloroethyl)amino]-
U037	108-90-7	Benzene, chloro-
U221	25376-45-8	Benzenediamine, ar-methyl-
U028	117-81-7	1,2-Benzenedicarboxylic
		acid,bis(2- ethylhexyl)ester
U069	84-74-2	1,2-Benzenedicarboxylic acid,dibutyl ester
U088	84-66-2	1,2-Benzenedicarboxylic acid,diethyl ester
U102	131-11-3	1,2-Benzenedicarboxylic acid,dimethyl ester
U107	117-84-0	1,2-Benzenedicarboxylic acid,dioctyl ester
U070	95-50-1	Benzene, 1,2-dichloro-
U071	541-73-1	Benzene, 1,3-dichloro-
U072	106-46-7	Benzene, 1,4-dichloro-
U060	72-54-8	Benzene,
		1,1-(2,2-dichloroethyli- dene)bis[4-chloro-
U017	98-87-3	Benzene, (dichloromethyl)-
U223	26471-62-5	Benzene, 1,3-diisocyanatomethyl-(R,T)
U239	1330-20-7	Benzene, dimethyl-(I,T)
U201	108-46-3	1,3-Benzenediol
U127	118-74-1	Benzene, hexachloro-
U056	110-82-7	Benzene, hexahydro-(I)
U220	108-88-3	Benzene, methyl-
U105	121-14-2	Benzene, 1-methyl-2,4-dinitro-
U106	606-20-2	Benzene, 2-methyl-1,3-dinitro-
U055	98-82-8	Benzene, (l-methylethyl)-(I)
U169	98-95-3	Benzene, nitro-
U183	608-93-5	Benzene, pentachloro-
U185	82-68-8	Benzene, pentachloronitro-
U020	98-09-9	Benzenesulfonic acid chloride (C,R)
U020	98-09-9	Benzenesulfonyl chloride (C,R)
U207	95-94-3	Benzene, 1,2,4,5-tetrachloro-
U061	50-29-3	Benzene, 1,1-(2,2,2-trichloro ethylidene)bis[4-chloro-
U247	72-43-5	Benzene, 1,1-(2,2,2-trichloro ethylidene)bis[4-methoxy-
U023	98-07-7	Benzene, (trichloromethyl)-
U234	99-35-4	Benzene, 1,3,5-trinitro-
U021	92-87-5	Benzidine
U278	22781-23-3	1,3-Benzodioxol-4-ol,2,2-dimethyl-,methyl carbamate

** *	01 1 1	
Hazardous Waste No.	Chemical Abstracts No.	Substance
U364	22961-82-6	1,3,Benzodioxol-4-ol,2,2-dimethyl-,
U203	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-
U141	120-58-1	
		1,3-Benzodioxole, 5-(1-propenyl)-
U367	1563-38-8	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-
U090	94-58-6	1,3-Benzodioxole, 5-propyl-
U064	189-55-9	Benzo[rst]pentaphene
U248	<sup>1</sup> 81-81-2	2H-l-Benzopyran-2-one,4-hydroxy-3-(3-oxo-1-
		phenyl-butyl)-,&salts, when present at
		concentrations of 0.3% or less
U022	50-32-8	Benzo[a]pyrene
U197	106-51-4	p-Benzoquinone
U023	98-07-7	Benzotrichloride(C,R,T)
U085	1464-53-5	2,2-Bioxirane
U021	92-87-5	[1,1'-Biphenyl]-4,4-diamine
U073	91-94-1	[1,1'-Biphenyl]-4,4-diamine,3,3'- dichloro-
U091	119-90-4	[1,1'-Biphenyl]-4,4-diamine,3,3'- dimethoxy-
U095	119-93-7	[1,1'-Biphenyl]-4,4-diamine,3,3'- dimethyl-
U225	75-25-2	Bromoform
	101-55-3	
U030		4-Bromophenylphenylether
U128	87-68-3	1,3-Butadiene, 1,1,2,3,4,4- hexachloro-
U172	924-16-3	l-Butanamine, N-butyl-N-nitroso-
U031	71-36-3	1-Butanol(I)
U159	78-93-3	2-Butanone(I,T)
U160	1338-23-4	2-Butanone,peroxide(R,T)
U053	4170-30-3	2-Butenal
U074	764-41-0	2-Butene, 1,4-dichloro-(I,T)
U143	303-34-4	2-Butenoicacid,2-methyl-,7-[[2,3-dihydroxy-2
		-(1-methoxyethyl)-3- methyl-l-oxobutoxy meth
		yl]-2,3,5, 7a-tetrahydro-lH-pyrrolizin-l-yl
		ester,[lS-[lalpha(Z),7(2S*,3R*),7aalpha]]-
U031	71-36-3	n-Butyl alcohol(I)
U136	75-60-5	Cacodylic acid
U032	13765-19-0	Calcium chromate
U372	10605-21-7	Carbamic acid, 1H-benzimidazol-2-yl, methyl
0012	10000-21-1	ester
U271	17804-35-2	Carbamic acid,
0411	17004-33-4	·
		[1-[butylamino)carbonyl]-1H- benzimidazol-2-
11000	101 07 0	yl],methyl ester
U280	101-27-9	Carbamic acid, (3-chlorophenyl)-,
		4-chloro-2-butynyl ester
U238	51-79-6	Carbamic acid, ethylester
U178	615-53-2	Carbamic acid, methylnitroso-, ethylester
U373	122-42-9	Carbamic acid, phenyl-,1-methylethylester
U409	23564-05-8	Carbamic acid, [1,2-phenylene bis
		(iminocarbonothioyl)]bis-, dimethyl ester
U097	79-44-7	Carbamic chloride, dimethyl-
U389	2303-17-5	Carbamothioic acid, bis(1-methylethyl)-,
	_500 2. 0	S-(2,3,3-trichloro-2-propenyl)ester
		5 (2,0,0 themore 2 properly) cotter

Hazardous Waste No.	Chemical Abstracts No.	Substance
U387	52888-80-9	Carbamothioic acid, dipropyl-,
000.	02000 00 9	S-(phenylmethyl) ester
U114	<sup>1</sup> 111-54-6	Carbamodithioic acid, 1,2-ethane- diylbis-,
	111-54-0	salts & esters
U062	2303-16-4	Carbamothioic acid, bis(l- methylethyl)-,
		S-(2,3-dichloro-2-propenyl) ester
U279	63-25-2	Carbaryl
U372	10605-21-7	Carbendazim
U367	1563-38-8	Carbofuranphenol
U215	6533-73-9	Carbonicacid, dithallium(1+) salt
U033	353-50-4	Carbonic difluoride
U156	79-22-1	Carbonochloridicacid, methyl ester (I,T)
U033	353-50-4	Carbon oxyfluoride (R,T)
U211	56-23-5	Carbon tetrachloride
U034	75-87-6	Chloral
U035	305-03-3	Chlorambucil
U036	57-74-9	Chlordane, alpha & gamma isomers
U026	494-03-1	Chlornaphazine
U037	108-90-7	Chlorobenzene
U038	510-15-6	Chlorobenzilate
U039	59-50-7	p-Chloro-m-cresol
U042	110-75-8	2-Chloroethyl vinyl ether
U044	67-66-3	Chloroform
U046	107-30-2	Chloromethyl methyl ether
U047	91-58-7	beta-Chloronaphthalene
U048	95-57-8	o-Chlorophenol
U049	3165-93-3	4-Chloro-o-toluidine, hydrochloride
U032	13765-19-0	Chromic acid H <sub>2</sub> CrO <sub>4</sub> , calciumsalt
U050	218-01-9	Chrysene
U051		Creosote
U052	1319-77-3	Cresol (Cresylicacid)
U053	4170-30-3	Crotonaldehyde
U055	98-82-8	Cumene (I)
U246	506-68-3	Cyanogen bromide (CN)Br
U197	106-51-4	2,5-Cyclohexadiene- 1,4-dione
U056	110-82-7	Cyclohexane (I)
U129	58-89-9	Cyclohexane, 1,2,3,4,5,6-hexa- chloro-,
		(lalpha,2alpha,3beta, 4alpha,5alpha,6beta)-
U057	108-94-1	Cyclohexanone (I)
U130	77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-
U058	50-18-0	Cyclophosphamide
U240	<sup>1</sup> 94-75-7	2,4-D, salts and esters
U059	20830-81-3	Daunomycin
U060	72-54-8	DDD
U061	50-29-3	DDT
U062	2303-16-4	Diallate
U063	53-70-3	Dibenz[a,h]anthracene
	00 70 0	

	01 1 1	
Hazardous	Chemical	0-1-4
Waste No.	Abstracts No.	Substance
U064 U066	189-55-9	Dibenzo[a,i]pyrene
U069	96-12-8 84-74-2	1,2-Dibromo-3-chloropropane Dibutylphthalate
		o-Dichlorobenzene
U070	95-50-1	m-Dichlorobenzene
U071	541-73-1	
U072	106-46-7 91-94-1	p-Dichlorobenzene
U073		3,3'-Dichlorobenzidine
U074	764-41-0	1,4-Dichloro-2-butene(I,T)
U075	75-71-8	Dichlorodifluoromethane
U078	75-35-4	l,l-Dichloroethylene
U079	156-60-5	1,2-Dichloroethylene
U025	111-44-4	Dichloroethylether Di 11
U027	108-60-1	Dichloroisopropylether
U024	111-91-1	Dichloromethoxyethane
U081	120-83-2	2,4-Dichlorophenol
U082	87-65-0	2,6-Dichlorophenol
U084	542-75-6	1,3-Dichloropropene
U085	1464-53-5	1,2:3,4-Diepoxybutane(I,T)
U108	123-91-1	1,4-Diethyleneoxide
U028	117-81-7	Diethylhexyl phthalate
U395	5952-26-1	Diethylene glycol, dicarbamate
U086	1615-80-1	N,N'-Diethylhydrazine
U087	3288-58-2	O,O-DiethylS-methyl dithiophosphate
U088	84-66-2	Diethyl phthalate
U089	56-53-1	Diethylstilbesterol
U090	94-58-6	Dihydrosafrole
U091	119-90-4	3,3'-Dimethoxybenzidine
U092	124-40-3	Dimethylamine(I)
U093	60-11-7	p-Dimethylaminoazobenzene
U094	57-97-6	7,12-Dimethylbenz[a]anthracene
U095	119-93-7	3,3-Dimethylbenzidine
U096	80-15-9	alpha,alpha-Dimethylbenzylhydro-peroxide (R)
U097	79-44-7	Dimethylcarbamoylchloride
U098	57-14-7	1,1-Dimethylhydrazine
U099	540-73-8	1,2-Dimethylhydrazine
U101	105-67-9	2,4-Dimethylphenol
U102	131-11-3	Dimethyl phthalate
U103	77-78-1	Dimethyl sulfate
U105	121-14-2	2,4-Dinitrotoluene
U106	606-20-2	2,6-Dinitrotoluene
U107	117-84-0	Di-n-octyl phthalate
U108	123-91-1	1,4-Dioxane
U109	122-66-7	1,2-Diphenylhydrazine
U110	142-84-7	Dipropylamine (I)
U111	621-64-7	Di-n-propylnitrosamine
U041	106-89-8	Epichlorohydrin
U001	75-07-0	Ethanal (I)
U404	121-44-8	Ethanamine, N,N-diethyl-

Hazardous	Chemical	
Waste No.	Abstracts No.	Substance
U174	55-18-5	Ethanamine,N-ethyl-N-nitroso-
U155	91-80-5	1,2,Ethanediamine,N,N-dimethyl-N'-2-
		pyridinyl-N'-(2-thienyl-methyl)-
U067	106-93-4	Ethane, 1,2-dibromo-
U076	75-34-3	Ethane, 1,1-dichloro-
U077	107-06-2	Ethane, 1,2-dichloro-
U131	67-72-1	Ethane, hexachloro-
U024	111-91-1	Ethane,1,1'-[methylenebis(oxy)]
	111 71 1	bis[2-chloro-
U117	60-29-7	Ethane, 1,1'-osybis-(I)
U025	111-44-4	Ethane, 1,1'-oxybis[2-chloro-
U184	76-01-7	Ethane, pentachloro-
U208	630-20-6	Ethane, 1,1,1,2-tetrachloro-
U209	79-34-5	
U218	79-34-3 62-55-5	Ethane, 1,1,2,2-tetrachloro- Ethanethioamide
	71-55-6	
U226		Ethane, 1,1,0 trichlore
U227	79-00-5	Ethane, 1,1,2-trichloro-
U410	59669-26-0	Ethanimidothioic acid,
		N,N'-[thiobis[(methylimino) carbonyloxy]]bis-,
11004	20550 42 1	dimethyl ester
U394	30558-43-1	Ethanimidothioic acid,
		2-(dimethylamino)-N-hydroxy-2-oxo-, methyl
11050	110 00 5	ester
U359	110-80-5	Ethanol, 2-ethoxy-
U173	<sup>1</sup> 116-54-7	Ethanol, 2,2'-(nitrosoimino)bis-
U395	5952-26-1	Ethanol, 2,2'-oxybis-,dicarbamate
U004	98-86-2	Ethanone, l-phenyl-
U043	75-01-4	Ethene, chloro-
U042	110-75-8	Ethene, (2-chloroethoxy)-
U078	75-35-4	Ethene, 1,1-dichloro-
U079	156-60-5	Ethene, 1,2-dichloro-,(E)-
U210	127-18-4	Ethene, tetrachloro-
U228	79-01-6	Ethene, trichloro-
U112	141-78-6	Ethyl acetate (I)
U113	140-88-5	Ethyl acrylate (I)
U238	51-79-6	Ethyl carbamate (urethane)
U117	60-29-7	Ethyl ether (I)
U114	<sup>1</sup> 111-54-6	Ethylenebisdithiocarbamic acid, salts & esters
U067	106-93-4	Ethylene dibromide
U077	107-06-2	Ethylene dichloride
U359	110-80-5	Ethylene glycol monoethyl ether
U115	75-21-8	
		Ethylene oxide(I,T)
U116	96-45-7	Ethylenethiourea
U076	75-34-3	Ethylidene dichloride
U118	97-63-2	Ethyl methacrylate
U119	62-50-0	Ethyl methanesulfonate
U120	206-44-0	Fluoranthene

Hazardous	Chemical	
Waste No.	Abstracts No.	Substance
U122	50-00-0	Formaldehyde
U123	64-18-6	Formic acid( C,T)
U124	110-00-9	Furan (I)
U125	98-01-1	2-Furancarboxaldehyde (I)
U147	108-31-6	2,5-Furandione
U213	109-99-9	Furan, tetrahydro- (I)
U125	98-01-1	Furfural (I)
U124	110-00-9	Furfuran (I)
U206	18883-66-4	Glucopyranose,
		2-deoxy-2-(3-methyl-3-nitrosoureido)-, D-
U206	18883-66-4	D-Glucose,
		2-deoxy-2-[[(methyl-nitrosoamino)-carbonyl]
		amino]-
U126	765-34-4	Glycidylaldehyde
U163	70-25-7	Guanidine, N-methyl-N'-nitro-N-nitroso
U127	118-74-1	Hexachlorobenzene
U128	87-68-3	Hexachlorobutadiene
U130	77-47-4	Hexachlorocyclopentadiene
U131	67-72-1	Hexachloroethane
U132	70-30-4	Hexachlorophene
U243	1888-71-7	Hexachloropropene
U133	302-01-2	Hydrazine (R,T)
U086	1615-80-1	Hydrazine, 1,2-diethyl-
U098	57-14-7	Hydrazine ,l,l-dimethyl-
U099	540-73-8	Hydrazine, 1,2-dimethyl-
U109	122-66-7	Hydrazine, 1,2-diphenyl-
U134	7664-39-3	Hydrofluoric acid (C,T)
U134	7664-39-3	Hydrogen fluoride (C,T)
U135	7783-06-4	Hydrogen sulfide
U135	7783-06-4	Hydrogen sulfide H <sub>2</sub> S
U096	80-15-9	Hydroperoxide,l-methyl-l-phenylethyl-(R)
U116	96-45-7	2-Imidazolidinethione
U137	193-39-5	Indeno[1,2,3-cd]pyrene
U190	85-44-9	1,3-Isobenzofurandione
U140	78-83-1	Isobutyl alcohol(I,T)
U141	120-58-1	Isosafrole
U142	143-50-0	Kepone
U143	303-34-4	Lasiocarpine
U144	301-04-2	Lead acetate
U146	1335-32-6	Lead, bis(acetato-O)tetrahydroxytri-
U145	7446-27-7	Lead phosphate
U146	1335-32-6	Lead subacetate
U129	58-89-9	Lindane
U163	70-25-7	MNNG
U147	108-31-6	Maleic anhydride
U148	123-33-1	Maleic hydrazide
U149	109-77-3	Malononitrile

Hazardous	Chemical	
Waste No.	Abstracts No.	Substance
U150	148-82-3	Melphalan
U151	7439-97-6	Mercury
U152	126-98-7	Methacrylonitrile(I,T)
U092	124-40-3	Methanamine,N-methyl-(I)
U029	74-83-9	Methane, bromo-
U045	74-87-3	Methane, chloro-(I,T)
U046	107-30-2	Methane, chloromethoxy-
U068	74-95-3	Methane, dibromo-
U080	75-09-2	Methane, dichloro-
U075	75-71-8	Methane, dichlorodifluoro-
U138	74-88-4	Methane, iodo-
U119	62-50-0	Methanesulfonic acid, ethyl ester
U211	56-23-5	Methane, tetrachloro-
U153	74-93-1	Methanethiol (I,T)
U225	75-25-2	Methane, tribromo-
U044	67-66-3	Methane, trichloro-
U121	75-69-4	Methane, trichlorofluoro-
U036	57-74-9	4,7-Methano-1H-indene,1,2,4,5,6,7,8,8- octac
		hloro-2,3,3a,4,7,7a-hexahydro-
U154	67-56-1	Methanol (I)
U155	91-80-5	Methapyrilene
U142	143-50-0	1,3,4-Metheno-2H-cyclobuta[cd]
		pentalen-2-one,1,la,3,3a,4,5,5,
		5a,5b,6-decachlorooctahydro-
U247	72-43-5	Methoxychlor
U154	67-56-1	Methyl alcohol (I)
U029	74-83-9	Methyl bromide
U186	504-60-9	l-Methylbutadiene (I)
U045	74-87-3	Methyl chloride (I,T)
U156	79-22-1	Methyl chlorocarbonate (I,T)
U226	71-55-6	Methyl chloroform
U157	56-49-5	3-Methylcholanthrene
U158	101-14-4	4,4'-Methylenebis(2-chloroaniline)
U068	74-95-3	Methylene bromide
U080	75-09-2	Methylene chloride
U159	78-93-3	Methyl ethyl ketone (MEK) (I,T)
U160	1338-23-4	Methyl ethyl ketone peroxide (R,T)
U138	74-88-4	Methyl iodide
U161	108-10-1	Methyl isobutyl ketone (I)
U162	80-62-6	Methylmethacrylate (I,T)
U161	108-10-1	4-Methyl-2-pentanone (I)
U164	56-04-2	Methylthiouracil
U010	50-07-7	Mitomycin C
U059	20830-81-3	5,12-Naphthacenedione,8-acetyl-10[(3-amino-2,3,6-trideoxy)- alpha-L-lyxo-hexopyranosyl)
		oxy]-7,8,9,10-tetrahydro-6,8,11- trihydroxy-l-
		methoxy-,(8S-cis)-
U167	134-32-7	l-Naphthalenamine

Hazardous	Chemical	
Waste No.	Abstracts No.	Substance
U168	91-59-8	2-Naphthalenamine
U026	494-03-1	Naphthalenamine,N,N'-bis(2-chloroethyl)-
U165	91-20-3	Naphthalene
U047	91-58-7	Naphthalene, 2-chloro-
U166	130-15-4	1,4-Naphthalenedione
U236	72-57-1	2,7-Naphthalenedisulfonic acid,
0200	72 07 1	3,3'-[(3,3'-dimethyl[1,1'- biphenyl]-4,4'-diyl)
		bis(azo)bis[5-amino-4-hydroxy]-, tetrasodium
		salt
U279	63-25-2	1-Naphthalenol, methylcarbamate
U166	130-15-4	1,4,Naphthaquinone
U167	134-32-7	alpha-Naphthylamine
U168	91-59-8	beta-Naphthylamine
U217	10102-45-1	Nitric acid, thallium(1+) salt
U169	98-9-5-3	Nitrobenzene (I,T)
U170	100-02-7	p-Nitrophenol
U171	79-46-9	2-Nitropropane(I,T)
U172	924-16-3	N-Nitrosodi-n-butylamine
U173	1116-54-7	N-Nitrosodiethanolamine
U174	55-18-5	N-Nitrosodiethylamine
U176	759-73-9	N-Nitroso-N-ethylurea
U177	684-93-5	N-Nitroso-N-methylurea
U178	615-53-2	N-Nitroso-N-methylurethane
U179	100-75-4	N-Nitrosopiperidine
U180	930-55-2	N-Nitrosopyrrolidine
U181	99-55-8	5-Nitro-o-toluidine
U193	1120-71-4	1,2-Oxathiolane,2,2-dioxide
U058	50-18-0	2H-1,3,2-Oxazaphosphorin-2-amine,
		N,N-bis(2-chloroethyl) tetrahydro-,2-oxide
U115	75-21-8	Oxirane (I,T)
U126	765-34-4	Oxiranecarboxyaldehyde
U041	106-89-8	Oxirane, (chloromethyl)-
U182	123-63-7	Paraldehyde
U183	608-93-5	Pentachlorobenzene
U184	76-01-7	Pentachloroethane
U185	82-68-8	Pentachloronitrobenzene (PCNB)
See F027	87-86-5	Pentachlorophenol
U161	108-10-1	Pentanol, 4-methyl-
U186	504-60-9	1,3-Pentadiene (I)
U187	62-44-2	Phenacetin
U188	108-95-2	Phenol
U048	95-57-8	Phenol, 2-chloro-
U039	59-50-7	Phenol, 4-chloro-3-methyl-
		•
U081	120-83-2	Phenol ,2,4-dichloro-
U082	87-65-0	Phenol, 2,6-dichloro-
U089	56-53-1	Phenol, 4,4'-(1,2-diethyl-1,2-
11101	105 65 0	ethenediyl)bis-,(E)-
U101	105-67-9	Phenol, 2,4-dimethyl-

Hazardous	Chemical	
Waste No.	Abstracts No.	Substance
U052	1319-77-3	Phenol, methyl-
U132	70-30-4	Phenol, 2,2-methylenebis
		[3,4,6-trichloro-
U411	114-26-1	Phenol, 2-(1-methylethoxy)-,methylcarbamate
U170	100-02-7	Phenol, 4-nitro-
See F027	87-86-5	Phenol, pentachloro-
See F027	58-90-2	Phenol, 2,3,4,6-tetrachloro-
See F027	95-95-4	Phenol, 2,4,5-trichloro-
See F027	88-06-2	Phenol, 2,4,6-trichloro-
U150	148-82-3	L-Phenylalanine,4-[bis(2- chloroethyl)amino]-
U145	7446-27-7	- , ,
U087		Phosphoric acid, lead(2+) salt(2:3)
0007	3288-58-2	Phosphorodithioic acid, O,O-diethyl
11100	1014 00 0	S-methylester
U189	1314-80-3	Phosphorous sulfide (R)
U190	85-44-9	Phthalic anhydride
U191	109-06-8	2-Picoline
U179	100-75-4	Piperidine, 1-nitroso-
U192	23950-58-5	Pronamide (7.77)
U194	107-10-8	1-Propanamine (I,T)
U111	621-64-7	1-Propanamine, N-nitroso-N-propyl-
U110	142-84-7	1-Propanamine, N-propyl-(I)
U066	96-12-8	Propane, 1,2-dibromo-3-chloro-
U083	78-87-5	Propane, 1,2-dichloro-
U149	109-77-3	Propanedinitrile
U171	79-46-9	Propane, 2-nitro-(I,T)
U027	108-60-1	Propane, 2,2-oxybis[2-chloro-
U193	1120-71-4	1,3-Propanesultone
See F027	93-72-1	Propanoic acid, 2-(2,4,5-trichloro- phenoxy)-
U235	126-72-7	l-Propanol, 2,3-dibromo-,phosphate (3:1)
U140	78-83-1	1-Propanol, 2-methyl-(I,T)
U002	67-64-1	2-Propanone (I)
U007	79-06-1	2-Propenamide
U084	542-75-6	1-Propene, 1,3-dichloro-
U243	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-
U009	107-13-1	2-Propenenitrile
U152	126-98-7	2-Propenenitrile,2-methyl- (I,T)
U008	79-10-7	2-Propenoic acid (I)
U113	140-88-5	2-Propenoic acid, ethyl ester (I)
U118	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester
U162	80-62-6	2-Propenoic acid, 2-methyl-, methyl ester (I,T)
U373	122-42-9	Propham
U411	114-26-1	-
		Propulfocarb
U387	52888-80-9	Prosulfocarb
U194	107-10-8	n-Propylamine (I,T)
U083	78-87-5	Propylene dichloride
U148	123-33-1	3,6-Pyridazinedione, 1,2-dihydro-
U196	110-86-1	Pyridine
U191	109-06-8	Pyridine, 2-methyl-

Hazardous	Chemical	
Waste No.	Abstracts No.	Substance
U237	66-75-1	2,4-(lH,3H)-Pyrimidinedione,5-[bis
		(2-chloroethyl)amino]-
U164	56-04-2	4(1H)-Pyrimidinone,2,3-dihydro-6- methyl-2-t
		hioxo-
U180	930-55-2	Pyrrolidine,l-nitroso-
U200	50-55-5	Reserpine
U201	108-46-3	Resorcinol
U203	94-59-7	Safrole
U204	7783-00-8	Selenious acid
U204	7783-00-8	Selenium dioxide
U205	7488-56-4	Selenium sulfide
U205	7488-56-4	Selenium sulfide SeS 2(R,T)
U015	79-34-5	L-Serine, diazoacetate(ester)
SeeF027	115-02-6	Silves(2,4,5-TP)
U206	93-72-1	Streptozotocin
U103	18883-66-4	Sulfuric acid, dimethylester
U189		·
	77-78-1	Sulfur phosphide (R)
SeeF027	1314-80-3	2,4,5-T
U207	93-76-5	1,2,4,5-Tetrachlorobenzene
J208	95-94-3	1,1,1,2-Tetrachloroethane
J209	630-20-6	1,1,2,2-Tetrachloroethane
J210	127-18-4	Tetrachloroethylene
SeeF027	58-90-2	2,3,4,6-Tetrachlorophenol
J213	109-99-9	Tetrahydrofuran(I)
J214	563-68-8	Thallium(I) acetate
J215	6533-73-9	Thallium(I) carbonate
J216	7791-12-0	Thallium(I) chloride
J216	7791-12-0	Thallium chloride TlCl
J217	10102-45-1	Thallium(I) nitrate
J218	62-55-5	Thioacetamide
J410	59669-26-0	Thiodicarb
J153	74-93-1	Thiomethanol $(I,T)$
U244	137-26-8	Thioperoxydicarbonic
		diamide[ $(H_2N)C(S)$ ]2S2,tetrameth
J409	23564-05-8	Thiophanate-methyl
U219	62-56-6	Thiourea
U244	137-26-8	Thiram
U220	108-88-3	Toluene
U221	25376-45-8	Toluenediamine
U223	26471-62-5	Toluene diisocyanate(R,T)
U328	95-53-4	o-Toluidine
U353	106-49-0	p-Toluidine
U222	636-21-5	o-Toluidinehydrochloride
U389	2303-17-5	Triallate
U011	61-82-5	lH-1,2,4-Triazol-3-amine
	79-00-5	1,1,2-Trichloroethane
U227		

Hazardous	Chemical	
Waste No.	Abstracts No.	Substance
U121	75-69-4	Trichloromonofluoromethane
See F027	95-95-4	2,4,5-Trichlorophenol
See F027	88-06-2	2,4,6-Trichlorophenol
U404	121-44-8	Triethylamine
U234	99-35-4	1,3,5-Trinitrobenzene(R,T)
U182	123-63-7	1,3,5-Trioxane, 2,4,6-trimethyl-
U235	126-72-7	Tris(2,3-dibromopropyl) phosphate
U236	72-57-1	Trypan blue
U237	66-75-1	Uracil mustard
U176	59-73-9	Urea, N-ethyl-N-nitroso-
U177	684-93-5	Urea, N-methyl-N-nitroso-
U043	75-01-4	Vinyl chloride
U248	<sup>1</sup> 81-81-2	Warfarin, & salts, when present at
	01 01 2	concentrations of 0.3% or less
U239	1330-20-7	Xylene(I)
U200	50-55-5	Yohimban-16-carboxylicacid,11,17- dimethox
		y-18-[(3,4,5-trimethoxy-benzoyl)oxy]-,methyle
		ster,(3beta, 16beta,17alpha,18beta,20alpha)-
U249	1314-84-7	Zincphosphide,Zn3P2,when present at
		concentrations of 10% or less

<sup>&</sup>lt;sup>1</sup>CAS Number given for parent compound only.

## (5) [Reserved].

# (6) <u>Deletion of Certain Hazardous Waste Codes Following Equipment Cleaning and Replacement.</u>

- (a) Wastes from wood preserving processes at plants that do not resume or initiate use of chlorophenolic preservatives will not meet the listing definition of F032 once the generator has met all of the requirements of 335-14-2-.04(6)(b) and (c). These wastes may, however, continue to meet another hazardous waste listing description or may exhibit one or more of the hazardous waste characteristics.
- (b) Generators must either clean or replace all process equipment that may have come into contact with chlorophenolic formulations or constituents thereof, including, but not limited to, treatment cylinders, sumps, tanks, piping systems, drip pads, fork lifts, and trams, in a manner which minimizes or eliminates the escape of hazardous waste or constituents, leachate, contaminated drippage, or hazardous waste decomposition products to the groundwater, surface water, or atmosphere.

#### 1. Generators shall do one of the following:

- (i) Prepare and follow an equipment cleaning plan and clean equipment in accordance with 335-14-2-.04(6);
- (ii) Prepare and follow an equipment replacement plan and replace equipment in accordance with 335-14-2-.04(6); or

cleaning and replacement in accordance with (iii) Document 335-14-2-.04(6), carried out after termination of use of chlorophenolic preservatives. 2. Cleaning Requirements. (i) Prepare and sign a written equipment cleaning plan that describes: (I) The equipment to be cleaned; (II) How the equipment will be cleaned; The solvent to be used in cleaning; (III) How solvent rinses will be tested; and (IV) (V) How cleaning residues will be disposed. Equipment must be cleaned as follows: (ii) Remove all visible residues from process equipment; (I) Rinse process equipment with an appropriate solvent until dioxins (II) and dibenzofurans are not detected in the final solvent rinse. (iii) Analytical requirements. (I) Rinses must be tested by using an appropriate method. "Not detected" means at or below the following lower method (II)calibration limits (MCLs): The 2,3,7,8-TCDD-based MCL-0.01 parts per trillion (ppt), sample weight of 1000g, IS spiking level of 1 ppt, final extraction volume of 10-50 µL. For other congeners - multiply the values by 1 for TCDF/PeCDD/PeCDF, by 2.5 for HxCDD/HxCDF/HpCDD/HpCDF, and by 5 for OCDD/OCDF. The generator must manage all residues from the cleaning process (iv) as F032 waste. 3. Replacement requirements. Prepare and sign a written equipment replacement plan that describes: (I) The equipment to be replaced; (II) How the equipment will be replaced; and

How the equipment will be disposed.

(III)

- (ii) The generator must manage the discarded equipment as F032 waste.
  - 4. Documentation requirements.
- (i) Document that previous equipment cleaning and/or replacement was performed in accordance with 335-14-2-.04(6) and occurred after cessation of use of chlorophenolic preservatives.
- (c) The generator must maintain the following records documenting the cleaning and replacement as part of its operating record:
  - 1. The name and address of the generator;
- 2. Formulations previously used and the date on which their use ceased in each process at the plant;
  - 3. Formulations currently used in each process at the plant;
  - 4. The equipment cleaning or replacement plan;
- 5. The name and address of any persons who conducted the cleaning and replacement;
  - 6. The dates on which cleaning and replacement were accomplished;
  - 7. The dates of sampling and testing;
- 8. A description of the sample handling and preparation techniques, including techniques used for extraction, containerization, preservation, and chain-of-custody of the samples;
- 9. A description of the tests performed, the date the tests were performed, and the results of the tests;
- 10. The name and model numbers of the instrument(s) used in performing the tests;
  - 11. QA/QC documentation; and
- 12. The following statement signed by the generator or his authorized representative:

I certify under penalty of law that all process equipment required to be cleaned or replaced under 335-14-2-.04(6) was cleaned or replaced as represented in the equipment cleaning and replacement plan and accompanying documentation. I am aware that there are significant penalties for providing false information, including the possibility of fine or imprisonment.

#### (7) [Reserved].

- (8) [Reserved].
- (9) [Reserved].

**Authors:** Stephen C. Maurer; Steven O. Jenkins; C. Edwin Johnston; Bradley N. Curvin; Jonah Harris; Theresa A. Maines; Heather M. Jones; Lynn T. Roper; Metz P. Duites; Vernon H. Crockett; Sonja B. Favors; Brent A. Watson.

**Statutory Authority:** Code of Alabama 1975, §§ 22-30-10, 22-30-11.

History: November 19, 1980. Amended: Effective: April 9, 1986; Amended: Effective: September 29, 1986; Amended: Effective: February 15, 1988; Amended: Effective: August 24, 1989; Amended: Effective: December 6, 1990; Amended: Effective: January 25, 1992; Amended: Effective: January 5, 1995; Amended: Effective: January 12, 1996; Amended: Effective: March 27, 1998; Amended: Effective: April 2, 1999; Amended: Effective: April 13, 2001; Amended: Effective: March 15, 2002; Amended: Effective: April 17, 2003; Amended: Effective: April 4, 2006; Amended: Effective: April 3, 2007; Amended: Effective: May 27, 2008; Amended: Effective: March 31, 2009; Amended: Effective: March 31, 2011; Amended: Effective: April 3, 2012; Amended: Effective: April 8, 2016; Amended: Effective: March 31, 2017; Amended: Effective: April 6, 2018; Amended: Proposed: October 21, 2019.

## 335-14-2-.08 <u>Financial Requirements for Management of Excluded Hazardous Secondary Materials</u>.

- (1) Applicability
- (a) The requirements of this subpart apply to owners or operators of reclamation and intermediate facilities managing hazardous secondary materials excluded under 335-14-2-.01(4)(a)24, except as provided otherwise in this section.
- (b) States and the Federal government are exempt from the financial assurance requirements of this subpart.
- (2) Definitions of terms as used in this section. Some terms used in this section are defined in 335-14-1-.02 have the same meaning as those used in 335-14-6-.08.
  - (3) Cost estimate
- (a) The owner or operator must have a detailed written estimate, in current dollars, of the cost of disposing of any hazardous secondary material as listed or characteristic hazardous waste, and the potential cost of closing the facility as a treatment, storage, and disposal facility.
- 1. The estimate must equal the cost of conducting the activities described in paragraph (a) at the point when the extent and manner of the facility's operation would make these activities the most expensive; and
- 2. The cost estimate must be based on the costs to the owner or operator of hiring a third party to conduct these activities. A third party is a party who is neither a parent nor a subsidiary of the owner or operator. (See definition of parent corporation in 335-14-1-.02.) The owner or operator may use costs for on-site disposal in accordance with applicable requirements if he can demonstrate that on-site disposal capacity will exist at all times over the life of the facility.
- 3. The cost estimate may not incorporate any salvage value that may be realized with the sale of hazardous secondary materials, or hazardous or non-hazardous wastes if applicable under 335-14-6-.07(4)(d), facility structures or equipment, land, or other assets associated with the facility.
- 4. The owner or operator may not incorporate a zero cost for hazardous secondary materials, or hazardous or non-hazardous wastes if applicable under 335-14-6-.07(4)(d) that might have economic value.
- (b) During the active life of the facility, the owner or operator must adjust the cost estimate for inflation within 60 days prior to the anniversary date of the establishment of the financial instrument(s) used to comply with 335-14-2-.08(4). For owners and operators using the financial test or corporate guarantee, the cost estimate must be updated for inflation within 30 days after the close of the firm's fiscal year and before submission of updated information to the Department as specified in 335-14-2-.08(4)(e)3. The adjustment may be made by recalculating the closure cost

estimate in current dollars, or by using an inflation factor derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in its <u>Survey of Current Business</u>, as specified in 335-14-2-.08(3)(b)1. and (b)2. The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year.

- 1. The first adjustment is made by multiplying the cost estimate by the inflation factor. The result is the adjusted cost estimate.
- 2. Subsequent adjustment are made by multiplying the latest adjusted cost estimate by the latest inflation factor.
- (c) During the active life of the facility, the owner or operator must revise the cost estimate no later than 30 days after a change in a facility's operating plan or design that would increase the costs of conducting the activities described in 335-14-2-.08(3)(a) or no later than 60 days after an unexpected event which increases the cost of conducting the activities described in 335-14-2-.08(3)(a). The revised cost estimate must be adjusted for inflation as specified in 335-14-2-.08(3)(b).
- (d) The owner or operator must keep the following at the facility during the operating life of the facility: The latest cost estimate prepared in accordance with paragraphs 335-14-2-.08(3)(a) and (c) and, when this estimate has been adjusted in accordance with 335-14-2-.08(3)(b), the latest adjusted cost estimate.
- (4) Per 335-14-2-.01(4)(a)24.(vi)(VI), an owner or operator of a reclamation or intermediate facility must have financial assurance as a condition of the exclusion as required 335-14-2-.01(4)(a)24. He must choose from the options as specified in paragraphs (a) through (e) of this section.

#### (a) Trust fund

- 1. An owner or operator may satisfy the requirements of 335-14-2-.08(4) by establishing a trust fund which conforms to the requirements of 335-14-2-.08(4)(a) and submitting an originally signed duplicate of the trust agreement to the Department. The trustee must be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal or State agency.
- 2. The wording of the trust agreement must be identical to the wording specified in 335-14-2-.08(12)(a)1, and the trust agreement must be accompanied by a formal certification of acknowledgment (for example, see 335-14-2-.08(12)(a)2. Schedule A of the trust agreement must be updated within 60 days after a change in the amount of the current cost estimate covered by the agreement.
- 3. The trust fund must be funded for the full amount of the current cost estimate before it may be relied upon to satisfy the requirements of this section.
- 4. Whenever the current cost estimate changes, the owner or operator must compare the new estimate with the trustee's most recent annual valuation of the trust fund. If the value of the fund is less than the amount of the new estimate, the owner or operator, within 60 days after the change in the cost estimate, must either

deposit an amount into the fund so that its value after this deposit at least equals the amount of the current cost estimate, or obtain other financial assurance as specified in 335-14-2-.08(4) to cover the difference.

- 5. If the value of the trust fund is greater than the total amount of the current cost estimate, the owner or operator may submit a written request to the Department for release of the amount in excess of the current cost estimate.
- 6. If an owner or operator substitutes other financial assurance as specified in 335-14-2-.08(4) for all or part of the trust fund, he may submit a written request to the Department for release of the amount in excess of the current cost estimate covered by the trust fund.
- Within 60 days after receiving a request from the owner or operator for release of funds as specified 335-14-2-.08(4)(a)5. or 6., the Department will instruct the trustee to release to the owner or operator such funds as the Department specifies in writing. If the owner or operator begins final closure under subpart 335-14-5-.07 or 335-14-6-.07, an owner or operator may request reimbursements for partial or final closure expenditures by submitting itemized bills to the Department. The owner or operator may request reimbursements for partial closure only if sufficient funds are remaining in the trust fund to cover the maximum costs of closing the facility over its remaining operating life. No later than 60 days after receiving bills for partial or final closure activities, the Department will instruct the trustee to make reimbursements in those amounts as the Department specifies in writing, if the Department determines that the partial or final closure expenditures are in accordance with the approved closure plan, or otherwise justified. If the Department has reason to believe that the maximum cost of closure over the remaining life of the facility will be significantly greater than the value of the trust fund, he may withhold reimbursements of such amounts as he deems prudent until he determines, in accordance with 335-14-2-.08(4)(i) that the owner or operator is no longer required to maintain financial assurance for final closure of the facility. If the Department does not instruct the trustee to make such reimbursements, he will provide to the owner or operator a detailed written statement of reasons.
  - 8. The Department will agree to termination of the trust when:
- (i) An owner or operator substitutes alternate financial assurance as specified in 335-14-2-.08(4); or
- (ii) The Department releases the owner or operator from the requirements of this section in accordance with paragraph 335-14-2-.08(4)(i).
  - (b) Surety bond guaranteeing payment into a trust fund.
- 1. An owner or operator may satisfy the requirements of 335-14-2-.08(4) by obtaining a surety bond which conforms to the requirements of this 335-14-2-.08(4)(b) and submitting the bond to the Department. The surety company issuing the bond must, at a minimum, be among those listed as acceptable sureties on Federal bonds in Circular 570 of the U.S. Department of the Treasury.

- 2. The wording of the surety bond must be identical to the wording specified in 335-14-2-.08(12)(b).
- 3. The owner or operator who uses a surety bond to satisfy the requirements of 335-14-2-.08(4) must also establish a standby trust fund. Under the terms of the bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with instructions from the Department. This standby trust fund must meet the requirements specified in 335-14-2-.08(4)(a), except that:
- (i) An originally signed duplicate of the trust agreement must be submitted to the Department with the surety bond; and
- (ii) Until the standby trust fund is funded pursuant to the requirements of 335-14-2-.08(4), the following are not required by these regulations:
  - (I) Payments into the trust fund as specified in 335-14-2-.08(4)(a);
- (II) Updating of Schedule A of the trust agreement (see 335-14-2-.08(12)(a)) to show current cost estimates;
  - (III) Annual valuations as required by the trust agreement; and
  - (IV) Notices of nonpayment as required by the trust agreement.
  - 4. The bond must guarantee that the owner or operator will:
- (i) Fund the standby trust fund in an amount equal to the penal sum of the bond before loss of the exclusion under 335-14-2-.01(4)(a)24; or
- (ii) Fund the standby trust fund in an amount equal to the penal sum within 15 days after an administrative order to begin closure issued by the Department becomes final, or within 15 days after an order to begin closure is issued by a U.S. district court or other court of competent jurisdiction; or
- (iii) Provide alternate financial assurance as specified in 335-14-2-.08(4), and obtain the Department's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and the Department of a notice of cancellation of the bond from the surety.
- 5. Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond.
- 6. The penal sum of the bond must be in an amount at least equal to the current cost estimate, except as provided in 335-14-2-.08(4)(f).
- 7. Whenever the current cost estimate increases to an amount greater than the penal sum, the owner or operator, within 60 days after the increase, must either cause the penal sum to be increased to an amount at least equal to the current cost estimate and submit evidence of such increase to the Department, or obtain other

financial assurance as specified in 335-14-2-.08(4) to cover the increase. Whenever the current cost estimate decreases, the penal sum may be reduced to the amount of the current cost estimate following written approval by the Department.

- 8. Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the Department. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Department, as evidenced by the return receipts.
- 9. The owner or operator may cancel the bond if the Department has given prior written consent based on his receipt of evidence of alternate financial assurance as specified in 335-14-2-.08(4).
  - (c) Letter of credit.
- 1. An owner or operator may satisfy the requirements of 335-14-2-.08(4) by obtaining an irrevocable standby letter of credit which conforms to the requirements of 335-14-2-.08(4)(c) and submitting the letter to the Department. The issuing institution must be an entity which has the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by a Federal or State agency.
- 2. The wording of the letter of credit must be identical to the wording specified in 335-14-2-.08(12)(c).
- 3. An owner or operator who uses a letter of credit to satisfy the requirements of 335-14-2-.08(4) must also establish a standby trust fund. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the Department will be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the Department. This standby trust fund must meet the requirements of the trust fund specified in 335-14-2-.08(4)(a) of this section, except that:
- (i) An originally signed duplicate of the trust agreement must be submitted to the Department with the letter of credit; and
- (ii) Unless the standby trust fund is funded pursuant to the requirements of 335-14-2-.08(4), the following are not required by these regulations:
  - (I) Payments into the trust fund as specified in 335-14-2-.08(4)(a);
- (II) Updating of Schedule A of the trust agreement (see 335-14-2-.08(12)(a)) to show current cost estimates;
  - (III) Annual valuations as required by the trust agreement; and
  - (IV) Notices of nonpayment as required by the trust agreement.

- 4. The letter of credit must be accompanied by a letter from the owner or operator referring to the letter of credit by number, issuing institution, and date, and providing the following information: The EPA Identification Number (if any issued), name, and address of the facility, and the amount of funds assured for the facility by the letter of credit.
- 5. The letter of credit must be irrevocable and issued for a period of at least 1 year. The letter of credit must provide that the expiration date will be automatically extended for a period of at least 1 year unless, at least 120 days before the current expiration date, the issuing institution notifies both the owner or operator and the Department by certified mail of a\_decision not to extend the expiration date. Under the terms of the letter of credit, the 120 days will begin on the date when both the owner or operator and the Department have received the notice, as evidenced by the return receipts.
- 6. The letter of credit must be issued in an amount at least equal to the current cost estimate, except as provided in 335-14-2-.08(4)(f).
- 7. Whenever the current cost estimate increases to an amount greater than the amount of the credit, the owner or operator, within 60 days after the increase, must either cause the amount of the credit to be increased so that it at least equals the current cost estimate and submit evidence of such increase to the Department, or obtain other financial assurance as specified in 335-14-2-.08(4) to cover the increase. Whenever the current cost estimate decreases, the amount of the credit may be reduced to the amount of the current cost estimate following written approval by the Department.
- 8. Following a determination by the Department that the hazardous secondary materials do not meet the conditions of the exclusion under 335-14-2-.01(4)(a)24., the Department may draw on the letter of credit.
- 9. If the owner or operator does not establish alternate financial assurance as specified in 335-14-2-.08(4) and obtain written approval of such alternate assurance from the Department within 90 days after receipt by both the owner or operator and the Department of a notice from the issuing institution that it has decided not to extend the letter of credit beyond the current expiration date, the Department will draw on the letter of credit. The Department may delay the drawing if the issuing institution grants an extension of the term of the credit. During the last 30 days of any such extension the Department will draw on the letter of credit if the owner or operator has failed to provide alternate financial assurance as specified in 335-14-2-.08(4) and obtain written approval of such assurance from the Department.
- 10. The Department will return the letter of credit to the issuing institution for termination when:
- (i) An owner or operator substitutes alternate financial assurance as specified in 335-14-2-.08(4); or
- (ii) The Department releases the owner or operator from the requirements of this section in accordance with paragraph 335-14-2-.08(4)(i).

- (d) Insurance.
- 1. An owner or operator may satisfy the requirements of 335-14-2-.08(4) by obtaining insurance which conforms to the requirements of this 335-14-2-.08(4)(d) and submitting a certificate of such insurance to the Department. At a minimum, the insurer must be licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.
- 2. The wording of the certificate of insurance must be identical to the wording specified in 335-14-2-.08(12)(d).
- 3. The insurance policy must be issued for a face amount at least equal to the current cost estimate, except as provided in paragraph 335-14-2-.08(4)(f) of this section. The term "face amount" means the total amount the insurer is obligated to pay under the policy. Actual payments by the insurer will not change the face amount, although the insurer's future liability will be lowered by the amount of the payments.
- 4. The insurance policy must guarantee that funds will be available whenever needed to pay the cost of removal of all hazardous secondary materials from the unit, to pay the cost of decontamination of the unit, to pay the costs of the performance of activities required under 335-14-5-.07 or 335-14-6-.07, as applicable, for the facilities covered by this policy. The policy must also guarantee that once funds are needed, the insurer will be responsible for paying out funds, up to an amount equal to the face amount of the policy, upon the direction of the Department, to such party or parties as the Department specifies.
- After beginning partial or final closure under 335-14-5 or 335-14-6, as applicable, an owner or operator or any other authorized person may request reimbursements for closure expenditures by submitting itemized bills to the Department. The owner or operator may request reimbursements only if the remaining value of the policy is sufficient to cover the maximum costs of closing the facility over its remaining operating life. Within 60 days after receiving bills for closure activities, the Department will instruct the insurer to make reimbursements in such amounts as the Department specifies in writing if the Department determines that the expenditures are in accordance with the approved plan or otherwise justified. If the Department has reason to believe that the maximum cost over the remaining life of the facility will be significantly greater than the face amount of the policy, he may withhold reimbursement of such amounts as he deems prudent until he determines, in accordance with 335-14-2-.08(4)(h), that the owner or operator is no longer required to maintain financial assurance for the particular facility. If the Department does not instruct the insurer to make such reimbursements, he will provide to the owner or operator a detailed written statement of reasons.
- 6. The owner or operator must maintain the policy in full force and effect until the Department consents to termination of the policy by the owner or operator as specified in 335-14-2-.08(4)(i)10. of this section. Failure to pay the premium, without substitution of alternate financial assurance as specified in 335-14-2-.08(4), will constitute a significant violation of these regulations warranting such remedy as the Department deems necessary. Such violation will be deemed to begin upon receipt by

the Department of a notice of future cancellation, termination, or failure to renew due to nonpayment of the premium, rather than upon the date of expiration.

- 7. Each policy must contain a provision allowing assignment of the policy to a successor owner or operator. Such assignment may be conditional upon consent of the insurer, provided such consent is not unreasonably refused.
- 8. The policy must provide that the insurer may not cancel, terminate, or fail to renew the policy except for failure to pay the premium. The automatic renewal of the policy must, at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy. If there is a failure to pay the premium, the insurer may elect to cancel, terminate, or fail to renew the policy by sending notice by certified mail to the owner or operator and the Department. Cancellation, termination, or failure to renew may not occur, however, during the 120 days beginning with the date of receipt of the notice by both the Department and the owner or operator, as evidenced by the return receipts. Cancellation, termination, or failure to renew may not occur and the policy will remain in full force and effect in the event that on or before the date of expiration:
  - (i) The Department deems the facility abandoned; or
- (ii) Conditional exclusion or interim status is lost, terminated, or revoked; or
- (iii) Closure is ordered by the Department or a U.S. district court or other court of competent jurisdiction; or
- (iv) The owner or operator is named as a debtor in a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code; or
  - (v) The premium due is paid.
- 9. Whenever the current cost estimate increases to an amount greater than the face amount of the policy, the owner or operator, within 60 days after the increase, must either cause the face amount to be increased to an amount at least equal to the current cost estimate and submit evidence of such increase to the Department, or obtain other financial assurance as specified in 335-14-2-.08(4) to cover the increase. Whenever the current cost estimate decreases, the face amount may be reduced to the amount of the current cost estimate following written approval by the Department.
- 10. The Department will give written consent to the owner or operator that he may terminate the insurance policy when:
- (i) An owner or operator substitutes alternate financial assurance as specified in 335-14-2-.08(4); or
- (ii) The Department releases the owner or operator from the requirements of 335-14-2-.08(4) in accordance with 335-14-2-.08(4)(i).
  - (e) Financial test and corporate guarantee.

- 1. An owner or operator may satisfy the requirements of 335-14-2-.08(4) by demonstrating that he passes a financial test as specified in 335-14-2-.08(4)(e). To pass this test the owner or operator must meet the criteria of either paragraph335-14-2-.08(4)(e)1.(i) or (ii):
  - (i) The owner or operator must have:
- (I) Two of the following three ratios: A ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities greater than 0.1; and a ratio of current assets to current liabilities greater than 1.5; and
- (II) Net working capital and tangible net worth each at least six times the sum of the current cost estimates and the current plugging and abandonment cost estimates; and
  - (III) Tangible net worth of at least \$10 million; and
- (IV) Assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the current cost estimates and the current plugging and abandonment cost estimates.
  - (ii) The owner or operator must have:
- (I) A current rating for his most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's; and
- (II) Tangible net worth at least six times the sum of the current cost estimates and the current plugging and abandonment cost estimates; and
  - (III) Tangible net worth of at least \$10 million; and
- (IV) Assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the current cost estimates and the current plugging and abandonment cost estimates.
- 2. The phrase\_"current cost estimates" as used in 335-14-2-.08(4)(e)1. refers to the cost estimates required to be shown in paragraphs 1–4 of the letter from the owner's or operator's chief financial officer (335-14-2-.08(12)(e)). The phrase "current plugging and abandonment cost estimates" as used in 335-14-2-.08(4)(e)1. of this section refers to the cost estimates required to be shown in paragraphs 1–4 of the letter from the owner's or operator's chief financial officer (§ 40 CFR 144.70(f)).
- 3. To demonstrate that he meets this test, the owner or operator must submit the following items to the Department:
  - (i) A letter signed by the owner's or operator's chief financial officer and worded as specified in 335-14-2-.08(12)(e); and

- (ii) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year; and
- (iii) If the chief financial officer's letter providing evidence of financial assurance includes financial data showing that the owner or operator satisfies 335-14-2-.08(4)(e)1.(i) that are different from the data in the audited financial statements referred to in 335-14-2-.08(4)(e)3.(ii) or any other audited financial statement or data filed with the SEC, then a special report from the owner's or operator's independent certified public accountant to the owner or operator is required. The special report shall be based upon an agreed upon procedures engagement in accordance with professional auditing standards and shall describe the procedures performed in comparing the data in the chief financial officer's letter derived from the independently audited, year end financial statements for the latest fiscal year with the amounts in such financial statements, the findings of the comparison, and the reasons for any differences.
- 4. The owner or operator may obtain an extension of the time allowed for submission of the documents specified in 335-14-2-.08(4)(e)3. if the fiscal year of the owner or operator ends during the 90 days prior to the effective date of these regulations and if the year end financial statements for that fiscal year will be audited by an independent certified public accountant. The extension will end no later than 90 days after the end of the owner's or operator's fiscal year. To obtain the extension, the owner's or operator's chief financial officer must send, by the effective date of these regulations, a letter to the Department. This letter from the chief financial officer must:
  - (i) Request the extension;
- (ii) Certify that he has grounds to believe that the owner or operator meets the criteria of the financial test;
- (iii) Specify for each facility to be covered by the test the EPA Identification Number (if any issued), name, address, and current cost estimates to be covered by the test;
- (iv) Specify the date ending the owner's or operator's last complete fiscal year before the effective date of these regulations in this subpart;
- (v) Specify the date, no later than 90 days after the end of such fiscal year, when he will submit the documents specified in 335-14-2-.08(4)(e)3; and
- (vi) Certify that the year end financial statements of the owner or operator for such fiscal year will be audited by an independent certified public accountant.
- 5. After the initial submission of items specified in 335-14-2-.08(4)(e)3<sub>2</sub>, the owner or operator must send updated information to the Department within 90 days after the close of each succeeding fiscal year. This information must consist of all three items specified 335-14-2-.08(4)(e)3.

- 6. If the owner or operator no longer meets the requirements of 335-14-2-.08(4)(e)1<sub>2</sub>, he must send notice to the Department of intent to establish alternate financial assurance as specified in 335-14-2-.08(4). The notice must be sent by certified mail within 90 days after the end of the fiscal year for which the year end financial data show that the owner or operator no longer meets the requirements. The owner or operator must provide the alternate financial assurance within 120 days after the end of such fiscal year.
- 7. The Department may, based on a reasonable belief that the owner or operator may no longer meet the requirements of 335-14-2-.08(4)(e)1, require reports of financial condition at any time from the owner or operator in addition to those specified in 335-14-2-.08(4)(e)3. If the Department, on the basis of such reports or other information, that the owner or operator no longer meets the requirements of 335-14-2-.08(4)(e)1, the owner or operator must provide alternate financial assurance as specified in 335-14-2-.08(4) within 30 days after notification of such a finding.
- 8. The Department may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in his report on examination of the owner's or operator's financial statements (see 335-14-2-.08(4)(e)3(ii)). An adverse opinion or a disclaimer of opinion will be cause for disallowance. The Department will evaluate other qualifications on an individual basis. The owner or operator must provide alternate financial assurance as specified in 335-14-2-.08(4) within 30 days after notification of the disallowance.
- 9. The owner or operator is no longer required to submit the items specified in 335-14-2-.08(4)(e)3. when:
- (i) An owner or operator substitutes alternate financial assurance as specified in 335-14-2-.08(4); or
- (ii) The Department releases the owner or operator from the requirements of 335-14-2-.08(4) in accordance with 335-14-2-.08(4)(i).
- by obtaining a written guarantee. The guarantor must be the direct or higher-tier parent corporation of the owner or operator, a firm whose parent corporation is also the parent corporation of the owner or operator, or a firm with a "substantial business relationship" with the owner or operator. The guarantor must meet the requirements for owners or operators in 335-14-2-.08(4)(e)1. through 8. and must comply with the terms of the guarantee. The wording of the guarantee must be identical to the wording specified in 335-14-2-.08(12)(g)1. A certified copy of the guarantee must accompany the items sent to the Department as specified in 335-14-2-.08(4)(e)3. One of these items must be the letter from the guarantor's chief financial officer. If the guarantor's parent corporation is also the parent corporation of the owner or operator, the letter must describe the value received in consideration of the guarantee. If the guarantor is a firm with a "substantial business relationship" with the owner or operator, this letter must describe this "substantial business relationship" and the value received in consideration of the guarantee. The terms of the guarantee must provide that:

- (i) Following a determination by the Department that the hazardous secondary materials at the owner or operator's facility covered by this guarantee do not meet the conditions of the exclusion under 335-14-2-.01(4)(a)24, the guarantor will dispose of any hazardous secondary material as hazardous waste and close the facility in accordance with closure requirements found in 335-14-5 or 335-14-6, as applicable, or establish a trust fund as specified in 335-14-2-.08(4)(a) in the name of the owner or operator in the amount of the current cost estimate.
- (ii) The corporate guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the Department. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Department, as evidenced by the return receipts.
- (iii) If the owner or operator fails to provide alternate financial assurance as specified in 335-14-2-.08(4) and obtain the written approval of such alternate assurance from the Department within 90 days after receipt by both the owner or operator and the Department of a notice of cancellation of the corporate guarantee from the guarantor, the guarantor will provide such alternate financial assurance in the name of the owner or operator.
- (f) Use of multiple financial mechanisms. An owner or operator may satisfy the requirements of 335-14-2-.08(4) by establishing more than one financial mechanism per facility. These mechanisms are limited to trust funds, surety bonds, letters of credit, and insurance. The mechanisms must be as specified in 335-14-2-.08(4)(a) through (d), except that it is the combination of mechanisms, rather than the single mechanism, which must provide financial assurance for an amount at least equal to the current cost estimate. If an owner or operator uses a trust fund in combination with a surety bond or a letter of credit, he may use the trust fund as the standby trust fund for the other mechanisms. A single standby trust fund may be established for two or more mechanisms. The Department may use any or all of the mechanisms to provide for the facility.
- (g) Use of a financial mechanism for multiple facilities. An owner or operator may use a financial assurance mechanism specified in 335-14-2-.08(4) to meet the requirements for more than one facility. Evidence of financial assurance submitted to the Department must include a list showing, for each facility, the EPA Identification Number (if any issued), name, address, and the amount of funds assured by the mechanism. The amount of funds available through the mechanism must be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for each facility. In directing funds available through the mechanism for any of the facilities covered by the mechanism, the Department may direct only the amount of funds designated for that facility, unless the owner or operator agrees to the use of additional funds available under the mechanism.

### (h) Removal and Decontamination Plan for Release.

1. An owner or operator of a reclamation facility or an intermediate facility who wishes to be released from his financial assurance obligations under 335-14-2-.01(4)(a)24.(vi)(VI) must submit a plan for removing all hazardous secondary

material residues to the Department at least 180 days prior to the date on which he expects to cease to operate under the exclusion.

- 2. The plan must include, at least:
- (i) For each hazardous secondary materials storage unit subject to financial assurance requirements under 335-14-2-.01(4)(a)24.(vi)(VI), a description of how all excluded hazardous secondary materials will be recycled or sent for recycling, and how all residues, contaminated containment systems (liners, etc.), contaminated soils, subsoils, structures, and equipment will be removed or decontaminated as necessary to protect human health and the environment, and
- (ii) A detailed description of the steps necessary to remove or decontaminate all hazardous secondary material residues and contaminated containment system components, equipment, structures, and soils including, but not limited to, procedures for cleaning equipment and removing contaminated soils, methods for sampling and testing surrounding soils, and criteria for determining the extent of decontamination necessary to protect human health and the environment; and
- (iii) A detailed description of any other activities necessary to protect human health and the environment during this timeframe, including, but not limited to, leachate collection, run-on and run-off control, etectc.; and
- (iv) A schedule for conducting the activities described which, at a minimum, includes the total time required to remove all excluded hazardous secondary materials for recycling and decontaminate all units subject to financial assurance under335-14-2-.01(4)(a)24.(vi)(VI) and the time required for intervening activities which will allow tracking of the progress of decontamination.
- 3. The Department will provide the owner or operator and the public, through a newspaper notice, the opportunity to submit written comments on the plan and request modifications to the plan no later than 30 days from the date of the notice. He will also, in response to a request or at his discretion, hold a public hearing whenever such a hearing might clarify one or more issues concerning the plan. The Department will give public notice of the hearing at least 30 days before it occurs. (Public notice of the hearing may be given at the same time as notice of the opportunity for the public to submit written comments, and the two notices may be combined.) The Department will approve, modify, or disapprove the plan within 90 days of its receipt. If the Department does not approve the plan, he shall provide the owner or operator with a detailed written statement of reasons for the refusal and the owner or operator must modify the plan or submit a new plan for approval within 30 days after receiving such written statement. The Department will approve or modify this plan in writing within 60 days. If the Department modifies the plan, this modified plan becomes the approved plan. The Department must assure that the approved plan is consistent with 335-14-2-.08(4)(h). A copy of the modified plan with a detailed statement of reasons for the modifications must be mailed to the owner or operator.
- 4. Within 60 days of completion of the activities described for each hazardous secondary materials management unit, the owner or operator must submit to the Department, by registered mail, a certification that all hazardous secondary

materials have been removed from the unit and the unit has been decontaminated in accordance with the specifications in the approved plan. The certification must be signed by the owner or operator and by a qualified Professional Engineer. Documentation supporting the Professional Engineer's certification must be furnished to the Department, upon request, until he releases the owner or operator from the financial assurance requirements for 335-14-2-.01(4)(a)24.(vi)(VI).

- (i) Release of the owner or operator from the requirements of 335-14-2-.08(4). Within 60 days after receiving certifications from the owner or operator and a qualified Professional Engineer that all hazardous secondary materials have been removed from the facility or a unit at the facility and the facility or a unit has been decontaminated in accordance with the approved plan per 335-14-2-.08(4)(h), the Department will notify the owner or operator in writing that he is no longer required under 335-14-2-.01(4)(a)24(vi)(VI) to maintain financial assurance for that facility or a unit at the facility, unless the Department has reason to believe that all hazardous secondary materials have not been removed from the facility or unit at a facility or that the facility or unit has not been decontaminated in accordance with the approved plan. The Department shall provide the owner or operator a detailed written statement of any such reason to believe that all hazardous secondary materials have not been removed from the unit or that the unit has not been decontaminated in accordance with the approved plan.
  - (5) [Reserved].
  - (6) [Reserved].
  - (7) [Reserved].
  - (8) <u>Liability requirements</u>.
- (a) Coverage for sudden accidental occurrences. An owner or operator of a hazardous secondary material reclamation facility or an intermediate facility subject to financial assurance requirements under 335-14-2-.01(4)(a)24\_(vi)(VI), or a group of such facilities, must demonstrate financial responsibility for bodily injury and property damage to third parties caused by sudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator must have and maintain liability coverage for sudden accidental occurrences in the amount of at least \$1 million per occurrence with an annual aggregate of at least \$2 million, exclusive of legal defense costs. This liability coverage may be demonstrated as specified in 335-14-2-.08(8)(a)1\_1, 2\_1, 3\_1, 4\_2, 5\_1, or 6\_1:
- 1. An owner or operator may demonstrate the required liability coverage by having liability insurance as specified in 335-14-2-.08(8)(a).
- (i) Each insurance policy must be amended by attachment of the Hazardous Secondary Material Facility Liability Endorsement, or evidenced by a Certificate of Liability Insurance. The wording of the endorsement must be identical to the wording specified in 335-14-2-.08(12)(h). The wording of the certificate of insurance must be identical to the wording specified in 335-14-2-.08(12)(i). The owner or operator must submit a signed duplicate original of the endorsement or the certificate of

insurance to the Department. If requested by a Department, the owner or operator must provide a signed duplicate original of the insurance policy.

- (ii) Each insurance policy must be issued by an insurer which, at a minimum, is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.
- 2. An owner or operator may meet the requirements of 335-14-2-.08(8) by passing a financial test or using the guarantee for liability coverage as specified in 335-14-2-.08(8)(f) and (g).
- 3. An owner or operator may meet the requirements of 335-14-2-.08(8) by obtaining a letter of credit for liability coverage as specified in 335-14-2-.08(8)(h).
- 4. An owner or operator may meet the requirements of 335-14-2-.08(8) by obtaining a surety bond for liability coverage as specified in 335-14-2-.08(8)(i).
- 5. An owner or operator may meet the requirements of 335-14-2-.08(8) by obtaining a trust fund for liability coverage as specified in 335-14-2-.08(8)(j).
- 6. An owner or operator may demonstrate the required liability coverage through the use of combinations of insurance, financial test, guarantee, letter of credit, surety bond, and trust fund, except that the owner or operator may not combine a financial test covering part of the liability coverage requirement with a guarantee unless the financial statement of the owner or operator is not consolidated with the financial statement of the guarantor. The amounts of coverage demonstrated must total at least the minimum amounts required by 335-14-2-.08(8). If the owner or operator demonstrates the required coverage through the use of a combination of financial assurances under this 335-14-2-.08(8)(a), the owner or operator shall specify at least one such assurance as "primary" coverage and shall specify other assurance as "excess" coverage.
- 7. An owner or operator shall notify the Department in writing within 30 days whenever:
- (i) A claim results in a reduction in the amount of financial assurance for liability coverage provided by a financial instrument authorized in 335-14-2-.08(8)(a)1. through 6; or
- (ii) A Certification of Valid Claim for bodily injury or property damages caused by a sudden or non-sudden accidental occurrence arising from the operation of a hazardous secondary material reclamation facility or intermediate facility is entered between the owner or operator and third-party claimant for liability coverage under 335-14-2-.08(8)(a)1. through 6.; or
- (iii) A final court order establishing a judgment for bodily injury or property damage caused by a sudden or nonsudden accidental occurrence arising from the operation of a hazardous secondary material reclamation facility or intermediate facility is issued against the owner or operator or an instrument that is providing financial assurance for liability coverage under 335-14-2-.08(8)(a)1. through 6.

- Coverage for nonsudden accidental occurrences. An owner or (b) operator of a hazardous secondary material reclamation facility or intermediate facility with land-based units, as defined in 335-14-1-.02(1), which are used to manage hazardous secondary materials excluded under 335-14-2-.01(4)(a)24. or a group of such facilities, must demonstrate financial responsibility for bodily injury and property damage to third parties caused by nonsudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator must have and maintain liability coverage for nonsudden accidental occurrences in the amount of at least \$3 million per occurrence with an annual aggregate of at least \$6 million, exclusive of legal defense costs. An owner or operator who must meet the requirements of this section may combine the required per-occurrence coverage levels for sudden and nonsudden accidental occurrences into a single per-occurrence level, and combine the required annual aggregate coverage levels for sudden and nonsudden accidental occurrences into a single annual aggregate level. Owners or operators who combine coverage levels for sudden and nonsudden accidental occurrences must maintain liability coverage in the amount of at least \$4 million per occurrence and \$8 million annual aggregate. This liability coverage may be demonstrated as specified in 335-14-2-.08(8)(b)1<sub>.</sub>, 2<sub>.</sub>, 3<sub>.</sub>, 4<sub>.</sub>, 5<sub>.</sub>, or 6<sub>.</sub>:
- 1. An owner or operator may demonstrate the required liability coverage by having liability insurance as specified in 335-14-2-.08(8)(b).
- (i) Each insurance policy must be amended by attachment of the Hazardous Secondary Material Facility Liability Endorsement or evidenced by a Certificate of Liability Insurance. The wording of the endorsement must be identical to the wording specified in 335-14-2-.08(12)(h). The wording of the certificate of insurance must be identical to the wording specified in 335-14-2-.08(12)(i). The owner or operator must submit a signed duplicate original of the endorsement or the certificate of insurance to the Department. If requested by the Department, the owner or operator must provide a signed duplicate original of the insurance policy.
- (ii) Each insurance policy must be issued by an insurer which, at a minimum, is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.
- 2. An owner or operator may meet the requirements of 335-14-2-.08(8) by passing a financial test or using the guarantee for liability coverage as specified in 335-14-2-.08(12)(f) and (g).
- 3. An owner or operator may meet the requirements of 335-14-2-.08(8) by obtaining a letter of credit for liability coverage as specified in 335-14-2-.08(8)(h).
- 4. An owner or operator may meet the requirements of 335-14-2-.08(8) by obtaining a surety bond for liability coverage as specified in 335-14-2-.08(8)(i).
- 5. An owner or operator may meet the requirements of 335-14-2-.08(8) by obtaining a trust fund for liability coverage as specified in 335-14-2-.08(8)(j).

- 6. An owner or operator may demonstrate the required liability coverage through the use of combinations of insurance, financial test, guarantee, letter of credit, surety bond, and trust fund, except that the owner or operator may not combine a financial test covering part of the liability coverage requirement with a guarantee unless the financial statement of the owner or operator is not consolidated with the financial statement of the guarantor. The amounts of coverage demonstrated must total at least the minimum amounts required by 335-14-2-.08(8). If the owner or operator demonstrates the required coverage through the use of a combination of financial assurances under 335-14-2-.08(8)(b), the owner or operator shall specify at least one such assurance as "primary" coverage and shall specify other assurance as "excess" coverage.
- 7. An owner or operator shall notify the Department in writing within 30 days whenever:
- (i) A claim results in a reduction in the amount of financial assurance for liability coverage provided by a financial instrument authorized in 335-14-2-.08(8)(b)1. through 6.; or
- (ii) A Certification of Valid Claim for bodily injury or property damages caused by a sudden or non-sudden accidental occurrence arising from the operation of a hazardous secondary material treatment and/or storage facility is entered between the owner or operator and third-party claimant for liability coverage under 335-14-2-.08(8)(b)1. through 6.; or
- (iii) A final court order establishing a judgment for bodily injury or property damage caused by a sudden or nonsudden accidental occurrence arising from the operation of a hazardous secondary material treatment and/or storage facility is issued against the owner or operator or an instrument that is providing financial assurance for liability coverage under 335-14-2-.08(8)(b)1. through 6.
- (c) Request for variance. If an owner or operator can demonstrate to the satisfaction of the Department that the levels of financial responsibility required by 335-14-2-.08(8)(a) or (b) are not consistent with the degree and duration of risk associated with treatment and/or storage at the facility or group of facilities, the owner or operator may obtain a variance from the Department. The request for a variance must be submitted in writing to the Department. If granted, the variance will take the form of an adjusted level of required liability coverage, such level to be based on the Department's assessment of the degree and duration of risk associated with the ownership or operation of the facility or group of facilities. The Department may require an owner or operator who requests a variance to provide such technical and engineering information as is deemed necessary by the Department to determine a level of financial responsibility other than that\_required by 335-14-2-.08(8)(a) or (b).
- (d) Adjustments by the Department. If the Department determines that the levels of financial responsibility required by 335-14-2-.08(8)(a) or (b) are not consistent with the degree and duration of risk associated with treatment and/or storage at the facility or group of facilities, the Department may adjust the level of financial responsibility required under 335-14-2-.08(8)(a) or (b) as may be necessary to protect human health and the environment. This adjusted level will be based on the

Department's assessment of the degree and duration of risk associated with the ownership or operation of the facility or group of facilities. In addition, if the Department determines that there is a significant risk to human health and the environment from nonsudden accidental occurrences resulting from the operations of a facility that is not a surface impoundment, pile, or land treatment facility, he may require that an owner or operator of the facility comply with 335-14-2-.08(8)(b). An owner or operator must furnish to the Department, within a reasonable time, any information which the Department requests to determine whether cause exists for such adjustments of level or type of coverage.

- (e) Period of coverage. Within 60 days after receiving certifications from the owner or operator and a qualified Professional Engineer that all hazardous secondary materials have been removed from the facility or a unit at the facility and the facility or a unit has been decontaminated in accordance with the approved plan per 335-14-2-.08(4)(h), the Department will notify the owner or operator in writing that he is no longer required under 335-14-2-.01(4)(a)24.(vi)(VI) to maintain liability coverage for that facility or a unit at the facility, unless the Department has reason to believe that that all hazardous secondary materials have not been removed from the facility or unit at a facility or that the facility or unit has not been decontaminated in accordance with the approved plan.
  - (f) Financial test for liability coverage.
- 1. An owner or operator may satisfy the requirements of 335-14-2-.08(8) by demonstrating that he passes a financial test as specified in 335-14-2-.08(8)(f). To pass this test the owner or operator must meet the criteria of 335-14-2-.08(8)(f)1.(i) or (ii):
  - (i) The owner or operator must have:
- (I) Net working capital and tangible net worth each at least six times the amount of liability coverage to be demonstrated by this test; and
  - (II) Tangible net worth of at least \$10 million; and
  - (III) Assets in the United States amounting to either:
  - I. At least 90 percent of his total assets; or
- II. At least six times the amount of liability coverage to be demonstrated by this test.
  - (ii) The owner or operator must have:
- (I) A current rating for his most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's, or Aaa, Aa, A, or Baa as issued by Moody's; and
  - (II) Tangible net worth of at least \$10 million; and

- (II) Tangible net worth at least six times the amount of liability coverage to be demonstrated by this test; and
- (IV) Assets in the United States amounting to either:
- I. At least 90 percent of his total assets; or
- II. At least six times the amount of liability coverage to be demonstrated by this test.
- 2. The phrase "amount of liability coverage" as used in 335-14-2-.08(8)(f)1. refers to the annual aggregate amounts for which coverage is required under 335-14-2-.08(8)(a) and (b) and the annual aggregate amounts for which coverage is required under 335-14-5-.08(8)(a) and (b) and 335-14-6-.08(8)(a) and (b).
- 3. To demonstrate that he meets this test, the owner or operator must submit the following three items to the Department:
- (i) A letter signed by the owner's or operator's chief financial officer and worded as specified in 335-14-2-.08(12)(f). If an owner or operator is using the financial test to demonstrate both assurance as specified by 335-14-2-.08(4)(e), and liability coverage, he must submit the letter specified in 335-14-2-.08(12)(f) to cover both forms of financial responsibility; a separate letter as specified in 335-14-2-.08(12)(e) is not required.
- (ii) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year.
- (iii) If the chief financial officer's letter providing evidence of financial assurance includes financial data showing that the owner or operator satisfies 335-14-2-.08(8)(f)1.(i) that are different from the data in the audited financial statements referred to in 335-14-2-.08(8)(f)3.(ii) or any other audited financial statement or data filed with the SEC, then a special report from the owner's or operator's independent certified public accountant to the owner or operator is required. The special report shall be based upon an agreed upon procedures engagement in accordance with professional auditing standards and shall describe the procedures performed in comparing the data in the chief financial officer's letter derived from the independently audited, yearend financial statements for the latest fiscal year with the amounts in such financial statements, the findings of the comparison, and the reasons for any difference.
- 4. The owner or operator may obtain a one-time extension of the time allowed for submission of the documents specified in 335-14-2-.08(8)(f)3. if the fiscal year of the owner or operator ends during the 90 days prior to the effective date of these regulations and if the year end financial statements for that fiscal year will be audited by an independent certified public accountant. The extension will end no later than 90 days after the end of the owner's or operator's fiscal year. To obtain the extension, the owner's or operator's chief financial officer must send, by the effective date of these regulations, a letter to the Department. This letter from the chief financial officer must:

- (i) Request the extension;
- (ii) Certify that he has grounds to believe that the owner or operator meets the criteria of the financial test;
- (iii) Specify for each facility to be covered by the test the EPA Identification Number, name, address, the amount of liability coverage and, when applicable, current closure and post-closure cost estimates to be covered by the test;
- (iv) Specify the date ending the owner's or operator's last complete fiscal year before the effective date of these regulations;
- (v) Specify the date, no later than 90 days after the end of such fiscal year, when he will submit the documents specified in 335-14-2-.08(8)(f)3; and
- (vi) Certify that the year end financial statements of the owner or operator for such fiscal year will be audited by an independent certified public accountant.
- 5. After the initial submission of items specified in 335-14-2-.08(8)(f)3., the owner or operator must send updated information to the within 90 days after the close of each succeeding fiscal year. This information must consist of all three items specified in 335-14-2-.08(8)(f)3.
- 6. If the owner or operator no longer meets the requirements of 335-14-2-.08(8)(f)1, he must obtain insurance, a letter of credit, a surety bond, a trust fund, or a guarantee for the entire amount of required liability coverage as specified in 335-14-2-.08(8). Evidence of liability coverage must be submitted to the Department within 90 days after the end of the fiscal year for which the year end financial data show that the owner or operator no longer meets the test requirements.
- 7. The Department may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in his report on examination of the owner's or operator's financial statements (see 335-14-2-.08(8)(f)3.(ii). An adverse opinion or a disclaimer of opinion will be cause for disallowance. The Department will evaluate other qualifications on an individual basis. The owner or operator must provide evidence of insurance for the entire amount of required liability coverage as specified in 335-14-2-.08(8) within 30 days after notification of disallowance.
  - (g) Guarantee for liability coverage.
- 1. Subject to 335-14-2-.08(8)(g)2, an owner or operator may meet the requirements of 335-14-2-.08(8) by obtaining a written guarantee, hereinafter referred to as "guarantee." The guarantor must be the direct or higher-tier parent corporation of the owner or operator, a firm whose parent corporation is also the parent corporation of the owner or operator, or a firm with a "substantial business relationship" with the owner or operator. The guarantor must meet the requirements for owners or operators in 335-14-2-.08(8)(f)1. through 6. The wording of the guarantee must be identical to the wording specified in 335-14-2-.08(12)(g)2. A certified copy of the guarantee must

accompany the items sent to the Department as specified in 335-14-2-.08(8)(f)3. One of these items must be the letter from the guarantor's chief financial officer. If the guarantor's parent corporation is also the parent corporation of the owner or operator, this letter must describe the value received in consideration of the guarantee. If the guarantor is a firm with a "substantial business relationship" with the owner or operator, this letter must describe this "substantial business relationship" and the value received in consideration of the guarantee.

(i) If the owner or operator fails to satisfy a judgment based on a determination of liability for bodily injury or property damage to third parties caused by sudden or nonsudden accidental occurrences (or both as the case may be), arising from the operation of facilities covered by this corporate guarantee, or fails to pay an amount agreed to in settlement of claims arising from or alleged to arise from such injury or damage, the guarantor will do so up to the limits of coverage.

## (ii) [Reserved].

- 2. (i) In the case of corporations incorporated in the United States, a guarantee may be used to satisfy the requirements of 335-14-2-.08(8) only if the Attorneys General or Insurance Commissioners of:
  - (I) The State in which the guarantor is incorporated; and
- (II) Each State in which a facility covered by the guarantee is located have submitted a written statement to EPA that a guarantee executed as described in 335-14-2-.08(8) and 335-14-2-.08(12)(g)2. is a legally valid and enforceable obligation in that State.
- (ii) In the case of corporations incorporated outside the United States, a guarantee may be used to satisfy the requirements of 335-14-2-.08(8) only if:
- (I) The non-U.S. corporation has identified a registered agent for service of process in each State in which a facility covered by the guarantee is located and in the State in which it has its principal place of business; and if
- (II) The Attorney General or Insurance Commissioner of each State in which a facility covered by the guarantee is located and the State in which the guarantor corporation has its principal place of business, has submitted a written statement to EPA that a guarantee executed as described in 335-14-2-.08(8) and 335-14-2-.08(12)(g)2. is a legally valid and enforceable obligation in that State.
  - (h) Letter of credit for liability coverage.
- 1. An owner or operator may satisfy the requirements of 335-14-2-.08(8) by obtaining an irrevocable standby letter of credit that conforms to the requirements of 335-14-2-.08(8)(h) and submitting a copy of the letter of credit to the Department.

- 2. The financial institution issuing the letter of credit must be an entity that has the authority to issue letters of credit and whose letter of credit operations are regulated and examined by a Federal or State agency.
- 3. The wording of the letter of credit must be identical to the wording specified in 335-14-2-.08(12)(j).
- 4. An owner or operator who uses a letter of credit to satisfy the requirements of 335-14-2-.08(8) may also establish a standby trust fund. Under the terms of such a letter of credit, all amounts paid pursuant to a draft by the trustee of the standby trust will be deposited by the issuing institution into the standby trust in accordance with instructions from the trustee. The trustee of the standby trust fund must be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal or State agency.
- 5. The wording of the standby trust fund must be identical to the wording specified in 335-14-2-.08(12)(m).
  - (i) Surety bond for liability coverage.
- 1. An owner or operator may satisfy the requirements of 335-14-2-.08(8) by obtaining a surety bond that conforms to the requirements of 335-14-2-.08(8)(i) and submitting a copy of the bond to the Department.
- 2. The surety company issuing the bond must be among those listed as acceptable sureties on Federal bonds in the most recent Circular 570 of the U.S. Department of the Treasury.
- 3. The wording of the surety bond must be identical to the wording specified in 335-14-2-.08(12)(k).
- 4. A surety bond may be used to satisfy the requirements of 335-14-2-.08(8) only if the Attorneys General or Insurance Commissioners of:
  - (i) The State in which the surety is incorporated; and
- (ii) Each State in which a facility covered by the surety bond is located have submitted a written statement to EPA that a surety bond executed as described in 335-14-2-.08(8) and 335-14-2-.08(12)(k) is a legally valid and enforceable obligation in that State.
  - (j) Trust fund for liability coverage.
- 1. An owner or operator may satisfy the requirements of 335-14-2-.08(8) by establishing a trust fund that conforms to the requirements of 335-14-2-.08(8)(j) and submitting an originally signed duplicate of the trust agreement to the Department.

- 2. The trustee must be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal or State agency.
- 3. The trust fund for liability coverage must be funded for the full amount of the liability coverage to be provided by the trust fund before it may be relied upon to satisfy the requirements of 335-14-2-.08(8). If at any time after the trust fund is created the amount of funds in the trust fund is reduced below the full amount of the liability coverage to be provided, the owner or operator, by the anniversary date of the establishment of the Fund, must either add sufficient funds to the trust fund to cause its value to equal the full amount of liability coverage to be provided, or obtain other financial assurance as specified in 335-14-2-.08(8) to cover the difference. For purposes of this paragraph, "the full amount of the liability coverage to be provided" means the amount of coverage for sudden and/or nonsudden occurrences required to be provided by the owner or operator by 335-14-2-.08(8), less the amount of financial assurance for liability coverage that is being provided by other financial assurance mechanisms being used to demonstrate financial assurance by the owner or operator.
- 4. The wording of the trust fund must be identical to the wording specified in ADEM Admin. Code r. 335-14-2-.08(12)(1).
- (9) <u>Incapacity of owners or operators, guarantors, or financial institutions.</u>
- (a) An owner or operator must notify the Department by certified mail of the commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming the owner or operator as debtor, within 10 days after commencement of the proceeding. A guarantor of a corporate guarantee as specified in ADEM Admin. Code r. 335-14-2-.08(4)(e) must make such a notification if he is named as debtor, as required under the terms of the corporate guarantee.
- (b) An owner or operator who fulfills the requirements of ADEM Admin. Code r. 335-14-2-.08(4) or 335-14-2-.08(8) by obtaining a trust fund, surety bond, letter of credit, or insurance policy will be deemed to be without the required financial assurance or liability coverage in the event of bankruptcy of the trustee or issuing institution, or a suspension or revocation of the authority of the trustee institution to act as trustee or of the institution issuing the surety bond, letter of credit, or insurance policy to issue such instruments. The owner or operator must establish other financial assurance or liability coverage within 60 days after such an event.
  - (10) [Reserved].
  - (11) [Reserved].
  - (12) Wording of the instruments.
- (a)1. A trust agreement for a trust fund, as specified in ADEM Admin. Code r. 335-14-2-.08(4)(a) must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

### **Trust Agreement**

Trust Agreement, the "Agreement," entered into as of [date] by and between [name of the owner or operator], a [name of State] [insert "corporation," "partnership," "association," or "proprietorship"], the "Grantor," and [name of corporate trustee], [insert "incorporated in the State of \_\_\_\_\_\_" or "a national bank"], the "Trustee."

Whereas, the Alabama Department of Environmental Management, "the Department," an agency of the State of Alabama, has established certain regulations applicable to the Grantor, requiring that an owner or operator of a facility regulated under ADEM Admin. Code r. 335-14-5, or 335-14-6, or satisfying the conditions of the exclusion under ADEM Admin. Code r. 335-14-2-.01(4)(a)24. shall provide assurance that funds will be available if needed for care of the facility under ADEM Admin. Code r. 335-14-5-.07 or 335-14-6-.07, as applicable,

Whereas, the Grantor has elected to establish a trust to provide all or part of such financial assurance for the facilities identified herein,

Whereas, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this agreement, and the Trustee is willing to act as trustee,

Now, Therefore, the Grantor and the Trustee agree as follows:

- Section 1. Definitions. As used in this Agreement:
- (a) The term "Grantor" means the owner or operator who enters into this Agreement and any successors or assigns of the Grantor.
- (b) The term "Trustee" means the Trustee who enters into this Agreement and any successor Trustee.
- Section 2. Identification of Facilities and Cost Estimates. This Agreement pertains to the facilities and cost estimates identified on attached Schedule A [on Schedule A, for each facility list the EPA Identification Number (if available), name, address, and the current cost estimates, or portions thereof, for which financial assurance is demonstrated by this Agreement].
- Section 3. Establishment of Fund. The Grantor and the Trustee hereby establish a trust fund, the "Fund," for the benefit of the Department in the event that the hazardous secondary materials of the grantor no longer meet the conditions of the exclusion under ADEM Admin. Code r. 335-14-2-.01(4)(a)24. The Grantor and the Trustee intend that no third party have access to the Fund except as herein provided. The Fund is established initially as consisting of the property, which is acceptable to the Trustee, described in Schedule B attached hereto. Such property and any other property subsequently transferred to the Trustee is referred to as the Fund, together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement. The Fund shall be held by the Trustee, IN TRUST, as hereinafter provided. The Trustee shall not be responsible nor shall it undertake any

responsibility for the amount or adequacy of, nor any duty to collect from the Grantor, any payments necessary to discharge any liabilities of the Grantor established by the Department.

- Section 4. Payments from the Fund. The Trustee shall make payments from the Fund as the Department shall direct, in writing, to provide for the payment of the costs of the performance of activities required under ADEM Admin. Code r. 335-14-5-.07 or 335-14-6-.07 for the facilities covered by this Agreement. The Trustee shall reimburse the Grantor or other persons as specified by the Department from the Fund for expenditures for such activities in such amounts as the beneficiary shall direct in writing. In addition, the Trustee shall refund to the Grantor such amounts as the Department specifies in writing. Upon refund, such funds shall no longer constitute part of the Fund as defined herein.
- Section 5. Payments Comprising the Fund. Payments made to the Trustee for the Fund shall consist of cash or securities acceptable to the Trustee.
- Section 6. Trustee Management. The Trustee shall invest and reinvest the principal and income of the Fund and keep the Fund invested as a single fund, without distinction between principal and income, in accordance with general investment policies and guidelines which the Grantor may communicate in writing to the Trustee from time to time, subject, however, to the provisions of this section. In investing, reinvesting, exchanging, selling, and managing the Fund, the Trustee shall discharge his duties with respect to the trust fund solely in the interest of the beneficiary and with the care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; except that:
- (i) Securities or other obligations of the Grantor, or any other owner or operator of the facilities, or any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 U.S.C. 80a–2.(a), shall not be acquired or held, unless they are securities or other obligations of the Federal or a State government;
- (ii) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the Federal or State government; and
- (iii) The Trustee is authorized to hold cash awaiting investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon.
- Section 7. Commingling and Investment. The Trustee is expressly authorized in its discretion:
- (a) To transfer from time to time any or all of the assets of the Fund to any common, commingled, or collective trust fund created by the Trustee in which the Fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and

- (b) To purchase shares in any investment company registered under the Investment Company Act of 1940, 15 U.S.C. 80a–1 *et seq.*, including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.
- Section 8. Express Powers of Trustee. Without in any way limiting the powers and discretions conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:
- (a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public or private sale. No person dealing with the Trustee shall be bound to see to the application of the purchase money or to inquire into the validity or expediency of any such sale or other disposition;
- (b) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;
- (c) To register any securities held in the Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depositary even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depositary with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States Government, or any agency or instrumentality thereof, with a Federal Reserve bank, but the books and records of the Trustee shall at all times show that all such securities are part of the Fund;
- (d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the Federal or State government; and
- (e) To compromise or otherwise adjust all claims in favor of or against the Fund.
- Section 9. Taxes and Expenses. All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund. All other expenses incurred by the Trustee in connection with the administration of this Trust, including fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid directly by the Grantor, and all other proper charges and disbursements of the Trustee shall be paid from the Fund.
- Section 10. Annual Valuation. The Trustee shall annually, at least 30 days prior to the anniversary date of establishment of the Fund, furnish to the Grantor and to the Department a statement confirming the value of the Trust. Any securities in the Fund

shall be valued at market value as of no more than 60 days prior to the anniversary date of establishment of the Fund. The failure of the Grantor to object in writing to the Trustee within 90 days after the statement has been furnished to the Grantor and the Department shall constitute a conclusively binding assent by the Grantor, barring the Grantor from asserting any claim or liability against the Trustee with respect to matters disclosed in the statement.

Section 11. Advice of Counsel. The Trustee may from time to time consult with counsel, who may be counsel to the Grantor, with respect to any question arising as to the construction of this Agreement or any action to be taken hereunder. The Trustee shall be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

Section 12. Trustee Compensation. The Trustee shall be entitled to reasonable compensation for its services as agreed upon in writing from time to time with the Grantor.

Section 13. Successor Trustee. The Trustee may resign or the Grantor may replace the Trustee, but such resignation or replacement shall not be effective until the Grantor has appointed a successor trustee and this successor accepts the appointment. The successor trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor trustee's acceptance of the appointment, the Trustee shall assign, transfer, and pay over to the successor trustee the funds and properties then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the appointment of a successor trustee or for instructions. The successor trustee shall specify the date on which it assumes administration of the trust in a writing sent to the Grantor, the Department, and the present Trustee by certified mail 10 days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this Section shall be paid as provided in Section 9.

Section 14. Instructions to the Trustee. All orders, requests, and instructions by the Grantor to the Trustee shall be in writing, signed by such persons as are designated in the attached Exhibit A or such other designees as the Grantor may designate by amendment to Exhibit A. The Trustee shall be fully protected in acting without inquiry in accordance with the Grantor's orders, requests, and instructions. All orders, requests, and instructions by the Department to the Trustee shall be in writing, signed by the Department, or his designees, and the Trustee shall act and shall be fully protected in acting in accordance with such orders, requests, and instructions. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the Grantor or the Department hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instructions from the Grantor and/or the Department, except as provided for herein.

Section 15. Amendment of Agreement. This Agreement may be amended by an instrument in writing executed by the Grantor, the Trustee, and the appropriate Department, or by the Trustee and the appropriate Department if the Grantor ceases to exist.

Section 16. Irrevocability and Termination. Subject to the right of the parties to amend this Agreement as provided in Section 15, this Trust shall be irrevocable and shall continue until terminated at the written agreement of the Grantor, the Trustee, and the Department, or by the Trustee and the Department, if the Grantor ceases to exist. Upon termination of the Trust, all remaining trust property, less final trust administration expenses, shall be delivered to the Grantor.

Section 17. Immunity and Indemnification. The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this Trust, or in carrying out any directions by the Grantor or the Department, issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by the Grantor or from the Trust Fund, or both, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event the Grantor fails to provide such defense.

Section 18. Choice of Law. This Agreement shall be administered, construed, and enforced according to the laws of the State of Alabama.

Section 19. Interpretation. As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each Section of this Agreement shall not affect the interpretation or the legal efficacy of this Agreement.

In Witness Whereof the parties have caused this Agreement to be executed by their respective officers duly authorized and their corporate seals to be hereunto affixed and attested as of the date first above written: The parties below certify that the wording of this Agreement is identical to the wording specified in ADEM Admin. Code r. 335-14-2-.08(12)(a)1. as such regulations were constituted on the date first above written.

[Signature of Grantor]
[Title]
Attest:
[Title]
[Seal]
[Signature of Trustee]
Attest:
[Title]
[Seal]

2. The following is an example of the certification of acknowledgment which must accompany the trust agreement for a trust fund as specified in ADEM Admin. Code r. 335-14-208(4)(a).
State of
County of
On this [date], before me personally came [owner or operator] to me known, who, being by me duly sworn, did depose and say that she/he resides at [address], that she/he is [title] of [corporation], the corporation described in and which executed the above instrument; that she/he knows the seal of said corporation; that the seal affixed to such instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that she/he signed her/his name thereto by like order.
[Signature of Notary Public]
(b) A surety bond guaranteeing payment into a trust fund, as specified in ADEM Admin. Code r. 335-14-208(4)(b), must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:
Financial Guarantee Bond
Date bond executed:
Effective date:
Principal:
[legal name and business address of owner or operator]
Type of Organization: [insert "individual," "joint venture," "partnership," or "corporation"]
State of incorporation:
Surety(ies): [name(s) and business address(es)]
EPA Identification Number, name, address and amount(s) for each facility guaranteed by this bond:
Total penal sum of bond: \$
Surety's bond number:

Know All Persons By These Presents, That we, the Principal and Surety(ies) are firmly bound to the Alabama Department of Environmental Management in the event that the hazardous secondary materials at the reclamation or intermediate facility listed below no longer meet the conditions of the exclusion under ADEM Admin. Code r. 335-14-2-.01(4)(a)24, in the above penal sum for the payment of which we bind ourselves, our heirs, executors, administrators, successors, and assigns jointly and severally; provided that, where the Surety(ies) are corporations acting as cosureties, we, the Sureties, bind ourselves in such sum "jointly and severally" only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sum only as is set forth opposite the name of such Surety, but if no limit of liability is indicated, the limit of liability shall be the full amount of the penal sum.

Whereas said Principal is required, under the Alabama Hazardous Wastes Management and Minimization Act of 1978 (AHWMMA), as amended, to have a permit or interim status in order to own or operate each facility identified above, or to meet\_conditions under ADEM Admin. Code r. 335-14-2-.01(4)(a)24\_, and

Whereas said Principal is required to provide financial assurance as a condition of permit or interim status or as a condition of an exclusion under ADEM Admin. Code r. 335-14-2-.01(4)(a)24., and

Whereas said Principal shall establish a standby trust fund as is required when a surety bond is used to provide such financial assurance;

Now, Therefore, the conditions of the obligation are such that if the Principal shall faithfully, before the beginning of final closure of each facility identified above, fund the standby trust fund in the amount(s) identified above for the facility,

Or, if the Principal shall satisfy all the conditions established for exclusion of hazardous secondary materials from coverage as solid waste under ADEM Admin. Code r. 335-14-2-.01(4)(a)24\_i,

Or, if the Principal shall fund the standby trust fund in such amount(s) within 15 days after a final order to begin closure is issued by the Department or a U.S. district court or other court of competent jurisdiction,

Or, if the Principal shall provide alternate financial assurance, as specified in ADEM Admin. Code r. 335-14-2-.08, as applicable, and obtain the Department's written approval of such assurance, within 90 days after the date notice of cancellation is received by both the Principal and the Department from the Surety(ies), then this obligation shall be null and void; otherwise it is to remain in full force and effect.

The Surety(ies) shall become liable on this bond obligation only when the Principal has failed to fulfill the conditions described above. Upon notification by the Department that the Principal has failed to perform as guaranteed by this bond, the Surety(ies) shall place funds in the amount guaranteed for the facility(ies) into the standby trust fund as directed by the Department.

The liability of the Surety(ies) shall not be discharged by any payment or succession of payments hereunder, unless and until such payment or payments shall amount in the aggregate to the penal sum of the bond, but in no event shall the obligation of the Surety(ies) hereunder exceed the amount of said penal sum.

The Surety(ies) may cancel the bond by sending notice of cancellation by certified mail to the Principal and to the Department, provided, however, that cancellation shall not occur during the 120 days beginning on the date of receipt of the notice of cancellation by both the Principal and the Department, as evidenced by the return receipts.

The Principal may terminate this bond by sending written notice to the Surety(ies), provided, however, that no such notice shall become effective until the Surety(ies) receive(s) written authorization for termination of the bond by the Department.

[The following paragraph is an optional rider that may be included but is not required.]

Principal and Surety(ies) hereby agree to adjust the penal sum of the bond yearly so that it guarantees a new amount, provided that the penal sum does not increase by more than 20 percent in any one year, and no decrease in the penal sum takes place without the written permission of the Department.

In Witness Whereof, the Principal and Surety(ies) have executed this Financial Guarantee Bond and have affixed their seals on the date set forth above.

The persons whose signatures appear below hereby certify that they are authorized to execute this surety bond on behalf of the Principal and Surety(ies) and that the wording of this surety bond is identical to the wording specified in ADEM Admin. Code r. 335-14-2-.08(12)(b) as such regulations were constituted on the date this bond was executed.

[Signature(s)]	Principal	
[Name(s)]		
[Title(s)]		
[Corporate seal]		
[Name and address]	Corporate Surety(ies)	
State of incorporation:		
Liability limit: \$ [Signature(s)]		
[Name(s) and title(s)]		
[Corporate seal]		

[For every co-surety, provide signature(s), corporate seal, and other information in the same manner as for Surety above.]				
Bond premium:	\$			
.08(4)(c), must be	A letter of credit, as specified in ADEM Admin. Code r. 335-14-2-worded as follows, except that instructions in brackets are to be elevant information and the brackets deleted:			
Irrevocable Standby Letter of Credit				
Director				
Alabama Departme	nt of Environmental Management			
No in you covered reclamation exclusion under AD account of [owner's	n: We hereby establish our Irrevocable Standby Letter of Credit r favor, in the event that the hazardous secondary materials at the n or intermediary facility(ies) no longer meet the conditions of the EM Admin. Code r. 335-14-201(4)(a)24., at the request and for the or operator's name and address] up to the aggregate amount of [in \$, available upon presentation of			

(2) your signed statement reading as follows: "I certify that the amount of the draft is payable pursuant to regulations issued under authority of the Alabama Hazardous Wastes Management Act of 1978, as amended."

your sight draft, bearing reference to this letter of credit

This letter of credit is effective as of [date] and shall expire on [date at least 1 year later], but such expiration date shall be automatically extended for a period of [at least 1 year] on [date] and on each successive expiration date, unless, at least 120 days before the current expiration date, we notify both you and [owner's or operator's name] by certified mail that we have decided not to extend this letter of credit beyond the current expiration date. In the event you are so notified, any unused portion of the credit shall be available upon presentation of your sight draft for 120 days after the date of receipt by both you and [owner's or operator's name], as shown on the signed return receipts.

Whenever this letter of credit is drawn on under and in compliance with the terms of this credit, we shall duly honor such draft upon presentation to us, and we shall deposit the amount of the draft directly into the standby trust fund of [owner's or operator's name] in accordance with your instructions.

We certify that the wording of this letter of credit is identical to the wording specified in ADEM Admin. Code r. 335-14-2-.08(12)(c) as such regulations were constituted on the date shown immediately below.

[Signature(s) and title(s) of official(s) of issuing institution] [Date]

No.\_\_\_\_\_, and

This credit is subject to [insert "the most recent edition of the Uniform Customs and Practice for Documentary Credits, published and copyrighted by the International Chamber of Commerce," or "the Uniform Commercial Code"].

(d) A certificate of insurance, as specified in ADEM Admin. Code r. 335-14-2-.08(4)(e), must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

#### **Certificate of Insurance**

Certificate of Insurance
Name and Address of Insurer (herein called the "Insurer"):
Name and Address of Insured (herein called the "Insured"):
Facilities Covered: [List for each facility: The EPA Identification Number (if any issued), name, address, and the amount of insurance for all facilities covered, which must total the face amount shown below.]
Face Amount:
Policy Number:
Effective Date:
The Insurer hereby certifies that it has issued to the Insured the policy of insurance identified above to provide financial assurance so that in accordance with applicable regulations all hazardous secondary materials can be removed from the facility or any unit at the facility and the facility or any unit at the facility can be decontaminated at the facilities identified above. The Insurer further warrants that such policy conforms in all respects with the requirements of ADEM Admin. Code r. 335-14-208(4)(d) as applicable and as such regulations were constituted on the date shown immediately below. It is agreed that any provision of the policy inconsistent with such regulations is hereby amended to eliminate such inconsistency.
Whenever requested by the Department, the Insurer agrees to furnish to the Department a duplicate original of the policy listed above, including all endorsements thereon.
I hereby certify that the wording of this certificate is identical to the wording specified in ADEM Admin. Code r. 335-14-208(12)(d) such regulations were constituted on the date shown immediately below.
[Authorized signature for Insurer]
[Name of person signing]
[Title of person signing]
Signature of witness or notary:
[Date]

(e) A letter from the chief financial officer, as specified in ADEM Admin. Code r. 335-14-2-.08(4)(e), must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

### Letter From Chief Financial Officer

[Address to the Department in which facilities for which financial responsibility is to be demonstrated through the financial test are located].

I am the chief financial officer of [name and address of firm]. This letter is in support of this firm's use of the financial test to demonstrate financial assurance, as specified in ADEM Admin. Code r. 335-14-2-.08.

[Fill out the following nine paragraphs regarding facilities and associated cost estimates. If your firm has no facilities that belong in a particular paragraph, write "None" in the space indicated. For each facility, include its EPA Identification Number (if any issued), name, address, and current cost estimates.]

- 1. This firm is the owner or operator of the following facilities for which financial assurance is demonstrated through the financial test specified in ADEM Admin. Code r. 335-14-2-.08. The current cost estimates covered by the test are shown for each facility: \_\_\_\_\_\_.
- 2. This firm guarantees, through the guarantee specified in ADEM Admin. Code r. 335-14-2-.08, the following facilities owned or operated by the guaranteed party. The current cost estimates so guaranteed are shown for each facility:

The firm identified above is [insert one or more: (1) The direct or higher-tier parent corporation of the owner or operator; (2) owned by the same parent corporation as the parent corporation of the owner or operator, and receiving the following value in consideration of this guarantee \_\_\_\_\_\_\_, or (3) engaged in the following substantial business relationship with the owner or operator \_\_\_\_\_\_, and receiving the following value in consideration of this guarantee \_\_\_\_\_\_\_]. [Attach a written description of the business relationship or a copy of the contract establishing such relationship to this letter].

- 3. In States outside of Alabama, where EPA or some designated authority is administering the financial requirements of ADEM Admin. Code r. 335-14-2-.08, this firm, as owner or operator or guarantor, is demonstrating financial assurance for the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in ADEM Admin. Code r. 335-14-2-.08. The current cost estimates covered by such a test are shown for each facility: \_\_\_\_\_\_.
- 4. This firm is the owner or operator of the following hazardous secondary materials management facilities for which financial assurance is not demonstrated either to the state through the financial test or any other financial assurance mechanism specified in ADEM Admin. Code r. 335-14-2-.08 or equivalent or

substantially equivalent State mechanisms. The current cost estimates not covered by such financial assurance are shown for each facility: 5. This firm is the owner or operator of the following UIC facilities for which financial assurance for plugging and abandonment is required under part 144. The current closure cost estimates as required by 40 CFR 144.62 are shown for each facility: This firm is the owner or operator of the following facilities for which financial assurance for closure or post-closure care is demonstrated through the financial test specified in ADEM Admin. Code r. 335-14-5-.08 and 335-14-6-.08. The current closure and/or post-closure cost estimates covered by the test are shown for each facility: \_\_\_ 7. This firm guarantees, through the guarantee specified in ADEM Admin. Code r. 335-14-5-.08 and 335-14-6-.08, the closure or post-closure care of the following facilities owned or operated by the guaranteed party. The current cost estimates for the closure or post-closure care so guaranteed are shown for each facility: . The firm identified above is [insert one or more: (1) The direct or higher-tier parent corporation of the owner or operator; (2) owned by the same parent corporation as the parent corporation of the owner or operator, and receiving the following value in consideration of this guarantee \_\_\_\_\_; or (3) engaged in the following substantial business relationship or a copy of the contract establishing such relationship to this letter]. In States where EPA is not administering the financial requirements of ADEM Admin. Code r. 335-14-5-.08 and 335-14-6-.08, this firm, as owner or operator or guarantor, is demonstrating financial assurance for the closure or post-closure care of the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in ADEM Admin. Code r. 335-14-5-.08 and 335-14-6-.08. The current closure and/or post-closure cost estimates covered by such a test are shown for each facility: \_\_\_\_\_. This firm is the owner or operator of the following hazardous waste management facilities for which financial assurance for closure or, if a disposal facility, post-closure care, is not demonstrated either to the Department through the financial test or any other financial assurance mechanism specified in ADEM Admin. Code r. 335-14-5-.08 and 335-14-6-.08 or equivalent or substantially equivalent State mechanisms. The current closure and/or post-closure cost estimates not covered by such financial assurance are shown for each facility: \_\_\_ This firm [insert "is required" or "is not required"] to file a Form 10K with the Securities and Exchange Commission (SEC) for the latest fiscal year.

The fiscal year of this firm ends on [month, day]. The figures for the following items marked with an asterisk are derived from this firm's independently audited, year end financial statements for the latest completed fiscal year, ended [date].

[Fill in Alternative I if the criteria of  $335-14-2-.08(4)(e)1_{\underline{.}}(i)$ . Fill in Alternative II if the criteria of  $335-14-2-.08(4)(e)1_{\underline{.}}(ii)$  are used.]

## **ALTERNATIVE I**

1.	Sum of current cost estimates [total of all cost estimates shown in the nine paragraphs above]	\$_	
2.	Total liabilities [if any portion of the cost estimates is included in total liabilities, you may deduct the amount of that portion from this line and add that amount to lines 3 and 4]	\$_	
3.	Tangible net worth	\$_	
4.	Net worth	\$_	
5.	Current asset	\$_	
6.	Current liabilities	\$_	
7.	Net working capital [line 5 minus line 6]	\$_	
8.	The sum of net income plus depreciation, depletion, and amortization	\$_	
9.	Total assets in U.S. (required only if less than 90% of firm's assets are located in the U.S.)	\$_	
10.	Is line 3 at least \$10 million?	Yes	No
11.	Is line 3 at least 6 times line 1?	Yes	No
12.	Is line 7 at least 6 times line 1?	Yes	No
13.	Are at least 90% of firm's assets located in the U.S.? If not, complete line 14.	Yes	No
14.	Is line 9 at least 6 times line 1?	Yes	No

Tangible net worth [if any portion of the cost <u>e</u> stimates is included in "total liabilities" on your firm's financial statements, you may add the amount of that portion to			
15.	this line]	Yes	No
16.	Is line 8 divided by line 2 greater than 0.1?	Yes	No
17.	Is line 5 divided by line 6 greater than 1.5?	Yes	No
	ALTERNATIVE II		
1.	Sum of current cost estimates [total of all cost estimates shown in the eight paragraphs above]	\$	
2.	Current bond rating of most recent issuance of this firm and name of rating service	\$	
3.	Date of issuance of bond	\$	
4.	Date of maturity of bond	\$	
5.	Tangible net worth [if any portion of the cost estimates is included in "total liabilities" on your firm's financial statements, you may add the amount of that portion to this line]	\$	
6.	Total assets in U.S. (required only if less than 90% of firm's assets are located in the U.S.)	\$	
7.	Is line 5 at least \$10 million?	Yes	No
8.	Is line 5 at least 6 times line 1?	Yes	No
9.	Are at least 90% of the firm's assets located in the U.S.? If not, complete line 10.	Yes	No
10.	Is line 6 at least 6 times line 1?	Yes	No
I hereby certify that the wording of this letter is identical to the wording specified in ADEM Admin. Code 335-14-208(12)(e) as such regulations were constituted on the date shown immediately below.			

[Signature]

[Name]				
(Title]				
[Date]				
(f) A letter from the chief financial officer, as specified in ADEM Admin. Code r. 335-14-208(8)(f), must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted.				
Letter From Chief Financial Officer				
[Address to the Director, Alabama Department of Environmental Management, P.O. Box 301463, Montgomery, Alabama 36130-1463].				
I am the chief financial officer of [firm's name and address]. This letter is in support of the use of the financial test to demonstrate financial responsibility for liability coverage under ADEM Admin. Code r. 335-14-208(8)_[insert "and costs assured ADEM Admin. Code r. 335-14-208(4)(e)" if applicable] as specified in ADEM Admin. Code r. 335-14-208.				
[Fill out the following paragraphs regarding facilities and liability coverage. If there are no facilities that belong in a particular paragraph, write "None" in the space indicated. For each facility, include its EPA Identification Number (if any issued), name, and address].				
The firm identified above is the owner or operator of the following facilities for which liability coverage for [insert "sudden" or "nonsudden" or "both sudden and nonsudden"] accidental occurrences is being demonstrated through the financial test specified in ADEM Admin. Code r. 335-14-208:				
The firm identified above guarantees, through the guarantee specified in ADEM Admin. Code r. 335-14-208, liability coverage for [insert "sudden" or "nonsudden" or "both sudden and nonsudden"] accidental occurrences at the following facilities owned or operated by the following:				
The firm identified above is [insert one or more: (1) The direct or higher-tier parent corporation of the owner or operator; (2) owned by the same parent corporation as the parent corporation of the owner or operator, and receiving the following value in consideration of this guarantee; or (3) engaged in the following substantial business relationship with the owner or operator, and receiving the following value in consideration of this guarantee]. [Attach a written description of the business relationship or a copy of the contract establishing such relationship to this letter.]				
The firm identified above is the owner or operator of the following facilities for which liability coverage for [insert "sudden" or "nonsudden" or "both sudden and nonsudden"] accidental occurrences is being demonstrated through the financial test specified ADEM Admin. Code r. 335-14-508 and 335-14-608:				

The firm identified above guarantees, through the guarantee specified in ADEM Admin. Code r. 335-14-508 and 335-14-608, liability coverage for [insert "sudden" or "nonsudden" or "both sudden and nonsudden"] accidental occurrences at the following facilities owned or operated by the following: The firm identified above is [insert one or more: (1) The direct or higher_tier parent corporation of the owner or operator; (2) owned by the same parent corporation as the parent corporation of the owner or operator, and receiving the following value in consideration of this guarantee; or (3) engaged in the following substantial business relationship with the owner or operator, and receiving the following value in consideration of this guarantee, [Attach a written description of the business relationship or a copy of the contract establishing such relationship to this letter.]
[If you are using the financial test to demonstrate coverage of both liability and costs assured under ADEM Admin. Code r. 335-14-208(4)(e) or closure or post-closure care costs under ADEM Admin. Code r. 335-14-508(4), 335-14-508(6), 335-14-608(4) or 335-14-608(6), fill in the following nine paragraphs regarding facilities and associated cost estimates. If there are no facilities that belong in a particular paragraph, write "None" in the space indicated. For each facility, include its EPA identification number (if any issued), name, address, and current cost estimates.]
1. This firm is the owner or operator of the following facilities for which financial assurance is demonstrated through the financial test specified in ADEM Admin. Code r. 335-14-208. The current cost estimates covered by the test are shown for each facility:
2. This firm guarantees, through the guarantee specified in ADEM Admin. Code r. 335-14-208, the following facilities owned or operated by the guaranteed party. The current cost estimates so guaranteed are shown for each facility: The firm identified above is [insert one or more: (1) The direct or higher-tier parent corporation of the owner or operator; (2) owned by the same parent corporation as the parent corporation of the owner or operator, and receiving the following value in consideration of this guarantee, or (3) engaged in the following substantial business relationship with the owner or operator, and receiving the following value in consideration of this guarantee, [Attach a written description of the business relationship or a copy of the contract establishing such relationship to this letter].
3. In States outside of Alabama, where the U.S. EPA or some designated authority is administering the financial requirements, this firm, as owner or operator or guarantor, is demonstrating financial assurance for the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in ADEM Admin. Code r. 335-14-208. The current cost estimates covered by such a test are shown for each facility:
4. This firm is the owner or operator of the following hazardous

secondary materials management facilities for which financial assurance is not demonstrated to the Department through the financial test or any other financial assurance mechanism specified in ADEM Admin. Code r. 335-14-2-.08. The current

cost estimates not covered by such financial assurance are shown for each facility: 5. This firm is the owner or operator of the following UIC facilities for which financial assurance for plugging and abandonment is required under part 144. The current closure cost estimates as required by 40 CFR 144.62 are shown for each facility: This firm is the owner or operator of the following facilities for which financial assurance for closure or post-closure care is demonstrated through the financial test specified in ADEM Admin. Code r. 335-14-5-.08 and 335-14-6-.08. The current closure and/or post-closure cost estimates covered by the test are shown for each facility: . This firm guarantees, through the guarantee specified in ADEM 7. Admin. Code r. 335-14-5-.08 and 335-14-6-.08, the closure or post-closure care of the following facilities owned or operated by the guaranteed party. The current cost estimates for the closure or post-closure care so guaranteed are shown for each facility: . The firm identified above is [insert one or more: (1) The direct or higher-tier parent corporation of the owner or operator; (2) owned by the same parent corporation as the parent corporation of the owner or operator, and receiving the following value in consideration of this guarantee \_\_\_\_\_; or (3) engaged in the following substantial business relationship with the owner or operator \_\_\_\_\_\_, and receiving the following [Attach a written description of the business relationship or a copy of the contract establishing such relationship to this letter]. In States outside of Alabama, where the U.S. EPA or some designated authority is administering the financial requirements, this firm, as owner or operator or guarantor, is demonstrating financial assurance for the closure or postclosure care of the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in ADEM Admin. Code r. 335-14-5-.08 and 335-14-6-.08. The current closure and/or post-closure cost estimates covered by such a test are shown for each facility: This firm is the owner or operator of the following hazardous waste management facilities for which financial assurance for closure or, if a disposal facility, post-closure care, is not demonstrated to the Department through the financial test or any other financial assurance mechanism specified in ADEM Admin. Code r. 335-14-5-.08 and 335-14-6-.08 or equivalent. The current closure and/or post-closure cost estimates not covered by such financial assurance are shown for each facility: This firm [insert "is required" or "is not required"] to file a Form 10K with the Securities and Exchange Commission (SEC) for the latest fiscal year.

The fiscal year of this firm ends on [month, day]. The figures for the following items marked with an asterisk are derived from this firm's independently audited, year end financial statements for the latest completed fiscal year, ended [date].

# Part A. Liability Coverage for Accidental Occurrences

[Fill in Alternative I if the criteria specified in 335-14-2-.08(8)(f)1.(i) are used. Fill in Alternative II if the criteria specified in 335-14-2-.08(8)(f)1.(ii) are used.]

## **ALTERNATIVE I**

1.	Amount of annual aggregate liability coverage to be demonstrated	\$		
2.	Current assets	\$		
3.	Current liabilities	\$		
4.	Net working capital [line 2 minus line 3]	\$		
5.	Tangible net worth If less than 90% of assets are located in the U.S. give total U.S.	\$		
6.	assets.	\$		
7.	Is line 5 at least \$10 million?	Yes	No	
8.	Is line 4 at least 6 times line 1?	Yes	No	
9.	Is line 5 at least 6 times line 1?	Yes	No	
10.	Are at least 90% of firm's assets located in the U.S.? If not, complete line 11.	Yes	No	
11.	Is line 6 at least 6 times line 1?	Yes	No	
ALTERNATIVE II				
1.	Amount of annual aggregate liability coverage to be demonstrated	\$		
2.	Current bond rating of most recent issuance of this firm and name of rating service	\$		
3.	Date of issuance of bond			
4.	Date of maturity of bond			

5.	Tangible net worth	\$	
6.	Total assets in U.S. (required only if less than 90% of firm's assets are located in the U.S.)	\$	
7.	Is line 5 at least \$10 million?	Yes	No
8.	Is line 5 at least 6 times line 1?	Yes	No
9.	Are at least 90% of the firm's assets located in the U.S.? If not, complete line 10.	Yes	No
10.	Is line 6 at least 6 times line 1?	Yes	No

[Fill in part B if you are using the financial test to demonstrate assurance of both liability coverage and costs assured under 335-14-2-.08(4)(e) or closure or post-closure care costs under ADEM Admin. Code r. 335-14-5-.08(4), 335-14-5-.08(6), 335-14-6-.08(4) or 335-14-6-.08(6).]

## Part B. Facility Care and Liability Coverage

[Fill in Alternative I if the criteria of 335-14-2-.08(4)(e)1.(i) and 335-14-2-.08(8)(f)1.(i) are used. Fill in Alternative II if the criteria of 335-14-2-.08(4)(e)1.(ii) and 335-14-2-.08(8)(f)1.(ii) are used.]

### **ALTERNATIVE I**

1.	above	\$
2.	Amount of annual aggregate liability coverage to be demonstrated	\$
3.	Sum of line 1 and 2	\$
4.	Total liabilities (if any portion of your estimates is included in your total liabilities, you may deduct that portion from this line and add that amount to lines 5 and 6)	\$
5.	Tangible net worth	\$
6.	Net worth	\$
7.	Current assets	\$
8.	Current liabilities	\$
9.	Net working capital [line 7 minus line 8]	\$
10.	The sum of net income plus depreciation, depletion, and amortization	\$

11.	Total assets in the U.S. (required only if less than 90% of firm's assets are located in the U.S.)	\$_	
12.	Is line 5 at least \$10 million?	Yes	No
13.	Is line 5 at least 6 times line 3?	Yes	No
14.	Is line 9 at least 6 times line 3?	Yes	No
15.	Are at least 90% of firms assets located in the U.S.? If not, complete line 16.	Yes	No
16.	Is line 11 at least 6 times line 3?	Yes	No
17.	Is line 4 divided by line 6 less than 2.0?	Yes	No
18.	Is line 10 divided by line 4 greater than 0.1?	Yes	No
19.	Is line 7 divided by line 8 greater than 1.5	Yes	No
	ALTERNATIVE II		
1.	Sum of current cost estimates [total of all cost estimates listed above]	\$	
2.	Amount of annual aggregate liability coverage to be demonstrated	\$_	
3.	Sum of lines 1 and 2	_	
4.	Current bond rating of most recent issuance and name of rating service	_	
5.	Date of issuance bond		
6.	Date of maturity bond	_	
7.	Tangible net worth (if any portion of the cost estimates is included in "total liabilities" on your financial statements you may add that portion to this line)	\$_	
8.	Total assets in the U.S. (required only if less than 90% of firm's assets are located in the U.S.)	\$_	
9.	Is line 7 at least \$10 million?	Yes	No

10.	Is line 7 at least 6 times line 3?	Yes	No
11.	Are at least 90% of the firm's assets located in the U.S.? If not, complete line 12.	Yes	No
12.	Is line 8 at least 6 times line 3?	Yes	No

I hereby certify that the wording of this letter is identical to the wording specified in ADEM Admin. Code 335-14-2-.08(12)(f) as such rules were constituted on the date shown immediately below.

[Signature]	
[Name]	
(Title]	
[Date] _	

(g)1. A corporate guarantee, as specified in 335-14-2-.08(4)(e), must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

# **Corporate Guarantee for Facility Care**

Guarantee made this [date] by [name of guaranteeing entity], a business corporation organized under the laws of the State of [insert name of State], herein referred to as guarantor. This guarantee is made on behalf of the [owner or operator] of [business address], which is [one of the following: "our subsidiary"; "a subsidiary of [name and address of common parent corporation], of which guarantor is a subsidiary"; or "an entity with which guarantor has a substantial business relationship, as defined in ADEM Admin. Code r. 335-14-5-.08(2)(h) and 335-14-6-.08(2)(h)" to the Alabama Department of Environmental Management.

### **Recitals**

- 1. Guarantor meets or exceeds the financial test criteria and agrees to comply with the reporting requirements for guarantors as specified in ADEM Admin. Code r. 335-14-2-.08(4)(e).
- 2. [Owner or operator] owns or operates the following facility(ies) covered by this guarantee: [List for each facility: EPA Identification Number (if any issued), name, and address].

- 3. "Closure plans" as used below refer to the plans maintained as required by ADEM Admin. Code r. 335-14-2-.08 for the care of facilities as identified above.
- 4. For value received from [owner or operator], guarantor guarantees that in the event of a determination by the Department that the hazardous secondary materials at the owner or operator's facility covered by this guarantee do not meet the conditions of the exclusion under ADEM Admin. Code r. 335-14-2-.01(4)(a)24, the guarantor will dispose of any hazardous secondary material as hazardous waste, and close the facility in accordance with closure requirements found in ADEM Admin. Code r.335-14-6, as applicable, or establish a trust fund as specified in ADEM Admin. Code r.335-14-2-.08(4)(a) in the name of the owner or operator in the amount of the current cost estimate.
- 5. Guarantor agrees that if, at the end of any fiscal year before termination of this guarantee, the guarantor fails to meet the financial test criteria, guarantor shall send within 90 days, by certified mail, notice to the Department and to [owner or operator] that he intends to provide alternate financial assurance as specified in ADEM Admin. Code r. 335-14-2-.08, as applicable, in the name of [owner or operator]. Within 120 days after the end of such fiscal year, the guarantor shall establish such financial assurance unless [owner or operator] has done so.
- 6. The guarantor agrees to notify the Department by certified mail, of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming guarantor as debtor, within 10 days after commencement of the proceeding.
- 7. Guarantor agrees that within 30 days after being notified by the Department of a determination that guarantor no longer meets the financial test criteria or that he is disallowed from continuing as a guarantor, he shall establish alternate financial assurance as specified in of ADEM Admin. Code r. 335-14-5, 335-14-6, or 335-14-2-.08, as applicable, in the name of [owner or operator] unless [owner or operator] has done so.
- 8. Guarantor agrees to remain bound under this guarantee notwithstanding any or all of the following: amendment or modification of the closure plan, the extension or reduction of the time of performance, or any other modification or alteration of an obligation of the owner or operator pursuant to ADEM Admin. Code r. 335-14-5, 335-14-6, or 335-14-2-.08.
- 9. Guarantor agrees to remain bound under this guarantee for as long as [owner or operator] must comply with the applicable financial assurance requirements of ADEM Admin. Code r. 335-14-5 and 335-14-6 or the financial assurance condition of ADEM Admin. Code r. 335-14-2-.01(4)(a)24.(vi) for the above-listed facilities, except as provided in paragraph 10 of this agreement.
- 10. [Insert the following language if the guarantor is (a) a direct or higher-tier corporate parent, or (b) a firm whose parent corporation is also the parent corporation of the owner or operator]:

Guarantor may terminate this guarantee by sending notice by certified mail to the Department and to [owner or operator], provided that this guarantee may not be terminated unless and until [the owner or operator] obtains, and the Department approves, alternate coverage complying with ADEM Admin. Code r.335-14-2-.08(4).

[Insert the following language if the guarantor is a firm qualifying as a guarantor due to its "substantial business relationship" with the owner or operator

Guarantor may terminate this guarantee 120 days following the receipt of notification, through certified mail, by the Department and by [the owner or operator].

- 11. Guarantor agrees that if [owner or operator] fails to provide alternate financial assurance as specified in ADEM Admin. Code r. 335-14-5, 335-14-6, or 335-14-2-.08, as applicable, and obtain written approval of such assurance from the Department within 90 days after a notice of cancellation by the guarantor is received by the Department from guarantor, guarantor shall provide such alternate financial assurance in the name of [owner or operator].
- 12. Guarantor expressly waives notice of acceptance of this guarantee by the Department or by [owner or operator]. Guarantor also expressly waives notice of amendments or modifications of the closure plan and of amendments or modifications of the applicable requirements of ADEM Admin. Code r. 335-14-5, 335-14-6, or 335-14-2-.08.

I hereby certify that the wording of this guarantee is identical to the wording specified in ADEM Admin. Code r. 335-14-2-.08(12)(g)1. as such regulations were constituted on the date first above written.

Effective date:
Name of guarantor]
Authorized signature for guarantor]
Name of person signing]
Title of person signing]
Signature of witness or notary:

2. A guarantee, as specified in ADEM Admin. Code r. 335-14-2-.08(8)(g), must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

## **Guarantee for Liability Coverage**

Guarantee made this [date] by [name of guaranteeing entity], a business corporation organized under the laws of [if incorporated within the United States insert "the State of \_\_\_\_\_\_-" and insert name of State; if incorporated outside the United States insert

the name of the country in which incorporated, the principal place of business within the United States, and the name and address of the registered agent in the State of the principal place of business], herein referred to as guarantor. This guarantee is made on behalf of [owner or operator] of [business address], which is one of the following: "our subsidiary;" "a subsidiary of [name and address of common parent corporation], of which guarantor is a subsidiary;" or "an entity with which guarantor has a substantial business relationship, as defined in ADEM Admin. Code r. 335-14-1-.02", to any and all third parties who have sustained or may sustain bodily injury or property damage caused by [sudden and/or nonsudden] accidental occurrences arising from operation of the facility(ies) covered by this guarantee.

#### **Recitals**

- 1. Guarantor meets or exceeds the financial test criteria and agrees to comply with the reporting requirements for guarantors as specified in ADEM Admin. Code r. 335-14-2-.08(8)(g).
- 2. [Owner or operator] owns or operates the following facility(ies) covered by this guarantee: [List for each facility: EPA identification number (if any issued), name, and address; and if guarantor is incorporated outside the United States list the name and address of the guarantor's registered agent in each State.] This corporate guarantee satisfies RCRA third-party liability requirements for [insert "sudden" or "nonsudden" or "both sudden and nonsudden"] accidental occurrences in above-named owner or operator facilities for coverage in the amount of [insert dollar amount] for each occurrence and [insert dollar amount] annual aggregate.
- 3. For value received from [owner or operator], guarantor guarantees to any and all third parties who have sustained or may sustain bodily injury or property damage caused by [sudden and/or nonsudden] accidental occurrences arising from operations of the facility(ies) covered by this guarantee that in the event that [owner or operator] fails to satisfy a judgment or award based on a determination of liability for bodily injury or property damage to third parties caused by [sudden and/or nonsudden] accidental occurrences, arising from the operation of the above-named facilities, or fails to pay an amount agreed to in settlement of a claim arising from or alleged to arise from such injury or damage, the guarantor will satisfy such judgment(s), award(s) or settlement agreement(s) up to the limits of coverage identified above.
  - 4. Such obligation does not apply to any of the following:
- (a) Bodily injury or property damage for which [insert owner or operator] is obligated to pay damages by reason of the assumption of liability in a contract or agreement. This exclusion does not apply to liability for damages that [insert owner or operator] would be obligated to pay in the absence of the contract or agreement.
- (b) Any obligation of [insert owner or operator] under a workers' compensation, disability benefits, or unemployment compensation law or any similar law.
  - (c) Bodily injury to:

- (1) An employee of [insert owner or operator] arising from, and in the course of, employment by [insert owner or operator]; or
- (2) The spouse, child, parent, brother, or sister of that employee as a consequence of, or arising from, and in the course of employment by [insert owner or operator]. This exclusion applies:
- (A) Whether [insert owner or operator] may be liable as an employer or in any other capacity; and
- (B) To any obligation to share damages with or repay another person who must pay damages because of the injury to persons identified in paragraphs (1) and (2).
- (d) Bodily injury or property damage arising out of the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle or watercraft.
  - (e) Property damage to:
- (1) Any property owned, rented, or occupied by [insert owner or operator];
- (2) Premises that are sold, given away or abandoned by [insert owner or operator] if the property damage arises out of any part of those premises;
  - (3) Property loaned to [insert owner or operator];
- (4) Personal property in the care, custody or control of [insert owner or operator];
- (5) That particular part of real property on which [insert owner or operator] or any contractors or subcontractors working directly or indirectly on behalf of [insert owner or operator] are performing operations, if the property damage arises out of these operations.
- 5. Guarantor agrees that if, at the end of any fiscal year before termination of this guarantee, the guarantor fails to meet the financial test criteria, guarantor shall send within 90 days, by certified mail, notice to the Department and to [owner or operator] that he intends to provide alternate liability coverage as specified in ADEM Admin. Code r. 335-14-2-.08(8), as applicable, in the name of [owner or operator]. Within 120 days after the end of such fiscal year, the guarantor shall establish such liability coverage unless [owner or operator] has done so.
- 6. The guarantor agrees to notify the Department by certified mail of a voluntary or involuntary proceeding under title 11 (Bankruptcy), U.S. Code, naming guarantor as debtor, within 10 days after commencement of the proceeding. Guarantor agrees that within 30 days after being notified by the Department of a determination that guarantor no longer meets the financial test criteria or that he is disallowed from continuing as a guarantor, he shall establish alternate liability coverage as specified in

ADEM Admin. Code r. 335-14-2-.08(8) in the name of [owner or operator], unless [owner or operator] has done so.

- 7. Guarantor reserves the right to modify this agreement to take into account amendment or modification of the liability requirements set by ADEM Admin. Code r. 335-14-2-.08(8), provided that such modification shall become effective only if the Department does not disapprove the modification within 30 days of receipt of notification of the modification.
- 8. Guarantor agrees to remain bound under this guarantee for so long as [owner or operator] must comply with the applicable requirements of ADEM Admin. Code r. 335-14-2-.08(8) for the above-listed facility(ies), except as provided in paragraph 10 of this agreement.
- 9. [Insert the following language if the guarantor is (a) a direct or higher-tier corporate parent, or (b) a firm whose parent corporation is also the parent corporation of the owner or operator]:
- 10. Guarantor may terminate this guarantee by sending notice by certified mail to the Department and to [owner or operator], provided that this guarantee may not be terminated unless and until [the owner or operator] obtains, and the Department approves, alternate liability coverage complying with 335-14-2-.08(8).

[Insert the following language if the guarantor is a firm qualifying as a guarantor due to its "substantial business relationship" with the owner or operator]:

Guarantor may terminate this guarantee 120 days following receipt of notification, through certified mail, by the Department and by [the owner or operator].

- 11. Guarantor hereby expressly waives notice of acceptance of this guarantee by any party.
- 12. Guarantor agrees that this guarantee is in addition to and does not affect any other responsibility or liability of the guarantor with respect to the covered facilities.
- 13. The Guarantor shall satisfy a third party liability claim only on receipt of one of the following documents:
- (a) Certification from the Principal and the third-party claimant(s) that the liability claim should be paid. The certification must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

#### Certification of Valid Claim

The undersigned, as parties [insert Principal] and [insert name and address of third-party claimant(s)], hereby certify that the claim of bodily injury and/or property damage caused by a [sudden or nonsudden] accidental occurrence arising from operating [Principal's] facility should be paid in the amount of \$\_\_\_\_\_\_.

[Signatures]
Principal
(Notary) Date
[Signatures]
Claimant(s)
(Notary) Date
(b) A valid final court order establishing a judgment against the Principal for bodily injury or property damage caused by sudden or nonsudden accidental occurrences arising from the operation of the Principal's facility or group of facilities.
14. In the event of combination of this guarantee with another mechanism to meet liability requirements, this guarantee will be considered [insert "primary" or "excess"] coverage.
I hereby certify that the wording of the guarantee is identical to the wording specified in ADEM Admin. Code r. $335-14-208(12)(g)2_{\underline{.}}$ as such regulations were constituted on the date shown immediately below.
Effective date:
[Name of guarantor]
[Authorized signature for guarantor]
[Name of person signing]
[Title of person signing]
Signature of witness or notary:
(h) A hazardous waste facility liability endorsement as required by

(h) A hazardous waste facility liability endorsement as required by ADEM Admin. Code r. 335-14-2-.08(8) must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

# Hazardous Secondary Material Reclamation/Intermediate Facility Liability Endorsement

1. This endorsement certifies that the policy to which the endorsement is attached provides liability insurance covering bodily injury and property damage in connection with the insured's obligation to demonstrate financial responsibility under ADEM Admin. Code r. 335-14-2-.08(8). The coverage applies at [list EPA Identification

Number (if any issued), name, and address for each facility] for [insert "sudden accidental occurrences," "nonsudden accidental occurrences," or "sudden and nonsudden accidental occurrences"; if coverage is for multiple facilities and the coverage is different for different facilities, indicate which facilities are insured for sudden accidental occurrences, which are insured for nonsudden accidental occurrences, and which are insured for both]. The limits of liability are [insert the dollar amount of the "each occurrence" and "annual aggregate" limits of the Insurer's liability], exclusive of legal defense costs.

- 2. The insurance afforded with respect to such occurrences is subject to all of the terms and conditions of the policy; provided, however, that any provisions of the policy inconsistent with subsections (a) through (e) of this Paragraph 2 are hereby amended to conform with subsections (a) through (e):
- (a) Bankruptcy or insolvency of the insured shall not relieve the Insurer of its obligations under the policy to which this endorsement is attached.
- (b) The Insurer is liable for the payment of amounts within any deductible applicable to the policy, with a right of reimbursement by the insured for any such payment made by the Insurer. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated as specified in ADEM Admin. Code r. 335-14-2-.08(8)(f).
- (c) Whenever requested by the Department, the Insurer agrees to furnish to the Department a signed duplicate original of the policy and all endorsements.
- (d) Cancellation of this endorsement, whether by the Insurer, the insured, a parent corporation providing insurance coverage for its subsidiary, or by a firm having an insurable interest in and obtaining liability insurance on behalf of the owner or operator of the facility, will be effective only upon written notice and only after the expiration of 60 days after a copy of such written notice is received by the Department.
- (e) Any other termination of this endorsement will be effective only upon written notice and only after the expiration of thirty (30) days after a copy of such written notice is received by the Department. Attached to and forming part of policy No. issued by [name of Insurer], herein called the Insurer, of [address of Insurer] to [name of insured] of [address] this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_. The effective date of said policy is \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_.

I hereby certify that the wording of this endorsement is identical to the wording specified in ADEM Admin. Code r. 335-14-2-.08(12)(h) as such regulation was constituted on the date first above written, and that the Insurer is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

[Signature of Authorized Representative of Insurer]

[Type name]

[Title], Authorized Representative of [name of Insurer]

[Address of Representative]

(i) A certificate of liability insurance as required in ADEM Admin. Code r. 335-14-2-.08(8) must be worded as follows, except that the instructions in brackets are to be replaced with the relevant information and the brackets deleted:

# Hazardous Secondary Material Reclamation/ Intermediate Facility Certificate of Liability Insurance

- 1. [Name of Insurer], (the "Insurer"), of [address of Insurer] hereby certifies that it has issued liability insurance covering bodily injury and property damage to [name of insured], (the "insured"), of [address of insured] in connection with the insured's obligation to demonstrate financial responsibility under ADEM Admin. Code r. 335-14-5, 335-14-6, and the financial assurance condition of ADEM Admin. Code r. 335-14-2-.01(4)(a)24.(vi)(VI). The coverage applies at [list EPA Identification Number (if any issued), name, and address for each facility for [insert "sudden accidental occurrences," "nonsudden accidental occurrences," or "sudden and nonsudden accidental occurrences"; if coverage is for multiple facilities and the coverage is different for different facilities, indicate which facilities are insured for sudden accidental occurrences, which are insured for nonsudden accidental occurrences, and which are insured for both]. The limits of liability are [insert the dollar amount of the "each occurrence" and "annual aggregate" limits of the Insurer's liability], exclusive of legal defense costs. The coverage is provided under policy number, issued on [date]. The effective date of said policy is [date].
- 2. The Insurer further certifies the following with respect to the insurance described in Paragraph 1:
- (a) Bankruptcy or insolvency of the insured shall not relieve the Insurer of its obligations under the policy.
- (b) The Insurer is liable for the payment of amounts within any deductible applicable to the policy, with a right of reimbursement by the insured for any such payment made by the Insurer. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated as specified in ADEM Admin. Code r. 335-14-2-.08(8).
- (c) Whenever requested by the Department, the Insurer agrees to furnish to the Department a signed duplicate original of the policy and all endorsements.
- (d) Cancellation of the insurance, whether by the insurer, the insured, a parent corporation providing insurance coverage for its subsidiary, or by a firm having an insurable interest in and obtaining liability insurance on behalf of the owner or operator of the hazardous waste management facility, will be effective only upon written notice and only after the expiration of 60 days after a copy of such written notice is received by the Department.

# **Certificate of Valid Claim**

The undersigned, as parties [insert principal] and [insert name and address of third party claimant(s)], hereby certify that the claim of bodily injury and/or property damage caused by a [sudden or nonsudden] accidental occurrence arising from operations of [principal's] facility should be paid in the amount of \$[]. We hereby certify that the claim does not apply to any of the following:

agreement. This exc	Bodily injury or property damage for which [insert principal] is amages by reason of the assumption of liability in a contract or clusion does not apply to liability for damages that [insert principal] to pay in the absence of the contract or agreement.
(b) disability benefits,	Any obligation of [insert principal] under a workers' compensation, or unemployment compensation law or any similar law.
(c)	Bodily injury to:
(1) employment by [ins	An employee of [insert principal] arising from, and in the course of, sert principal]; or
(2) consequence of, or	The spouse, child, parent, brother or sister of that employee as a arising from, and in the course of employment by [insert principal].
This exclusion appl	ies:
(A) other capacity; and	Whether [insert principal] may be liable as an employer or in any
(B) who must pay dama (2).	To any obligation to share damages with or repay another person ages because of the injury to persons identified in paragraphs (1) and
(d) maintenance, use,	Bodily injury or property damage arising out of the ownership, or entrustment to others of any aircraft, motor vehicle or watercraft.
(e)	Property damage to:
(1)	Any property owned, rented, or occupied by [insert principal];
(2) principal] if the pro	Premises that are sold, given away or abandoned by [insert perty damage arises out of any part of those premises;
(3)	Property loaned to [insert principal];
(4) principal];	Personal property in the care, custody or control of [insert
č	That particular part of real property on which [insert principal] or subcontractors working directly or indirectly on behalf of [insert orming operations, if the property damage arises out of these
[Signatures]	
Grantor	

[Signatures]	 	
Claimant(s)		

or (2) a valid final court order establishing a judgment against the Grantor for bodily injury or property damage caused by sudden or nonsudden accidental occurrences arising from the operation of the Grantor's facility or group of facilities.]

This letter of credit is effective as of [date] and shall expire on [date at least one year later], but such expiration date shall be automatically extended for a period of [at least one year] on [date and on each successive expiration date, unless, at least 120 days before the current expiration date, we notify you, the Alabama Department of Environmental Management, and [owner's or operator's name] by certified mail that we have decided not to extend this letter of credit beyond the current expiration date.

Whenever this letter of credit is drawn on under and in compliance with the terms of this credit, we shall duly honor such draft upon presentation to us.

[Insert the following language if a standby trust fund is not being used: "In the event that this letter of credit is used in combination with another mechanism for liability coverage, this letter of credit shall be considered [insert "primary" or "excess" coverage]."

We certify that the wording of this letter of credit is identical to the wording specified in ADEM Admin. Code r. 335-14-2-.08(12)(j) as such regulations were constituted on the date shown immediately below.

[Signature(s) and title(s) of official(s) of issuing institution]

[Date].

This credit is subject to [insert "the most recent edition of the Uniform Customs and Practice for Documentary Credits, published and copyrighted by the International Chamber of Commerce," or "the Uniform Commercial Code"].

(k) A surety bond, as specified in ADEM Admin. Code r. 335-14-2-.08(8)(i), must be worded as follows: except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

#### **Payment Bond**

Surety Bond No. [Insert number]

Parties [Insert name and address of owner or operator], Principal, incorporated in [Insert State of incorporation] of [Insert city and State of principal place of business] and [Insert name and address of surety company(ies)], Surety Company(ies), of [Insert surety(ies) place of business].

EPA	Identification	Number	(if	any	issued),	name,	and	address	for	each	facility
guara	anteed by this	bond:									

	Sudden accidental occurences	Nonsudden accidental
Penal Sum per Occurrence	[insert amount]	[insert amount]
Annual Aggregate	[insert amount]	[insert amount]

Purpose: This is an agreement between the Surety(ies) and the Principal under which the Surety(ies), its (their) successors and assignees, agree to be responsible for the payment of claims against the Principal for bodily injury and/or property damage to third parties caused by ["sudden" and/or "nonsudden"] accidental occurrences arising from operations of the facility or group of facilities in the sums prescribed herein; subject to the governing provisions and the following conditions.

## Governing Provisions:

- (1) Section 22-30-16 of the Alabama Hazardous Waste Management and Minimization Act of 1978, as amended.
- (2) Rules and regulations of the Alabama Department of Environmental Management Administrative Code, particularly 335-14-5-.08, 335-14-6-.08, and 335-14-2-.08 (if applicable).

#### Conditions:

- (1) The Principal is subject to the applicable governing provisions that require the Principal to have and maintain liability coverage for bodily injury and property damage to third parties caused by ["sudden" and/or "nonsudden"] accidental occurrences arising from operations of the facility or group of facilities. Such obligation does not apply to any of the following:
- (a) Bodily injury or property damage for which [insert Principal] is obligated to pay damages by reason of the assumption of liability in a contract or agreement. This exclusion does not apply to liability for damages that [insert Principal] would be obligated to pay in the absence of the contract or agreement.
- (b) Any obligation of [insert Principal] under a workers' compensation, disability benefits, or unemployment compensation law or similar law.
  - (c) Bodily injury to:
- (1) An employee of [insert Principal] arising from, and in the course of, employment by [insert principal]; or
- (2) The spouse, child, parent, brother or sister of that employee as a consequence of, or arising from, and in the course of employment by [insert Principal]. This exclusion applies:

- (A) Whether [insert Principal] may be liable as an employer or in any other capacity; and
- (B) To any obligation to share damages with or repay another person who must pay damages because of the injury to persons identified in paragraphs (1) and (2).
- (d) Bodily injury or property damage arising out of the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle or watercraft.
  - (e) Property damage to:
  - (1) Any property owned, rented, or occupied by [insert Principal];
- (2) Premises that are sold, given away or abandoned by [insert Principal] if the property damage arises out of any part of those premises;
  - (3) Property loaned to [insert Principal];
- (4) Personal property in the care, custody or control of [insert Principal];
- (5) That particular part of real property on which [insert Principal] or any contractors or subcontractors working directly or indirectly on behalf of [insert Principal] are performing operations, if the property damage arises out of these operations.
- (2) This bond assures that the Principal will satisfy valid third party liability claims, as described in condition 1.
- (3) If the Principal fails to satisfy a valid third party liability claim, as described above, the Surety(ies) becomes liable on this bond obligation.
- (4) The Surety(ies) shall satisfy a third party liability claim only upon the receipt of one of the following documents:
- (a) Certification from the Principal and the third party claimant(s) that the liability claim should be paid. The certification must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

#### Certification of Valid Claim

The undersigned, as parties [insert name of Principal] and [insert name and address of third party claimant(s)], hereby certify that the claim of bodily injury and/or property damage caused by a [sudden or nonsudden] accidental occurrence arising from operating [Principal's] facility should be paid in the amount of \$[].

[Signature]

Principal	
[Notary]	Date
[Signature(s)]	
Claimant(s)	

[Notary]

(b) A valid final court order establishing a judgment against the Principal for bodily injury or property damage caused by sudden or nonsudden accidental occurrences arising from the operation of the Principal's facility or group of facilities.

Date

- (5) In the event of combination of this bond with another mechanism for liability coverage, this bond will be considered [insert "primary" or "excess"] coverage.
- (6) The liability of the Surety(ies) shall not be discharged by any payment or succession of payments hereunder, unless and until such payment or payments shall amount in the aggregate to the penal sum of the bond. In no event shall the obligation of the Surety(ies) hereunder exceed the amount of said annual aggregate penal sum, provided that the Surety(ies) furnish(es) notice to the Department forthwith of all claims filed and payments made by the Surety(ies) under this bond.
- (7) The Surety(ies) may cancel the bond by sending notice of cancellation by certified mail to the Principal and the Alabama Department of Environmental Management, provided, however, that cancellation shall not occur during the 120 days beginning on the date of receipt of the notice of cancellation by the Principal and the Department, as evidenced by the return receipt.
- (8) The Principal may terminate this bond by sending written notice to the Surety(ies) and to the Alabama Department of Environmental Management.
- (9) The Surety(ies) hereby waive(s) notification of amendments to applicable laws, statutes, rules and regulations and agree(s) that no such amendment shall in any way alleviate its (their) obligation on this bond.
- (10) This bond is effective from [insert date] (12:01 a.m., standard time, at the address of the Principal as stated herein) and shall continue in force until terminated as described above.

In Witness Whereof, the Principal and Surety(ies) have executed this Bond and have affixed their seals on the date set forth above.

The persons whose signatures appear below hereby certify that they are authorized to execute this surety bond on behalf of the Principal and Surety(ies) and that the wording of this surety bond is identical to the wording specified in ADEM Admin. Code r. 335-14-2-.08(12)(k), as such regulations were constituted on the date this bond was executed.

## **PRINCIPAL**

[Signature(s)]
[Name(s)]
[Title(s)]
[Corporate Seal]
CORPORATE SURETY[IES]
[Name and address]
State of incorporation:
Liability Limit: \$
[Signature(s)]
[Name(s) and title(s)]
[Corporate seal]
[For every co-surety, provide signature(s), corporate seal, and other information in the same manner as for Surety above.]
Bond premium: \$
(l) A trust agreement, as specified in ADEM Admin. Code r. 335-14-208(8)(j), must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:
Trust Agreement
Trust Agreement, the "Agreement," entered into as of [date] by and between [name of the owner or operator] a [name of State] [insert "corporation," "partnership," "association," or "proprietorship"], the "Grantor," and [name of corporate trustee], [insert, "incorporated in the State of" or "a national bank"], the "trustee."
Whereas, the Alabama Department of Environmental Management (the 'Department') has established certain regulations applicable to the Grantor, requiring that an owner or operator must demonstrate financial responsibility for bodily injury and property damage to third parties caused by sudden accidental and/or nonsudden accidental

Whereas, the Grantor has elected to establish a trust to assure all or part of such financial responsibility for the facilities identified herein. Whereas, the Grantor, acting

occurrences arising from operations of the facility or group of facilities.

through its duly authorized officers, has selected the Trustee to be the trustee under this agreement, and the Trustee is willing to act as trustee.

Now, therefore, the Grantor and the Trustee agree as follows:

# Section 1. Definitions. As used in this Agreement:

- (a) The term "Grantor" means the owner or operator who enters into this Agreement and any successors or assigns of the Grantor.
- (b) The term "Trustee" means the Trustee who enters into this Agreement and any successor Trustee.
- Section 2. Identification of Facilities. This agreement pertains to the facilities identified on attached schedule A [on schedule A, for each facility list the EPA Identification Number (if any issued), name, and address of the facility(ies) and the amount of liability coverage, or portions thereof, if more than one instrument affords combined coverage as demonstrated by this Agreement].
- Section 3. Establishment of Fund. The Grantor and the Trustee hereby establish a trust fund, hereinafter the "Fund," for the benefit of any and all third parties injured or damaged by [sudden and/or nonsudden] accidental occurrences arising from operation of the facility(ies) covered by this guarantee, in the amounts of \_\_\_\_\_\_-[up to \$1 million] per occurrence and \_\_\_\_\_ [up to \$2 million] annual aggregate for sudden accidental occurrences and \_\_\_\_\_ [up to \$3 million] per occurrence and \_\_\_\_\_\_ [up to \$6 million] annual aggregate for nonsudden occurrences, except that the Fund is not established for the benefit of third parties for the following:
- (a) Bodily injury or property damage for which [insert Grantor] is obligated to pay damages by reason of the assumption of liability in a contract or agreement. This exclusion does not apply to liability for damages that [insert Grantor] would be obligated to pay in the absence of the contract or agreement.
- (b) Any obligation of [insert Grantor] under a workers' compensation, disability benefits, or unemployment compensation law or any similar law.
  - (c) Bodily injury to:
- (1) An employee of [insert Grantor] arising from, and in the course of, employment by [insert Grantor]; or
- (2) The spouse, child, parent, brother or sister of that employee as a consequence of, or arising from, and in the course of employment by [insert Grantor]. This exclusion applies:
- (A) Whether [insert Grantor] may be liable as an employer or in any other capacity; and

- (B) To any obligation to share damages with or repay another person who must pay damages because of the injury to persons identified in paragraphs (1) and (2).
- (d) Bodily injury or property damage arising out of the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle or watercraft.
  - (e) Property damage to:
  - (1) Any property owned, rented, or occupied by [insert Grantor];
- (2) Premises that are sold, given away or abandoned by [insert Grantor] if the property damage arises out of any part of those premises;
  - (3) Property loaned to [insert Grantor];
  - (4) Personal property in the care, custody or control of [insert Grantor];
- (5) That particular part of real property on which [insert Grantor] or any contractors or subcontractors working directly or indirectly on behalf of [insert Grantor] are performing operations, if the property damage arises out of these operations.

In the event of combination with another mechanism for liability coverage, the Fund shall be considered [insert "primary" or "excess"] coverage.

The Fund is established initially as consisting of the property, which is acceptable to the Trustee, described in Schedule B attached hereto. Such property and any other property subsequently transferred to the Trustee is referred to as the Fund, together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement. The Fund shall be held by the Trustee, IN TRUST, as hereinafter provided. The Trustee shall not be responsible nor shall it undertake any responsibility for the amount or adequacy of, nor any duty to collect from the Grantor, any payments necessary to discharge any liabilities of the Grantor established by the Department.

- Section 4. Payment for Bodily Injury or Property Damage. The Trustee shall satisfy a third party liability claim by making payments from the Fund only upon receipt of one of the following documents;
- (a) Certification from the Grantor and the third party claimant(s) that the liability claim should be paid. The certification must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

## Certification of Valid Claim

The undersigned, as parties [insert Grantor] and [insert name and address of third party claimant(s)], hereby certify that the claim of bodily injury and/or property damage

caused by a [sudden or nonsudden] accidental occurrence arising from operating [Grantor's] facility or group of facilities should be paid in the amount of $[-]$ .
[Signatures]
Grantor
[Signatures]
Claimant(s)

- (b) A valid final court order establishing a judgment against the Grantor for bodily injury or property damage caused by sudden or nonsudden accidental occurrences arising from the operation of the Grantor's facility or group of facilities.
- Section 5. Payments Comprising the Fund. Payments made to the Trustee for the Fund shall consist of cash or securities acceptable to the Trustee.
- Section 6. Trustee Management. The Trustee shall invest and reinvest the principal and income, in accordance with general investment policies and guidelines which the Grantor may communicate in writing to the Trustee from time to time, subject, however, to the provisions of this section. In investing, reinvesting, exchanging, selling, and managing the Fund, the Trustee shall discharge his duties with respect to the trust fund solely in the interest of the beneficiary and with the care, skill, prudence, and diligence under the circumstance then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; except that:
- (i) Securities or other obligations of the Grantor, or any other owner or operator of the facilities, or any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 U.S.C. 80a–2.(a), shall not be acquired or held unless they are securities or other obligations of the Federal or a State government;
- (ii) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the Federal or State government; and
- (iii) The Trustee is authorized to hold cash awaiting investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon.
- Section 7. Commingling and Investment. The Trustee is expressly authorized in its discretion:
- (a) To transfer from time to time any or all of the assets of the Fund to any common commingled, or collective trust fund created by the Trustee in which the fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and

- (b) To purchase shares in any investment company registered under the Investment Company Act of 1940, 15 U.S.C. 81a–1 et seq., including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.
- Section 8. Express Powers of Trustee. Without in any way limiting the powers and discretions conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:
- (a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public or private sale. No person dealing with the Trustee shall be bound to see to the application of the purchase money or to inquire into the validity or expediency of any such sale or other disposition;
- (b) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;
- (c) To register any securities held in the Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depository even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depository with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States Government, or any agency or instrumentality thereof, with a Federal Reserve bank, but the books and records of the Trustee shall at all times show that all such securities are part of the Fund;
- (d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the Federal or State government; and
- (e) To compromise or otherwise adjust all claims in favor of or against the Fund.
- Section 9. Taxes and Expenses. All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund. All other expenses incurred by the Trustee in connection with the administration of this Trust, including fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid directly by the Grantor, and all other proper charges and disbursements of the Trustee shall be paid from the Fund.
- Section 10. Annual Valuations. The Trustee shall annually, at least 30 days prior to the anniversary date of establishment of the Fund, furnish to the Grantor and to the Department a statement confirming the value of the Trust. Any securities in the

Fund shall be valued at market value as of no more than 60 days prior to the anniversary date of establishment of the Fund. The failure of the Grantor to object in writing to the Trustee within 90 days after the statement has been furnished to the Grantor and the Department shall constitute a conclusively binding assent by the Grantor barring the Grantor from asserting any claim or liability against the Trustee with respect to matters disclosed in the statement.

Section 11. Advice of Counsel. The Trustee may from time to time consult with counsel, who may be counsel to the Grantor with respect to any question arising as to the construction of this Agreement or any action to be taken hereunder. The Trustee shall be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

Section 12. Trustee Compensation. The Trustee shall be entitled to reasonable compensation for its services as agreed upon in writing from time to time with the Grantor.

Section 13. Successor Trustee. The Trustee may resign or the Grantor may replace the Trustee, but such resignation or replacement shall not be effective until the Grantor has appointed a successor trustee and this successor accepts the appointment. The successor trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor trustee's acceptance of the appointment, the Trustee shall assign, transfer, and pay over to the successor trustee the funds and properties then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the appointment of a successor trustee or for instructions. The successor trustee shall specify the date on which it assumes administration of the trust in a writing sent to the Grantor, the Department, and the present Trustee by certified mail 10 days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this section shall be paid as provided in Section 9.

Section 14. Instructions to the Trustee. All orders, requests, and instructions by the Grantor to the Trustee shall be in writing, signed by such persons as are designated in the attached Exhibit A or such other designees as the Grantor may designate by amendments to Exhibit A. The Trustee shall be fully protected in acting without inquiry in accordance with the Grantor's orders, requests, and instructions. All orders, requests, and instructions by the Department to the Trustee shall be in writing, signed by the Department, or their designees, and the Trustee shall act and shall be fully protected in acting in accordance with such orders, requests, and instructions. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the Grantor or the Department hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instructions from the Grantor and/or the Department, except as provided for herein.

Section 15. Notice of Nonpayment. If a payment for bodily injury or property damage is made under Section 4 of this trust, the Trustee shall notify the Grantor of such payment and the amount(s) thereof within five (5) working days. The Grantor shall, on or before the anniversary date of the establishment of the Fund following such notice,

either make payments to the Trustee in amounts sufficient to cause the trust to return to its value immediately prior to the payment of claims under Section 4, or shall provide written proof to the Trustee that other financial assurance for liability coverage has been obtained equaling the amount necessary to return the trust to its value prior to the payment of claims. If the Grantor does not either make payments to the Trustee or provide the Trustee with such proof, the Trustee shall within 10 working days after the anniversary date of the establishment of the Fund provide a written notice of nonpayment to the Department.

Section 16. Amendment of Agreement. This Agreement may be amended by an instrument in writing executed by the Grantor, the Trustee, and the Department, or by the Trustee and the Department if the Grantor ceases to exist.

Section 17. Irrevocability and Termination. Subject to the right of the parties to amend this Agreement as provided in Section 16, this Trust shall be irrevocable and shall continue until terminated at the written agreement of the Grantor, the Trustee, and the Department, or by the Trustee and the Department, if the Grantor ceases to exist. Upon termination of the Trust, all remaining trust property, less final trust administration expenses, shall be delivered to the Grantor. The Department will agree to termination of the Trust when the owner or operator substitutes alternate financial assurance as specified in this section.

Section 18. Immunity and Indemnification. The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this Trust, or in carrying out any directions by the Grantor or the Department issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by the Grantor or from the Trust Fund, or both, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event the Grantor fails to provide such defense.

Section 19. Choice of Law. This Agreement shall be administered, construed, and enforced according to the laws of the State of [enter name of State].

Section 20. Interpretation. As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each section of this Agreement shall not affect the interpretation or the legal efficacy of this Agreement.

In Witness Whereof the parties have caused this Agreement to be executed by their respective officers duly authorized and their corporate seals to be hereunto affixed and attested as of the date first above written. The parties below certify that the wording of this Agreement is identical to the wording specified in ADEM Admin. Code r. 335-14-2-.08(12)(I) as such regulations were constituted on the date first above written.

[Signature	of	Grantor]

Attest:

[Title]

[Title]
[Seal]
[Signature of Trustee]
Attest:
[Title]
[Seal]
(2) The following is an example of the certification of acknowledgement which must accompany the trust agreement for a trust fund as specified in ADEM Admin. Code r. 335-14-208(8)(j).
State of
County of
On this [date], before me personally came [owner or operator] to me known, who, being by me duly sworn, did depose and say that she/he resides at [address], that she/he is [title] of [corporation], the corporation described in and which executed the above

on this [date], before me personally came [owner or operator] to me known, who, being by me duly sworn, did depose and say that she/he resides at [address], that she/he is [title] of [corporation], the corporation described in and which executed the above instrument; that she/he knows the seal of said corporation; that the seal affixed to such instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that she/he signed her/ his name thereto by like order.

[Signature of Notary Public]

(m)1. A standby trust agreement, as specified in ADEM Admin. Code r. 335-14-2-.08(8)(h), must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

# **Standby Trust Agreement**

Trust Agreement, the "Agreement," entered into as of [date] by and between [name of the owner or operator] a [name of a State] [insert "corporation," "partnership," "association," or "proprietorship"], the "Grantor," and [name of corporate trustee], [insert, "incorporated in the State of \_\_\_\_\_\_" or "a national bank"], the "trustee."

Whereas the Alabama Department of Environmental Management (the "Department," has established certain regulations applicable to the Grantor, requiring that an owner or operator must demonstrate financial responsibility for bodily injury and property damage to third parties caused by sudden accidental and/or nonsudden accidental occurrences arising from operations of the facility or group of facilities.

Whereas, the Grantor has elected to establish a standby trust into which the proceeds from a letter of credit may be deposited to assure all or part of such financial responsibility for the facilities identified herein.

Whereas, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this agreement, and the Trustee is willing to act as trustee.

Now, therefore, the Grantor and the Trustee agree as follows:

Section 1. Definitions. As used in this Agreement:

- (a) The term Grantor means the owner or operator who enters into this Agreement and any successors or assigns of the Grantor.
- (b) The term Trustee means the Trustee who enters into this Agreement and any successor Trustee.
- Section 2. Identification of Facilities. This Agreement pertains to the facilities identified on attached schedule A [on schedule A, for each facility list the EPA Identification Number (if any issued), name, and address of the facility(ies) and the amount of liability coverage, or portions thereof, if more than one instrument affords combined coverage as demonstrated by this Agreement].
- Section 3. Establishment of Fund. The Grantor and the Trustee hereby establish a standby trust fund, hereafter the "Fund," for the benefit of any and all third parties injured or damaged by [sudden and/or nonsudden] accidental occurrences arising from operation of the facility(ies) covered by this guarantee, in the amounts of \_\_\_\_\_\_-[up to \$1 million] per occurrence and \_\_\_\_\_\_-[up to \$2 million] annual aggregate for sudden accidental occurrences and \_\_\_\_\_\_-[up to \$3 million] per occurrence and \_\_\_\_\_\_-[up to \$6 million] annual aggregate for nonsudden occurrences, except that the Fund is not established for the benefit of third parties for the following:
- (a) Bodily injury or property damage for which [insert Grantor] is obligated to pay damages by reason of the assumption of liability in a contract or agreement. This exclusion does not apply to liability for damages that [insert Grantor] would be obligated to pay in the absence of the contract or agreement.
- (b) Any obligation of [insert Grantor] under a workers' compensation, disability benefits, or unemployment compensation law or any similar law.
  - (c) Bodily injury to:
- (1) An employee of [insert Grantor] arising from, and in the course of, employment by [insert Grantor]; or
- (2) The spouse, child, parent, brother or sister of that employee as a consequence of, or arising from, and in the course of employment by [insert Grantor].

This exclusion applies:

- (A) Whether [insert Grantor] may be liable as an employer or in any other capacity; and
- (B) To any obligation to share damages with or repay another person who must pay damages because of the injury to persons identified in paragraphs (1) and (2).
- (d) Bodily injury or property damage arising out of the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle or watercraft.
  - (e) Property damage to:
  - (1) Any property owned, rented, or occupied by [insert Grantor];
- (2) Premises that are sold, given away or abandoned by [insert Grantor] if the property damage arises out of any part of those premises;
  - (3) Property loaned by [insert Grantor];
  - (4) Personal property in the care, custody or control of [insert Grantor];
- (5) That particular part of real property on which [insert Grantor] or any contractors or subcontractors working directly or indirectly on behalf of [insert Grantor] are performing operations, if the property damage arises out of these operations.

In the event of combination with another mechanism for liability coverage, the Fund shall be considered [insert "primary" or "excess"] coverage.

The Fund is established initially as consisting of the proceeds of the letter of credit deposited into the Fund. Such proceeds and any other property subsequently transferred to the Trustee is referred to as the Fund, together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement. The Fund shall be held by the Trustee, IN TRUST, as hereinafter provided. The Trustee shall not be responsible nor shall it undertake any responsibility for the amount or adequacy of, nor any duty to collect from the Grantor, any payments necessary to discharge any liabilities of the Grantor established by the Department.

- Section 4. Payment for Bodily Injury or Property Damage. The Trustee shall satisfy a third party liability claim by drawing on the letter of credit described in Schedule B and by making payments from the Fund only upon receipt of one of the following documents:
- (a) Certification from the Grantor and the third party claimant(s) that the liability claim should be paid. The certification must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

#### Certification of Valid Claim

The undersigned, as parties [insert Grantor] and [insert name and a claimant(s)], hereby certify that the claim of bodily injury and/caused by a [sudden or nonsudden] accidental occurrence aris	or property damage
[Grantor's] facility should be paid in the amount of \$[]	sing nom operating
[Signature]	
Grantor	
[Signatures]	
Claimant(s)	
(b) A valid final court order establishing a jud Grantor for bodily injury or property damage caused by sudden or no	0

Section 5. Payments Comprising the Fund. Payments made to the Trustee for the Fund shall consist of the proceeds from the letter of credit drawn upon by the Trustee in accordance with the requirements of ADEM Admin. Code r. 335-14-2-.08(12)(k) and Section 4 of this Agreement.

occurrences arising from the operation of the Grantor's facility or group of facilities.

- Section 6. Trustee Management. The Trustee shall invest and reinvest the principal and income, in accordance with general investment policies and guidelines which the Grantor may communicate in writing to the Trustee from time to time, subject, however, to the provisions of this Section. In investing, reinvesting, exchanging, selling, and managing the Fund, the Trustee shall discharge his duties with respect to the trust fund solely in the interest of the beneficiary and with the care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; except that:
- (i) Securities or other obligations of the Grantor, or any other owner or operator of the facilities, or any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 U.S.C. 80a–2(a), shall not be acquired or held, unless they are securities or other obligations of the Federal or a State government;
- (ii) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the Federal or a State government; and
- (iii) The Trustee is authorized to hold cash awaiting investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon.
- Section 7. Commingling and Investment. The Trustee is expressly authorized in its discretion:

- (a) To transfer from time to time any or all of the assets of the Fund to any common, commingled, or collective trust fund created by the Trustee in which the Fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and
- (b) To purchase shares in any investment company registered under the Investment Company Act of 1940, 15 U.S.C. 80a–1 et seq., including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.
- Section 8. Express Powers of Trustee. Without in any way limiting the powers and discretions conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:
- (a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public or private sale. No person dealing with the Trustee shall be bound to see to the application of the purchase money or to inquire into the validity or expediency of any such sale or other disposition;
- (b) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;
- (c) To register any securities held in the Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depositary even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depositary with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States Government, or any agency or instrumentality thereof, with a Federal Reserve Bank, but the books and records of the Trustee shall at all times show that all such securities are part of the Fund:
- (d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the Federal or State government; and
- (e) To compromise or otherwise adjust all claims in favor of or against the Fund.
- Section 9. Taxes and Expenses. All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund. All other expenses incurred by the Trustee in connection with the administration of this Trust, including fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid directly

by the Grantor, and all other proper charges and disbursements to the Trustee shall be paid from the Fund.

Section 10. Advice of Counsel. The Trustee may from time to time consult with counsel, who may be counsel to the Grantor, with respect to any question arising as to the construction of this Agreement or any action to be taken hereunder. The Trustee shall be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

Section 11. Trustee Compensation. The Trustee shall be entitled to reasonable compensation for its services as agreed upon in writing from time to time with the Grantor.

Section 12. Successor Trustee. The Trustee may resign or the Grantor may replace the Trustee, but such resignation or replacement shall not be effective until the Grantor has appointed a successor trustee and this successor accepts the appointment. The successor trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor trustee's acceptance of the appointment, the Trustee shall assign, transfer, and pay over to the successor trustee the funds and properties then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the appointment of a successor trustee or for instructions. The successor trustee shall specify the date on which it assumes administration of the trust in a writing sent to the Grantor, the Department and the present Trustee by certified mail 10 days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this Section shall be paid as provided in Section 9.

Section 13. Instructions to the Trustee. All orders, requests, certifications of valid claims, and instructions to the Trustee shall be in writing, signed by such persons as are designated in the attached Exhibit A or such other designees as the Grantor may designate by amendments to Exhibit A. The Trustee shall be fully protected in acting without inquiry in accordance with the Grantor's orders, requests, and instructions. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the Grantor or the Department hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instructions from the Grantor and/or the Department, except as provided for herein.

Section 14. Amendment of Agreement. This Agreement may be amended by an instrument in writing executed by the Grantor, the Trustee, and the Department, or by the Trustee and the Department if the Grantor ceases to exist.

Section 15. Irrevocability and Termination. Subject to the right of the parties to amend this Agreement as provided in Section 14, this Trust shall be irrevocable and shall continue until terminated at the written agreement of the Grantor, the Trustee, and the Department, or by the Trustee and the Department, if the Grantor ceases to exist. Upon termination of the Trust, all remaining trust property, less final trust administration expenses, shall be paid to the Grantor. The Department will agree to

termination of the Trust when the owner or operator substitutes alternative financial assurance as specified in this section.

Section 16. Immunity and indemnification. The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this Trust, or in carrying out any directions by the Grantor and the Department issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by the Grantor or from the Trust Fund, or both, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event the Grantor fails to provide such defense.

Section 17. Choice of Law. This Agreement shall be administered, construed, and enforced according to the laws of the State of Alabama.

Section 18. Interpretation. As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each Section of this Agreement shall not affect the interpretation of the legal efficacy of this Agreement.

In Witness Whereof the parties have caused this Agreement to be executed by their respective officers duly authorized and their corporate seals to be hereunto affixed and attested as of the date first above written. The parties below certify that the wording of this Agreement is identical to the wording specified in ADEM Admin. Code r. 335-14-2-.08(12)(m) as such regulations were constituted on the date first above written.

[Signature of Grantor]		
[Title]		
Attest:		
[Title]		
[Seal]		
[Signature of Trustee]		
Attest:		
[Title]		
[Seal]		

2. The following is an example of the certification of acknowledgement which must accompany the trust agreement for a standby trust fund as specified in ADEM Admin. Code r. 335-14-2-.08(8)(h). State requirements may differ on the proper content of this acknowledgement.

State of			
County of _			

On this [date], before me personally came [owner or operator] to me known, who, being by me duly sworn, did depose and say that she/he resides at [address], that she/he is [title] of [corporation], the corporation described in and which executed the above instrument; that she/he knows the seal of said corporation; that the seal affixed to such instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that she/he signed her/ his name thereto by like order.

[Signature of Notary Public]

**Authors:** Bradley N. Curvin; Vernon H. Crockett; <u>Sonja B. Favors</u>; <u>Brent A. Watson.</u>-**Statutory Authority:** <u>Code of Alabama</u> 1975, §§ 22-30-11

**History:** April 8, 2016; **Amended:** Effective: March 31, 2017; **Amended:** Filed: February 19, 2019; Effective: April 5, 2019; **Amended:** Proposed: October 21, 2019-

# 335-14-2-.09 Use and Management of Containers

# (1) Applicability

This subpart applies to hazardous secondary materials excluded under the remanufacturing exclusion at 335-14-2-.01(4)(a)27. and stored in containers.

#### (2) Condition of containers

If a container holding hazardous secondary material is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak, the hazardous secondary material must be transferred from this container to a container that is in good condition or managed in some other way that complies with the requirements of this part.

(3) Compatibility of hazardous secondary materials with containers.

The container must be made of or lined with materials which will not react with, and are otherwise compatible with, the hazardous secondary material to be stored, so that the ability of the container to contain the material is not impaired.

- (4) Management of containers
- (a) A container holding hazardous secondary material must always be closed during storage, except when it is necessary to add or remove the hazardous secondary material.
- (b) A container holding hazardous secondary material must not be opened, handled, or stored in a manner which may rupture the <u>conainer container</u> of cause it to leak.
  - (5) [Reserved].
  - (6) Containment
- (a) Container storage areas must have a containment system that is designed and operated in accordance with paragraph (b) of this section.
  - (b) A containment system must be designed and operated as follows:
- 1. A base must underlie the containers which is free of cracks or gaps and is sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed;
- 2. The base must be sloped or the containment system must be otherwise designed and operated to drain and remove liquids resulting from leaks, spills, or precipitation, unless the containers are elevated or are otherwise protected from contact with accumulated liquids;

- 3. The containment system must have sufficient capacity to contain 10% of the volume of containers or the volume of the largest container, whichever is greater.
- 4. Run-on into the containment system must be prevented unless the collection system has sufficient excess capacity in addition to that required in paragraph (b)(3) of this section to contain any run-on which might enter the system; and
- 5. Spilled or leaked material and accumulated precipitation must be removed from the sump or collection area in as timely a manner as is necessary to prevent overflow of the collection system.
- (7) Special requirements for ignitable or reactive hazardous secondary material.

Containers holding ignitable or reactive hazardous secondary material must be located at least 15 meters (50 feet) from the facility's property line.

- (8) Special requirements for incompatible materials.
- (a) Incompatible materials must not be placed in the same container.
- (b) Hazardous secondary material must not be placed in an unwashed container that previously held an incompatible material.
- (c) A storage container holding a hazardous secondary material that is incompatible with any other materials stored nearby must be separated from the other materials or protected from them by means of a dike, berm, wall, or other device.
  - (9) [Reserved].
  - (10) 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 container in accordance with the applicable requirements of 335-14-2-.27, 335-14-2-.28, and 335-14-2-.29.

Author: Bradley N. Curvin; Sonja B. Favors; Brent A. Watson.Statutory Authority: Code of Alabama 1975, §§ 22-30-11
History: April 8, 2016; Amended: Proposed: October 21, 2019.

## 335-14-2-.10 Tank Systems

- (1) Applicability
- (a) The requirements of this subpart 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 (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 (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 (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-foruse 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 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 (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 (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) 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).
  - (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, BB, and CC of this part.

Authors: Bradley N. Curvin; Metz P. Duites; Sonja B. Favors; Brent A. Watson.

Statutory Authority: Code of Alabama 1975, §§ 22-30-11. History: April 8, 2016; Amended: Proposed: October 21, 2019.

### 335-14-3-.01 General.

- (1) Purpose, scope, and applicability.
- (a) 335-14-3 establishes standards for generators of hazardous waste as defined in 335-14-1-.02 and generators of other waste destined for disposal at commercial hazardous waste disposal facilities located in the State of Alabama.
- 1. A person who generates a hazardous waste as defined in 335-14-2 is subject to all the applicable independent requirements listed below:
- (i) Independent requirements of a very small quantity generator include those found in 335-14-3-.01(2)(a) through (d) and 335-14-3-.01(3);
- (ii) Independent requirements of a small quantity generator include those found in:
  - a. 335-14-3-.01(2) Hazardous waste determination and recordkeeping;
  - b. 335-14-3-.01(3) Generator category determination;
- c. 335-14-3-.01(8) EPA identification numbers and re-notification for small quantity generators and large quantity generators;
- d. 335-14-3-.02 Manifest requirements applicable to small and large quantity generators;
- e. 335-14-3-.03 Pre-transport requirements applicable to small and large quantity generators;
  - f. 335-14-3-.04(1) Recordkeeping;
  - g. 335-14-3-.04(5) Recordkeeping for small quantity generators; and
- h. 335-14-3-.09 Transboundary movements of hazardous waste for recovery or disposal.
- (iii) Independent requirements of a large quantity generator include those found in:
  - a. 335-14-3-.01(2) Hazardous waste determination and recordkeeping;
  - b. 335-14-3-.01(3) Generator category determination;
- c. 335-14-3-.01(8) EPA identification numbers and re-notification for small quantity generators and large quantity generators;
- d. 335-14-3-.02 Manifest requirements applicable to small and large quantity generators;

- e. 335-14-3-.03 Pre-transport requirements applicable to small and large quantity generators;
- f. 335-14-3-.04 Recordkeeping and reporting applicable to small and large quantity generators, except 335-14-3-.04(5); and
- g. 335-14-3-.09 Transboundary movements of hazardous waste for recovery or disposal.
- 2. A generator that accumulates hazardous waste on site is a person that stores hazardous waste; such generator is subject to the applicable requirements of 335-14-3 through 8, unless it is one of the following:
- (i) A very small quantity generator that meets the conditions for exemption in 335-14-3-.01(4);
- (ii) A small quantity generator that meets the conditions for exemption in 335-14-3-.01(5) and (6); or
- (iii) A large quantity generator that meets the conditions for exemption in 335-14-3-.01(5) and (7).
- 3. A generator shall not transport, offer its hazardous waste for transport, or otherwise cause its hazardous waste to be sent to a facility that is not a designated facility, as defined in 335-14-1-.02, or not otherwise authorized to receive the generator's hazardous waste.
- (b) A generator must use 335-14-3-.01(3) to determine which provisions of 335-14-3 are applicable to the generator based on the quantity of hazardous waste generated per calendar month.
  - (c) [Reserved]
- (d) Any person who exports or imports hazardous wastes must comply with 335-14-3-.01(8) and 335-14-3-.09.
- (e) Any person who imports hazardous waste into the United States must comply with the standards applicable to generators established in 335-14-3.
- (f) A farmer who generates waste pesticides which are hazardous waste and who complies with all the requirements of 335-14-3-.07(1) is not required to comply with other standards in 335-14-3 or in Chapters 335-14-5, 335-14-6, 335-14-8, or 335-14-9 with respect to such pesticides.
  - (g) [Reserved]
- (h) An owner or operator who initiates a shipment of hazardous waste from a treatment, storage, or disposal facility must comply with the generator standards established in 335-14-3.

- (i) Persons responding to an explosives or munitions emergency in accordance with 335-14-5-.01(1)(g)8.(i)(IV) or (iv) or 335-14-6-.01(1)(c)11.(i)(IV) or (iv), and 335-14-8-.01(1)(c)3. (i)(IV) or (iii) are not required to comply with the standards of 335-14-3.
  - (j) [Reserved]
  - (k) [Reserved]
- (l) The laboratories owned by an eligible academic entity that chooses to be subject to the requirements of 335-14-3-.12 are not subject to (for purposes of this paragraph, the terms "laboratory" and "eligible academic entity" shall have the meaning as defined in 335-14-1-.02):
- 1. The independent requirements of 335-14-3-.01(2) or 335-14-3-.01(5), for large quantity generators and small quantity generators, except as provided in 335-14-3-.12, and
- 2. The conditions of 335-14-3-.01(4), for very small quantity generators, except as provided in 335-14-3-.12.

[**Note**: A generator who treats, stores, or disposes of hazardous waste on-site must comply with the applicable standards and permit requirements set forth in Chapters 335-14-5, 335-14-6, 335-14-7, 335-14-8, and 335-14-9.]

- (m) All reverse distributors (as defined in 335-14-1-.02) are subject to 335-14-7-.16 for the management of hazardous waste pharmaceuticals in lieu of 335-14-3.
- (n) Each healthcare facility (as defined 335-14-1-.02) must determine whether it is subject to 335-14-7-.16 for the management of hazardous waste pharmaceuticals, based on the total hazardous waste it generates per calendar month (including both hazardous waste pharmaceuticals and non-pharmaceutical hazardous waste). A healthcare facility that generates more than 100 kg (220 pounds) of hazardous waste per calendar month, or more than 1 kg (2.2 pounds) of acute hazardous waste per calendar month, or more than 100 kg (220 pounds) per calendar month of any residue or contaminated soil, water, or other debris, resulting from the clean-up of a spill, into or on any land or water, of any acute hazardous wastes listed in 335-14-2-.04(2) or 335-14-2-.04(4), is subject to 335-14-7-.16 for the management of hazardous waste pharmaceuticals in lieu of this part. A healthcare facility that is a very small quantity generator when counting all of its hazardous waste, including both its hazardous waste pharmaceuticals and its non-pharmaceutical hazardous waste, remains subject to 335-14-3-.01(4) and is not subject to 335-14-7-.16, except for 335-14-7-.16(5) and (7) and the optional provisions of 335-14-7-.16(4).
- <u>(o)</u> The generators of other waste destined for disposal at commercial hazardous waste disposal facilities located in the State of Alabama must only comply with 335-14-3-.08, Appendix I, and Appendix II.
- (2) <u>Hazardous waste determination and recordkeeping</u>. A person who generates a solid waste, as defined in 335-14-2-.01(2), must make an accurate

determination as to whether that waste is a hazardous waste in order to ensure wastes are properly managed according to applicable AHWMMA regulations. A hazardous waste determination is made using the following steps:

- (a) The hazardous waste determination for each solid waste must be made at the point of waste generation, before any dilution, mixing, or other alteration of the waste occurs, and at any time in the course of its management that it has, or may have, changed its properties as a result of exposure to the environment or other factors that may change the properties of the waste such that the classification of the waste may change.
- (b) A person must determine whether the solid waste is excluded from regulation under 335-14-2-.01(4).
- (c) If the waste is not excluded under 335-14-2-.01(4), the person must then use knowledge of the waste to determine whether the waste meets any of the listing descriptions under 335-14-2-.04. Acceptable knowledge that may be used in making an accurate determination as to whether the waste is listed may include waste origin, composition, the process producing the waste, feedstock, and other reliable and relevant information. If the waste is listed, the person may file a petition in accordance with 335-14-1-.03(2) to demonstrate to the Department that the waste from this particular site or operation is not a hazardous waste.
- (d) A person must also determine whether the waste exhibits one or more hazardous characteristics as identified in 335-14-2-.03 by following one or both of the following procedures:
- 1. The person must apply knowledge of the hazard characteristic of the waste in light of the materials or the processes used to generate the waste. Acceptable knowledge may include process knowledge (e.g., information about chemical feedstocks and other inputs to the production process); knowledge of products, by-products, and intermediates produced by the manufacturing process; chemical or physical characterization of wastes; information on the chemical and physical properties of the chemicals used or produced by the process or otherwise contained in the waste; testing that illustrates the properties of the waste; or other reliable and relevant information about the properties of the waste or its constituents. A test other than a test method set forth in 335-14-2-.03, or an equivalent test method approved under 335-14-1-.03, may be used as part of a person's knowledge to determine whether a solid waste exhibits a characteristic of hazardous waste. However, such tests do not, by themselves, provide definitive results. Persons testing their waste must obtain a representative sample of the waste for the testing, as defined in 335-14-1-.02.
- 2. When available knowledge is inadequate to make an accurate determination, the person must test the waste according to the applicable methods set forth in 335-14-2-.03 or according to an equivalent method approved by the Department under 335-14-1-.03 and in accordance with the following:
- (i) Persons testing their waste must obtain a representative sample of the waste for the testing, as defined in 335-14-1-.02.

- (ii) Where a test method is specified in 335-14-2-.03, the results of the regulatory test, when properly performed, are definitive for determining the regulatory status of the waste.
- (e) If the waste is determined to be hazardous, the generator must refer to Chapters 335-14-2, 335-14-5, 335-14-6, 335-14-7, 335-14-9, and 335-14-11 for possible exclusions or restrictions pertaining to management of his specific waste.
  - (f) Recordkeeping for small and large quantity generators.
- 1. A small or large quantity generator must maintain records supporting its hazardous waste determinations, including records that identify whether a solid waste is a hazardous waste under 335-14-2.
- 2. Records must be maintained for at least three years from the date that the waste was last sent to on-site or off-site treatment, storage, or disposal. These records must comprise the generator's knowledge of the waste and support the generator's determination in accordance with 335-14-3-.01(2).
- 3. The records must include, but are not limited to, the following types of information:
- (i) The results of any tests, sampling, waste analyses, or other determinations made in accordance with this section;
- (ii) Records documenting the tests, sampling, and analytical methods used to demonstrate the validity and relevance of such tests;
- (iii) Records consulted in order to determine the process by which the waste was generated, the composition of the waste, and the properties of the waste; and
- (iv) Records which explain the knowledge basis for the generator's determination in accordance with 335-14-3-.01(2). The periods of record retention referred to in this section are extended automatically during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Department.
- 4. In addition to the records described in 335-14-3-.01(2)(f)1. through 3., a small or large quantity generator must maintain sufficient documentation to demonstrate the quantity of hazardous waste generated each calendar month. This documentation must be retained on-site for at least three years from the date the waste was generated.
- (g) <u>Identifying hazardous waste numbers for small and large quantity generators</u>. If the waste is determined to be hazardous, small quantity generators and large quantity generators must identify all applicable EPA hazardous waste numbers (EPA hazardous waste codes) in 335-14-2-.03 and .04. Prior to shipping the waste off site, the generator also must mark its containers with all applicable EPA hazardous waste numbers (EPA hazardous waste codes) according to 335-14-3-.03(3).

- (3) <u>Generator Category Determination</u>. A generator must determine its generator category. A generator's category is based on the amount of hazardous waste generated each month and may change from month to month. This section sets forth procedures to determine whether a generator is a very small quantity generator, a small quantity generator, or a large quantity generator for a particular month, as defined in 335-14-1-.02.
- (a) Generators of either acute hazardous waste or non-acute hazardous waste. A generator who either generates acute hazardous waste or non-acute hazardous waste in a calendar month shall determine its generator category for that month by doing the following:
- 1. Counting the total amount of hazardous waste generated in the calendar month;
- 2. Subtracting from the total any amounts of waste exempt from counting as described in 335-14-3-.01(3)(c) and (d); and
- 3. Determining the resulting generator category for the hazardous waste generated using Table 1of this rule.
- (b) Generators of both acute and non-acute hazardous wastes. A generator who generates both acute hazardous waste and non-acute hazardous waste in the same calendar month shall determine its generator category for that month by doing the following:
- 1. Counting separately the total amount of acute hazardous waste and the total amount of non-acute hazardous waste generated in the calendar month;
- 2. Subtracting from each total any amounts of waste exempt from counting as described in 335-14-3-.01(3)(c) and (d);
- 3. Determining separately the resulting generator categories for the quantities of acute and non-acute hazardous waste generated using Table 1; and
- 4. Comparing the resulting generator categories from 335-14-3-.01(3)(b)3. and applying the more stringent generator category to the accumulation and management of both non-acute hazardous waste and acute hazardous waste generated for that month.

Table 1 Generator Categories Based on Quantity of Waste Generated in a Calendar Month			
Quantity of acute hazardous waste generated in a calendar month	Quantity of non-acute hazardous waste generated in a calendar month	Quantity of residues from a cleanup of acute hazardous waste generated in a calendar month	Generator category
> 1 kg	Any amount	Any amount	Large quantity generator.
Any amount	≥ 1,000 kg	Any amount	Large quantity generator.
Any amount	Any amount	> 100 kg	Large quantity generator.
≤ 1 kg	> 100 kg and < 1,000 kg	≤ 100 kg	Small quantity generator.
≤ 1 kg	≤ 100 kg	≤ 100 kg	Very small quantity generator.

- (c) When making the monthly quantity-based determinations required by 335-14-3-.01(3), the generator must include all hazardous waste that it generates, except hazardous waste that:
- 1. Is exempt from regulation under 335-14-2-.01(4)(c) through (f), 335-14-2-.01(6)(a)3., 335-14-2-.01(7)(a)1., or 335-14-2-.01(8);
- 2. Is managed immediately upon generation only in on-site elementary neutralization units, wastewater treatment units, or totally enclosed treatment facilities as defined in 335-14-1-.02;
- 3. Is recycled, without prior storage or accumulation, only in an on-site process subject to regulation under 335-14-2-.01(6(c)2.;
- 4. Is used oil managed under the requirements of 335-2-.01(6)(a)4. and 335-14-17;
- 5. Is spent lead-acid batteries managed under the requirements of 335-14-7-.07;
  - 6. Is universal waste managed under 335-14-2-.01(9) and 335-14-11;
- 7. Is a hazardous waste that is an unused commercial chemical product (listed in 335-14-2-.04 or exhibiting one or more characteristics in 335-14-2-.03) that

is generated solely as a result of a laboratory clean-out conducted at an eligible academic entity pursuant to 335-14-3-.12(14); or

- 8. Is managed as part of an episodic event in compliance with the conditions of 335-14-3-.13.
- 9. Is a hazardous waste pharmaceutical, as defined in 335-14-1-.02, that is subject to or managed in accordance with 335-14-7-.16 or is a hazardous waste pharmaceutical that is also a Drug Enforcement Administration controlled substance and is conditionally exempt under 335-14-7-.16(6).
- (d) In determining the quantity of hazardous waste generated in a calendar month, a generator need not include:
- 1. Hazardous waste when it is removed from on-site accumulation, so long as the hazardous waste was previously counted once;
- 2. Hazardous waste generated by on-site treatment (including reclamation) of the generator's hazardous waste, so long as the hazardous waste that is treated was previously counted once; and
- 3. Hazardous waste spent materials that are generated, reclaimed, and subsequently reused on site, so long as such spent materials have been previously counted once.
- (e) Based on the generator category as determined under 335-14-3-.01(3), the generator must meet the applicable independent requirements listed in 335-14-3-.01. A generator's category also determines which of the provisions of 335-14-3-.01(4) through (7) must be met to obtain an exemption from the storage facility permit, interim status, and operating requirements when accumulating hazardous waste.
  - (f) Mixing hazardous wastes with solid wastes.
  - 1. Very small quantity generator wastes.
- (i) Hazardous wastes generated by a very small quantity generator may be mixed with solid wastes. Very small quantity generators may mix a portion or all of its hazardous waste with solid waste and remain subject to 335-14-3-.01(4) even though the resultant mixture exceeds the quantity limits identified in the definition of very small quantity generator under 335-14-1-.02, unless the mixture exhibits one or more of the characteristics of hazardous waste identified in 335-14-2-.03.
- (ii) If the resulting mixture exhibits a characteristic of hazardous waste, this resultant mixture is a newly-generated hazardous waste. The very small quantity generator must count both the resultant mixture amount plus the other hazardous waste generated in the calendar month to determine whether the total quantity exceeds the very small quantity generator calendar month quantity limits identified in the definition of generator categories under 335-14-1-.02. If so, to remain exempt from the permitting, interim status, and operating standards, the very small quantity generator must meet the conditions for exemption applicable to either a small quantity generator

or a large quantity generator. The very small quantity generator must also comply with the applicable independent requirements for either a small quantity generator or a large quantity generator.

(iii) If a very small quantity generator's wastes are mixed with used oil, the mixture is subject to 335-14-17. Any material produced from such a mixture by processing, blending, or other treatment is also subject to the requirements of 335-14-17.

## 2. <u>Small quantity generator and large quantity generator wastes.</u>

- (i) Hazardous wastes generated by a small quantity generator or large quantity generator may be mixed with solid waste. These mixtures are subject to the following: the mixture rule in 335-14-2-.01(3)(a)2.(iv), (b)2. and (b)3., and (g)2.(i); the prohibition of dilution rule at 335-14-9-.01(3); the land disposal restriction requirements of 335-14-9-.04(1) if a characteristic hazardous waste is mixed with a solid waste so that it no longer exhibits the hazardous characteristic; and the hazardous waste determination requirement at 335-14-3-.01(2).
- (ii) If the resulting mixture is found to be a hazardous waste, this resultant mixture is a newly-generated hazardous waste. A small quantity generator must count both the resultant mixture amount plus the other hazardous waste generated in the calendar month to determine whether the total quantity exceeds the small quantity generator calendar monthly quantity limits identified in the definition of generator categories under 335-14-1-.02. If so, to remain exempt from the permitting, interim status, and operating standards, the small quantity generator must meet the conditions for exemption applicable to a large quantity generator. The small quantity generator must also comply with the applicable independent requirements for a large quantity generator.

### (4) <u>Conditions for exemption for a very small quantity generator.</u>

- (a) Provided that the very small quantity generator meets all the conditions for exemption listed in this section, hazardous waste generated by the very small quantity generator is not subject to the requirements of 335-14-3 [except 335-14-3-.01(1) through (4)] through 335-14-9, and the very small quantity generator may accumulate hazardous waste on site without complying with such requirements. The conditions for exemption are as follows:
- 1. In a calendar month the very small quantity generator generates less than or equal to the amounts specified in the definition of "very small quantity generator" in 335-14-1-.02;
  - 2. The very small quantity generator complies with 335-14-3-.01(2);
- 3. If the very small quantity generator accumulates at any time greater than 1 kilogram (2.2 lbs) of acute hazardous waste or 100 kilograms (220 lbs) of any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous waste listed in 335-14-2-.04(2) or 335-

- 14-2-.04(4)(e), all quantities of that acute hazardous waste are subject to the following additional conditions for exemption:
- (i) Such waste is held on site for no more than 90 days beginning on the date when the accumulated wastes exceed the amounts provided above; and
  - (ii) The conditions for exemption in 335-14-3-.01(7)(a)-(g).
- 4. If the very small quantity generator accumulates at any time 1,000 kilograms (2,200 lbs) or greater of non-acute hazardous waste, all quantities of that hazardous waste are subject to the following additional conditions for exemption:
- (i) Such waste is held on site for no more than 180 days, or 270 days, if applicable, beginning on the date when the accumulated waste exceed the amounts provided above;
- (ii) The quantity of waste accumulated on site never exceeds 6,000 kilograms (13,200 lbs); and
  - (iii) The conditions for exemption in 335-14-3-.01(6)(b)2. through (6)(f).
- 5. A very small quantity generator that accumulates hazardous waste in amounts less than or equal to the limits in 335-14-3-.01(4)(a)3. through 4. must either treat or dispose of its hazardous waste in an on-site facility or ensure delivery to an off-site treatment, storage, or disposal facility, either of which, if located in the U.S., is:
  - (i) Permitted under 335-14-8;
  - (ii) In interim status under 335-14-6 and 335-14-8;
- (iii) Authorized to manage hazardous waste by, either, another state with a hazardous waste management program approved under 40 CFR Part 271, or by EPA under 40 CFR Part 265 or Part 270, if in a state without a hazardous waste management program approved under 40 CFR Part 271;
- (iv) a landfill permitted to manage municipal solid waste under 335-13, or a facility permitted, licensed, or registered by another state to manage municipal solid waste and, if managed in a municipal solid waste landfill is subject to 40 CFR Part 258;
- (v) a landfill permitted to manage non-municipal solid waste under 335-13, or a facility permitted, licensed, or registered by another state to manage non-municipal non-hazardous waste and, if managed in a non-municipal non-hazardous waste disposal unit, is subject to the requirements in 40 CFR §§257.5 through 257.30;
  - (vi) A facility which:
- a. Beneficially uses or reuses, or legitimately recycles or reclaims its waste; or

- b. Treats its waste prior to beneficial use or reuse, or legitimate recycling or reclamation;
- (vii) For universal waste, a universal waste handler or destination facility subject to the requirements 335-14-11;
- (viii) A large quantity generator under the control of the same person as the very small quantity generator, provided the following conditions are met:
- a. The very small quantity generator and the large quantity generator are under the control of the same person as defined in 335-14-1-.02. "Control," for the purposes of this rule, means the power to direct the policies of the generator, whether by the ownership of stock, voting rights, or otherwise, except that contractors who operate generator facilities on behalf of a different person as defined in 335-14-1-.02 shall not be deemed to "control" such generators.
- b. The very small quantity generator marks its container(s) of hazardous waste with:
  - (I) The words "Hazardous Waste" and
- (II) An indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the Department of Transportation requirements at 49 CFR part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or a chemical hazard label consistent with the National Fire Protection Association code 704).
- (ix) A reverse distributor (as defined in 335-14-1-.02), if the hazardous waste pharmaceutical is a potentially creditable hazardous waste pharmaceutical generated by a healthcare facility (as defined in 335-14-1-.02).
- (x) A healthcare facility (as defined in 335-14-1-.02) that meets the conditions in 335-14-7-.16(2)(l) and 335-14-7-.16(3)(b), as applicable, to accept non-creditable hazardous waste pharmaceuticals and potentially creditable hazardous waste pharmaceuticals from an off-site healthcare facility that is a very small quantity generator.
- (xi) For airbag waste, an airbag waste collection facility or a designated facility subject to the requirements of 335-14-2-.01(4)(j).
- (b) The placement of bulk or non-containerized liquid hazardous waste or hazardous waste containing free liquids (whether or not sorbents have been added) in any landfill is prohibited.
- (c) A very small quantity generator experiencing an episodic event may generate and accumulate hazardous waste in accordance with 335-14-3-.13 in lieu of 335-14-3-.01(5)-(7).

- (d) A very small quantity generator is not required to have an EPA ID number, but may obtain one if desired by complying with the requirements of 335-14-3-.01(8)(d). A very small quantity generator with an existing and active EPA ID number is required to submit ADEM Form 8700-12 annually or deactivate the number by formally notifying the Department in accordance with the requirements of 335-14-3-.01(8)(d)4.
- (5) <u>Satellite accumulation area requirements for small and large quantity generators.</u>
- (a) A generator may accumulate as much as 55 gallons of non-acute hazardous waste and/or either one quart of liquid acute hazardous waste listed in 335-14-2-.04(2) or 335-14-2-.04(4)(e) or 1 kg (2.2 lbs) of solid acute hazardous waste listed in 14-2-.04(2) or 335-14-2-.04(4)(e) in containers at or near any point of generation where wastes initially accumulate which is under the control of the operator of the process generating the waste, without a permit or interim status and without complying with the requirements of 335-14-5 through 335-14-8, provided that all of the conditions for exemption in this section are met. A generator may comply with the conditions for exemption in this section instead of complying with the conditions for exemption in 335-14-3-.01(6)(b) or (7)(a), except as required in 335-14-3-.01(5)(a)7.through 8. The conditions for exemption for satellite accumulation are:
- 1. If a container holding hazardous waste is not in good condition, or if it begins to leak, the generator must immediately transfer the hazardous waste from this container to a container that is in good condition and does not leak, or immediately transfer and manage the waste in a central accumulation area operated in compliance with 335-14-3-.01(6)(b) or (7)(a).
- 2. The generator must use a container made of or lined with materials that will not react with, and are otherwise compatible with, the hazardous waste to be accumulated, so that the ability of the container to contain the waste is not impaired.
  - 3. Special standards for incompatible wastes.
- (i) Incompatible wastes, or incompatible wastes and materials, (see 335-14-6 Appendix V) must not be placed in the same container, unless 335-14-6-.02(8)(b) is complied with.
- (ii) Hazardous waste must not be placed in an unwashed container that previously held an incompatible waste or material (see 335-14-6 Appendix V for examples), unless 335-14-6-.02(8)(b) is complied with.
- (iii) A container holding a hazardous waste that is incompatible with any waste or other materials accumulated nearby in other containers must be separated from the other materials or protected from them by any practical means.
- 4. A container holding hazardous waste must be closed at all times during accumulation, except:
  - (i) When adding, removing, or consolidating waste; or

- (ii) When temporary venting of a container is necessary for the proper operation of equipment, or to prevent dangerous situations, such as build-up of extreme pressure.
  - 5. A generator must mark or label its container with the following:
  - (i) The words "Hazardous Waste" and
- (ii) An indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the Department of Transportation requirements at 49 CFR part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or a chemical hazard label consistent with the National Fire Protection Association code 704).
- 6. A generator who accumulates either acute hazardous waste listed in 335-14-2-.04(2) or 335-14-2-.04(4)(e) or non-acute hazardous waste in excess of the amounts listed in 335-14-3-.01(5)(a) at or near any point of generation must do the following:
- (i) Comply within three consecutive calendar days with the applicable central accumulation area regulations in 335-14-3-.01(6)(b) or (7)(a), or
- (ii) Remove the excess from the satellite accumulation area within three consecutive calendar days to either a central accumulation area operated in accordance with the applicable requirements in 335-14-3-.01(6)(b) or (7)(a), an on-site interim status or permitted treatment, storage, or disposal facility, or an off-site designated facility; and
- (iii) During the three-consecutive-calendar-day period the generator must continue to comply with 335-14-3-.01(5)(a)1.through 5. The generator must mark or label the container(s) holding the excess accumulation of hazardous waste with the date the excess amount began accumulating.
- 7. All satellite accumulation areas operated by a small quantity generator must meet the preparedness and prevention regulations in 335-14-3-.01(6)(b)8. and emergency procedures at 335-14-3-.01(6)(b)9.
- 8. All satellite accumulation areas operated by a large quantity generator must comply with 335-14-3-.14.
  - (b) [Reserved]
- (6) <u>Conditions for exemption for a small quantity generator that accumulates</u> <u>hazardous waste</u>. A small quantity generator may accumulate hazardous waste on site without a permit or interim status, and without complying with the requirements of

- 335-14-5 through 335-14-8, provided that all the conditions for exemption listed in this section are met:
- (a) <u>Generation</u>. The generator generates in a calendar month no more than the amounts specified in the definition of "small quantity generator" in 335-14-1-.02.
- (b) <u>Accumulation</u>. The generator accumulates hazardous waste on site for no more than 180 days, unless in compliance with the conditions for exemption for longer accumulation in 335-14-3-.01(6)(d) and (e). The following accumulation conditions also apply:
- 1. <u>Accumulation limit</u>. The quantity of hazardous waste accumulated on site never exceeds 6,000 kilograms (13,200 pounds);
  - 2. <u>Accumulation of hazardous waste in containers</u>.
- (i) <u>Condition of containers</u>. If a container holding hazardous waste is not in good condition, or if it begins to leak, the small quantity generator must immediately transfer the hazardous waste from this container to a container that is in good condition, or immediately manage the waste in some other way that complies with the conditions for exemption of this section.
- (ii) <u>Compatibility of waste with container</u>. The small quantity generator must use a container made of or lined with materials that will not react with, and are otherwise compatible with, the hazardous waste to be accumulated, so that the ability of the container to contain the waste is not impaired.
- (iii) <u>Management of containers</u>. A container holding hazardous waste must always be closed during accumulation, except when it is necessary to add or remove waste and must not be opened, handled, or accumulated in a manner that may rupture the container or cause it to leak. Containers having a capacity greater than 30 gallons must not be stacked over two containers high.
- (iv) <u>Inspections</u>. At least weekly, the small quantity generator must inspect central accumulation areas. The small quantity generator must look for leaking containers and for deterioration of containers caused by corrosion or other factors, and comply with 335-14-3-.01(6)(b)2.(i) if deterioration or leaks are detected. The small quantity generator must record inspections in an inspection log or summary that, at a minimum, includes the date and time of the inspection, the name of the inspector, a notation of observations made, and the date and nature of any repairs or other remedial actions. These records must be kept for at least three years from the date of inspection.

## (v) Special conditions for accumulation of incompatible wastes.

a. Incompatible wastes, or incompatible wastes and materials, (see 335-14-6 Appendix V for examples) must not be placed in the same container, unless 335-14-6-.02(8)(b) is complied with.

- b. Hazardous waste must not be placed in an unwashed container that previously held an incompatible waste or material (see 335-14-6 Appendix V for examples), unless 335-14-6-.02(8)(b) is complied with.
- c. A container accumulating hazardous waste that is incompatible with any waste or other materials accumulated or stored nearby in other containers, piles, open tanks, or surface impoundments must be separated from the other materials or protected from them by means of a dike, berm, wall, or other device.
  - 3. Accumulation of hazardous waste in tanks.
  - (i) [Reserved]
- (ii) A small quantity generator of hazardous waste must comply with the following general operating conditions:
- a. Accumulation of hazardous waste in tanks must comply with 335-14-6-.02(8)(b).
- b. Hazardous wastes must not be placed in a tank if they could cause the tank or its inner liner to rupture, leak, corrode, or otherwise fail before the end of its intended life.
- c. Uncovered tanks must be operated to ensure at least 60 centimeters (2 feet) of freeboard, unless the tank is equipped with a containment structure (e.g., dike or trench), a drainage control system, or a diversion structure (e.g., standby tank) with a capacity that equals or exceeds the volume of the top 60 centimeters (2 feet) of the tank.
- d. Where hazardous waste is continuously fed into a tank, the tank must be equipped with a means to stop this inflow (e.g., waste feed cutoff system or by-pass system to a stand-by tank).
- (iii) Except as noted in 335-14-3-.03(6)(b)3.(iv), a small quantity generator that accumulates hazardous waste in tanks must inspect, where present:
- a. Discharge control equipment (e.g., waste feed cutoff systems, by-pass systems, and drainage systems) at least once each operating day, to ensure that it is in good working order;
- b. Data gathered from monitoring equipment (e.g., pressure and temperature gauges) at least once each operating day to ensure that the tank is being operated according to its design;
- c. The level of waste in the tank at least once each operating day to ensure compliance with 335-14-3-.01(6)(b)3.(ii)c.;
- d. The construction materials of the tank at least weekly to detect corrosion or leaking of fixtures or seams; and

- e. The construction materials of, and the area immediately surrounding, discharge confinement structures (e.g., dikes) at least weekly to detect erosion or obvious signs of leakage (e.g., wet spots or dead vegetation). The generator must remedy any deterioration or malfunction of equipment or structures which the inspection reveals on a schedule which ensures that the problem does not lead to an environmental or human health hazard. Where a hazard is imminent or has already occurred, remedial action must be taken immediately.
- (iv) A small quantity generator accumulating hazardous waste in tanks or tank systems that have full secondary containment and that either use leak detection equipment to alert personnel to leaks, or implement established workplace practices to ensure leaks are promptly identified, must inspect at least weekly, where applicable, the areas identified in 335-14-3-.01(6)(b)3.(iii)a. through e. Use of the alternate inspection schedule must be documented in the generator's operating record. This documentation must include a description of the established workplace practices at the generator.

# (v) [Reserved].

- (vi) A small quantity generator accumulating hazardous waste in tanks must, upon closure of the facility, remove all hazardous waste from tanks, discharge control equipment, and discharge confinement structures. At closure, as throughout the operating period, unless the small quantity generator can demonstrate, in accordance with 335-14-2-.01(3)(c) or (d), that any solid waste removed from its tank is not a hazardous waste, then it must manage such waste in accordance with all applicable provisions of parts 335-14-3 through 335-14-9.
- (vii) A small quantity generator must comply with the following special conditions for accumulation of ignitable or reactive waste:
- a. Ignitable or reactive waste must not be placed in a tank, unless 335-14-6-.02(8)(b) is complied with, and the waste is accumulated in such a way that it is protected from any material or conditions that may cause the waste to ignite or react, or the tank is used solely for emergencies.
- b. A small quantity generator which accumulates ignitable or reactive waste in covered tanks must comply with the buffer zone requirements for tanks contained 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 in 335-14-1-.02(2)).
- (viii). A small quantity generator must comply with the following special conditions for incompatible wastes:
- a. Incompatible wastes, or incompatible wastes and materials, (see 335-14-6 Appendix V for examples) must not be placed in the same tank, unless 335-14-6-.02(8)(b) is complied with.
- b. Hazardous waste must not be placed in an unwashed tank that previously held an incompatible waste or material, unless 335-14-6-.02(8)(b) is complied with.

- 4. <u>Accumulation of hazardous waste on drip pads</u>. If the waste is placed on drip pads, the small quantity generator must comply with the following:
  - (i) 335-14-6-.23, except <del>334335</del>-14-6-.23(6);
- (ii) The small quantity generator must remove all wastes from the drip pad at least once every 90 days. Any hazardous wastes that are removed from the drip pad at least once every 90 days are then subject to the 180-day accumulation limit in 335-14-3-.01(6)(b) and 335-14-3-.01(5) if hazardous wastes are being managed in satellite accumulation areas prior to being moved to the central accumulation area; and
- (iii) The small quantity generator must maintain on site at the facility the following records readily available for inspection:
- a. A written description of procedures that are followed to ensure that all wastes are removed from the drip pad and associated collection system at least once every 90 days; and
- b. Documentation of each waste removal, including the quantity of waste removed from the drip pad and the sump or collection system and the date and time of removal.
- 5. Accumulation of hazardous waste in containment buildings. If the waste is placed in containment buildings, the small quantity generator must comply with 335-14-6-.30. The generator must label its containment buildings with the words "Hazardous Waste" in a conspicuous place easily visible to employees, visitors, emergency responders, waste handlers, or other persons on site and also in a conspicuous place provide an indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the Department of Transportation requirements at 49 CFR part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or a chemical hazard label consistent with the National Fire Protection Association code 704). The generator must also maintain:
- (i) The professional engineer certification that the building complies with the design standards specified in 335-14-6-.30(2). This certification must be in the generator's files prior to operation of the unit; and
- (ii) The following records by use of inventory logs, monitoring equipment, or any other effective means:
- a. A written description of procedures to ensure that each waste volume remains in the unit for no more than 90 days, a written description of the waste generation and management practices for the facility showing that the generator is consistent with maintaining the 90 day limit, and documentation that the procedures are complied with; or
  - b. Documentation that the unit is emptied at least once every 90 days.

- c. Inventory logs or records with the above information must be maintained on site and readily available for inspection.
  - 6. <u>Labeling and marking of containers and tanks</u>.
- (i) <u>Containers</u>. A small quantity generator must mark or label its containers with the following:
  - a. The words "Hazardous Waste" and the EPA hazardous waste number;
- b. An indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the Department of Transportation requirements at 49 CFR part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or a chemical hazard label consistent with the National Fire Protection Association code 704);
- c. The date upon which each period of accumulation begins is clearly visible for inspection on each container; and
- d. All appropriate hazardous waste numbers associated with the hazardous waste as specified in 335-14-2-.03 and 335-14-2-.04.
- (ii) <u>Tanks</u>. A small quantity generator accumulating hazardous waste in tanks must do the following:
- a. Mark or label its tanks with the words "Hazardous Waste" and the EPA hazardous waste number;
- b. Mark or label its tanks with an indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the Department of Transportation requirements at 49 CFR part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or a chemical hazard label consistent with the National Fire Protection Association code 704);
- c. Use inventory logs, monitoring equipment, or other records to demonstrate that hazardous waste has been emptied within 180 days of first entering the tank if using a batch process, or in the case of a tank with a continuous flow process, demonstrate that estimated volumes of hazardous waste entering the tank daily exit the tank within 180 days of first entering; and
- d. Keep inventory logs or records with the above information on site and readily available for inspection.

7. <u>Land disposal restrictions</u>. A small quantity generator must comply with all the applicable requirements under 335-14-9.

## 8. Preparedness and prevention.

- (i) <u>Maintenance and operation of facility</u>. A small quantity generator must maintain and operate its facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.
- (ii) Required equipment. All areas where hazardous waste is either generated or accumulated must be equipped with the items in paragraphs 335-14-3-.01(6)(b)8.(ii)a. through d. Upon approval from the Department, a small quantity generator may omit or substitute one or more items listed in 335-14-3-.01(6)(b)8.(ii)a. if none of the hazards posed by waste handled at the facility could require a particular kind of equipment or the actual waste generation or accumulation area does not lend itself for safety reasons to have a particular kind of equipment specified below. A small quantity generator may determine the most appropriate locations to locate equipment necessary to prepare for and respond to emergencies.
- a. An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel;
- b. A device, such as a telephone (immediately available at the scene of operations) or a hand-held two-way radio, capable of summoning emergency assistance from local law enforcement agencies, fire departments, or State or local emergency response teams;
- c. Portable fire extinguishers, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals), spill control equipment, and decontamination equipment; and
- d. Water at adequate volume and pressure to supply water hose streams, or foam producing equipment, or automatic sprinklers, or water spray systems.
- (iii) <u>Testing and maintenance of equipment</u>. All communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, must be tested and maintained as necessary to assure its proper operation in time of emergency.

# (iv) Access to communications or alarm system.

a. Whenever hazardous waste is being poured, mixed, spread, or otherwise handled, all personnel involved in the operation must have immediate access (e.g., direct or unimpeded access) to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee, unless such a device is not required under 335-14-3-.01(6)(b)8.(ii).

- b. In the event there is just one employee on the premises while the facility is operating, the employee must have immediate access (e.g., direct or unimpeded access) to a device, such as a telephone (immediately available at the scene of operation) or a hand-held two-way radio, capable of summoning external emergency assistance, unless such a device is not required under paragraph 335-14-3-.01(6)(b)8.(ii).
- (v) Required aisle space. The small quantity generator must maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless aisle space is not needed for any of these purposes.

### (vi) Arrangements with local authorities.

- The small quantity generator must attempt to make arrangements with the local law enforcement agency, fire department, other emergency response teams, emergency response contractors, equipment suppliers and local hospitals, taking into account the types and quantities of hazardous wastes handled at the facility. Arrangements may be made with the Local Emergency Planning Committee, if it is determined to be the appropriate organization with which to make arrangements. A small quantity generator attempting to make arrangements with its local fire department must determine the potential need for the services of the local law enforcement agency, other emergency response teams, emergency response contractors, equipment suppliers and local hospitals. As part of this coordination, the small quantity generator shall attempt to make arrangements, as necessary, to familiarize the above organizations with the layout of the facility, the properties of hazardous waste handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to roads inside the facility, and possible evacuation routes as well as the types of injuries or illnesses that could result from fires, explosions, or releases at the facility. Where more than one law enforcement agency or fire department might respond to an emergency, the small quantity generator shall attempt to make arrangements designating primary emergency authority to a specific fire or law enforcement agency, and arrangements with any others to provide support to the primary emergency authority.
- b. A small quantity generator shall maintain records documenting the arrangements with the local fire department as well as any other organization necessary to respond to an emergency. This documentation must include documentation in the operating record that either confirms such arrangements actively exist or, in cases where no arrangements exist, confirms that attempts to make such arrangements were made.
- c. A facility possessing 24-hour response capabilities may seek a waiver from the authority having jurisdiction (AHJ) over the fire code within the facility's state or locality from the requirements to make arrangements with the local fire department as well as any other organization necessary to respond to an emergency, provided that the waiver is documented in the operating record.
- 9. <u>Emergency procedures</u>. The small quantity generator complies with the following conditions for those areas of the generator facility where hazardous waste is generated and accumulated:

- (i) At all times there must be at least one employee either on the premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures specified in paragraph 335-14-3-.01(6)(b)9.(iv) of this section. This employee is the emergency coordinator.
- (ii) The small quantity generator must post the following information next to telephones or in areas directly involved in the generation and accumulation of hazardous waste:
  - a. The name and emergency telephone number of the emergency coordinator;
- b. Location of fire extinguishers and spill control material, and, if present, fire alarm; and
- c. The telephone number of the fire department, unless the facility has a direct alarm.
- (iii) The small quantity generator must ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies;
- (iv) The emergency coordinator or his designee must respond to any emergencies that arise. The applicable responses are as follows:
- a. In the event of a fire, call the fire department or attempt to extinguish it using a fire extinguisher;
- b. In the event of a spill, the small quantity generator is responsible for containing the flow of hazardous waste to the extent possible, and as soon as is practicable, cleaning up the hazardous waste and any contaminated materials or soil. Such containment and cleanup can be conducted either by the small quantity generator or by a contractor on behalf of the small quantity generator;
- c. In the event of a fire, explosion, or other release that could threaten human health outside the facility or when the small quantity generator has knowledge that a spill has reached surface water, the small quantity generator must immediately notify the National Response Center (using their 24-hour toll free number 800/424-8802). The report must include the following information:
- (I) The name, address, and U.S. EPA identification number of the small quantity generator;
  - (II) Date, time, and type of incident (e.g., spill or fire);
  - (III) Quantity and type of hazardous waste involved in the incident;
  - (IV) Extent of injuries, if any; and

- (V) Estimated quantity and disposition of recovered materials, if any.
- 10. <u>Employee training</u>. Facility personnel whose duties have a direct effect on hazardous waste management and/or hazardous waste accumulation, whether by direct contact with the hazardous waste or through hazardous waste management activities, must receive training.
- (i) The training program must consist of classroom instruction or on-the-job training that teaches employees to perform their duties in a way that ensures the facility's compliance with the requirements of 335-14-3 during normal site operations and emergencies;
- (ii) The small quantity generator must maintain at the site documentation that the required training has been administered to and completed by required employees. Documentation of training records must be maintained on-site for a period of at least three years from the date the employee last worked for the generator or until the generator closes, whichever comes first.
- (iii) The generator must maintain on-site a written description of the training required under 335-14-3-.01(6)(b)10.
- (c) <u>Transporting over 200 miles</u>. A small quantity generator who must transport its waste, or offer its waste for transportation, over a distance of 200 miles or more for off-site treatment, storage or disposal may accumulate hazardous waste on site for 270 days or less without a permit or without having interim status provided that the generator complies with the conditions of 335-14-3-.01(6)(b).
- (d) Accumulation time limit extension. A small quantity generator who accumulates hazardous waste for more than 180 days (or for more than 270 days if it must transport its waste, or offer its waste for transportation, over a distance of 200 miles or more) is subject to the requirements of 335-14-5 through 335-14-9 unless it has been granted an extension to the 180-day (or 270-day if applicable) period. Such extension may be granted by the Department if hazardous wastes must remain on site for longer than 180 days (or 270 days if applicable) due to unforeseen, temporary, and uncontrollable circumstances. An extension of up to 30 days may be granted at the discretion of the Department on a case-by-case basis.
- (e) Rejected load. A small quantity generator who sends a shipment of hazardous waste to a designated facility with the understanding that the designated facility can accept and manage the waste and later receives that shipment back as a rejected load or residue in accordance with the manifest discrepancy provisions of 335-14-5-.05(3) or 335-14-6-.05(3) may accumulate the returned waste on site in accordance with 335-14-3-.01(6)(a) (d). Upon receipt of the returned shipment, the generator must:
- 1. Sign Item 18c of the manifest, if the transporter returned the shipment using the original manifest; or
- 2. Sign Item 20 of the manifest, if the transporter returned the shipment using a new manifest.

- (f) A small quantity generator experiencing an episodic event may accumulate hazardous waste in accordance with 335-14-3-.13 in lieu of 335-14-3-.01(7).
- (7) Conditions for exemption for a large quantity generator that accumulates hazardous waste. A large quantity generator may accumulate hazardous waste on site without a permit or interim status, and without complying with the requirements of 335-14-5 through 335-14-8, provided that all of the following conditions for exemption are met:
- (a) <u>Accumulation</u>. A large quantity generator accumulates hazardous waste on site for no more than 90 days, unless in compliance with the accumulation time limit extension or F006 accumulation conditions for exemption in 335-14-3-.01(7)(b) through (e). The following accumulation conditions also apply:
- 1. <u>Accumulation of hazardous waste in containers</u>. If the hazardous waste is placed in containers, the large quantity generator must comply with the following:
- (i) <u>Air emission standards</u>. The applicable requirements of 335-14-6-.27, .28, and .29;
- (ii) <u>Condition of containers</u>. If a container holding hazardous waste is not in good condition, or if it begins to leak, the large quantity generator must immediately transfer the hazardous waste from this container to a container that is in good condition, or immediately manage the waste in some other way that complies with the conditions for exemption of this section;
- (iii) <u>Compatibility of waste with container</u>. The large quantity generator must use a container made of or lined with materials that will not react with, and are otherwise compatible with, the hazardous waste to be stored, so that the ability of the container to contain the waste is not impaired;
- (iv) <u>Management of containers</u>. A container holding hazardous waste must always be closed during accumulation, except when it is necessary to add or remove waste and must not be opened, handled, or stored in a manner that may rupture the container or cause it to leak. Containers having a capacity greater than 30 gallons must not be stacked over two containers high.
- (v) <u>Inspections</u>. At least weekly, the large quantity generator must inspect central accumulation areas. The large quantity generator must look for leaking containers and for deterioration of containers caused by corrosion or other factors. The large quantity generator must record inspections in an inspection log or summary. He must keep these records for at least three years from the date of inspection. At a minimum, these records must include the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions.
  - (vi) Special conditions for accumulation of ignitable and reactive wastes.

- a. Containers holding ignitable or reactive waste must be located at least 15 meters (50 feet) from the facility's property line unless a written approval is obtained from the authority having jurisdiction over the local fire code allowing hazardous waste accumulation to occur within this restricted area. A record of the written approval must be maintained as long as ignitable or reactive hazardous waste is accumulated in this area.
- b. The large quantity generator must take precautions to prevent accidental ignition or reaction of ignitable or reactive waste. This waste must be separated and protected from sources of ignition or reaction including but not limited to the following: Open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks (static, electrical, or mechanical), spontaneous ignition (e.g., from heat-producing chemical reactions), and radiant heat. While ignitable or reactive waste is being handled, the large quantity generator must confine smoking and open flame to specially designated locations. "No Smoking" signs must be conspicuously placed wherever there is a hazard from ignitable or reactive waste.

# (vii) Special conditions for accumulation of incompatible wastes.

- a. Incompatible wastes, or incompatible wastes and materials, (see 335-14-6 Appendix V for examples) must not be placed in the same container, unless 335-14-6-.02(8)(b) is complied with.
- b. Hazardous waste must not be placed in an unwashed container that previously held an incompatible waste or material (see 335-14-6 Appendix V for examples), unless 335-14-6-.02(8)(b) is complied with.
- c. A container holding a hazardous waste that is incompatible with any waste or other materials accumulated or stored nearby in other containers, piles, open tanks, or surface impoundments must be separated from the other materials or protected from them by means of a dike, berm, wall, or other device.
- (viii) <u>Containment</u>. Container storage areas must meet the containment requirements of 335-14-6-.09(6).
- 2. Accumulation of hazardous waste in tanks. If the waste is placed in tanks, the large quantity generator must comply with the applicable requirements of 335-14-6-.10, except 335-14-6-.10(8)(e) and 335-14-6-.10(11), as well as the applicable requirements of 335-14-6-.27, .28, and .29.
- 3. <u>Accumulation of hazardous waste on drip pads</u>. If the hazardous waste is placed on drip pads, the large quantity generator must comply with the following:
  - (i) 335-14-6-.23;
- (ii) The large quantity generator must remove all wastes from the drip pad at least once every 90 days. Any hazardous wastes that are removed from the drip pad are then subject to the 90-day accumulation limit in 335-14-3-.01(7)(a) and 335-14-3-.01(5), if the hazardous wastes are being managed in satellite accumulation areas prior to being moved to a central accumulation area; and

- (iii) The large quantity generator must maintain on site at the facility the following records readily available for inspection:
- a. A written description of procedures that are followed to ensure that all wastes are removed from the drip pad and associated collection system at least once every 90 days; and
- b. Documentation of each waste removal, including the quantity of waste removed from the drip pad and the sump or collection system and the date and time of removal.
- 4. Accumulation of hazardous waste in containment buildings. If the waste is placed in containment buildings, the large quantity generator must comply with 335-14-6-.30. The generator must label its containment building with the words "Hazardous Waste" in a conspicuous place easily visible to employees, visitors, emergency responders, waste handlers, or other persons on site, and also in a conspicuous place provide an indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the Department of Transportation requirements at 49 CFR part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or a chemical hazard label consistent with the National Fire Protection Association code 704). The generator must also maintain:
- (i) The professional engineer certification that the building complies with the design standards specified in 335-14-6-.30(2). This certification must be in the generator's files prior to operation of the unit; and
- (ii) The following records by use of inventory logs, monitoring equipment, or any other effective means:
- a. A written description of procedures to ensure that each waste volume remains in the unit for no more than 90 days, a written description of the waste generation and management practices for the facility showing that the generator is consistent with respecting the 90 day limit, and documentation that the procedures are complied with; or
  - b. Documentation that the unit is emptied at least once every 90 days.
- c. Inventory logs or records with the above information must be maintained on site and readily available for inspection.
  - 5. Labeling and marking of containers and tanks.
- (i) <u>Containers</u>. A large quantity generator must mark or label its containers with the following:
  - a. The words "Hazardous Waste" and the EPA hazardous waste number;

- b. An indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the Department of Transportation requirements at 49 CFR part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or a chemical hazard label consistent with the National Fire Protection Association code 704); and
- c. The date upon which each period of accumulation begins clearly visible for inspection on each container.
- (ii) <u>Tanks</u>. A large quantity generator accumulating hazardous waste in tanks must do the following:
- a. Mark or label its tanks with the words "Hazardous Waste" and the EPA hazardous waste number;
- b. Mark or label its tanks with an indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the Department of Transportation requirements at 49 CFR part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or a chemical hazard label consistent with the National Fire Protection Association code 704);
- c. Use inventory logs, monitoring equipment or other records to demonstrate that hazardous waste has been emptied within 90 days of first entering the tank if using a batch process, or in the case of a tank with a continuous flow process, demonstrate that estimated volumes of hazardous waste entering the tank daily exit the tank within 90 days of first entering; and
- d. Keep inventory logs or records with the above information on site and readily available for inspection.
- 6. <u>Emergency procedures</u>. The large quantity generator must comply with 335-14-3-.14, Preparedness, Prevention and Emergency Procedures for Large Quantity Generators.
  - 7. Personnel training.
  - (i) Required program.
- a. Facility personnel must successfully complete a program of classroom instruction, online training (e.g., computer-based or electronic), or on-the-job training that teaches them to perform their duties in a way that ensures compliance with 335-14-3. The large quantity generator must ensure that this program includes all the elements described in the document required under 335-14-3-.01(7)(a)7.(iv).

- b. This program must be directed by a person trained in hazardous waste management procedures, and must include instruction which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed.
- c. At a minimum, the training program must be designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency systems, including where applicable:
- (I) Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment;
  - (II) Key parameters for automatic waste feed cut-off systems;
  - (III) Communications or alarm systems;
  - (IV) Response to fires or explosions;
  - (V) Response to ground-water contamination incidents; and
  - (VI) Shutdown of operations.
- d. For facility employees that receive emergency response training pursuant to Occupational Safety and Health Administration regulations 29 CFR 1910.120(p)(8) and 1910.120(q), the large quantity generator is not required to provide separate emergency response training pursuant to this section, provided that the overall facility training meets all the conditions of exemption in this section.
- (ii) Facility personnel must successfully complete the program required in 335-14-3-.01(7)(a)7.(i) within six months after the date of their employment or assignment to the facility, or to a new position at the facility, whichever is later. Employees must not work in unsupervised positions until they have completed the training standards of 335-14-3-.01(7)(a)7.(i).
- (iii) <u>Annual Review</u>. Facility personnel must take part in an annual review of the initial training required in 335-14-3-.01(7)(a)7.(i).
- (iv) <u>Training Records</u>. The large quantity generator must maintain the following documents and records at the facility:
- a. The job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job;
- b. A written job description for each position listed under 335-14-3-.01(7)(a)7.(iv)a. This description may be consistent in its degree of specificity with descriptions for other similar positions in the same company location or bargaining unit, but must include the requisite skill, education, or other qualifications, and duties of facility personnel assigned to each position;

- c. A written description of the type and amount of both introductory and continuing training that will be given to each person filling a position listed under 335-14-3-.01(7)(a)7.(iv)a.;
- d. Records that document that the training or job experience, required under 335-14-3-.01(7)(a)7.(i) (iii), has been given to, and completed by, facility personnel.
- (v) Training records on current personnel must be kept until closure of the facility. Training records on former employees must be kept for at least three years from the date the employee last worked at the facility. Personnel training records may accompany personnel transferred within the same company.
- 8. <u>Closure</u>. A large quantity generator accumulating hazardous wastes in containers, tanks, drip pads, and containment buildings, prior to closing a unit at the facility, or prior to closing the facility, must meet the following conditions:
  - (i) Notification for closure of the facility.
- a. <u>Prior to closure</u>. A large quantity generator who closes a unit, either during the active life of the facility or at closure of the facility, must notify the Department in writing no less than 30 days prior to the expected date of beginning closure. The notification must include:
  - (I) The generator's name, address, and EPA identification number;
- (II) The date closure is expected to begin, and a timeframe for completing closure activities (not to exceed 180 days);
- (III) A description of the units to be closed, and a site diagram identifying each unit;
  - (IV) The procedures to be used for closure;
- (V) The type and maximum volume of hazardous wastes stored in the unit at any time and the associated EPA hazardous waste numbers;
- (VI) The type and amount of hazardous waste expected to be stored in the unit at the time closure activities are expected to begin;
  - (VII) The conditions of the unit(s) at the time of the notification; and
- (VIII) Plans for hazardous waste determinations on, and proper management and disposal of, stored wastes, unit components, investigation derived wastes, and decontamination wastes.
- b. <u>After closure</u>. Within 45 Days after completion of closure, the owner or operator must provide a written report documenting the procedures used to comply with the closure performance standards of 335-14-3-.01(7)(a)8.(ii) or (iii). This report shall not be deemed complete without payment of the fee specified in Chapter 335-1-6 of the

Department's Administrative Code. If the facility cannot meet the closure performance standards of 335-14-3-.01(7)(a)8.(ii) or (iii), the large quantity generator must notify the Department in writing that it will close as a landfill under 335-14-6-.14(11) in the case of a container, tank or containment building unit(s), or for a facility with drip pads, notify that it will close under the standards of 335-14-6-.23(6).

- c. A large quantity generator may request additional time to clean close, but it must notify the Department in writing within 75 days after the date provided in 335-14-3-.01(7)(a)8.(i)a. to request an extension and provide an explanation as to why the additional time is required.
- (ii) <u>Closure performance standards for container, tank systems, and containment building waste accumulation units.</u>
- a. At closure, the generator must close the waste accumulation unit or facility in a manner that:
- (I) Minimizes the need for further maintenance by controlling, minimizing, or eliminating, to the extent necessary to protect human health and the environment, the post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated run-off, or hazardous waste decomposition products to the ground or surface waters or to the atmosphere,
- (II) Removes or decontaminates all contaminated equipment, structures and soil and any remaining hazardous waste residues from waste accumulation units including containment system components (pads, liners, etc.), contaminated soils and subsoils, bases, and structures and equipment contaminated with waste, unless 335-14-2-.01(3)(d) applies.
- (III) Any hazardous waste generated in the process of closing either the generator's facility or unit(s) accumulating hazardous waste must be managed in accordance with all applicable standards of 335-14-3 through 335-14-9, including removing any hazardous waste contained in these units within 90 days of generating it and managing these wastes in a permitted hazardous waste treatment, storage and disposal facility or interim status facility.
- (IV) If the generator demonstrates that any contaminated soils and wastes cannot be practicably removed or decontaminated as required in 335-14-3-.01(7)(a)8.(ii)a.(II) of this section, then the waste accumulation unit is considered to be a landfill and the generator must close the waste accumulation unit and perform post-closure care in accordance 335-14-6-.14(11). In addition, for the purposes of closure, post-closure, and financial responsibility, such a waste accumulation unit is then considered to be a landfill, and the generator must meet all of the requirements for landfills specified in 335-14-6-.07 and .08.
- (iii) <u>Closure performance standards for drip pad waste accumulation units</u>. At closure, the generator must comply with the closure requirements of 335-14-3-.01(7)(a)8.(i) and 335-14-3-.01(7)(a)8.(ii)a.(I) and (III), and 335-14-6-.23(6)(a) and (b).

- (v) The closure requirements of 335-14-3-.01(7)(a)8. do not apply to satellite accumulation areas.
- 9. <u>Land disposal restrictions</u>. The large quantity generator must comply with all applicable requirements under 335-14-9.
- 10. <u>Site security</u>. The large quantity generator must prevent the unknowing entry, and minimize the possibility for the unauthorized entry, of persons or livestock into the central accumulation area, unless physical contact with the waste, structures, or equipment will not injure unknowing or unauthorized persons or livestock which may enter the central accumulation area, and disturbance of the waste or equipment, by the unknowing or unauthorized entry of persons or livestock into the central accumulation area will not cause a violation of the requirements of 335-14-3.
- (i) Unless exempt under 335-14-3-.01(7)(a)10., a large quantity generator must have:
- 1. A 24-hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel) which continuously monitors and controls entry onto the active portion of the facility; or
- 2. An artificial or natural barrier (e.g., a fence in good repair or a fence combined with a cliff), which completely surrounds the active portion of the facility, and a means to control entry, at all times, through the gates or other entrances to the central accumulation area (e.g., an attendant, television monitors, locked entrance, or controlled roadway access to the facility).
- (ii) Unless exempt under 335-14-3-.01(7)(a)10., a sign with the legend, "Danger--Unauthorized Personnel Keep Out", must be posted at each entrance to the central accumulation area, and at other locations, in sufficient numbers to be seen from any approach. The legend must be written in English and in any other language predominant in the workplace and the area surrounding the facility, and must be legible from a distance of at least 25 feet. Existing signs with a legend other than "Danger—Unauthorized Personnel Keep Out" may be used if the legend on the sign indicates that only authorized personnel are allowed to enter the active portion, and that entry onto the active portion can be dangerous.
- (b) Accumulation time limit extension. A large quantity generator who accumulates hazardous waste for more than 90 days is subject to the requirements of 335-14-5 through 9, unless it has been granted an extension to the 90-day period. Such extension may be granted by the Department if hazardous wastes must remain on site for longer than 90 days due to unforeseen, temporary, and uncontrollable circumstances. An extension of up to 30 days may be granted at the discretion of the Department on a case-by-case basis.
- (c) <u>Accumulation of F006</u>. A large quantity generator who also generates wastewater treatment sludges from electroplating operations that meet the listing description for the EPA hazardous waste number F006, may accumulate F006 waste on site for more than 90 days, but not more than 180 days without being subject to 335-

14-5 through 9, provided that it complies with all of the following additional conditions for exemption:

- 1. The large quantity generator has implemented pollution prevention practices that reduce the amount of any hazardous substances, pollutants, or contaminants entering F006 or otherwise released to the environment prior to its recycling;
  - 2. The F006 waste is legitimately recycled through metals recovery;
- 3. No more than 20,000 kilograms of F006 waste is accumulated on site at any one time; and
  - 4. The F006 waste is managed in accordance with the following:
  - (i) Unit-specific requirements for F006 waste.
- a. If the F006 waste is placed in containers, the large quantity generator must comply with the applicable conditions for exemption in 335-14-3-.01(7)(a)1.; and/or
- b. If the F006 is placed in tanks, the large quantity generator must comply with the applicable conditions for exemption in 335-14-3-.01(7)(a)2.; and/or
- c. If the F006 is placed in containment buildings, the large quantity generator must comply with 335-14-6-.30, and must have placed its professional engineer certification that the building complies with the design standards specified in 335-14-6-.30(2) in the facility's files prior to operation of the unit. The large quantity generator must maintain the following records:
- (I) A written description of procedures to ensure that the F006 waste remains in the unit for no more than 180 days, a written description of the waste generation and management practices for the facility showing that they are consistent with the 180-day limit, and documentation that the large quantity generator is complying with the procedures; or
  - (II) Documentation that the unit is emptied at least once every 180 days.
- (ii) The large quantity generator is exempt from all the requirements in 335-14-6-.07 and .08, except for those referenced in 335-14-3-.01(7)(a)8.
- (iii) The date upon which each period of accumulation begins is clearly marked and must be clearly visible for inspection on each container;
- (iv) While being accumulated on site, each container and tank is labeled or marked clearly with:
- a. The words "Hazardous Waste" and the EPA hazardous waste number; and

- b. An indication of the hazards of the contents (examples include, but are not limited to, the applicable hazardous waste characteristic(s) (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the Department of Transportation requirements at 49 CFR part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the Occupational Safety and Health Administration Hazard Communication Standard at 29 CFR 1910.1200; or a chemical hazard label consistent with the National Fire Protection Association code 704).
- (v) The large quantity generator complies with the requirements in 335-14-3-.01(7)(a)6. and 7.
- (d) F006 transported over 200 miles. A large quantity generator who also generates wastewater treatment sludges from electroplating operations that meet the listing description for the EPA hazardous waste number F006, and who must transport this waste, or offer this waste for transportation, over a distance of 200 miles or more for off-site metals recovery, may accumulate F006 waste on site for more than 90 days, but not more than 270 days without being subject to 335-14-5 through 335-14-8, if the large quantity generator complies with all of the conditions for exemption of 335-14-3-.01(7)(c)1. through 4.
- (e) F006 accumulation time extension. A large quantity generator accumulating F006 in accordance with 335-14-3-.01(7)(c) and (d) of this section who accumulates F006 waste on site for more than 180 days (or for more than 270 days if the generator must transport this waste, or offer this waste for transportation, over a distance of 200 miles or more), or who accumulates more than 20,000 kilograms of F006 waste on site is an operator of a storage facility and is subject to the requirements of 335-14-5 through 335-14-8, unless the generator has been granted an extension to the 180-day (or 270-day if applicable) period or an exception to the 20,000 kilogram accumulation limit. Such extensions and exceptions may be granted by the Department if F006 waste must remain on site for longer than 180 days (or 270 days if applicable) or if more than 20,000 kilograms of F006 waste must remain on site due to unforeseen, temporary, and uncontrollable circumstances. An extension of up to 30 days or an exception to the accumulation limit may be granted at the discretion of the Department on a case-by-case basis.
- (f) <u>Consolidation of hazardous waste received from very small quantity generators</u>. Large quantity generators may accumulate on site hazardous waste received from very small quantity generators under control of the same person (as defined in 335-14-1-.02), without a storage permit or interim status and without complying with the requirements of 335-14-5 through 35-14-8, provided that they comply with the following conditions. "Control," for the purposes of this section, means the power to direct the policies of the generator, whether by the ownership of stock, voting rights, or otherwise, except that contractors who operate generator facilities on behalf of a different person shall not be deemed to "control" such generators.
- 1. The large quantity generator notifies the Department at least thirty (30) days prior to receiving the first shipment from a very small quantity generator(s) using ADEM Form 8700-12; and

- (i) Identifies on the form the name(s) and site address(es) for the very small quantity generator(s) as well as the name and business telephone number for a contact person for the very small quantity generator(s); and
- (ii) Submits an updated ADEM Form 8700-12 within 30 days after a change in the name or site address for the very small quantity generator.
- 2. The large quantity generator maintains records of shipments for three years from the date the hazardous waste was received from the very small quantity generator. These records must identify the name, site address, and contact information for the very small quantity generator and include a description of the hazardous waste received, including the quantity and the date the waste was received.
- 3. The large quantity generator complies with the independent requirements identified in 335-14-3-.01(1)(a)1.(iii) and the conditions for exemption in 335-14-3-.01(7) for all hazardous waste received from a very small quantity generator. For purposes of the labeling and marking regulations in 335-14-3-.01(7)(a)5., the large quantity generator must label the container or unit with the date accumulation started (i.e., the date the hazardous waste was received from the very small quantity generator). If the large quantity generator is consolidating incoming hazardous waste from a very small quantity generator with either its own hazardous waste or with hazardous waste from other very small quantity generators, the large quantity generator must label each container or unit with the earliest date any hazardous waste in the container was accumulated on site.
- (g) Rejected load. A large quantity generator who sends a shipment of hazardous waste to a designated facility with the understanding that the designated facility can accept and manage the waste and later receives that shipment back as a rejected load or residue in accordance with the manifest discrepancy provisions of 335-14-5-.05(3) or 335-14-6-.05(3) may accumulate the returned waste on site in accordance with 335-14-3-.01(7)(a) and (b). Upon receipt of the returned shipment, the generator must:
- 1. Sign Item 18c of the manifest, if the transporter returned the shipment using the original manifest; or
- 2. Sign Item 20 of the manifest, if the transporter returned the shipment using a new manifest.
- (8) <u>EPA identification numbers and re-notification for small quantity</u> generators and large quantity generators.
- (a) A generator must not treat, store, dispose of, transport, or offer for transportation, hazardous waste without having received an EPA identification number from the Department.
- (b) A generator who has not received an EPA identification number may obtain one by applying to the Department using the ADEM Form 8700-12. Upon receiving the request, the Department will assign an EPA identification number to the generator. A

generator shall file a new ADEM Form 8700-12 if the generator changes physical location.

[**Note:** EPA identification numbers are location specific and cannot be transferred from one individual generation site to another.]

- (c) A generator must not offer his hazardous waste to transporters that have not received an EPA identification number and an Alabama Hazardous Waste Transport Permit or to treatment, storage, or disposal facilities that have not received an EPA identification number and an Alabama Hazardous Waste Facility Permit or interim status pursuant to 335-14-8-.07 (or, in the case of out-of-state facilities, a permit valid in the receiving state).
- (d) <u>Annual notification of regulated waste activity and certifications of waste</u> management.
- 1. A large quantity generator or small quantity generator must submit a correct and complete ADEM Form 8700-12 (including all appropriate attachment pages and fees) reflecting current waste activities to the Department annually. The Department must receive the ADEM Form 8700-12 (including all appropriate attachment pages and fees) no later than the 15th day of the specified month in the specified month schedule located at 335-14-1-.02(1)(a).
- 2. Except as provided by 335-14-3-.13, generators which anticipate an increase in hazardous waste generation in amounts significant enough to cause a change to a higher generator classification should notify for the higher classification during the annual notification period (i.e., if a generator typically operates as a small quantity generator, but anticipates being a large quantity generator for any period during the year, they should notify as a large quantity generator). However, if a generator chooses not to notify at the higher classification or fails to anticipate an increase in hazardous waste generation that would change their generator status, a notification must be submitted to the Department at the time of the increase.

[Note: If a generator notifies at a level higher than their actual generator status, the generator will be required to comply with all the applicable requirements of that higher generator classification. Alternatively, the generator has the option to submit multiple ADEM Form 8700-12 notifications (including all appropriate attachment pages and fees) each time their generator status changes, and comply with the requirements applicable to their actual monthly generator status.]

- 3. A very small quantity generator is not required to obtain an EPA ID number, but may do so by complying with 335-14-3-.01(8)(b). A very small quantity generator with an existing and active EPA ID number is required to submit ADEM Form 8700-12 annually in accordance with 335-14-3-.01(8)(d)1.
- 4. A very small quantity generator that has an EPA ID number and wants to stop using it for their site may send a letter to the Department requesting that the ID number be deactivated. The deactivated ID cannot be used by the generator for any purpose after that point.

[**Note:** The ADEM Form 8700-12, Notification of Regulated Waste Activity, is not complete without payment of all the appropriate fees specified in Chapter 335-1-6 of the ADEM Administrative Code.]

Author: Sonja B. Favors; Brent A. Watson.

Statutory Authority: Code of Alabama 1975, §§22-30-11, 22-30-13, 22-30-14.

History: November 19, 1980. Amended: Effective: April 9, 1986; Amended: Effective: August 24, 1989; Amended: Effective: December 21, 1989; Amended: Effective: December 6, 1990; Amended: Effective: January 25, 1992; Amended: Effective: January 1, 1993; Amended: Effective: January 5, 1995; Amended: Effective: January 12, 1996; Amended: Effective: March 8, 1996; Amended: Effective: March 28, 1997Amended: Effective: March 27, 1998; Amended: Effective: April 13, 2001; Amended: Effective: March 15, 2002; Amended: Effective: April 17, 2003Amended: Effective: March 31, 2005; Amended: Effective: April 4, 2006; Amended: Effective: March 30, 2010; Amended: Effective: March 31, 2011; Amended: Effective: April 3, 2012; Amended: Effective: March 31, 2017; Amended: Effective: April 6, 2018; Amended: Filed: February 19, 2019; Effective: April 5, 2019.\_Amended: Proposed: October 21, 2019.

#### 335-14-5-.01 General.

- (1) Purpose, scope and applicability.
- (a) The purpose of 335-14-5 is to establish minimum standards which define the acceptable management of hazardous waste.
- (b) The standards in 335-14-5 apply to owners and operators of all facilities which treat, store, or dispose of hazardous waste, except as specifically provided otherwise in 335-14-5 or 335-14-2.
  - (c) [Reserved].
  - (d) [Reserved].
  - (e) [Reserved].
  - (f) [Reserved].
  - (g) The requirements of 335-14-5 do not apply to:
- 1. The owner or operator of a facility permitted by the Department to manage municipal or industrial solid waste, if the only hazardous waste the facility treats, stores, or disposes of is excluded from regulation under 335-14-5 or 335-14-3-.01(4);
- 2. The owner or operator of a facility managing recyclable materials described in 335-14-2-.01(6)(a)2., 3. and 4. (except to the extent that requirements of 335-14-5 are referred to in 335-14-17 or 335-14-7-.03, 335-14-7-.06, 335-14-7-.07 or 335-14-7-.08);
- 3. A generator accumulating waste on-site in compliance with 335-14-3-.01, except as otherwise provided in 335-14-3;
- 4. A farmer disposing of waste pesticides from his own use in compliance with 335-14-3-.07(1);
- 5. The owner or operator of a totally enclosed treatment facility, as defined in 335-14-1-.02;
- 6. The owner or operator of an elementary neutralization unit or a wastewater treatment unit as defined in 335-14-1-.02, provided that if the owner or operator is treating hazardous ignitable (D001) wastes [other than the D001 High TOC Subcategory defined in 335-14-9-.04(1), Table "Treatment Standards for Hazardous Wastes"], or reactive (D003) waste, to remove the characteristic before land disposal, the owner/operator must comply with the requirements set out in 335-14-5-.02(8)(b).

## 7. [Reserved].

- 8.(i) Except as provided in 335-14-5-.01(1)(g)8.(ii), a person engaged in treatment or containment activities during immediate response to any of the following situations:
  - (I) A discharge of a hazardous waste;
- (II) An imminent and substantial threat of a discharge of hazardous waste;
- (III) A discharge of a material which, when discharged, becomes a hazardous waste;
- (IV) An immediate threat to human health, public safety, property, or the environment, from the known or suspected presence of military munitions, other explosive material, or an explosive device, as determined by an explosive or munitions emergency response specialist as defined in 335-14-1-.02.
- (ii) An owner or operator of a facility otherwise regulated by Division 335-14 must comply with all applicable requirements of 335-14-5-.03 and 335-14-5-.04;
- (iii) Any person who is covered by 335-14-5-.01(1)(g)8.(i) and who continues or initiates hazardous waste treatment or containment activities after the immediate response is over is subject to all applicable requirements of 335-14-5 and 335-14-8;
- (iv) In the case of an explosives or munitions emergency response, if a Federal, State of Alabama, Tribal or local official acting within the scope of his or her official responsibilities, or an explosives or munitions emergency response specialist, determines that immediate removal of the material or waste is necessary to protect human health or the environment, that official or specialist may authorize the removal of the material or waste by transporters who do not have EPA Identification numbers or Alabama Hazardous Waste Transport Permits and without the preparation of a manifest. In the case of emergencies involving military munitions, the responding military emergency response specialist's organizational unit must retain records for three years identifying the dates of the response, the responsible persons responding, the type and description of material addressed, and its disposition.

#### 9. [Reserved].

- 10. The addition of sorbent material to waste in a container or the addition of waste to sorbent material in a container, provided that these activities occur at the time waste is first placed in the container, and 335-14-5-.02(8)(b) and 335-14-5-.09(2) and (3) are complied with.
- 11. A generator treating hazardous wastes, generated on-site, by evaporation in tanks or containers, provided such treatment complies with 335-14-8-.01(1)(c)2.(viii).

- 12. Universal waste handlers and universal waste transporters [as defined in 335-14-1-.02] handling the wastes listed below. These handlers are subject to regulation under 335-14-11, when handling the below listed universal wastes:
  - (i) Batteries as described in 335-14-11-.01(2);
  - (ii) Pesticides as described in 335-14-11-.01(3);
- (iii) Mercury-containing equipment as described in 335-14-11-.01(4); and
  - (iv) Lamps as described in 335-14-11-.01(5).
- 13. Reverse distributors accumulating potentially creditable hazardous waste pharmaceuticals and evaluated hazardous waste pharmaceuticals, as defined in 335-14-1-.02. Reverse distributors are subject to regulation under 335-14-7-.16 in lieu of 335-14-5 for the accumulation of potentially creditable hazardous waste pharmaceuticals and evaluated hazardous waste pharmaceuticals.
- (h) The requirements of 335-14-5 apply to owners or operators of all facilities which treat, store, or dispose of hazardous waste referred to in 335-14-9.
- (i) 335-14-7-.13(6) identifies when the requirements of 335-14-5-.01 apply to the storage of military munitions classified as solid waste under 335-14-7-.13(3). The treatment and disposal of hazardous waste military munitions are subject to the applicable permitting, procedural, and technical standards in 335-14-1 through 335-14-9.
- (j) The requirements of 335-14-5-.02, 335-14-5-.03, 334335-14-5-.04 and 335-14-5-.06(12) do not apply to remediation waste management sites. (However, some remediation waste management sites may be a part of a facility that is subject to a traditional RCRA permit because the facility is also treating, storing or disposing of hazardous wastes that are not remediation wastes. In these cases, 335-14-5-.02, 335-14-5-.03, 335-14-5-.04 and 335-14-5-.06(12) do apply to the facility subject to the traditional RCRA permit.) Instead of the requirements of 335-14-5-.02, 335-14-5-.03, and 335-14-5-.04 owners or operators of remediation waste management sites must:
- 1. Obtain an EPA identification number by applying to ADEM using ADEM Form 8700-12;
- 2. Obtain a detailed chemical and physical analysis of a representative sample of the hazardous remediation wastes to be managed at the site. At a minimum, the analysis must contain all of the information which must be known to treat, store or dispose of the waste according to 335-14-5 and 335-14-9, and must be kept accurate and up to date;
- 3. Prevent people who are unaware of the danger from entering, and minimize the possibility for unauthorized people or livestock to enter onto the active portion of the remediation waste management site, unless the owner or operator can demonstrate to the Department that:

- (i) Physical contact with the waste, structures, or equipment within the active portion of the remediation waste management site will not injure people or livestock who may enter the active portion of the remediation waste management site; and
- (ii) Disturbance of the waste or equipment by people or livestock who enter onto the active portion of the remediation waste management site, will not cause a violation of 335-14-5;
- 4. Inspect the remediation waste management site for malfunctions, deterioration, operator errors, and discharges that may be causing, or may lead to, a release of hazardous waste constituents to the environment, or a threat to human health. The owner or operator must conduct these inspections often enough to identify problems in time to correct them before they harm human health or the environment, and must remedy the problem before it leads to a human health or environmental hazard. Where a hazard is imminent or has already occurred, the owner/operator must take remedial action immediately;
- 5. Provide personnel with classroom or on-the-job training on how to perform their duties in a way that ensures the remediation waste management site complies with the requirements of 335-14-5, and on how to respond effectively to emergencies;
- 6. Take precautions to prevent accidental ignition or reaction of ignitable or reactive waste, and prevent threats to human health and the environment from ignitable, reactive and incompatible waste;
- 7. For remediation waste management sites subject to regulation under 335-14-5-.09 through 335-14-5-.15 and 335-1-5-.24, the owner/operator must design, construct, operate, and maintain a unit within a 100-year floodplain to prevent washout of any hazardous waste by a 100-year flood, unless the owner/operator can meet the demonstration of 335-14-5-.02(9)(b);
- 8. Not place any non-containerized or bulk liquid hazardous waste in any salt dome formation, salt bed formation, underground mine or cave;
- 9. Develop and maintain a construction quality assurance program for all surface impoundments, waste piles and landfill units that are required to comply with 335-14-5-.11(2)(c) and (d), 335-14-5-.12(2)(c) and (d), and 335-14-5-.14(2)(c) and (d) at the remediation waste management site, according to the requirements of 335-14-5-.02(10);
- 10. Develop and maintain procedures to prevent accidents and a contingency and emergency plan to control accidents that occur. These procedures must address proper design, construction, maintenance, and operation of remediation waste management units at the site. The goal of the plan must be to minimize the possibility of, and the hazards from, a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water that could threaten human health or the environment. The plan must explain

specifically how to treat, store and dispose of the hazardous remediation waste in question, and must be implemented immediately in the event of a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment;

- 11. Designate at least one employee, either on the facility premises or on call (that is, available to respond to an emergency by reaching the facility quickly), to coordinate all emergency response measures. The emergency coordinator must be thoroughly familiar with all aspects of the facility's contingency plan, all operations and activities at the facility, the location and characteristics of waste handled, the location of all records within the facility, and the facility layout. In addition, this person must have the authority to commit the resources needed to carry out the contingency plan;
- 12. Develop, maintain and implement a plan to meet the requirements in 335-14-5-.01(1)(j)2. through (j)6. and (j)9. through (j)10.; and
- 13. Maintain records documenting compliance with 335-14-5-.01(1)(j)1. Through\_(j)12.

# (2) [Reserved].

- (3) Relationship to interim status standards. A facility owner or operator who has fully complied with the requirements for interim status must comply with the Rules specified in 335-14-6 in lieu of 335-14-5, until final administrative disposition of his Hazardous Waste Facility Permit is made; except as provided under 335-14-5-.19.
- (4) <u>Imminent hazard action</u>. Notwithstanding any other provisions of these Rules, enforcement actions may be brought pursuant to Section 7003 of RCRA and the AHWMMA.

**Authors:** Stephen C. Maurer, Lynn T. Roper, C. Edwin Johnston, Michael Champion, Bradley N. Curvin, Theresa A. Maines, Jonah Harris, Vernon H. Crockett; <u>Sonja B. Favors</u>; <u>Brent A. Watson</u>.

**Statutory Authority:** Code of Alabama 1975, §§22-30-11, 22-30-16.

History: November 19, 1980. Amended: April 9, 1986; Amended: Effective: August 24, 1989; Amended: Effective January 5, 1995; Amended: Effective April 28, 1995; Amended: Effective January 12, 1996; Amended: Effective March 27, 1998; Amended: Effective March 31, 2000; Amended: Effective April 13, 2001; Amended: Effective March 15, 2002; Amended: Effective April 17, 2003; Amended: Effective March 31, 2005; Amended: Effective April 4, 2006; Amended: Effective April 3, 2007; Amended: Effective April 3, 2012; Amended: Effective April 6, 2018; Amended: Proposed: October 21, 2019.

## 335-14-5-.02 General Facility Standards.

#### (1) Applicability.

(a) The requirements of 335-14-5-.02 apply to owners and operators of all hazardous waste facilities, except as provided in 335-14-5-.01(1).

#### (b) [Reserved].

(2) <u>Identification number</u>. Every facility owner or operator must obtain an EPA identification number by submitting a correct and complete ADEM Form 8700-12 to the Department, along with the appropriate fees specified in ADEM Admin. Code Rule 335-1-6.

# (3) <u>Required notices</u>.

- (a) The owner or operator of a facility that has arranged to receive hazardous waste subject to 335-14-3-.09 from a foreign source must submit the following required notices:
- 1. For imports where the competent authority of the country of export does not require the foreign exporter to submit to it a notification proposing export and obtain consent from EPA and the competent authorities for the countries of transit, such owner or operator of the facility, if acting as the importer, must provide notification of the proposed transboundary movement in English to EPA using the allowable methods listed in 335-14-.09(5) at least 60 days before the first shipment is expected to depart the country of export. The notification may cover up to one year of shipments of wastes having similar physical and chemical characteristics, the same United Nations classification, the same RCRA waste codes and OECD waste codes, and being sent from the same foreign exporter.
- a copy of the movement document bearing all required signatures within three (3) working days of receipt of the shipment to the foreign exporter; to the competent authorities of the countries of export and transit that control the shipment as an export and transit shipment of hazardous waste respectively; and on or after the electronic import-export reporting compliance date, to EPA electronically using EPA's Waste Import Export Tracking System (WIETS), or its successor system. The original of the signed movement document must be maintained at the facility for at least three (3) years. The owner or operator of a facility may satisfy this recordkeeping requirement by retaining electronically submitted documents in the facility's account on EPA's Waste Import Export Tracking System (WIETS), or its successor system, provided that copies are readily available for viewing and production if requested by any EPA or authorized state inspector. No owner or operator of a facility may be held liable for the inability to produce the documents for inspection under this section if the owner or operator of a facility can demonstrate that the inability to produce the document is due exclusively to technical difficulty with EPA's Waste Import Export Tracking System (WIETS), or its successor system for which the owner or operator of a facility bears no responsibility.
- 3. If the facility has physical control of the waste and it must be sent to an alternate facility or returned to the country of export, such owner or operator of

the facility must inform EPA, using the allowable methods listed in 335-14-.09(5) of the need to return or arrange alternate management of the shipment.

# 4. Such owner or operator shall:

- (i) Send copies of the signed and dated confirmation of recovery or disposal, as soon as possible, but no later than thirty days after completing recovery or disposal on the waste in the shipment and no later than one calendar year following receipt of the waste, to the foreign exporter, to the competent authority of the country of export that controls the shipment as an export of hazardous waste, and for shipments recycled or disposed of on or after the electronic import-export reporting compliance date, to EPA electronically using EPA's Waste Import Export Tracking System (WIETS), or its successor system.
- (ii) If the facility performed any of recovery operations R12, R13, or RC16, or disposal operations D13 through D15, or DC17, promptly send copies of the confirmation of recovery or disposal that it receives from the final recovery or disposal facility within one year of shipment delivery to the final recovery or disposal facility that performed one of recovery operations R1 through R11, or RC16, or one of disposal operations D1 through D12, or DC15 to DC16, to the competent authority of the country of export that controls the shipment as an export of hazardous waste, and on or after the electronic import-export reporting compliance date, to EPA electronically using EPA's Waste Import Export Tracking System (WIETS), or its successor system. The recovery and disposal operations in this paragraph are defined in 335-14-.09(2).
- (b) The owner or operator of a facility that receives hazardous waste from an off-site source (except where the owner or operator is also the generator) must inform the generator in writing that he has the appropriate permit(s) for, and will accept, the waste the generator is shipping. The owner or operator must keep a copy of this written notice as part of the operating record.
- (c) Before transferring ownership or operation of a facility during its operating life, or of a disposal facility during the post-closure care period, the owner or operator must notify the new owner or operator in writing of the requirements of 335-14-5 and 335-14-8. (An owner's or operator's failure to notify the new owner or operator of the requirements of 335-14-5 in no way relieves the new owner or operator of his obligation to comply with all applicable requirements.)
- (d)1. A facility owner or operator must submit a correct and complete ADEM Form 8700-12 (including all appropriate attachment pages and fees) reflecting current waste activities to the Department annually. The Department must receive the ADEM Form 8700-12 (including all appropriate attachment pages and fees) no later than the 15<sup>th</sup> day of the specified month in the specified month schedule located at 335-14-1-.02(1)(a).
- 2. In order to eliminate the need for multiple notifications during the reporting year, facilities which anticipate periodically switching between generator classifications should notify for the higher classification (i.e., if a facility typically operates as a small quantity generator, but anticipates being a large quantity generator for any period during the year, they should notify as a large quantity generator); and

3. The ADEM Form 8700-12, Notification of Regulated Waste Activity, is not complete without payment of all the appropriate fees specified in ADEM Admin. Code Rule 335-1-6.

#### (4) <u>General waste analysis</u>.

- (a)1. Before an owner or operator treats, stores, or disposes of any hazardous wastes, or non-hazardous wastes if applicable under 335-14-5-.07(4)(d), he must obtain a detailed chemical and physical analysis of a representative sample of the wastes. At a minimum, this analysis must contain all the information which must be known to treat, store, or dispose of the waste in accordance with the requirements of 335-14-5, 335-14-7, and 335-14-9 and with the conditions of a permit issued under 335-14-8.
- 2. The analysis may include data developed under 335-14-2 and existing published or documented data on the hazardous waste or on hazardous waste generated from similar processes.
- 3. The analysis must be repeated as necessary to ensure that it is accurate and up to date. At a minimum, the analysis must be repeated:
- (i) When the owner or operator is notified, or has reason to believe, that the process or operation generating the hazardous wastes, or non-hazardous wastes if applicable under 335-14-5-.07(4)(d), has changed; and
- (ii) For off-site facilities, when the results of the inspection or analysis required in 335-14-5-.02(4)(a)4. indicate that the hazardous waste received at the facility does not match the waste described on the accompanying manifest or shipping paper.
- 4. The owner or operator of an off-site facility must inspect and analyze each hazardous waste movement received at the facility to determine whether it matches the identity of the waste specified on the accompanying manifest or shipping paper.
- (b) The owner or operator must develop and follow a written waste analysis plan which describes the procedures which he will carry out to comply with 335-14-5-.02(4)(a). He must keep this plan at the facility. At a minimum, the plan must specify:
- 1. The parameters for which each hazardous waste, or non-hazardous waste if applicable under 335-14-5-.07(4)(d), will be analyzed and the rationale for the selection of these parameters (i.e., how analysis for these parameters will provide sufficient information on the waste's properties to comply with 335-14-5-.02(4)(a));
  - 2. The test methods which will be used to test for these parameters;

- 3. The sampling method which will be used to obtain a representative sample of the waste to be analyzed. A representative sample may be obtained using either:
- (i) One of the sampling methods described in 335-14-2 Appendix I; or
  - (ii) An equivalent sampling method approved by the Department;
- 4. The frequency, approved by the Department, with which the initial analysis of the waste will be reviewed or repeated to ensure that the analysis is accurate and up to date; and
- 5. For off-site facilities, the waste analyses that hazardous waste generators have agreed to supply; and
- 6. Where applicable, the methods which will be used to meet the additional waste analysis requirements for specific waste management methods as specified in 335-14-5-.02(8), 335-14-5-.14(15), 335-14-5-.15(2), 335-14-5-.27, 335-14-5-.28, 335-14-5-.29, 335-14-7-.08(3), and 335-14-9-.01(7).
- 7. For surface impoundments exempted from land disposal restrictions under 335-14-9-.01(4), the procedures and schedules for:
  - (i) The sampling of impoundment contents;
  - (ii) The analysis of test data; and
- (iii) The annual removal of residues which are not delisted under 335-14-1-.03(2) or which exhibit a characteristic of hazardous waste and either:
  - (I) Do not meet applicable treatment standards 335-14-9-.04; or
  - (II) Where no treatment standards have been established;
- I. Such residues are prohibited from land disposal under 335-14-9-.03(13) or RCRA Section 3004(d); or
- II. Such residues are prohibited from land disposal under 335-14-9-.03(14).
- 8. For owners and operators seeking an exemption to the air emission standards of 335-14-5-.29:
- (i) The procedures and schedules for waste sampling and analysis, and the analysis of test data to verify the exemption.
- (ii) Each generator's notice and certification of the volatile organic concentration in the waste if the waste is received from off site.

- (c) For off-site facilities, the waste analysis plan required in 335-14-5-.02(4)(b) must also specify the procedures which will be used to inspect and analyze each movement of hazardous waste received at the facility to ensure that it matches the identity of the waste designated on the accompanying manifest or shipping paper. At a minimum, the plan must describe and justify:
- 1. The procedures which will be used to determine the identity of each movement of waste managed at the facility and shall include collection of representative samples which will be obtained from each waste stream from each shipment of waste received from each generator and analyzed in accordance with the requirements of 335-14-5-.02(4) to accurately identify each movement of hazardous waste received at the facility;
- 2. The sampling method and number of samples which will be used to obtain a representative sample of the waste stream to be identified;
  - 3. The method(s) which will be used to analyze the sample(s); and
- 4. The procedures that the owner or operator of an off-site landfill receiving containerized hazardous waste will use to determine whether a hazardous waste generator or treater has added a biodegradable sorbent to the waste in the container.
- (d) For off-site facilities, samples of waste(s) from each generator collected in accordance with the requirements of 335-14-5-.02(4)(c) may be composited prior to analysis provided that:
- 1. No more than ten individual samples are composited into any one sample for analysis;
- 2. Only compatible wastes from the same generator and waste stream are composited into any one sample which is to be analyzed; and
- 3. In the event that the analytical results of sample(s) obtained in compliance with the requirements 335-14-5-.02(4) indicate that the hazardous waste received at the facility does not match the waste described on the accompanying manifest or shipping paper, the facility owner or operator shall:
  - (i) Collect and analyze a representative sample from each container;
- (ii) Identify the container(s) holding the waste(s) which cause the discrepancy to occur; and
  - (iii) Comply with the requirements of 335-14-5-.05(3)(c).
- (e) Upon receipt of a satisfactory demonstration based on the types of waste received and treated, stored or disposed of at the facility, processes utilized to manage the waste, and any other reasonable factors, the Department may grant a partial or full exemption from the requirements for the sampling and analysis of each shipment of waste as required by 335-14-5-.02(4)(c).

[**Note**: The term "movement" as used in 335-14-5-.02(4) refers to individual truckloads, batches, shipments, etc., of wastes received at the facility. It is not intended to impose requirements for additional waste analyses for internal movements of wastes within the facility unless otherwise required by Division 335-14.]

#### (5) <u>Security</u>.

- (a) The owner or operator must prevent the unknowing entry, and minimize the possibility for unauthorized entry, of persons or livestock onto the active portion of his facility, unless he can demonstrate to the Department that:
- 1. Physical contact with the waste, structures, or equipment within the active portion of the facility will not injure unknowing or unauthorized persons or livestock which may enter the active portion of the facility; and
- 2. Disturbance of the waste or equipment, by the unknowing or unauthorized entry of persons or livestock onto the active portion of the facility, will not cause a violation of 335-14-5.
- (b) Unless the owner or operator has made a successful demonstration under 335-14-5-.02(5)(a)1. and (a)2., a facility must have:
- 1. A 24-hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel) which continuously monitors and controls entry onto the active portion of the facility; or
- 2.(i) An artificial or natural barrier (e.g., a fence in good repair or a fence combined with a cliff), which completely surrounds the active portion of the facility; and
- (ii) A means to control entry, at all times, through the gates or other entrances to the active portion of the facility (e.g., an attendant, television monitors, locked entrance, or controlled roadway access to the facility).
- (c) Unless the owner or operator has made a successful demonstration under 335-14-5-.02(5)(a)1. and (a)2., a sign with the legend "Danger-Unauthorized Personnel Keep Out" must be posted at each entrance to the active portion of the facility, and at other locations, in sufficient numbers to be seen from any approach to the active portion. The legend must be written in English and in any other language predominant in the workplace and the area surrounding the facility, and must be legible from a distance of at least 25 feet. Existing signs with a legend other than "Danger-Unauthorized Personnel Keep Out" may be used if the legend on the sign indicates that only authorized personnel are allowed to enter the active portion, and that entry onto the active portion can be dangerous.

#### (6) <u>General inspection requirements.</u>

(a) The owner or operator must inspect his facility for malfunctions and deterioration, operator errors, and discharges which may be causing, or may lead to, the release of hazardous waste constituents to the environment or a threat to human

health. The owner or operator must conduct these inspections often enough to identify problems in time to correct them before they harm human health or the environment.

- (b)1. The owner or operator must develop and follow a written schedule for inspecting monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment that are important to preventing, detecting, or responding to environmental or health hazards.
  - 2. He must keep the schedule at the facility.
- 3. The schedule must identify the types of problems which are to be looked for during the inspection.
- 4. The frequency of inspection may vary for the items on the schedule. However, the frequency should be based on the rate of deterioration of the equipment and the probability of an environmental or human health incident if the deterioration, malfunction, or operator error goes undetected between inspections. Areas subject to spills, such as loading and unloading areas, must be inspected daily when in use. At a minimum, the inspection schedule must include the items and frequencies called for in 335-14-5-.09(5), 335-14-5-.10(4), 335-14-5-.10(6), 335-14-5-.11(7), 335-14-5-.12(5), 335-14-5-.13(9), 335-14-5-.14(4), 335-14-5-.15(8), 335-14-5-.24(3), 335-14-5-.27, 335-14-5-.28, 335-14-5-.28, 335-14-5-.28, and 335-14-5-.29) where applicable.

[Comment: 335-14-8 requires the inspection schedule to be submitted with Part B of the permit application. ADEM will evaluate the schedule along with the rest of the application to ensure that it adequately protects human health and the environment. As part of this review, the Department may modify or amend the schedule as may be necessary.]

- (c) The owner or operator must remedy any deterioration or malfunction of equipment or structures which the inspection reveals on a schedule which ensures that the problem does not lead to an environmental or human health hazard. Where a hazard is imminent or has already occurred, remedial action must be taken immediately.
- (d) The owner or operator must record inspections in an inspection log or summary. He must keep these records for at least three years from the date of inspection. At a minimum, these records must include the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions.

## (7) <u>Personnel training.</u>

- (a) Facility personnel whose duties have a direct effect on hazardous waste management and/or hazardous waste accumulation, whether by direct contact with the hazardous waste or through hazardous waste management activities, must receive training.
- 1. Facility personnel must successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties

in a way that ensures the facility's compliance with the requirements of 335-14-5. The owner or operator must ensure that this program includes all the elements described in the document required under 335-14-5-.02(7)(d)3.

- 2. This program must be directed by a person trained in hazardous waste management procedures, and must include instruction which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed.
- 3. At a minimum, the training program must be designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency systems, including, where applicable:
- (i) Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment;
  - (ii) Key parameters for automatic waste feed cut-off systems;
  - (iii) Communications or alarm systems;
  - (iv) Response to fires or explosions;
  - (v) Response to groundwater contamination incidents; and
  - (vi) Shutdown of operations.
- 4. For facility employees that receive emergency response training pursuant to Occupational Safety and Health Administration (OSHA) regulations 29 CFR 1910.120(p)(8) and 1910.120(q), the facility is not required to provide separate emergency response training pursuant to 335-14-5-.02(7), provided that the overall facility training meets all the requirements of 335-14-5-.02(7).
- (b) Facility personnel must successfully complete the program required in 335-14-5-.02(7)(a) within six months after the effective date of these rules or six months after the date of their employment or assignment to a facility, or to a new position at a facility, whichever is later. Employees hired after the effective date of these rules must not work in unsupervised positions until they have completed the training requirements of 335-14-5-.02(7)(a).
- (c) Facility personnel must take part in an annual review of the initial training required in 335-14-5-.02(7)(a).
- (d) The owner or operator must maintain the following documents and records at the facility:
- 1. The job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job;

- 2. A written job description for each position listed under 335-14-5-.02(7)(d)1. This description may be consistent in its degree of specificity with descriptions for other similar positions in the same company location or bargaining unit, but must include the requisite skill, education, or other qualifications, and duties of employees assigned to each position;
- 3. A written description of the type and amount of both introductory and continuing training that will be given to each person filling a position listed under 335-14-5-.02(7)(d)1.; and
- 4. Records that document that the training or job experience required under 335-14-5-.02(7)(a), (b), and (c) has been given to, and completed by, facility personnel.
- (e) Training records on current personnel must be kept until closure of the facility; training records on former employees must be kept for at least three years from the date the employee last worked at the facility. Personnel training records may accompany personnel transferred within the same company.
- (8) <u>General requirements for ignitable, reactive, or incompatible</u> wastes.
- (a) The owner or operator must take precautions to prevent accidental ignition or reaction of ignitable or reactive waste. This waste must be separated and protected from sources of ignition or reaction including but not limited to: open flames, smoking, cutting, and welding, hot surfaces, frictional heat, sparks (static, electrical, or mechanical), spontaneous ignition (e.g., from heat-producing chemical reactions), and radiant heat. While ignitable or reactive waste is being handled, the owner or operator must confine smoking and open flame to specially designated locations. "No Smoking" signs must be conspicuously placed wherever there is a hazard from ignitable or reactive waste.
- (b) Where specifically required by other paragraphs of 335-14-5, the owner or operator of a facility that treats, stores, or disposes ignitable or reactive waste, or mixes incompatible waste or incompatible wastes and other materials, must take precautions to prevent reactions which:
- 1. Generate extreme heat or pressure, fire or explosions, or violent reactions;
- 2. Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health or the environment;
- 3. Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions;
  - 4. Damage the structural integrity of the device or facility;
- 5. Through other like means threaten human health or the environment.

- (c) When required to comply with 335-14-5-.02(8)(a) or (b), the owner or operator must document that compliance. This documentation may be based on references to published scientific or engineering literature, data from trial tests (e.g., bench scale or pilot scale tests), waste analyses (as specified in 335-14-5-.02(4)), or the results of the treatment of similar wastes by similar treatment processes and under similar operating conditions.
  - (9) Location standards.

### (a) [Reserved].

- (b)1. Floodplains. A facility located in a 100-year floodplain must be designed, constructed, operated, and maintained to prevent washout of any hazardous waste by a 100-year flood, unless the owner or operator can demonstrate to the Department's satisfaction that:
- (i) Procedures are in effect which will cause the waste to be removed safely, before flood waters can reach the facility, to a location where the wastes will not be vulnerable to flood waters; or
- (ii) For existing surface impoundments, waste piles, land treatment units, landfills, and miscellaneous units, no adverse effects on human health or the environment will result if washout occurs, considering:
- (I) The volume and physical and chemical characteristics of the waste in the facility;
- (II) The concentration of hazardous constituents that would potentially affect surface waters as a result of washout;
- (III) The impact of such concentrations on the current or potential uses of and water quality standards established for the affected surface waters; and
- (IV) The impact of hazardous constituents on the sediments of affected surface waters or the soils of the 100-year floodplain that could result from washout.
  - 2. As used in 335-14-5-.02(9)(b)1.:
- (i) "100-year floodplain" means any land area which is subject to a one percent or greater chance of flooding in any given year from any source.
- (ii) "Washout" means the movement of hazardous waste from the active portion of the facility as a result of flooding.
- (iii) "100-year flood" means a flood that has a one percent chance of being equaled or exceeded in any given year.

- (c) Salt dome formations, salt bed formations, underground mines, and caves. The placement of any noncontainerized or bulk liquid hazardous waste in any salt dome formation, salt bed formation, underground mine or cave is prohibited.
  - (10) <u>Construction quality assurance program.</u>
  - (a) CQA program.
- 1. A construction quality assurance (CQA) program is required for all surface impoundment, waste pile and landfill units that are required to comply with 335-14-5-.11(2)(c) and (d), 335-14-5-.12(2)(c) and (d), and 335-14-5-.14(2)(b). The program must ensure that the constructed unit meets or exceeds all design criteria and specifications in the permit. The program must be developed and implemented under the direction of a CQA officer who is a registered professional engineer.
- 2. The CQA program must address the following physical components, where applicable:
  - (i) Foundations;
  - (ii) Dikes;
  - (iii) Low-permeability soil liners;
  - (iv) Geomembranes (flexible membrane liners);
- (v) Leachate collection and removal systems and leak detection systems; and
  - (vi) Final cover systems.
- (b) Written CQA plan. The owner or operator of units subject to the CQA program under 335-14-5-.02(10)(a) of must develop and implement a written CQA plan. The plan must identify steps that will be used to monitor and document the quality of materials and the condition and manner of their installation. The CQA plan must include:
- 1. Identification of applicable units and a description of how they will be constructed.
- 2. Identification of key personnel in the development and implementation of the CQA plan and CQA officer qualifications.
- 3. A description of inspection and sampling activities for all unit components identified in 335-14-5-.02(10)(a)2., including observations and tests that will be used before, during, and after construction to ensure that the construction materials and the installed unit components meet the design specifications. The description must cover: sampling size and locations; frequency of testing; data evaluation procedures; acceptance and rejection criteria for construction materials;

plans for implementing corrective measures; and data or other information to be recorded and retained in the operating record under 335-14-5-.05(4).

- (c) Contents of program.
- 1. The CQA program must include observations, inspections, tests, and measurements sufficient to ensure:
- (i) Structural stability and integrity of all components of the unit identified in 335-14-5-.02(10)(a)2.;
- (ii) Proper construction of all components of the liners, leachate collection and removal system, leak detection system, and final cover system, according to permit specifications and good engineering practices, and proper installation of all components (e.g., pipes) according to design specifications; and
- (iii) Conformity of all materials used with design and other material specifications under 335-14-5-.11(2), 335-14-5-.12(2), and 335-14-5-.14(2).
- 2. The CQA program shall include test fills for compacted soil liners, using the same compaction methods as in the full scale unit, to ensure that the liners constructed meet the hydraulic conductivity requirements to 335-14-5-.11(2)(c)1.(i)(II), 335-14-5-.12(2)(c)1.(i)(II), and 335-14-5-.14(2)(b)1.(i)(II) in the field. Compliance with the hydraulic conductivity requirements must be verified by using in-situ testing on the constructed test fill. The Department may accept an alternative demonstration, in lieu of a test fill, where data are sufficient to show that a constructed soil liner will meet the hydraulic conductivity requirements of 335-14-5-.11(2)(c)1.(i)(II), 335-14-5-.12(2)(c)1.(i)(II), and 335-14-5-.14(2)(b)1.(i)(II) in the field.
- (d) Certification. Waste shall not be received in a unit subject to 335-14-5-.02(10) until the owner or operator has submitted to the Department by certified mail or hand delivery a certification signed by the CQA officer that the approved CQA plan has been successfully carried out and that the unit meets the requirements of 335-14-5-.11(2)(c) or (d), 335-14-5-.12(2)(c) or (d), or 335-14-5-.14(2)(b); and the procedure in 335-14-8-.03(1)(1)2.(ii) has been completed. Documentation supporting the CQA officer's certification must be furnished to the Department upon request.

**Authors:** Stephen C. Maurer; Steven O. Jenkins; Stephen A. Cobb; Amy P. Zachry; Michael B. Champion; Bradley N. Curvin; Theresa A. Maines; Clethes Stallworth; Jonah Harris; Vernon H. Crockett; <u>Sonja B. Favors; Brent A. Watson</u> **Statutory Authority:** Code of Alabama 1975, §§22-30-11, 22-30-16.

History: July 19, 1982. Amended: Effective April 9, 1986; Amended: Effective September 29, 1986; Amended: Effective February 15, 1988; Amended: Effective August 24, 1989; Amended: Effective December 6, 1990; Amended: Effective January 25, 1992; Amended: Effective January 1, 1993; Amended: Effective January 5, 1995; Amended: Effective January 12, 1996; Amended: Effective March 28, 1997; Amended: Effective March 27, 1998; Amended: Effective April 2, 1999; Amended: Effective March 31, 2000; Amended: Effective April 13, 2001; Amended: Effective March 31, 2005; Amended: Effective March 31, 2005; Amended: Effective March 31, 2005; Amended:

Effective April 4, 2006; **Amended:** Effective April 3, 2007; **Amended:** Effective March 30, 2010; **Amended:** Effective March 31, 2011; **Amended:** Effective April 3, 2012; **Amended:** Effective March 31, 2017; **Amended:** Effective April 6, 2018; **Amended:** Proposed: October 21, 2019.

#### 335-14-5-.07 Closure and Post-Closure.

- (1) <u>Applicability</u>. Except as 335-14-5-.01(1) provides otherwise:
- (a) 335-14-5-.07(2) through (6) (which concern closure) apply to the owners and operators of all hazardous waste management facilities and CAMUs; and
- (b) 335-14-5-.07(7) through (11) (which concern post-closure care) apply to the owners and operators of:
  - 1. All hazardous waste disposal facilities;
- 2. Waste piles, surface impoundments, and drip pads from which the owner or operator intends to remove the wastes at closure to the extent that these paragraphs are made applicable to such facilities in 335-14-5-.12(9), 335-14-5-.11(9), or 335-14-5-.23(6);
- 3. Tank systems that are required under 335-14-5-.10(8) to meet the requirements for landfills;
- 4. Containment buildings that are required under 335-14-5-.30(3) to meet the requirements for landfills;
- 5. Corrective action management units in which wastes remain after closure; and
- 6. Other hazardous waste management units which are unable to demonstrate closure by removal.
- (c) The Department may replace all or part of the requirements of 335-14-5-.07 (and the unit-specific standards referenced in 334335-14-5-.07(2)(c) applying to a regulated unit, which alternative requirements set out in a permit or in an enforceable document (as defined in 335-14-8-.01(1)(c)7.), where the Department determines that:
- 1. The regulated unit is situated among solid waste management units (or areas of concern), a release has occurred, and both the regulated unit and one or more solid waste management unit(s) (or areas of concern) are likely to have contributed to the release; and
- 2. It is not necessary to apply to closure requirements of 335-14-5-.07 (and those referenced herein) because the alternative requirements will protect human health and the environment and will satisfy the closure performance standard of 334335-14-5-.07(2)(a) and (b).
- (2) <u>Closure performance standards</u>. The owner or operator must close the facility in a manner that:
  - (a) Minimizes the need for further maintenance; and

- (b) Controls, minimizes, or eliminates, to the extent necessary to protect human health and the environment, post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated run-off, or hazardous waste decomposition products to the ground or surface waters or to the atmosphere; and
- (c) Complies with the closure requirements of 335-14-5-.07, including, but not limited to, the requirements of 335-14-5-.09(9), 335-14-5-.10(8), 335-14-5-.11(9), 335-14-5-.12(9), 335-14-5-.13(11), 335-14-5-.14(11), 335-14-5-.15(12), 335-14-5-.19(1) through (3), 335-14-5-.23(6), 335-14-5-.24(2) through (4), 335-15-5-.30(3), and 335-14-7-.08(3) [40 CFR 266.102(e)(11)].
  - (3) <u>Closure plan: amendment of plan.</u>
  - (a) Written Plan.
- 1. The owner or operator of a hazardous waste management facility must have a written closure plan. In addition, certain surface impoundments, waste piles, and drip pads from which the owner or operator intends to remove or decontaminate the hazardous waste at partial or final closure are required by 335-14-5-.11(9)(c)1.(i), 335-14-5-.12(9)(c)1.(i), and 335-14-5-.23(6)(c)1.(i) to have contingent closure plans. The plan must be submitted with the permit application, in accordance with 335-14-8-.02(5)(b)13., and approved by the Director as part of the permit issuance procedures. In accordance with 335-14-8-.03(3), the approved closure plan will become a condition of any AHWMMA permit.
- The Director's approval of the plan must ensure that the approved closure plan is consistent with 335-14-5-.07(2) through (6) and the applicable et seq., requirements of 335-14-5-.06(1) 335-14-5-.09(9), 335-14-5-.10(8), 335-14-5-.12(9), 335-14-5-.11(9), 335-14-5-.13(11), 335-14-5-.14(11), 335-14-5-.15(12), 335-14-5-.19(1) through (3), 335-14-5-.23(6), 335-14-5-.24(2), 335-14-5-.30(3) and 335-14-7-.08(3) [40 CFR 266.102(e)(11)]. Until final closure is completed and certified in accordance with 335-14-5-.07(6), a copy of the approved plan and all approved revisions must be furnished to the Director upon request, including requests by mail.
- (b) Content of plan. The plan must identify steps necessary to perform partial and/or final closure of the facility at any point during its active life. The closure plan must include, at least:
- 1. A description of how each hazardous waste management unit at the facility will be closed in accordance with 335-14-5-.07(2);
- 2. A description of how final closure of the facility will be conducted in accordance with 335-14-5-.07(2). The description must identify the maximum extent of the operations which will be unclosed during the active life of the facility;
- 3. An estimate of the maximum inventory of hazardous wastes ever on-site over the active life of the facility and a detailed description of the methods to be used during partial closures and final closure, including, but not limited to, methods for removing, transporting, treating, storing, or disposing of all hazardous wastes, and

identification of the type(s) of the off-site hazardous waste management units to be used, if applicable; and

- 4. A detailed description of the steps needed to remove or decontaminate all hazardous waste residues and contaminated containment system components, equipment, structures, and soils during partial and final closure, including, but not limited to, procedures for cleaning equipment and removing contaminated soils, methods for sampling and testing surrounding soils, and criteria for determining the extent of decontamination required to satisfy the closure performance standard;
- 5. A detailed description of other activities necessary during the closure period to ensure that all partial closures and final closure satisfy the closure performance standards, including, but not limited to, groundwater monitoring, leachate collection, and run-on and run-off control; and
- 6. A schedule for closure for each hazardous waste management unit and for final closure of the facility. The schedule must include, at a minimum, the total time required to close each hazardous waste management unit and the time required for intervening closure activities which will allow tracking of the progress of partial and final closure. (For example, in the case of a landfill unit, estimates of the time required to treat or dispose of all hazardous waste inventory and of the time required to place a final cover must be included.)
- 7. For facilities that use trust funds to establish financial assurance under 335-14-5-.08(4) and (6) and that are expected to close prior to the expiration of the permit, an estimate of the expected year of final closure.
- 8. For facilities where the Department has applied alternative requirements at a regulated unit under 335-14-5-.06(1)(f), 335-14-5-.07(1)(c), and/or 335-14-5-.08(1)(e), either the alternative requirements applying to the regulated unit, or a reference to the enforceable document containing those alternative requirements.
- (c) Amendment of plan. The owner or operator must submit a written request for a permit modification to authorize a change in operating plans, facility design, or the approved closure plan in accordance with the procedures in 335-14-8. The written request must include a copy of the amended closure plan for review or approval by the Director.
- 1. The owner or operator may submit a written request to the Director for a permit modification to amend the closure plan at any time prior to the notification of partial or final closure of the facility.
- 2. The owner or operator must submit a written request for a permit modification to authorize a change in the approved closure plan whenever:
- (i) Changes in operating plans or facility design affect the closure plan, or
  - (ii) There is a change in the expected year of closure, if applicable, or

- (iii) In conducting partial or final closure activities, unexpected events require a modification of the approved closure plan.
- (iv) The owner or operator requests the Department to apply alternative requirements to a regulated unit under 335-14-5-.06(1)(f), 335-14-5-.07(1)(c), and/or 335-14-5-.08(1)(e).
- 3. The owner or operator must submit a written request for a permit modification including a copy of the amended closure plan for approval at least 60 days prior to the proposed change in facility design or operation, or no later than 60 days after an unexpected event has occurred which has affected the closure plan. If an unexpected event occurs during the partial or final closure period, the owner or operator must request a permit modification no later than 30 days after the unexpected event. An owner or operator of a surface impoundment, waste pile, or drip pad that intends to remove all hazardous waste at closure and is not otherwise required to prepare a contingent closure plan under 335-14-5-.11(9)(c)1.(i), 335-14-5-.12(9)(c)1 .(i), or 335-14-5-.23(6)(c)1.(i) must submit an amended closure plan to the Department no later than 60 days from the date that the owner or operator or Director determines that the hazardous waste management unit must be closed as a landfill, subject to the requirements of 335-14-5-.14(11), or no later than 30 days from that date if the determination is made during partial or final closure. The Department will approve, disapprove, or modify this amended plan in accordance with the procedures in 335-14-8. In accordance with 335-14-8-.03(3), the approved closure plan will become a condition of any AHWMMA permit issued.
- 4. The Department may request modifications to the plan under the conditions described in 335-14-5-.07(3)(c)2. The owner or operator must submit the modified plan within 60 days of the Department's request, or within 30 days if the change in facility conditions occurs during partial or final closure. Any modifications requested by the Department will be approved in accordance with the procedures in 335-14-8.
  - (d) Notification of partial closure and final closure.
- 1. The owner or operator must notify the Department in writing at least 60 days prior to the date on which he expects to begin closure of a surface impoundment, waste pile, land treatment or landfill unit, or final closure of a facility with such a unit. The owner or operator must notify the Department in writing at least 45 days prior to the date on which he expects to begin final closure of a facility with only treatment or storage tanks, container storage, or incinerator units to be closed. The owner or operator must notify the Department in writing at least 45 days prior to the date on which he expects to begin partial or final closure of a boiler or industrial furnace, whichever is earlier.
  - 2. The date when he "expects to begin closure" must be either:
- (i) No later than 30 days after the date on which any hazardous waste management unit receives the known final volume of hazardous wastes or, if there is a reasonable possibility that the hazardous waste management unit will receive additional

hazardous wastes, no later than one year after the date on which the unit received the most recent volume of hazardous waste. If the owner or operator of a hazardous waste management unit can demonstrate to the Department that the hazardous waste management unit or facility has the capacity to receive additional hazardous wastes and he has taken all steps to prevent threats to human health and the environment, including compliance with all applicable permit requirements, the Department may approve an extension to this one-year limit; or

- (ii) For units meeting the requirements of 335-14-5-.07(4)(d), no later than 30 days after the date on which the hazardous waste management unit receives the known final volume of non-hazardous wastes, or if there is a reasonable possibility that the hazardous waste management unit will receive additional non-hazardous wastes, no later than one year after the date on which the unit received the most recent volume of non-hazardous wastes. If the owner or operator can demonstrate to the Department that the hazardous waste management unit has the capacity to receive additional non-hazardous wastes and he has taken, and will continue to take, all steps to prevent threats to human health and the environment, including compliance with all applicable permit requirements, the Department may approve an extension to this one-year limit.
- 3. If the facility's permit is terminated, or if the facility is otherwise ordered, by judicial decree or final order under Section 3008 of RCRA, to cease receiving hazardous wastes or to close, then the requirements of 335-14-5-.07(3) do not apply. However, the owner or operator must close the facility in accordance with the deadlines established in 335-14-5-.07(4).
- (e) Nothing in 335-14-5-.07 shall preclude the owner or operator from removing hazardous wastes and decontaminating or dismantling equipment in accordance with the approved partial or final closure plan at any time before or after notification of partial or final closure.

#### (4) Closure: time allowed for closure.

- (a) Within 90 days after receiving the final volume of hazardous wastes, or the final volume of non-hazardous wastes if the owner or operator complies with all applicable requirements in 335-14-5-.07(4)(d) and (e), at a hazardous waste management unit or facility, the owner or operator must treat, remove from the unit or facility, or dispose of on-site, all hazardous wastes in accordance with the approved closure plan. The Department may approve a longer period if the owner or operator complies with all applicable requirements for requesting a modification to the permit and demonstrates that:
- 1.(i) The activities required to comply with 335-14-5-.07(4) will, of necessity, take longer than 90 days to complete; or
- (ii)(I) The hazardous waste management unit or facility has the capacity to receive additional hazardous wastes, or has the capacity to receive non-hazardous wastes if the owner or operator complies with 335-14-5-.07(4)(d) and (e);

- (II) There is a reasonable likelihood that he or another person will recommence operation of the hazardous waste management unit or the facility within one year; and
- (III) Closure of the hazardous waste management unit or facility would be incompatible with continued operation of the site; and
- 2. He has taken and will continue to take all steps to prevent threats to human health and the environment, including compliance with all applicable permit requirements.
- (b) The owner or operator must complete partial and final closure activities in accordance with the approved closure plan and within 180 days after receiving the final volume of hazardous wastes, or the final volume of non-hazardous wastes if the owner or operator complies with all applicable requirements in 335-14-5-.07(4)(d) and (e), at the hazardous waste management unit or facility. The Director may approve an extension to the closure period if the owner or operator complies with all applicable requirements for requesting a modification to the permit and demonstrates that:
- 1.(i) The partial or final closure activities will, of necessity, take longer than 180 days to complete; or
- (ii)(I) The hazardous waste management unit or facility has the capacity to receive additional hazardous wastes, or has the capacity to receive non-hazardous wastes if the owner or operator complies with 335-14-5-.07(4)(d) and (e);
- (II) There is reasonable likelihood that he or another person will recommence operation of the hazardous waste management unit or the facility within one year; and
- (III) Closure of the hazardous waste management unit or facility would be incompatible with continued operation of the site; and
- 2. He has taken and will continue to take all steps to prevent threats to human health and the environment from the unclosed but not operating hazardous waste management unit or facility, including compliance with all applicable permit requirements.
- (c) The demonstrations referred to in 335-14-5-.07(4)(a)l. and (b)l. must be made as follows:
- 1. The demonstrations in 335-14-5-.07(4)(a)1. must be made at least 30 days prior to the expiration of the 90-day period in 335-14-5-.07(4)(a); and
- 2. The demonstration in 335-14-5-.07(4)(b)l. must be made at least 30 days prior to the expiration of the 180-day period in 335-14-5-.07(4)(b), unless the owner or operator is otherwise subject to the deadlines in 335-14-5-.07(4)(d).

- (d) The Department may allow an owner or operator to receive only non-hazardous wastes in a landfill, land treatment, or surface impoundment unit after the final receipt of hazardous wastes at that unit if:
- 1. The owner or operator requests a permit modification in compliance with all applicable requirements in 335-14-8 and in the permit modification request demonstrates that:
- (i) The unit has the existing design capacity as indicated on the Part A Application to receive non-hazardous wastes; and
- (ii) There is a reasonable likelihood that the owner or operator or another person will receive non-hazardous wastes in the unit within one year after the final receipt of hazardous wastes; and
- (iii) The non-hazardous wastes will not be incompatible with any remaining wastes in the unit, or with the facility design and operating requirements of the unit or facility under this part; and
- (iv) Closure of the hazardous waste management unit would be incompatible with continued operation of the unit or facility; and
- (v) The owner or operator is operating and will continue to operate in compliance with all applicable permit requirements; and
- 2. The request to modify the permit includes an amended waste analysis plan, groundwater monitoring and response program, human exposure assessment required under RCRA Section 3019, and closure and post-closure plans, and updated cost estimates and demonstrations of financial assurance for closure and post-closure care as necessary and appropriate, to reflect any changes due to the presence of hazardous constituents in the non-hazardous wastes, and changes in closure activities, including the expected year of closure if applicable under 335-14-5-.07(3)(b)7., as a result of the receipt of non-hazardous wastes following the final receipt of hazardous wastes; and
- 3. The request to modify the permit includes revisions, as necessary and appropriate, to affected conditions of the permit to account for the receipt of non-hazardous wastes following receipt of the final volume of hazardous wastes; and
- 4. The request to modify the permit and the demonstrations referred to in 335-14-5-.07(4)(d)1. and (d)2. are submitted to the Director no later than 120 days prior to the date on which the owner or operator of the facility receives the known final volume of hazardous wastes at the unit, or no later than 90 days after the effective date of 335-14-5-.07, whichever is later.
- (e) In addition to the requirements in 335-14-5-.07(4)(d), an owner or operator of a hazardous waste surface impoundment that is not in compliance with the liner and leachate collection system requirements in 42 U.S.C. 3004(o)(1) and 3005(j)(1) or 42 U.S.C. 3004(o)(2) or (3) or 3005(j)(2), (3), (4), or (13) must:

- 1. Submit with the request to modify the permit:
- (i) A contingent corrective measures plan, unless a corrective action plan has already been submitted under 335-14-5-.06(10); and
- (ii) A plan for removing hazardous wastes in compliance with 335-14-5-.07(4)(e)2.; and
- 2. Remove all hazardous wastes from the unit by removing all hazardous liquids, and removing all hazardous sludges to the extent practicable without impairing the integrity of the liner(s), if any.
- 3. Removal of hazardous wastes must be completed no later than 90 days after the final receipt of hazardous wastes. The Director may approve an extension to this deadline if the owner or operator demonstrates that the removal of hazardous wastes will, of necessity, take longer than the allotted period to complete and that an extension will not pose a threat to human health and the environment.
- 4. If a release that is a statistically significant increase (or decrease in the case of pH) over background values for detection monitoring parameters or constituents specified in the permit or that exceeds the facility's groundwater protection standard at the point of compliance, if applicable, is detected in accordance with the requirements in 335-14-5-.06, the owner or operator of the unit:
- (i) Must implement corrective measures in accordance with the approved contingent corrective measures plan required by 335-14-5-.07(4)(e)1. no later than one year after detection of the release, or approval of the contingent corrective measures plan, whichever is later;
- (ii) May continue to receive wastes at the unit following detection of the release only if the approved corrective measures plan includes a demonstration that continued receipt of wastes will not impede corrective action; and
- (iii) May be required by the Director to implement corrective measures in less than one year or to cease the receipt of wastes until corrective measures have been implemented if necessary to protect human health and the environment.
- 5. During the period of corrective action, the owner or operator shall provide annual reports to the Director describing the progress of the corrective action program, compile all groundwater monitoring data, and evaluate the effect of the continued receipt of non-hazardous wastes on the effectiveness of the corrective action.
- 6. The Director may require the owner or operator to commence closure of the unit if the owner or operator fails to implement corrective action measures in accordance with the approved contingent corrective measures plan within one year as required in 335-14-5-.07(4)(e)4., or fails to make substantial progress in implementing corrective action and achieving the facility's groundwater protection standard or background levels if the facility has not yet established a groundwater protection standard.

- 7. If the owner or operator fails to implement corrective measures as required in 335-14-5-.07(4)(e)4. or if the Director determines that substantial progress has not been made pursuant to 335-14-5-.07(4)(e)6., he shall:
- (i) Notify the owner or operator in writing that the owner or operator must begin closure in accordance with the deadlines in 335-14-5-.07(4)(a) and (b) and provide a detailed statement of reasons for this determination.
- (ii) Provide the owner or operator and the public, through a newspaper notice, the opportunity to submit written comments on the decision no later than 20 days after the date of the notice.
- (iii) If the Director receives no written comments, the decision will become final five days after the close of the comment period. The Director will notify the owner or operator that the decision is final, and that a revised closure plan, if necessary, must be submitted within 15 days of the final notice and that closure must begin in accordance with the deadlines in 335-14-5-.07(4)(a) and (b).
- (iv) If the Director receives written comments on the decision, he shall make a final decision within 30 days after the end of the comment period, and provide the owner or operator in writing and the public through a newspaper notice, a detailed statement of reasons for the final decision. If the Director determines that substantial progress has not been made, closure must be initiated in accordance with the deadlines in 335-14-5-.07(4)(a) and (b).
- (v) The final determinations made by the Director under 335-14-5-.07(4)(e)7.(iii) and (iv) are not subject to administrative appeal.
- Disposal or decontamination of equipment, structures, and soils. During the partial and final closure periods, all contaminated equipment, structures, and soils must be properly disposed of or decontaminated unless otherwise specified in 335-14-5-.09(9), 335-14-5-.10(8), 335-14-5-.11(9), 335-14-5-.12(9), 335-14-5-.13(11), 335-14-5-.14(11), 335-14-5-.19(1) through (3), 335-14-5-.23(6), 335-14-5-.24, or 335-14-5-.30(3). By removing any hazardous wastes or hazardous constituents during partial and final closure, the owner or operator may become a generator of hazardous waste and must handle that waste in accordance with all applicable requirements of 335-14-3.
- (6) <u>Certification of closure</u>. Within 60 days of completion of closure of each hazardous waste surface impoundment, waste pile, land treatment, and landfill unit, and within 60 days of the completion of final closure, the owner or operator must submit to the Director, by registered mail, a certification that the hazardous waste management unit or facility, as applicable, has been closed in accordance with the specifications in the approved closure plan. The certification must be signed by the owner or operator and by an independent registered professional engineer. Documentation supporting the professional engineer's certification must be furnished to the Director upon request until he releases the owner or operator from the financial assurance requirements for closure under 335-14-5-.08(4)(i).

#### (7) Survey plat.

- (a) No later than the submission of the certification of closure of each hazardous waste disposal unit, the owner or operator must submit to the local zoning authority, or the authority with jurisdiction over local land use, and to the Director, a survey plat indicating the location and dimensions of landfill cells or other hazardous waste disposal units with respect to permanently surveyed benchmarks. This plat must be prepared and certified by a professional land surveyor. The plat filed with the local zoning authority, or the authority with jurisdiction over local land use, must contain a note, prominently displayed, which states the owner's or operator's obligation to restrict disturbance of the hazardous waste disposal unit in accordance with the applicable requirements of 335-14-5-.07; and
- (b) Where closure does not achieve the standard of unrestricted use, the owner or operator or other responsible person must provide documentation of compliance with the requirements of the Uniform Environmental Covenants Program in ADEM Admin. Code Division 335-5.

## (8) <u>Post-closure care and use of property.</u>

- (a)l. Post-closure care for each hazardous waste management unit subject to the requirements of 335-14-5-.07(8) through (11) must begin after completion of closure of the unit and continue for 30 years after that date, or for 30 years after the date of issuance of a post-closure permit or in an enforceable document (as defined in 335-14-8-.01(1)(c)7.), whichever is later. Post-closure care must consist of at least the following:
- (i) Monitoring and reporting in accordance with the requirements of 335-14-5-.06, .11, .12, .13, .14, .23, and .24; and
- (ii) Maintenance and monitoring of waste containment systems in accordance with the requirements of 335-14-5-.06, .11, .12, .13, .14, .23, and .24.
- 2. Any time preceding partial closure of a hazardous waste management unit subject to post-closure care requirements or final closure, or any time during the post-closure period for a particular unit, the Department may, in accordance with the permit modification procedures in 335-14-8:
- (i) Shorten the post-closure care period applicable to the hazardous waste management unit, or facility, if all disposal units have been closed, if it finds that the reduced period is sufficient to protect human health and the environment (e.g., leachate or groundwater monitoring results, characteristics of the hazardous wastes, application of advanced technology, or alternative disposal, treatment, or reuse techniques indicate that the hazardous waste management unit or facility is secure); or
- (ii) Extend the post-closure care period applicable to the hazardous waste management unit or facility if it finds that the extended period is necessary to protect human health and the environment (e.g., leachate or groundwater monitoring results indicate a potential for migration of hazardous wastes at levels which may be harmful to human health and the environment).

- (iii) The post-closure care period automatically extends through any time during which hazardous wastes remain in a hazardous waste management unit unless the owner/operator is able to demonstrate closure by removal in accordance with 335-14-8-.01(1)(c)5.
- (b) The Department may require, at partial and final closure, continuation of any of the security requirements of 335-14-5-.02(5) during part or all of the post-closure care period when:
- 1. Hazardous wastes may remain exposed after completion of partial or final closure; or
- 2. Access by the public or domestic livestock may pose a hazard to human health.
- (c) Post-closure use of property on or in which hazardous wastes remain after partial or final closure must never be allowed to disturb the integrity of the final cover, liner(s), or any other components of the containment system, or the function of the facility's monitoring systems, unless the Department finds that the disturbance:
- 1. Is necessary to the proposed use of the property, and will not increase the potential hazard to human health or the environment; or
  - 2. Is necessary to reduce a threat to human health or the environment.
- (d) All post-closure care activities must be in accordance with the provisions of the approved post-closure plan as specified in 335-14-5-.07(9).

# (9) <u>Post-closure plan; amendment of plan.</u>

- Written plan. The owner or operator of a hazardous waste disposal unit must have a written post-closure plan. In addition, certain surface impoundments, waste piles, and drip pads from which the owner or operator intends to remove or decontaminate the hazardous wastes at partial or final closure are required by 335-14-5-.11(9)(c)1.(ii), 335-14-5-.12(9)(c)1.(ii), and 335-14-5-.23(6)(c)1.(ii) to have contingent post-closure plans. Owners or operators of surface impoundments, waste piles, and drip pads not otherwise required to prepare contingent post-closure plans under 335-14-5-.11(9)(c)1.(ii), 335-14-5-.12(9)(c)1.(ii), and 335-14-5-.23(6)(c)1.(ii) and other hazardous waste management units and CAMUs which cannot demonstrate closure by removal must submit a post-closure plan to the Director within 90 days from the date that the owner or operator or Director determines that the hazardous waste management unit must be closed as a landfill, subject to the requirements of 335-14-5-.07(8) through (11). The plan must be submitted with the permit application, in accordance with 335-14-8-.02(5)(b)13. and approved by the Director as part of the permit issuance procedures under 335-14-8. In accordance with 335-14-8-.03(3), the approved post-closure plan will become a condition of any AHWMMA permit issued.
- (b) For each hazardous waste management unit subject to the requirements of 335-14-5-.07, the post-closure plan must identify the activities that will

be carried on after closure of each disposal unit and the frequency of these activities, and include at least:

- 1. A description of the planned monitoring activities and frequencies at which they will be performed to comply with 335-14-5-.06, .09, .10, .11, .12, .13, .14, .19, .23, .24, and .30 during the post-closure care period; and
- 2. A description of the planned maintenance activities, and frequencies at which they will be performed, to ensure:
- (i) The integrity of the cap and final cover or other containment systems in accordance with the requirements of 335-14-5-.06, .09, .10, .11, .12, .13, .14, .19, .23, .24, and .30; and
- (ii) The function of the monitoring equipment in accordance with the requirements of 335-14-5-.06, .09, .10, .11, .12, .13, .14, .19, .23, .24, and .30; and
- 3. The name, address, and phone number of the person or office to contact about the hazardous waste disposal unit or facility during the post-closure care period.
- 4. For facilities where the Department has applied alternative requirements at a regulated unit under 335-14-5-.06(1)(f), 335-14-5-.07(1)(c), and/or 335-14-.08(1)(e), either the alternative requirements that apply to the regulated unit, or a reference to the enforceable document containing those requirements.
- (c) Until final closure of the facility, a copy of the approved post-closure plan must be furnished to the Department upon request, including request by mail. After final closure has been certified, the person or office specified in 335-14-5-.07(9)(b)3. must keep the approved post-closure plan during the remainder of the post-closure period.
- (d) Amendment of plan. The owner or operator must submit a written request for a permit modification to authorize a change in the approved post-closure plan in accordance with the applicable requirements of 335-14-8. The written request must include a copy of the amended post-closure plan for review or approval by the Department.
- 1. The owner or operator may submit a written request to the Department for a permit modification to amend the post-closure plan at any time during the active life of the facility or during the post-closure care period.
- 2. The owner or operator must submit a written request for a permit modification to authorize a change in the approved post-closure plan whenever:
- (i) Changes in operating plans or facility design affect the approved post-closure plan, or
- (ii) There is a change in the expected year of final closure, if applicable, or

- (iii) Events which occur during the active life of the facility, including partial and final closures, affect the approved post-closure plan, or
- (iv) The owner or operator requests the Department to apply alternative requirements to a regulated unit under 335-14-5-.06(1)(f), 335-14-5-.07(1)(c), and/or 335-14-5-.08(1)(e).
- 3. The owner or operator must submit a written request for a permit modification at least 60 days prior to the proposed change in facility design or operation, or no later than 60 days after an unexpected event has occurred which has affected the post-closure plan. An owner or operator of a surface impoundment, waste pile or drip pad that intends to remove all hazardous waste at closure and is not otherwise required contingent post-closure plan under 335-14-5-.11(9)(c)1.(ii), 335-14-5-.12(9)(c)1.(ii), and 335-14-5-.23(6)(c)1.(ii) must submit a post-closure plan to the Department no later than 90 days after the date that the owner or operator or Department determines that the hazardous waste management unit must be closed as a landfill, subject to the requirements of 335-14-5-.14(11). The Department will approve, disapprove, or modify this plan in accordance with the procedures in 335-14-8. In accordance with 335-14-8-.03(3), the approved post-closure plan will become a permit condition.
- 4. The Department may request modifications to the plan under the conditions described in 335-14-5-.07(9)(d)2. The owner or operator must submit the modified plan no later than 60 days after the Department's request, or no later than 90 days if the unit is a surface impoundment, waste pile, or drip pad not previously required to prepare a contingent post-closure plan. Any modifications requested by the Department will be approved, disapproved, or modified in accordance with the procedures in 335-14-8.

#### (10) <u>Post-closure notices</u>.

- (a) No later than 60 days after certification of closure of each hazardous waste disposal unit, the owner or operator must submit to the local zoning authority, or the authority with jurisdiction over local land use, and to the Department a record of the type, location, and quantity of hazardous wastes disposed of within each cell or other disposal unit of the facility. For hazardous wastes disposed of before January 12, 1981, the owner or operator must identify the type, location, and quantity of the hazardous wastes to the best of his knowledge and in accordance with any records he has kept.
- (b) Within 60 days of certification of closure of the first hazardous waste disposal unit and within 60 days of certification of closure of the last hazardous waste disposal unit, the owner or operator must:
- 1. Record, in accordance with State of Alabama law, a notation on the deed to the facility property or on some other instrument which is normally examined during title search that will in perpetuity notify any potential purchaser of the property that:

- (i) The land has been used to manage hazardous wastes; and
- (ii) Its use is restricted under 335-14-5-.07; and
- (iii) The survey plat and record of the type, location, and quantity of hazardous wastes disposed of within each cell or other hazardous waste disposal unit of the facility required by 335-14-5-.07(7) and 335-14-5-.07(10)(a) have been filed with the local zoning authority or the authority with jurisdiction over local land use and with the Department; and
- 2. Submit a certification, signed by the owner or operator, that he has recorded the notation specified in 335-14-5-.07(10)(b)1., including a copy of the document in which the notation has been placed, to the Department.
- (c) If the owner or operator or any subsequent owner or operator of the land upon which a hazardous waste disposal unit is located wishes to remove hazardous wastes and hazardous waste residues, the liner, if any, or contaminated soils, he must request a modification to the post-closure permit in accordance with the applicable requirements in 335-14-8. The owner or operator must demonstrate that the removal of hazardous wastes will satisfy the criteria of 335-14-5-.07(8)(c). By removing hazardous waste, the owner or operator may become a generator of hazardous waste and must manage it in accordance with all applicable requirements of Division 335-14. If he is granted a permit modification or otherwise granted approval to conduct such removal activities, the owner or operator may request that the Director approve either:
- 1. The removal of the notation on the deed to the facility property or other instrument normally examined during title search; or
- 2. The addition of a notation to the deed or instrument indicating the removal of the hazardous waste.
- (11) Certification of completion of post-closure care. No later than 60 days after completion of the established post-closure care period for each hazardous waste disposal unit, the owner or operator must submit to the Department, by registered mail, a certification that the post-closure care period for the hazardous waste disposal unit was performed in accordance with the specifications in the approved post-closure plan. The certification must be signed by the owner or operator and an independent registered professional engineer. Documentation supporting the professional engineer's certification must be furnished to the Department upon request until the Director releases the owner or operator from the financial assurance requirements for post-closure care under 335-14-5-.08(6)(i).

**Authors:** Stephen C. Maurer; James W. Hathcock; Stephen A. Cobb; C. Edwin Johnston; Theresa A. Maines; Tracy P. Strickland; Metz P. Duites; Vernon H. Crockett; Sonja B. Favors; Brent A. Watson

**Statutory Authority:** Code of Alabama 1975, §§22-30-11, 22-30-12, 22-30-16.

**History:** July 19, 1982.; **Amended:** Effective: April 9, 1986; **Amended:** Effective: September 29, 1986; **Amended:** Effective: February 15, 1988; **Amended:** Effective: August 24, 1989; **Amended:** Effective: December 6, 1990; **Amended:** Effective: January 25, 1992; **Amended:** Effective: January 5, 1995; **Amended:** Effective: March 27, 1998;

Amended: Effective: March 31, 2000; Amended: Effective: April 13, 2001; Amended: Effective: March 15, 2002; Amended: Effective: April 17, 2003; Amended: Effective: April 3, 2007; Amended: Effective: March 30, 2010; Amended: Effective: April 8, 2016; Amended: Effective: March 31, 2017; Amended: Effective: April 6, 2018; Amended: Proposed: October 21, 2019.

## 335-14-5-.09 <u>Use and Management of Containers.</u>

- (1) <u>Applicability</u>. The regulations in 335-14-5-.09 apply to owners and operators of all hazardous waste facilities that store containers of hazardous waste, except as 335-14-5-.01 provides otherwise.
- (2) <u>Condition of containers</u>. If a container holding a hazardous waste is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak, the owner or operator must transfer the hazardous waste from this container to a container that is in good condition or manage the waste in some other way that complies with the requirements of 335-14-5.
- (3) <u>Compatibility of waste with containers</u>. The owner or operator must use a container made of or lined with materials which will not react with, and are otherwise compatible with, the hazardous waste to be stored, so that the ability of the container to contain the waste is not impaired.

#### (4) Management of containers.

- (a) A container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste.
- (b) A container holding hazardous waste must not be opened, handled, or stored in a manner which may rupture the container or cause it to leak.
- (c) Containers having a capacity greater than 30 gallons must not be stacked over two containers high.
- (5) <u>Inspections</u>. At least weekly, the owner or operator must inspect areas where containers are stored, looking for leaking containers and for deterioration of containers and the containment system caused by corrosion or other factors. The owner or operator must also note the number and capacity of hazardous waste containers present. These inspections must be documented in accordance with 335-14-5-.02(6)(d).

[**Comment:** See 335-14-5-.02(6)(c) and 335-14-5-.09(2) for remedial action required if deterioration or leaks are detected.]

#### (6) Containment.

- (a) Container storage areas must have a containment system that is designed and operated in accordance with 335-14-5-.09(6)(b), except as otherwise provided by 335-14-5-.09(6)(c).
  - (b) A containment system must be designed and operated as follows:
- 1. A base must <u>underlyunderlie</u> the containers which is free of cracks or gaps and is sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed;

- 2. The base must be sloped or the containment system must be otherwise designed and operated to drain and remove liquids resulting from leaks, spills, or precipitation, unless the containers are elevated or are otherwise protected from contact with accumulated liquids;
- 3. The containment system must have sufficient capacity to contain 10% of the volume of containers or the volume of the largest container, whichever is greater. Containers that do not contain free liquids need not be considered in this determination;
- 4. Run-on into the containment system must be prevented unless the collection system has sufficient excess capacity in addition to that required in 335-14-5-.09(6)(b)3. to contain any run-on which might enter the system; and
- 5. Spilled or leaked waste must be removed from the sump or collection area in a timely manner not to exceed 24 hours after detection. Accumulated precipitation must be removed in as timely a manner necessary to prevent overflow of the collection system.
- (c) Storage areas that store containers holding only wastes that do not contain free liquids need not have a containment system defined by 335-14-5-.09(6)(b), except as provided by 335-14-5-.09(6)(d) or provided that:
- 1. The storage area is sloped or is otherwise designed and operated to drain and remove liquid resulting from precipitation, or
- 2. The containers are elevated or are otherwise protected from contact with accumulated liquid.
- (d) Storage areas that store containers holding the wastes listed below that do not contain free liquids must have a containment system defined by 335-14-5-.09(6)(b):
  - 1. F020, F021, F022, F023, F026, and F027;

#### 2. [Reserved].

- (7) <u>Special requirements for ignitable or reactive waste</u>. Containers holding ignitable or reactive waste must be located at least 15 meters (50 feet) from the facility's property line.
  - (8) Special requirements for incompatible wastes.
- (a) Incompatible wastes, or incompatible wastes and materials (see 335-14-5 Appendix V for examples), must not be placed in the same container unless 335-14-5-.02(8)(b) is complied with.
- (b) Hazardous waste must not be placed in an unwashed container that previously held an incompatible waste or material.

(c) A storage container holding a hazardous waste that is incompatible with any waste or other materials stored nearby in other containers, piles, open tanks, or surface impoundments must be separated from the other materials or protected from them by means of a dike, berm, wall or other device.

# (9) <u>Closure and post-closure care.</u>

- (a) At closure, all hazardous waste and hazardous waste residues must be removed from the containment system. Remaining containers, liners, bases, and soil containing or contaminated with hazardous waste or hazardous waste residues must be decontaminated or removed.
- (b) If the owner or operator cannot remove or decontaminate all waste required by 335-14-5-.09(9)(a), then the owner or operator must close the container storage area and perform post-closure care in accordance with the closure and post-closure care requirements that apply to landfills [335-14-5-.14(11)].
- (10) <u>Air Emission Standards</u>. The owner or operator shall manage all hazardous waste placed in a container in accordance with the applicable requirements of 335-14-5-.27, 335-14-5-.28, and 335-14-5-.29.

**Authors:** Stephen C. Maurer, James W. Hathcock, C. Edwin Johnston, Michael B. Champion, Theresa A. Maines, Heather M. Jones; Metz Duites; Vernon H. Crockett; Sonja B. Favors; Brent A. Watson

**Statutory Authority:** Code of Alabama 1975, §§22-30-11, 22-30-16.

History: July 19, 1982. Amended: Effective: April 9, 1986; Amended: Effective: February 15, 1988; Amended: Effective: August 24, 1989; Amended: Effective: December 6, 1990; Amended: Effective: January 5, 1995; Amended: Effective: March 27, 1998; Amended: Effective: April 13, 2001; Amended: Effective: March 15, 2002; Amended: Effective: April 3, 2007; Amended: Effective: May 27, 2008; Amended: Effective: April 6, 2018; Amended: Proposed: October 21, 2019.

## 335-14-5-.12 Waste Piles.

- (1) Applicability.
- (a) The requirements of 335-14-5-.12 apply to owners and operators of facilities that store or treat hazardous waste in piles, except as 335-14-5-.01(1) provides otherwise.
- (b) The requirements of 335-14-5-.12 do not apply to owners or operators of waste piles that are closed with wastes left in place. Such waste piles are subject to regulation under 335-14-5-.14 (Landfills).
- (c) The owner or operator of any waste pile that is inside or under a structure that provides protection from precipitation so that neither run-off nor leachate is generated is not subject to regulation under 335-14-5-.12(2) or under 335-14-5-.06, provided that:
- 1. Liquids or materials containing free liquids are not placed in the pile;
- 2. The pile is protected from surface water run-on by the structure or in some other manner;
- 3. The pile is designed and operated to control dispersal of the waste by wind, where necessary, by means other than wetting; and
- 4. The pile will not generate leachate through decomposition or other reactions.
  - (2) Design and operating requirements.
- (a) A waste pile (except for an existing portion of a waste pile) must have:
- 1. A liner that is designed, constructed, and installed to prevent any migration of wastes out of the pile into the adjacent subsurface soil or groundwater or surface water at any time during the active life (including the closure period) of the waste pile. The liner may be constructed of materials that may allow waste to migrate into the liner itself (but not into the adjacent subsurface soil or groundwater or surface water) during the active life of the facility. The liner must be:
- (i) Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or leachate to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation;
- (ii) Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression or uplift; and

- (iii) Installed to cover all surrounding earth likely to be in contact with the waste or leachate; and
- 2. A leachate collection and removal system immediately above the liner that is designed, constructed, maintained, and operated to collect and remove leachate from the pile. The Department will specify design and operating conditions in the permit to ensure that the leachate depth over the liner does not exceed 30 cm (one foot). The leachate collection and removal system must be:
  - (i) Constructed of materials that are:
- (I) Chemically resistant to the waste managed in the pile and the leachate expected to be generated; and
- (II) Of sufficient strength and thickness to prevent collapse under the pressures exerted by overlaying wastes, waste cover materials, and by any equipment used at the pile; and
- (ii) Designed and operated to function without clogging through the scheduled closure of the waste pile.
- (b) The owner or operator will be exempted from the requirements of 335-14-5-.12(2)(a) if the Director finds, based on a demonstration by the owner or operator, that alternate design and operating practices, together with location characteristics, will prevent the migration of any hazardous constituents [see 335-14-5-.06(4)] into the groundwater or surface water at any future time. In deciding whether to grant an exemption, the Director will consider:
  - 1. The nature and quantity of the wastes;
  - 2. The proposed alternate design and operation;
- 3. The hydrogeologic setting of the facility, including attenuative capacity and thickness of the liners and soils present between the pile and groundwater or surface water; and
- 4. All other factors which would influence the quality and mobility of the leachate produced and the potential for it to migrate to groundwater or surface water.
- (c) The owner or operator of each new waste pile unit, unit, each lateral expansion of a waste pile unit, and each replacement of an existing waste pile unit must install two or more liners and a leachate collection and removal system above and between such liners.
  - 1.(i) The liner system must include:

- (I) A top liner designed and constructed of materials (e.g., a geomembrane) to prevent the migration of hazardous constituents into such liner during the active life and post-closure care period; and
- (II) A composite bottom liner, consisting of at least two components. The upper component must be designed and constructed of materials (e.g., a geomembrane) to prevent the migration of hazardous constituents into this component during the active life and post-closure care period. The lower component must be designed and constructed of materials to minimize the migration of hazardous constituents if a breach in the upper component were to occur. The lower component must be constructed of at least 3 feet (91 cm) of compacted soil material with a hydraulic conductivity of no more than  $1X10^{-7}$  cm/sec.
  - (ii) The liners must comply with 335-14-5-.12(2)(a)1.(i), (ii), and (iii).
- 2. The leachate collection and removal system immediately above the top liner must be designed, constructed, operated, and maintained to collect and remove leachate from the waste pile during the active life and post-closure care period. The Director will specify design and operating conditions in the permit to ensure that the leachate depth over the liner does not exceed 30 cm (one foot). The leachate collection and removal system must comply with 335-14-5-.12(2)(c)3.(iii) and (iv).
- 3. The leachate collection and removal system between the liners, and immediately above the bottom composite liner in the case of multiple leachate collection and removal systems, is also a leak detection system. This leak detection system must be capable of detecting, collecting, and removing leaks of hazardous constituents at the earliest practicable time through all areas of the top liner likely to be exposed to waste or leachate during the active life and post-closure care period. The requirements for a leak detection system in 335-14-5-.12(2)(c) are satisfied by installation of a system that is, at a minimum:
  - (i) Constructed with a bottom slope of one percent or more;
- (ii) Constructed of granular drainage materials with a hydraulic conductivity of  $1 \times 10^{-2}$  cm/sec or more and a thickness of 12 inches (30.5 cm) or more; or constructed of synthetic or geonet drainage materials with a transmissivity of  $3 \times 10^{-5}$  m<sup>2</sup>/sec or more;
- (iii) Constructed of materials that are chemically resistant to the waste managed in the waste pile and the leachate expected to be generated, and of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying wastes, waste cover materials, and equipment used at the waste pile;
- (iv) Designed and operated to minimize clogging during the active life and post-closure care period; and
- (v) Constructed with sumps and liquid removal methods (e.g., pumps) of sufficient size to collect and remove liquids from the sump and prevent liquids from backing up into the drainage layer. Each unit must have its own sump(s). The design of

each sump and removal system must provide a method for measuring and recording the volume of liquids present in the sump and of liquids removed.

- 4. The owner or operator shall collect and remove pumpable liquids in the leak detection system sumps to minimize the head on the bottom liner.
- 5. The owner or operator of a leak detection system that is not located completely above the seasonal high water table must demonstrate that the operation of the leak detection system will not be adversely affected by the presence of groundwater.
- (d) The Director may approve alternative design or operating practices to those specified in 335-14-5-.12(2)(c) if the owner or operator demonstrates to the Director that such design and operating practices, together with location characteristics:
- 1. Will prevent the migration of any hazardous constituent into the groundwater or surface waster at least as effectively as the liners and leachate collection and removal systems specified in 335-14-5-.12(2)(c); and
- 2. Will allow detection of leaks of hazardous constituents through the top liner at least as effectively.
- (e) 335-14-5-.12(2)(c) does not apply to monofills that are granted a waiver by the Director in accordance with 335-14-5-.11(2)(e).
- (f) The owner or operator of any replacement waste pile unit is exempt from 335-14-5-.12(2)(c) if:
- 1. The existing unit was constructed in compliance with the design standards of Section 3004(0)(1)(A)(i) and (0)(5) of the Resource Conservation and Recovery Act and the AHWMMA; and
- 2. There is no reason to believe that the liner is not functioning as designed.
- (g) The owner or operator must design, construct, operate, and maintain a run-on control system capable of preventing flow onto the active portion of the pile during peak discharge from at least a 25-year storm.
- (h) The owner or operator must design, construct, operate, and maintain a run-off management system to collect and control at least the water volume resulting from a 24-hour, 25-year storm.
- (i) Collection and holding facilities (e.g., tanks or basins) associated with run-on and run-off control systems must be emptied or otherwise managed expeditiously after storms to maintain design capacity of the system.
- (j) If the pile contains any particular matter which may be subject to wind dispersal, the owner or operator must cover or otherwise manage the pile to control wind dispersal.

(k) The Department will specify in the permit all design and operating practices that are necessary to ensure that the requirements of 335-14-5-.12(2) are satisfied.

### (3) <u>Action leakage rate</u>.

- (a) The Director shall approve an action leakage rate for waste pile units subject to 335-14-5-.12(2)(c) or (d). The action leakage rate is the maximum design flow rate that the leak detection system (LDS) can remove without the fluid head on the bottom liner exceeding one foot. The action leakage rate must include an adequate safety margin to allow for uncertainties in the design (e.g., slope, hydraulic conductivity, thickness of drainage material), construction, operation, and location of the LDS, waste and leachate characteristics, likelihood and amounts of other sources of liquids in the LDS, and proposed response actions (e.g., the action leakage rate must consider decreases in the flow capacity of the system over time resulting from siltation and clogging, rib layover and creep of synthetic components of the system, overburden pressures, etc.).
- (b) To determine if the action leakage rate has been exceeded, the owner or operator must convert the weekly flow rate from the monitoring data obtained under 335-14-5-.12(5)(c) to an average daily flow rate (gallons per acre per day) for each sump. Unless the Director approves a different calculation, the average daily flow rate for each sump must be calculated weekly during the active life and closure period.

## (4) Response actions.

- (a) The owner or operator of waste pile units subject to 335-14-5-.12(2)(c) or (d) must have an approved response action plan before receipt of waste. The response action plan must set forth the actions to be taken if the action leakage rate has been exceeded. At a minimum, the response action plan must describe the actions specified in 335-14-5-.12(4)(b).
- (b) If the flow rate into the leak detection system exceeds the action leakage rate for any sump, the owner or operator must:
- 1. Notify the Director in writing of the <u>exceedence</u> within seven days of the determination;
- 2. Submit a preliminary written assessment to the Director within 14 days of the determination, as to the amount of liquids, likely sources of liquids, possible location, size, and cause of any leaks, and short-term actions taken and planned;
- 3. Determine to the extent practicable the location, size, and cause of any leak;
- 4. Determine whether waste receipt should cease or be curtailed, whether any waste should be removed from the unit for inspection, repairs, or controls, and whether or not the unit should be closed;

- 5. Determine any other short-term and long-term actions to be taken to mitigate or stop any leaks; and
- 6. Within 30 days after the notification that the action leakage rate has been exceeded, submit to the Director the results of the analyses specified in 335-14-5-.12(4)(b)3., 4., and 5., the results of actions taken, and actions planned. Monthly thereafter, as long as the flow rate in the leak detection system exceeds the action leakage rate, the owner or operator must submit to the Director a report summarizing the results of any remedial actions taken and actions planned.
- (c) To make the leak and/or remediation determinations in 335-14-5-.12(4)(b)3., 4., and 5., the owner or operator must:
  - 1.(i) Assess the source of liquids and amounts of liquids by source,
- (ii) Conduct a fingerprint, hazardous constituent, or other analyses of the liquids in the leak detection system to identify the source of liquids and possible location of any leaks, and the hazard and mobility of the liquid; and
- (iii) Assess the seriousness of any leaks in terms of potential for escaping into the environment; or
  - 2. Document why such assessments are not needed.
  - (5) Monitoring and inspection.
- (a) During construction or installation, liners (except in the case of existing portions of piles exempt from 335-14-5-.12(2)(a)) and cover systems (e.g., membranes, sheets or coatings) must be inspected for uniformity, damage and imperfections (e.g., holes, cracks, thin spots, or foreign materials). Immediately after construction or installation:
- 1. Synthetic liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures, or blisters; and
- 2. Soil-based and admixed liners and covers must be inspected for imperfections including lenses, cracks, channels, root holes, or other structural non-uniformities that may cause an increase in the permeability of the liner or cover.
- (b) While a waste pile is in operation, it must be inspected weekly and after storms to detect evidence of any of the following:
- 1. Deterioration, malfunctions, or improper operation of run-on and run-off control systems;
- 2. Proper functioning of wind dispersal control systems, where present; and
- 3. The presence of leachate in and proper functioning of leachate collection and removal systems, where present.

[NOTE: These inspections must be documented in accordance with 335-14-5-.02(6)(d).]

(c) An owner or operator required to have a leak detection system under 335-14-5-.12(2)(c) must record the amount of liquids removed from each leak detection system sump at least once each week during the active life and closure period.

### (6) [Reserved].

- (7) <u>Special requirements for ignitable or reactive waste</u>. Ignitable or reactive waste must not be placed in a waste pile unless the waste and waste pile satisfy all applicable requirements of 335-14-9, and:
- (a) The waste is treated, rendered, or mixed before or immediately after placement in the pile so that:
- 1. The resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under 335-14-2-.03(2) or (4); and
  - 2. 335-14-5-.02(8)(b) is complied with; or
- (b) The waste is managed in such a way that it is protected from any material or conditions which may cause it to ignite or react.

# (8) Special requirements for incompatible wastes.

- (a) Incompatible wastes, or incompatible wastes and materials, (see 335-154-5 Appendix V for examples) must not be placed in the same pile, unless 335-14-5-.02(8)(b) is complied with.
- (b) A pile of hazardous waste that is incompatible with any waste or other material stored nearby in containers, other piles, open tanks, or surface impoundments must be separated from the other materials, or protected from them by means of a dike, berm, wall, or other device.
- (c) Hazardous waste must not be piled on the same base where incompatible wastes or materials were previously piled, unless the base has been decontaminated sufficiently to ensure compliance with 335-14-5-.02(8).

#### (9) Closure and post-closure care.

- (a) At closure, the owner or operator must remove or decontaminate all waste residues, contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leachate, and manage them as hazardous waste unless 335-14-2-.01(3)(d) applies.
- (b) If, after removing or decontaminating all residues and making all reasonable efforts to effect removal or decontamination of contaminated components, subsoils, structures, and equipment as required in 335-14-5-.12(9)(a), the owner or

operator finds that not all contaminated subsoils can be practicably removed or decontaminated, he must close the facility and perform post-closure care in accordance with the closure and post-closure care requirements that apply to landfills [335-14-5-.14(11)].

- (c)1. The owner or operator of a waste pile that does not comply with the liner requirements of 335-14-5-.12(2)(a)1. and is not exempt from them in accordance with 335-14-5-.12(1)(c) or 335-14-5-.12(2)(b), must:
- (i) Include in the closure plan for the pile under 335-14-5-.07(3) both a plan for complying with 335-14-5-.12(9)(a) and a contingent plan for complying with 335-14-5-.12(9)(b) in case not all contaminated subsoils can be practicably removed at closure; and
- (ii) Prepare a contingent post-closure plan under 335-14-5-.07(9) for complying with 335-14-5-.12(9)(b) in case not all contaminated subsoils can be practicably removed at closure.
- 2. The cost estimates calculated under 335-14-5-.08(3) and (5) for closure and post-closure care of a pile subject to 335-14-5-.12(9)(c) must include the cost of complying with the contingent closure plan and the contingent post-closure plan, but are not required to include the cost of expected closure under 335-14-5-.12(9)(a).
- (10) <u>Special requirements for hazardous wastes F020, F021, F022, F023, F026, and F027.</u>
- (a) Hazardous wastes F020, F021, F022, F023, F026, and F027 must not be placed in waste piles that are not enclosed (as defined in 335-14-5-.12(1)(c)) unless the owner or operator operates the waste pile in accordance with a management plan for these wastes that is approved by the Director pursuant to the standards set out in 335-14-5-.12(10)(a), and in accord with all other applicable requirements of 335-14-5. The factors to be considered include:
- 1. The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;
- 2. The attenuative properties of the underlying and surrounding soils or other materials;
- 3. The mobilizing properties of other materials co-disposed with these wastes; and
- 4. The effectiveness of additional treatment, design, or monitoring techniques.
- (b) The Department may determine that additional design, operating, and monitoring requirements are necessary for piles managing hazardous wastes F020, F021, F022, F023, F026 and F027 in order to reduce the possibility of migration of these

wastes to groundwater, surface water, or air so as to protect human health and the environment.

**Authors:** Stephen C. Maurer, Amy P. Zachry, Michael B. Champion, Bradley N. Curvin, Theresa A. Maines; Sonja B. Favors; Brent A. Watson

**Statutory Authority:** <u>Code of Alabama 1975</u>, §§22-30-11, 22-30-16.

History: July 19, 1982. Amended: Effective: April 9, 1986; Amended: Effective: September 29, 1986; Amended: Effective: February 15, 1988; Amended: Effective: August 24, 1989; Amended: Effective: December 6, 1990; Amended: Effective: January 1, 1993; Amended: Effective: January 5, 1995; Amended: Effective: March 27, 1998; Amended: Effective: April 13, 2001; Amended: Effective: March 15, 2002; Amended: Effective: April 17, 2003; Amended: Effective: April 4, 2006; Amended: Effective: April 3, 2007; Amended: Effective: March 30, 2010; Amended: Proposed: October 21, 2019.

### 335-14-5-.19 Special Provisions For Cleanup.

- (1) <u>Applicability of Corrective Action Management Unit (CAMU)</u> Regulations.
- (a) Except as provided in 335-14-5-.19(1)(b), CAMUs are subject to the requirements of 335-14-5-.19(3).
- (b) CAMUs that were approved before April 22, 2002, or for which substantially complete applications (or equivalents) were submitted to the Department on or before November 20, 2000, are subject to the requirements in 335-14-5-.19(2) for grandfathered CAMUs; CAMU waste, activities, and design will not be subject to the standards in 335-14-5-.19(2), so long as the waste, activities, and design remain within the general scope of the CAMU as approved.

## (2) Grandfathered Corrective Action Management Units (CAMU).

- (a) To implement remedies under 335-14-5-.06(12), § 22-30-19 et. seq., Code of Alabama 1975 and/or RCRA Section 3008(h), or to implement remedies at a permitted facility that is not subject to 335-14-5-.06(12), the Department may designate an area at the facility as a corrective action management unit under the requirements in 335-14-5-.19(2). "Corrective action management unit (CAMU)" means an area within a facility that is used only for implementing corrective action or cleanup at the facility, pursuant to the requirements of 335-14-5-.19(1), (2), and (3). A CAMU must be located within the contiguous property under the control of the owner/operator where the wastes to be managed in the CAMU originated. One or more CAMUs may be designated at a facility.
- 1. Placement of remediation wastes into or within a CAMU does not constitute land disposal of hazardous wastes.
- 2. Consolidation or placement of remediation wastes into or within a CAMU does not constitute creation of a unit subject to minimum technology requirements.

[**Note**: The provisions of 335-14-5-.19(2)(a)1. and (2)(a)2. do not relieve the owner or operator of the requirement to meet other applicable requirements of this or other Divisions of the ADEM Administrative Code or other authorities (i.e., These provisions only exempt the unit from the LDR provisions of Chapter 335-14-9 and the hazardous waste minimum technology design requirements of Chapters 335-14-5 and 335-14-8.)]

- (b)1. The Department may designate a regulated unit (as defined in 335-14-5-.06(1) as a CAMU, or may incorporate a regulated unit into a CAMU, if:
- (i) The regulated unit is closed or closing, meaning it has begun the closure process under 335-14-5-.07(4) or 335-14-6-.07(4); and
- (ii) Inclusion of the regulated unit will enhance implementation of effective, protective and reliable remedial actions for the facility.

- 2. The requirements of 335-14-5-.06, 335-14-5-.07 and 335-14-5-.08 and the unit-specific requirements of Chapters 335-14-5- and 335-14-6 that applied to that regulated unit will continue to apply to that portion of the CAMU after incorporation into the CAMU.
- (c) The Department shall designate a CAMU in accordance with the following:
- 1. The CAMU shall facilitate the implementation of reliable, effective, protective, and cost-effective remedies;
- 2. Waste management activities associated with the CAMU shall not create unacceptable risks to humans or to the environment resulting from exposure to hazardous wastes or hazardous constituents;
- 3. The CAMU shall include uncontaminated areas of the facility, only if including such areas for the purpose of managing remediation waste is more protective than management of such wastes at contaminated areas of the facility;
- 4. Areas within the CAMU, where wastes remain in place after closure of the CAMU, shall be managed and contained so as to minimize future releases, to the extent practicable;
- 5. The CAMU shall expedite the timing of remedial activity implementation, when appropriate and practicable;
- 6. The CAMU shall enable the use, when appropriate, of treatment technologies (including innovative technologies) to enhance the long-term effectiveness of remedial actions by reducing the toxicity, mobility, or volume of wastes that will remain in place after closure of the CAMU; and
- 7. The CAMU shall, to the extent practicable, minimize the land area of the facility upon which wastes will remain in place after closure of the CAMU.
- (d) The owner/operator shall provide sufficient information to enable the Department to designate a CAMU in accordance with the criteria of 335-14-5-.19.
- (e) The Department shall specify, in the permit or order, requirements for CAMUs to include the following:
  - 1. The areal configuration of the CAMU.
- 2. Requirements for remediation waste management to include the specification of applicable design, operation and closure requirements.
  - 3. Requirements for groundwater monitoring that are sufficient to:
- (i) Continue to detect and to characterize the nature, extent, concentration, direction, and movement of existing releases of hazardous constituents in ground water from sources located within the CAMU; and

- (ii) Detect and subsequently characterize releases of hazardous constituents to groundwater that may occur from areas of the CAMU in which wastes will remain in place after closure of the CAMU.
  - 4. Closure and post-closure requirements.
  - (i) Closure of corrective action management units shall:
  - (I) Minimize the need for further maintenance; and
- (II) Control, minimize, or eliminate, to the extent necessary to protect human health and the environment, for areas where wastes remain in place, post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated runoff, or hazardous waste decomposition products to the ground, to surface waters, or to the atmosphere.
- (ii) Requirements for closure of CAMUs shall include the following, as appropriate and as deemed necessary by the Department for a given CAMU:
- (I) Requirements for excavation, removal, treatment or containment of wastes;
- (II) For areas in which wastes will remain after closure of the CAMU, requirements for capping of such areas; and
- (III) Requirements for removal and decontamination of equipment, devices, and structures used in remediation waste management activities within the CAMU.
- (iii) In establishing specific closure requirements for CAMUs under 335-14-5-.19(2)(e), the Department shall consider the following factors:
  - (I) CAMU characteristics;
  - (II) Volume of wastes which remain in place after closure;
  - (III) Potential for releases from the CAMU;
  - (IV) Physical and chemical characteristics of the waste;
- (V) Hydrogeological and other relevant environmental conditions at the facility which may influence the migration of any potential or actual releases; and
- (VI) Potential for exposure of humans and environmental receptors if releases were to occur from the CAMU.
- (iv) Post-closure requirements as necessary to protect human health and the environment, to include, for areas where wastes will remain in place, monitoring

and maintenance activities, and the frequency with which such activities shall be performed to ensure the integrity of any cap, final cover, or other containment system.

- (f) The Department shall document the rationale for designating CAMUs and shall make such documentation available to the public.
- (g) Incorporation of a CAMU into an existing permit must be approved by the Department according to the permit modification procedures of 335-14-8-.04(2).
- (h) The designation of a CAMU does not change the Department's existing authority to address clean-up levels, media-specific points of compliance to be applied to remediation at a facility, or other remedy selection decisions.
  - (3) Corrective Action Management Units (CAMU).
- (a) To implement remedies under 335-14-5-.06(12) or RCRA Section 3008(h), or to implement remedies at a permitted facility that is not subject to 335-14-5-.06(12), the Department may designate an area at the facility as a corrective action management unit under the requirements in 335-14-5-.19. Corrective action management unit means an area within a facility that is used only for managing CAMU-eligible wastes for implementing corrective action or cleanup at the facility. A CAMU must be located within the contiguous property under the control of the owner or operator where the wastes to be managed in the CAMU originated. One or more CAMUs may be designated at a facility.

# 1. CAMU-eligible waste means:

- (i) All solid and hazardous wastes, and all media (including ground water, surface water, soils, and sediments) and debris, that are managed for implementing cleanup. As-generated wastes (either hazardous or non-hazardous) from ongoing industrial operations at a site are not CAMU-eligible wastes.
- (ii) Wastes that would otherwise meet the description in 335-14-5-.19(3)(a)1.(i) are not ~"CAMU-Eligible Wastes" where:
- (I) The wastes are hazardous wastes found during cleanup in intact or substantially intact containers, tanks, or other non-land-based units found above ground, unless the wastes are first placed in the tanks, containers or non-land-based units as part of cleanup, or the containers or tanks are excavated during the course of cleanup; or
- (II) The Department exercises the discretion in 335-14-5-.19(3)(a)2. to prohibit the wastes from management in a CAMU.
- (iii) Notwithstanding 335-14-5-.19(3)(a)1.(i), where appropriate, as-generated non-hazardous waste may be placed in a CAMU where such waste is being used to facilitate treatment or the performance of the CAMU.
- 2. The Department may prohibit, where appropriate, the placement of waste in a CAMU where the Department has or receives information that such wastes

have not been managed in compliance with applicable land disposal treatment standards of 335-14-9, or applicable unit design requirements of this part, or applicable unit design requirements of 335-14-6, or that non-compliance with other applicable requirements of this chapter likely contributed to the release of the waste.

- 3. Prohibition against placing liquids in CAMUs.
- (i) The placement of bulk or noncontainerized liquid hazardous waste or free liquids contained in hazardous waste (whether or not sorbents have been added) in any CAMU is prohibited except where placement of such wastes facilitates the remedy selected for the waste.
  - (i) The requirements in 335-14-5-.14(15)(d) for placement of containers holding free liquids in landfills apply to placement in a CAMU except where placement facilitates the remedy selected for the waste.
- (iii) The placement of any liquid which is not a hazardous waste in a CAMU is prohibited unless such placement facilitates the remedy selected for the waste or a demonstration is made pursuant to 335-14-5-.14(15)(f).
- (iv) The absence or presence of free liquids in either a containerized or a bulk waste must be determined in accordance with 335-14-5-.14(15)(c). Sorbents used to treat free liquids in CAMUs must meet the requirements of 335-14-5-.14(15)(e).
- 4. Placement of CAMU-eligible wastes into or within a CAMU does not constitute land disposal of hazardous wastes.
- 5. Consolidation or placement of CAMU-eligible wastes into or within a CAMU does not constitute creation of a unit subject to minimum technology requirements.
- (b)1. The Department may designate a regulated unit (as defined in 335-14-5-.06(1)(a)2.) as a CAMU, or may incorporate a regulated unit into a CAMU, if:
- (i) The regulated unit is closed or closing, meaning it has begun the closure process under 335-14-5-.07(4) or 335-14-6-.07(4); and
- (ii) Inclusion of the regulated unit will enhance implementation of effective, protective and reliable remedial actions for the facility.
- 2. 335-14-5-.06, 5-.07, and 5-.08 or 335-14-6-.06, 6-.07, and 6-.08 and the unit-specific requirements of 335-14-5 or 335-14-6 that applied to the regulated unit will continue to apply to that portion of the CAMU after incorporation into the CAMU.
- (c) The Department shall designate a CAMU that will be used for storage and/or treatment only in accordance with 335-14-5-.19(3)(f). The Department shall designate all other CAMUs in accordance with the following:

- 1. The CAMU shall facilitate the implementation of reliable, effective, protective, and cost-effective remedies;
- 2. Waste management activities associated with the CAMU shall not create unacceptable risks to humans or to the environment resulting from exposure to hazardous wastes or hazardous constituents;
- 3. The CAMU shall include uncontaminated areas of the facility, only if including such areas for the purpose of managing CAMU-eligible waste is more protective than management of such wastes at contaminated areas of the facility;
- 4. Areas within the CAMU, where wastes remain in place after closure of the CAMU, shall be managed and contained so as to minimize future releases, to the extent practicable;
- 5. The CAMU shall expedite the timing of remedial activity implementation, when appropriate and practicable;
- 6. The CAMU shall enable the use, when appropriate, of treatment technologies (including innovative technologies) to enhance the long-term effectiveness of remedial actions by reducing the toxicity, mobility, or volume of wastes that will remain in place after closure of the CAMU; and
- 7. The CAMU shall, to the extent practicable, minimize the land area of the facility upon which wastes will remain in place after closure of the CAMU.
- (d) The owner/operator shall provide sufficient information to enable the Department to designate a CAMU in accordance with the criteria in 335-14-5-.19. This must include, unless not reasonably available, information on:
- 1. The origin of the waste and how it was subsequently managed (including a description of the timing and circumstances surrounding the disposal and/or release);
- 2. Whether the waste was listed or identified as hazardous at the time of disposal and/or release; and
- 3. Whether the disposal and/or release of the waste occurred before or after the land disposal requirements of 335-14-9 were in effect for the waste listing or characteristic.
- (e) The Department shall specify, in the permit or order, requirements for CAMUs to include the following:
  - 1. The areal configuration of the CAMU.
- 2. Except as provided in 335-14-5-.19(3)(g), requirements for CAMU-eligible waste management to include the specification of applicable design, operation, treatment and closure requirements.

- 3. Minimum design requirements. CAMUs, except as provided in 335-14-5-.19(3)(f), into which wastes are placed must be designed in accordance with the following:
- (i) Unless the Department approves alternate requirements under 335-14-5-.19(3)(e)3.(ii), CAMUs that consist of new, replacement, or laterally expanded units must include a composite liner and a leachate collection system that is designed and constructed to maintain less than a 30-cm depth of leachate over the liner. For purposes of 335-14-5-.19, composite liner means a system consisting of two components; the upper component must consist of a minimum 30-mil flexible membrane liner (FML), and the lower component must consist of at least a two-foot layer of compacted soil with a hydraulic conductivity of no more than 1x10-7 cm/sec. FML components consisting of high density polyethylene (HDPE) must be at least 60 mil thick. The FML component must be installed in direct and uniform contact with the compacted soil component;
- (ii) Alternate requirements. The Department may approve alternate requirements if:
- (I) The Department finds that alternate design and operating practices, together with location characteristics, will prevent the migration of any hazardous constituents into the ground water or surface water at least as effectively as the liner and leachate collection systems in 335-14-5-.19(3)(e)3.(i); or
- (II) The CAMU is to be established in an area with existing significant levels of contamination, and the Department finds that an alternative design, including a design that does not include a liner, would prevent migration from the unit that would exceed long-term remedial goals.
- 4. Minimum treatment requirements: Unless the wastes will be placed in a CAMU for storage and/or treatment only in accordance with 335-14-5-.19(3)—)(f), CAMU-eligible wastes that, absent 335-14-5-.19, would be subject to the treatment requirements of 335-14-9, and that the Department determines contain principal hazardous constituents must be treated to the standards specified in 335-14-5-.19(3)(e)4.(iii).
- (i) Principal hazardous constituents are those constituents that the Department determines to pose a risk to human health and the environment substantially higher than the cleanup levels or goals at the site.
- (I) In general, the Department will designate as principal hazardous constituents:
- I. Carcinogens that pose a potential direct risk from ingestion or inhalation at the site at or above 10<sup>-3</sup>; and
- II. Non-carcinogens that pose a potential direct risk from ingestion or inhalation at the site an order of magnitude or greater over their reference dose.

- (II) The Department will also designate constituents as principal hazardous constituents, where appropriate, when risks to human health and the environment posed by the potential migration of constituents in wastes to ground water are substantially higher than cleanup levels or goals at the site; when making such a designation, the Department may consider such factors as constituent concentrations, and fate and transport characteristics under site conditions.
- (III) The Department may also designate other constituents as principal hazardous constituents that the Department determines pose a risk to human health and the environment substantially higher than the cleanup levels or goals at the site.
- (ii) In determining which constituents are `principal hazardous constituents," the Department must consider all constituents which, absent 335-14-5-.19, would be subject to the treatment requirements in 335-14-9.
- (iii) Waste that the Department determines to contain principal hazardous constituents must meet treatment standards determined in accordance with 335-14-5-.19(3)(e)4.(iv) or (e)4.(v).
  - (iv) Treatment standards for wastes placed in CAMUs.
- (I) For non-metals, treatment must achieve 90 percent reduction in total principal hazardous constituent concentrations, except as provided by 335-14-5-.19(3)(e)4.(iv)(III).
- (II) For metals, treatment must achieve 90 percent reduction in principal hazardous constituent concentrations as measured in leachate from the treated waste or media (tested according to the TCLP) or 90 percent reduction in total constituent concentrations (when a metal removal treatment technology is used), except as provided by 335-14-5-.19(3)(e)4.(iv)(III).
- (III) When treatment of any principal hazardous constituent to a 90 percent reduction standard would result in a concentration less than 10 times the Universal Treatment Standard for that constituent, treatment to achieve constituent concentrations less than 10 times the Universal Treatment Standard is not required. Universal Treatment Standards are identified in 335-14-9.
- (IV) For waste exhibiting the hazardous characteristic of ignitability, corrosivity or reactivity, the waste must also be treated to eliminate these characteristics.
- (V) For debris, the debris must be treated in accordance with 335-14-9, or by methods or to levels established under 335-14-5-.19(3)(e)4.(iv)(I) through (IV) or 335-14-5-.19(3)(e)4.(v), whichever the Department determines is appropriate.
- (VI) Alternatives to TCLP. For metal bearing wastes for which metals removal treatment is not used, the Department may specify a leaching test other than the TCLP (SW846 Method 1311, as incorporated by reference in 335-14-1.02(297)) to measure treatment effectiveness, provided the Department determines that an

alternative leach testing protocol is appropriate for use, and that the alternative more accurately reflects conditions at the site that affect leaching.

- (v) Adjusted standards. The Department may adjust the treatment level or method in 335-14-5-.19(3)(e)4.(iv) to a higher or lower level, based on one or more of the following factors, as appropriate. The adjusted level or method must be protective of human health and the environment:
- (I) The technical impracticability of treatment to the levels or by the methods in 335-14-5-.19(3)(e)4.(iv);
- (II) The levels or methods in 335-14-5-.19(3)(e)4.(iv) would result in concentrations of principal hazardous constituents (PHCs) that are significantly above or below cleanup standards applicable to the site (established either site-specifically, or promulgated under state or federal law);
- (III) The views of the affected local community on the treatment levels or methods in 335-14-5-.19(3)(e)4.(iv) as applied at the site, and, for treatment levels, the treatment methods necessary to achieve these levels;
- (IV) The short-term risks presented by the on-site treatment method necessary to achieve the levels or treatment methods in 335-14-5-.19(3)(e)4.(iv);
- (V) The long-term protection offered by the engineering design of the CAMU and related engineering controls:
- I. Where the treatment standards in 335-14-5-.19(3)(e)4.(iv) are substantially met and the principal hazardous constituents in the waste or residuals are of very low mobility; or
- II. Where cost-effective treatment has been used and the CAMU meets the Subtitle C liner and leachate collection requirements for new land disposal units at 335-14-5-.14(2)(b); or
- III. Where, after review of appropriate treatment technologies, the Department determines that cost-effective treatment is not reasonably available, and the CAMU meets the Subtitle C liner and leachate collection requirements for new land disposal units at 335-14-5-.14(2)(b); or
- IV. Where cost-effective treatment has been used and the principal hazardous constituents in the treated wastes are of very low mobility; or
- V. Where, after review of appropriate treatment technologies, the Department determines that cost-effective treatment is not reasonably available, the principal hazardous constituents in the wastes are of very low mobility, and either the CAMU meets or exceeds the liner standards for new, replacement, or laterally expanded CAMUs in 335-14-5-.19(3)(e)3.(i) and (ii), or the CAMU provides substantially equivalent or greater protection.

- (vi) The treatment required by the treatment standards must be completed prior to, or within a reasonable time after, placement in the CAMU.
- (vii) For the purpose of determining whether wastes placed in CAMUs have met site-specific treatment standards, the Department may, as appropriate, specify a subset of the principal hazardous constituents in the waste as analytical surrogates for determining whether treatment standards have been met for other principal hazardous constituents. This specification will be based on the degree of difficulty of treatment and analysis of constituents with similar treatment properties.
- 5. Except as provided in 335-14-5-.19(3)(f), requirements for ground water monitoring and corrective action that are sufficient to:
- (i) Continue to detect and to characterize the nature, extent, concentration, direction, and movement of existing releases of hazardous constituents in ground water from sources located within the CAMU; and
- (ii) Detect and subsequently characterize releases of hazardous constituents to ground water that may occur from areas of the CAMU in which wastes will remain in place after closure of the CAMU; and
- (iii) Require notification to the Department and corrective action as necessary to protect human health and the environment for releases to ground water from the CAMU.
- 6. Except as provided in 335-14-5-.19(3)(f), closure and post-closure requirements:
  - (i) Closure of corrective action management units shall:
  - (I) Minimize the need for further maintenance; and
- (II) Control, minimize, or eliminate, to the extent necessary to protect human health and the environment, for areas where wastes remain in place, post-closure escape of hazardous wastes, hazardous constituents, leachate, contaminated runoff, or hazardous waste decomposition products to the ground, to surface waters, or to the atmosphere.
- (ii) Requirements for closure of CAMUs shall include the following, as appropriate and as deemed necessary by the Department for a given CAMU:
- (I) Requirements for excavation, removal, treatment or containment of wastes: and
- (II) Requirements for removal and decontamination of equipment, devices, and structures used in CAMU-eligible waste management activities within the CAMU.
- (iii) In establishing specific closure requirements for CAMUs under 335-14-5-.19(3)(e), the Department shall consider the following factors:

- (I) CAMU characteristics;
- (II) Volume of wastes which remain in place after closure;
- (III) Potential for releases from the CAMU;
- (IV) Physical and chemical characteristics of the waste;
- (V) Hydrogeological and other relevant environmental conditions at the facility which may influence the migration of any potential or actual releases; and
- (VI) Potential for exposure of humans and environmental receptors if releases were to occur from the CAMU.
  - (iv) Cap requirements:
- (I) At final closure of the CAMU, for areas in which wastes will remain after closure of the CAMU, with constituent concentrations at or above remedial levels or goals applicable to the site, the owner or operator must cover the CAMU with a final cover designed and constructed to meet the following performance criteria, except as provided in 335-14-5-.19(3)(e)6.(iv)(II):
  - I. Provide long-term minimization of migration of liquids through the closed unit;
  - II. Function with minimum maintenance:
  - III. Promote drainage and minimize erosion or abrasion of the cover;
- IV. Accommodate settling and subsidence so that the cover's integrity is maintained; and
- V. Have a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present.
- (II) The Department may determine that modifications to 335-14-5-.19(3)(e)6.(iv)(I) are needed to facilitate treatment or the performance of the CAMU (e.g., to promote biodegradation).
- (v) Post-closure requirements as necessary to protect human health and the environment, to include, for areas where wastes will remain in place, monitoring and maintenance activities, and the frequency with which such activities shall be performed to ensure the integrity of any cap, final cover, or other containment system.
- (f) CAMUs used for storage and/or treatment only are CAMUs in which wastes will not remain after closure. Such CAMUs must be designated in accordance with all of the requirements of 335-14-5-.19, except as follows.

- 1. CAMUs that are used for storage and/or treatment only and that operate in accordance with the time limits established in the staging pile regulations at 335-14-5-.19(5)(d)1.(iii), (h), and (i) are subject to the requirements for staging piles at 335-14-5-.19(5)(d)1.(i) and (ii), 335-14-5-.19(5)(d)2., 335-14-5-.19(5)(e) and (f), and 335-14-5-.19(5)(j) and (k) in lieu of the performance standards and requirements for CAMUs at 335-14-5-.19(3)(c) and (e)3. through 6.
- 2. CAMUs that are used for storage and/or treatment only and that do not operate in accordance with the time limits established in the staging pile regulations at 335-14-5-.19(5)(d)1.(iii), (h), and (i):
- (i) Must operate in accordance with a time limit, established by the Department, that is no longer than necessary to achieve a timely remedy selected for the waste, and
- (ii) Are subject to the requirements for staging piles at 335-14-5-.19(5)(d)(1)(i) and (ii), 335-14-5-.19(5)(d)2., 335-14-5-.19(5)(e) and (f), and 335-14-5-.19(5)(j) and (k) in lieu of the performance standards and requirements for CAMUs at 335-14-5-.19(3)(e) and 335-14-5-.19(3)(e) and 335-14-5-.19(3)(e).
- (g) CAMUs into which wastes are placed where all wastes have constituent levels at or below remedial levels or goals applicable to the site do not have to comply with the requirements for liners at 335-14-5-.19(3)(e)3.(i), caps at 335-14-5-.19(3)(e)6.(iv), ground water monitoring requirements at 335-14-5-.19(3)(e)5. or, for treatment and/or storage-only CAMUs, the design standards at 335-14-5-.19(3)(f).
- (h) The Department shall provide public notice and a reasonable opportunity for public comment before designating a CAMU. Such notice shall include the rationale for any proposed adjustments under 335-14-5-.19(3)(e)4.(v) to the treatment standards in 335-14-5-.19(3)(e)4.(iv).
- (i) Notwithstanding any other provision of 335-14-5-.19, the Department may impose additional requirements as necessary to protect human health and the environment.
- (j) Incorporation of a CAMU into an existing permit must be approved by the Department according to the procedures for permit modifications under 335-14-8-.04(2).
- (k) The designation of a CAMU does not change ADEM's existing authority to address clean-up levels, media-specific points of compliance to be applied to remediation at a facility, or other remedy selection decisions.

#### (4) Temporary Units (TU).

(a) For temporary tanks and container storage areas used to treat or store hazardous remediation wastes during remedial activities required under 335-14-5-.06(12), §22-30-19 et. seq., <u>Code of Alabama 1975</u> and/or RCRA Section 3008(h), or at a permitted facility that is not subject to 335-14-5-.06(12), the

Department may designate a unit at the facility as a temporary unit. A temporary unit must by located within the contiguous property under the control of the owner/operator where the wastes to be managed in the temporary unit originated. For temporary units, the Department may replace the design, operating, or closure standard applicable to these units under 335-14-5 or 335-14-6 with alternative requirements which protect human health and the environment.

- (b) Any temporary unit to which alternative requirements are applied in accordance with 335-14-5-.19(2)(a) shall be:
  - 1. Located within the facility boundary; and
  - 2. Used only for treatment or storage of remediation wastes.
- (c) In establishing standards to be applied to a temporary unit, the Department shall consider the following factors:
  - 1. Length of time such unit will be in operation;
  - 2. Type of unit;
  - 3. Volumes of wastes to be managed;
- 4. Physical and chemical characteristics of the wastes to be managed in the unit;
  - 5. Potential for releases from the unit;
- 6. Hydrogeological and other relevant environmental conditions at the facility which may influence the migration of any potential releases; and
- 7. Potential for exposure of humans and environmental receptors if releases were to occur from the unit.
- (d) The Department shall specify in the permit or order the length of time a temporary unit will be allowed to operate, to be no longer than a period of one year. The Department shall also specify the design, operating, and closure requirements for the unit.
- (e) The Department may extend the operational period of a temporary unit once for no longer than a period of one year beyond that originally specified in the permit or order, if the Department determines that:
- 1. Continued operation of the unit will not pose a threat to human health and the environment; and
- 2. Continued operation of the unit is necessary to ensure timely and efficient implementation of remedial actions at the facility.

- (f) Incorporation of a temporary unit or a time extension for a temporary unit into an existing permit shall be:
- 1. Approved in accordance with the procedures for State of Alabama-initiated permit modifications under 335-14-8-.04(2); or
- 2. Requested by the owner/operator as a major modification according to the procedures under Rule 335-14-8-.04(2).
- (g) The Department shall document the rationale for designating a temporary unit and for granting time extensions for temporary units and shall make such documentation available to the public.

# (5) <u>Staging piles.</u>

- (a) A staging pile is an accumulation of solid, non-flowing remediation waste (as defined in 335-14-1-.02) that is not a containment building and is used only during remedial operations for temporary storage at a facility. A staging pile must be located within the contiguous property under the control of the owner/operator where the wastes to be managed in the staging pile originated. Staging piles must be designated by ADEM in accordance with the requirements in 335-14-5-.19.
- 1. For the purposes of 335-14-5-.19(5), storage includes mixing, sizing, blending, or other similar physical operations as long as they are intended to prepare the wastes for subsequent management or treatment.

#### 2. Reserved.

- (b) A staging pile may be used to store hazardous remediation waste (or remediation waste otherwise subject to land disposal restrictions) only if following the standards and design criteria ADEM has designated for that staging pile. ADEM must designate the staging pile in a permit or, at an interim status facility, in a closure plan or order (consistent with 335-14-8-.07(3)(a)5. and (b)5.). ADEM must establish conditions in the permit, closure plan, or order that comply with 335-14-5-.19(3)(d) through (k).
- (c) Staging pile designation. When seeking a staging pile designation, the following must be provided:
- 1. Sufficient and accurate information to enable ADEM to impose standards and design criteria for your staging pile according to 335-14-5-.19(3)(d) through (k);
- 2. Certification by a qualified professional engineer for technical data, such as design drawings and specifications, and engineering studies, unless ADEM determines, based on information that you provide, that this certification is not necessary to ensure that a staging pile will protect human health and the environment; and

- 3. Any additional information ADEM determines is necessary to protect human health and the environment.
- (d) Staging pile performance criteria. ADEM must establish the standards and design criteria for the staging pile in the permit, closure plan, or order.
  - 1. The standards and design criteria must comply with the following:
- (i) The staging pile must facilitate a reliable, effective and protective remedy;
- (ii) The staging pile must be designed so as to prevent or minimize releases of hazardous wastes and hazardous constituents into the environment, and minimize or adequately control cross-media transfer, as necessary to protect human health and the environment (for example, through the use of liners, covers, run-off/run-on controls, as appropriate); and
- (iii) The staging pile must not operate for more than two years, except when ADEM grants an operating term extension under 335-14-5-.19(3)(i). The two-year limit, or other operating term specified by ADEM in the permit, closure plan, or order, is measured from the first time remediation waste is placed into a staging pile. Records of the date remediation waste is placed into the staging pile must be maintained for the life of the permit, closure plan, or order, or for three years, whichever is longer.
- 2. In setting the standards and design criteria, ADEM must consider the following factors:
  - (i) Length of time the pile will be in operation;
  - (ii) Volumes of wastes intended to be stored in the pile;
- (iii) Physical and chemical characteristics of the wastes to be stored in the unit;
  - (iv) Potential for releases from the unit;
- (v) Hydrogeological and other relevant environmental conditions at the facility that may influence the migration of any potential releases; and
- (vi) Potential for human and environmental exposure to potential releases from the unit;
- (e) Receipt of ignitable or reactive remediation waste in a staging pile. Ignitable or reactive remediation waste must not be placed in a staging pile unless:
- 1. Remediation waste must be treated, rendered or mixed before being placed it in the staging pile so that:
- (i) The remediation waste no longer meets the definition of ignitable or reactive under 335-14-2-.03(2) or 335-14-2-.03(4); and

- (ii) -The owner or operator has complied with 335-14-5-.02(8)(b); or
- 2. -The remediation waste must be managed to protect it from exposure to any material or condition that may cause it to ignite or react.
- (f) -Handling incompatible remediation wastes in a staging pile. The term "incompatible waste" is defined in 335-14-1-.02. The owner or operator must comply with the following requirements for incompatible wastes in staging piles:
- 1. Incompatible remediation wastes must not be placed in the same staging pile unless compliance with 335-14-5-.02(8)(b) has occurred;
- 2. If remediation waste in a staging pile is incompatible with any waste or material stored nearby in containers, other piles, open tanks or land disposal units (for example, surface impoundments), you must separate the incompatible materials, or protect them from one another by using a dike, berm, wall or other device; and
- 3. Remediation waste must not be piled on the same base where incompatible wastes or materials were previously piled, unless the base has been decontaminated sufficiently to comply with 335-14-5-.02(8)(b).
- (g) Staging piles are subject to Land Disposal Restrictions (LDR) and Minimum Technological Requirements (MTR). Placing hazardous remediation wastes into a staging pile does not constitute land disposal of hazardous wastes or create a unit that is subject to the minimum technological requirements of RCRA 3004(o).
- (h) Length of staging pile operation. ADEM may allow a staging pile to operate for up to two years after hazardous remediation waste is first placed into the pile. A staging pile may be used no longer than the length of time designated by ADEM in the permit, closure plan, or order (the "operating term"), except as provided in 335-14-5-.19(5)(i).
  - (i) Operating extension for a staging pile
- 1. ADEM may grant one operating term extension of up to 180 days beyond the operating term limit contained in the permit, closure plan, or order (see 335-14-5-.19(5)(1) for modification procedures). To justify to ADEM the need for an extension, sufficient and accurate information must be provided to enable ADEM to determine that continued operation of the staging pile:
  - (i) Will not pose a threat to human health and the environment; and
- (ii) Is necessary to ensure timely and efficient implementation of remedial actions at the facility.
- 2. ADEM may, as a condition of the extension, specify further standards and design criteria in the permit, closure plan, or order, as necessary, to ensure protection of human health and the environment.

- (j) Closure requirement for a staging pile located in a previously contaminated area
- 1. Within 180 days after the operating term of the staging pile expires, a staging pile located in a previously contaminated area of the site must be closed by removing or decontaminating all:
  - (i) Remediation waste;
  - (ii) Contaminated containment system components; and
  - (iii) Structures and equipment contaminated with waste and leachate.
- 2. Contaminated subsoils must be decontaminated in a manner and according to a schedule that ADEM determines will protect human health and the environment.
- 3. ADEM must include the above requirements in the permit, closure plan, or order in which the staging pile is designated.
- (k) Closure requirement for a staging piles located in an uncontaminated area.
- 1. Within 180 days after the operating term of the staging pile expires, you must close a staging pile located in an uncontaminated area of the site according to 335-14-5-.12(9)(a) and 335-14-5-.07(2); or according to 335-14-6-.12(9)(a) and 335-14-6-.07(2).
- 2. ADEM must include the above requirement in the permit, closure plan, or order in which the staging pile is designated.
- (l) Modifying an existing permit, closure plan, or order to allow for use of a staging pile.
- 1. To modify a permit, to incorporate a staging pile or staging pile operating term extension, either:
- (i) ADEM must approve the modification under the procedures for ADEM-initiated permit modifications in 335-14-8-.04(2); or
  - (ii) Request a major modification under 335-14-8-.04(2).

## 2. [Reserved].

3. To modify a closure plan to incorporate a staging pile or staging pile operating term extension, the owner or operator must follow the applicable requirements under 335-14-5-.07(3)(c) or 335-14-6-.07(3)(c).

- 4. To modify an order to incorporate a staging pile or staging pile operating term extension, the owner or operator must follow the terms of the order and the applicable provisions of 335-14-8-.07(3)(a)5. or (b)5.
- (m) Public information. ADEM must document the rationale for designating a staging pile or staging pile operating term extension and make this documentation available to the public.
- (6) <u>Disposal of CAMU-eligible wastes in permitted hazardous waste</u> landfills.
- (a) The Department with regulatory oversight at the location where the cleanup is taking place may approve placement of CAMU-eligible wastes in hazardous waste landfills not located at the site from which the waste originated, without the wastes meeting the requirements of 335-14-9, if the conditions in 335-14-5-.19(6)(a)1. through 3. are met:
- 1. The waste meets the definition of CAMU-eligible waste in 335-14-5-.19(3)(a)1. and 2.
- 2. The Department with regulatory oversight at the location where the cleanup is taking place identifies principal hazardous constitutes in such waste, in accordance with 335-14-5-.19(3)(e)4.(i) and (ii), and requires that such principal hazardous constituents are treated to any of the following standards specified for CAMU-eligible wastes:
  - (i) The treatment standards under 335-14-5-.19(3)(e)4.(iv); or
  - (ii) Treatment standards adjusted in accordance with 335-14-5-.19(3)(e)4.(v)(I), (III), (IV) or (V)I.; or
- (iii) Treatment standards adjusted in accordance with 335-14-5-.19(3)(e)4.(v)(V)II., where treatment has been used and that treatment significantly reduces the toxicity or mobility of the principal hazardous constituents in the waste, minimizing the short-term and long-term threat posed by the waste, including the threat at the remediation site.
- 3. The landfill receiving the CAMU-eligible waste must have a RCRA hazardous waste permit, meet the requirements for new landfills in 335-14-5-.14, and be authorized to accept CAMU-eligible wastes; for the purposes of this requirement, "permit" does not include interim status.
- (b) The person seeking approval shall provide sufficient information to enable the Department with regulatory oversight at the location where the cleanup is taking place to approve placement of CAMU-eligible waste in accordance with 335-14-5-.19(6)(a). Information required by 335-14-5-.19(3)(d)1. through 3. for CAMU applications must be provided, unless not reasonably available.
- (c) The Department with regulatory oversight at the location where the cleanup is taking place shall provide public notice and a reasonable opportunity for

public comment before approving CAMU eligible waste for placement in an off-site permitted hazardous waste landfill, consistent with the requirements for CAMU approval at 335-14-5-.19(3)(h). The approval must be specific to a single remediation.

- (d) Applicable hazardous waste management requirements in this part, including recordkeeping requirements to demonstrate compliance with treatment standards approved under 335-14-5-.19, for CAMU-eligible waste must be incorporated into the receiving facility permit through permit issuance or a permit modification, providing notice and an opportunity for comment and a hearing. Notwithstanding 335-14-8-.01(4)(a), a landfill may not receive hazardous CAMU-eligible waste under 335-14-5-.19 unless its permit specifically authorizes receipt of such waste.
- (e) For each remediation, CAMU-eligible waste may not be placed in an off-site landfill authorized to receive CAMU-eligible waste in accordance with 335-14-5-.19(6)(d) until the following additional conditions have been met:
- 1. The landfill owner/operator notifies the Department responsible for oversight of the landfill and persons on the facility mailing list, maintained in accordance with 335-14-8-.08(6)(c)1.(ix), of his or her intent to receive CAMU-eligible waste in accordance with 335-14-5-.19; the notice must identify the source of the remediation waste, the principal hazardous constituents in the waste, and treatment requirements.
- 2. Persons on the facility mailing list may provide comments, including objections to the receipt of the CAMU-eligible waste, to the Department within 15 days of notification.
- 3. The Department may object to the placement of the CAMU-eligible waste in the landfill within 30 days of notification; the Department may extend the review period an additional 30 days because of public concerns or insufficient information.
- 4. CAMU-eligible wastes may not be placed in the landfill until the Department has notified the facility owner/operator that he or she does not object to its placement.
- 5. If the Department objects to the placement or does not notify the facility owner/operator that he or she has chosen not to object, the facility may not receive the waste, notwithstanding 335-14-8-.01(4)(a), until the objection has been resolved, or the owner/operator obtains a permit modification in accordance with the procedures of 335-14-8-.04(2) specifically authorizing receipt of the waste.
- 6. As part of the permit issuance or permit modification process of 335-14-5-.19(6)(d), the Department may modify, reduce, or eliminate the notification requirements of this paragraph as they apply to specific categories of CAMU-eligible waste, based on minimal risk.
- (f) Generators of CAMU-eligible wastes sent off-site to a hazardous waste landfill under 335-14-5-.19 must comply with the requirements of 335-14-9-.01(7); off-site facilities treating CAMU-eligible wastes to comply with

335-14-5-.19 must comply with the requirements of 335-14-9-.01(7), except that the certification must be with respect to the treatment requirements of 335-14-5-.19(6)(a)2.

(g) For the purposes of 335-14-5-.19 only, the "design of the CAMU" in 335-14-5-.19(3)(e)4.(v)(V) means design of the permitted Subtitle C landfill.

**Authors:** C. Lynn Garthright, L. Brian Hicks, C. Edwin Johnston, Lynn T. Roper, Theresa A. Maines; Heather M. Jones; Vernon H. Crockett; <u>Sonja B. Favors; Brent A. Watson</u>

**Authority:** Code of Alabama 1975, §§22-30-11, 22-30-12, 22-30-16.

**History:** January 5, 1995. **Amended:** Effective: March 31, 2000; **Amended:** Effective: April 13, 2001; **Amended:** Effective: March 15, 2002; **Amended:** Effective: April 17, 2003; **Amended:** Effective: April 4, 2006; **Amended:** Effective: April 3, 2007; **Amended:** Effective: May 27, 2008; **Amended:** Effective: March 31, 2009; **Amended:** Effective: March 30, 2010; **Amended:** Effective: March 31, 2017; **Amended:** Proposed: October 21, 2019.

## 335-14-5-.30 <u>Containment Buildings.</u>

- (1) <u>Applicability</u>. The requirements of 335-14-5-.30 apply to owners or operators who store or treat hazardous waste in units designed and operated under 335-14-5-.30(2). The owner or operator is not subject to the definition of land disposal in RCRA § 3004(K) provided that the unit:
- (a) Is a completely enclosed, self-supporting structure that is designed and constructed of manmade materials of sufficient strength and thickness to support themselves, the waste contents, and any personnel and heavy equipment that operate within the unit, and to prevent failure due to pressure gradients, settlement, compression, or uplift physical contact with the hazardous wastes to which they are exposed; climatic conditions; and the stresses of daily operation, including the movement of heavy equipment within the unit and contact of such equipment with containment walls;
- (b) Has a primary barrier that is designed to be sufficiently durable to withstand the movement of personnel, wastes, and handling equipment within the unit;
  - (c) If the unit is used to manage liquids, has:
- 1. A primary barrier designed and constructed of materials to prevent migration of hazardous constituents into the barrier;
- 2. A liquid collection system designed and constructed of materials to minimize the accumulation of liquid on the primary barrier, and
- 3. A secondary containment system designed and constructed of materials to prevent migration of hazardous constituents into the barrier, with a leak detection and liquid collection system capable of detecting, collecting, and removing leaks of hazardous constituents at the earliest practicable time, unless the unit has been granted a variance from the secondary containment system requirements under 335-14-5-.30(2).
- (d) Has controls sufficient to prevent fugitive dust emissions to meet the no visible emission standard in 335-14-5-.30(2)(c)1.(iv); and
- (e) Is designed and operated to ensure containment and prevent the tracking of materials from the unit by personnel or equipment.
  - (2) <u>Design and operating standards</u>.
- (a) All containment buildings must comply with the following design standards:
- 1. The containment building must be completely enclosed with a floor, walls, and a roof to prevent exposure to the elements, (e.g., precipitation, wind, run-on), and to assure containment of managed wastes.

- The floor and containment walls of the unit, including the secondary containment system if required under 335-14-5-.30(2)(b), must be designed and constructed of materials of sufficient strength and thickness to support themselves, the waste contents, and any personnel and heavy equipment that operate within the unit, and to prevent failure due to pressure gradients, settlement, compression, or uplift, physical contact with the hazardous wastes to which they are exposed; climatic conditions; and the stresses of daily operation, including the movement of heavy equipment within the unit and contact of such equipment with containment walls. The unit must be designed so that it has sufficient structural strength to prevent collapse or other failure. All surfaces to be in contact with hazardous wastes must be chemically compatible with those wastes. The Department will consider standards established by professional organizations generally recognized by the industry such as the American Concrete Institute (ACI) and the American Society of Testing Materials (ASTM) in judging the structural integrity requirements of 335-14-5-.30(2). If appropriate to the nature of the waste management operation to take place in the unit, an exception to the structural strength requirement may be made for light-weight doors and windows that meet these criteria:
- (i) They provide an effective barrier against fugitive dust emissions under 335-14-5\_.30(2)(c)1.(iv); and
- (ii) The unit is designed and operated in a fashion that assures that wastes will not actually come in contact with these openings.
- 3. Incompatible hazardous wastes or treatment reagents must not be placed in the unit or its secondary containment system if they could cause the unit or secondary containment system to leak, corrode, or otherwise fail.
- 4. A containment building must have a primary barrier designed to withstand the movement of personnel, waste, and handling equipment in the unit during the operating life of the unit and appropriate for the physical and chemical characteristics of the waste to be managed.
- (b) For a containment building used to manage hazardous wastes containing free liquids or treated with free liquids (the presence of which is determined by the paint filter test, a visual examination, or other appropriate means), the owner or operator must include:
- 1. A primary barrier designed and constructed of materials to prevent the migration of hazardous constituents into the barrier (e.g., a geomembrane covered by a concrete wear surface).
- 2. A liquid collection and removal system to minimize the accumulation of liquid on the primary barrier of the containment building:
- (i) The primary barrier must be sloped to drain liquids to the associated collection system; and
- (ii) Liquids and waste must be collected and removed to minimize hydraulic head on the containment system at the earliest practicable time.

- 3. A secondary containment system including a secondary barrier designed and constructed to prevent migration of hazardous constituents into the barrier, and a leak detection system that is capable of detecting failure of the primary barrier and collecting accumulated hazardous wastes and liquids at the earliest practicable time.
- (i) The requirements of the leak detection component of the secondary containment system are satisfied by installation of a system that is, at a minimum:
  - (I) Constructed with a bottom slope of 1 percent or more; and
- (II) Constructed of a granular drainage material with a hydraulic conductivity of 1 x  $10^{-2}$  cm/sec or more and a thickness of 12 inches (30.5 cm) or more, or constructed of synthetic or geonet drainage materials with a transmissivity of 3 x  $10^{-5}$ m<sup>2</sup>/sec or more.
- (ii) If treatment is to be conducted in the building, an area in which such treatment will be conducted must be designed to prevent the release of liquids, wet materials, or liquid aerosols to other portions of the building.
- (iii) The secondary containment system must be constructed of materials that are chemically resistant to the waste and liquids managed in the containment building and of sufficient strength and thickness to prevent collapse under the pressure exerted by overlaying materials and by any equipment used in the containment building. (Containment buildings can serve as secondary containment systems for tanks placed within the building under certain conditions. A containment building can serve as an external liner system for a tank, provided it meets the requirements of 335-14-5-.10(4)(e)1. In addition, the containment building must meet the requirements of 335-14-5-.10(4)(b) and 335-14-5-.10(4)(c)1. and 2. to be considered an acceptable secondary containment system for a tank.)
- 4. For existing units other than 90-day generator units, the Director may delay the secondary containment requirement for up to two years, based on a demonstration by the owner or operator that the unit substantially meets the standards of 335-14-5-.30. In making this demonstration, the owner or operator must:
- (i) Provide written notice to the Director of their request by November 16, 1992. This notification must describe the unit and its operating practices with specific reference to the performance of existing containment systems, and specific plans for retrofitting the unit with secondary containment;
- (ii) Respond to any comments from the Director on these plans within 30 days; and
- (iii) Fulfill the terms of the revised plans, if such plans are approved by the Director.
  - (c) Owners or operators of all containment buildings must:

- 1. Use controls and practices to ensure containment of the hazardous waste within the unit; and, at a minimum:
- (i) Maintain the primary barrier to be free of significant cracks, gaps, corrosion, or other deterioration that could cause hazardous waste to be released from the primary barrier;
- (ii) Maintain the level of the stored/treated hazardous waste within the containment walls of the unit so that the height of any containment wall is not exceeded;
  - (iii) Take measures to prevent the tracking of hazardous waste out of the unit by personnel or by equipment used in handling the waste.

    An area must be designated to decontaminate equipment and any rinsate must be collected and properly managed; and
- (iv) Take measures to control fugitive dust emissions such that any openings (doors, windows, vents, cracks, etc.) exhibit no visible emissions (see 40 CFR Part 60, Appendix A, Method 22-Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares). In addition, all associated particulate collection devices (e.g., fabric filter, electrostatic precipitator) must be operated and maintained with sound air pollution control practices (see 40 CFR Part 60 Subpart 292 for guidance). This state of no visible emissions must be maintained effectively at all times during routine operating and maintenance conditions, including when vehicles and personnel are entering and exiting the unit.
- 2. Obtain and keep on-site a certification by a qualified professional engineer that the containment building design meets the requirements of 335-14-5-.30(2)(a) through (c). A qualified professional engineer certification will be required prior to operation of the unit.
- 3. Throughout the active life of the containment building, if the owner or operator detects a condition that could lead to or has caused a release of hazardous waste, the owner or operator must repair the condition promptly, in accordance with the following procedures.
- (i) Upon detection of a condition that has led to a release of hazardous waste (e.g., upon detection of leakage from the primary barrier) the owner or operator must:
  - (I) Enter a record of the discovery in the facility operating record;
- (II) Immediately remove the portion the containment building affected by the condition from service;
- (III) Determine what steps must be taken to repair the containment building, remove any leakage from the secondary collection system, and establish a schedule for accomplishing the cleanup and repairs; and
- (IV) Within 7 days after the discovery of the condition, notify the Director of the condition, and within 14 working days, provide a written notice to the Director

with a description of the steps taken to repair the containment building, and the schedule for accomplishing the work.

- (ii) The Director will review the information submitted, make a determination regarding whether the containment building must be removed from service completely or partially until repairs and cleanup are completed and notify the owner or operator of the determination and the underlying rationale in writing.
- (iii) Upon completing all repairs and cleanup the owner or operator must notify the Director in writing and provide a verification, signed by a qualified, registered professional engineer, that the repairs and cleanup have been completed according to the written plan submitted in accordance with 335-14-5-.30(2)(c)3.(i)(IV).
- 4. Inspect and record in the facility's operating record, at least once every seven weekdays, data gathered from monitoring equipment and leak detection equipment as well as the containment building and the area immediately surrounding the containment building to detect signs of releases of hazardous waste.
- (d) For a containment building that contains both areas with and without secondary containment, the owner or operator must:
- 1. Design and operate each area in accordance with the requirements enumerated in 335-14-5-.30(2)(a) through (c);
- 2. Take measures to prevent the release of liquids or wet materials into areas without secondary containment; and
- 3. Maintain in the facility's operating log a written description of the operating procedures used to maintain the integrity of areas without secondary containment.
- (e) Notwithstanding any other provision of 335-14-5-.30 the Director may waive requirements for secondary containment for a permitted containment building where the owner or operator demonstrates that the only free liquids in the unit are limited amounts of dust suppression liquids required to meet occupational health and safety requirements, and where containment of managed wastes and liquids can be assured without a secondary containment system.

#### (3) Closure and post-closure care.

- (a) At closure of a containment building, the owner or operator must remove or decontaminate all waste residues, contaminated containment system components (liner, etc.) contaminated subsoils, and structures and equipment contaminated with waste and leachate, and manage them as hazardous waste unless 335-14-2-.01(3)(d) applies. The closure plan, closure activities, cost estimates for closure, and financial responsibility for containment buildings must meet all of the requirements specified in 335-14-5-.07 and 335-14-5-.08.
- (b) If, after removing or decontaminating all residues and making all reasonable efforts to effect removal or decontamination of contaminated components,

subsoils, structures, and equipment as required in 335-14-5-.30(3)(a), the owner or operator finds that not all contaminated subsoils can be practicably removed or decontaminated, he must close the facility and perform post-closure care in accordance with the closure and post-closure requirements that apply to landfills [335-14-5-.14(11)]. In addition, for the purposes of closure, post-closure and financial responsibility, such a containment building is then considered to be a landfill, and the owner or operator must meet all of the requirements for landfills specified in 335-14-5-.07 and 335-14-5-.08.

**Authors:** C. Lynn Garthright; C. Edwin Johnston; Michael B. Champion; Theresa A. Maines; Vernon H. Crockett; Sonja B. Favors; Brent A. Watson.

**Statutory Authority:** Code of Alabama 1975, §§22-30-11, 22-30-16.

**History:** January 5, 1995. **Amended:** Effective: April 13, 2001; **Amended:** Effective: March 15, 2002; **Amended:** Effective: April 17, 2003; **Amended:** Effective: April 3, 2007;

Amended: Effective: March 31, 2017; Amended: Proposed: October 21, 2019.

### 335-14-6-.01 General.

- (1) Purpose, scope, and applicability.
- (a) The purpose of 335-14-6 is to establish minimum standards that define the acceptable management of hazardous waste during the effective term of interim status and until the certification of final closure or, if the facility is subject to post-closure requirements, until post-closure responsibilities are fulfilled.
- (b) Except as provided in 335-14-6-.29, the standards of 335-14-6, and of 335-14-5-.19 apply to owners and operators of facilities that treat, store, or dispose of hazardous waste who have fully complied with the requirements for interim status under rule 335-14-8-.07 until either a final facility permit is issued or until applicable 335-14-6 closure and post-closure responsibilities are fulfilled, and to those owners and operators of facilities in existence on November 19, 1980 who have failed to provide timely notification as required by section 3010(a) of RCRA and/or failed to file Part A of the permit application as required by rule 335-14-8-.07. These standards apply to all treatment, storage, and disposal of hazardous waste at these facilities after the effective date of 335-14-6, except as specifically provided otherwise in 335-14-6 or 335-14-2.

Generators operating landfills, waste piles, or surface impoundments or other land units without <u>ean</u> AHWMMA Permit or interim status may be required by the Department to comply with the requirements of 335-14-6-.06, but shall not be granted interim status unless they otherwise qualify for interim status under Division 335-14. These units shall be subject to the closure and post-closure requirements of 335-14-5, except that closure and post-closure plans for these units shall be processed according to the Administrative procedures of rule 335-14-6-.07.

- (c) The requirements of 335-14-6 do not apply to:
- 1. [Reserved]
- 2. [Reserved]
- 3. [Reserved]
- 4. [Reserved]
- 5. The owner or operator of a facility permitted by the Department to manage municipal or industrial solid waste, if the only hazardous waste the facility treats, stores, or disposes of is excluded from regulation under 335-14-6 by 335-14-3-.01(4);
- 6. The owner or operator of a facility managing recyclable materials described in 335-14-2-.01(6)(a)2., 3. and 4. (except to the extent that requirements of 335-14-6 are referred to in 335-14-17 or rules 335-14-7-.03, 335-14-7-.06, 335-14-7-.07, or 335-14-7-.08);

- 7. A generator accumulating waste on-site in compliance with 335-14-3-.01, except as otherwise provided in rule 335-14-3;
- 8. A farmer disposing of waste pesticides from his own use in compliance with 335-14-3-.07(1);
- 9. The owner or operator of a totally enclosed treatment facility, as defined in 335-14-1-.02;
- 10. The owner or operator of an elementary neutralization unit or wastewater treatment unit as defined in 335-14-1-.02, provided that if the owner or operator is diluting hazardous ignitable (D001) wastes [other than the D001 High TOC Subcategory defined in 335-14-9-.04(1), Table "Treatment Standards for Hazardous Wastes"], or reactive (D003) waste, in order to remove the characteristic before land disposal, the owner/operator must comply with the requirements set out in 335-14-6-.02(8)(b).
- 11. (i) Except as provided in 335-14-6-.01(1)(c)11.(ii), a person engaged in treatment or containment activities during immediate response to any of the following situations:
  - (I) A discharge of hazardous waste;
- (II) An imminent and substantial threat of a discharge of hazardous waste;
- (III) A discharge of a material which, when discharged, becomes a hazardous waste;
- (IV) An immediate threat to human health, public safety, property, or the environment, from the known or suspected presence of military munitions, other explosive material, or an explosive devisedevice, as determined by an explosive or munitions emergency response specialist as defined in 335-14-1-.02.
- (ii) An owner or operator of a facility otherwise regulated by 335-14-6 must comply with all applicable requirements of rules 335-14-6-.03 and 335-14-6-.04.
- (iii) Any person who is covered by 335-14-6-.01(1)(c)11.(i) and who continues or initiates hazardous waste treatment or containment activities after the immediate response is over is subject to all applicable requirements of 335-14-6 and 335-14-8 for those activities.
- (iv) In the case of an explosives or munitions emergency response, if a Federal, State of Alabama, Tribal or local official acting within the scope of his or her official responsibilities, or an explosives or munitions emergency response specialist, determines that immediate removal of the material or waste is necessary to protect human health or the environment, that official or specialist may authorize the removal of the material or waste by transporters who do not have EPA Identification numbers and without the preparation of a manifest. In

the case of emergencies involving military munitions, the responding military emergency response specialist's organizational unit must retain records for three years identifying the dates of the response, the responsible persons responding, the type and description of material addressed, and its disposition.

### 12. [Reserved]

- 13. The addition of sorbent material to waste in a container or the addition of waste to sorbent material in a container, provided that these activities occur at the time waste is first placed in the container, and 335-14-6-.02(8) and 335-14-6-.09(2) and (3) are complied with.
- 14. Universal waste handlers and universal waste transporters [as defined in 335-14-1-.02] handling the wastes listed below. These handlers are subject to regulation under 335-14-11, when handling the below listed universal wastes.
  - (i) Batteries as Described in 335-14-11-.01(2);
  - (ii) Pesticides as described in 335-14-11-.01(3);
- (iii) Mercury-containing equipment as described in 335-14-11-.01(4); and
  - (iv) Lamps as described in 335-14-11-.01(5).
- 15. Reverse distributors accumulating potentially creditable hazardous waste pharmaceuticals and evaluated hazardous waste pharmaceuticals, as defined in 335-14-1-.02. Reverse distributors are subject to regulation under 335-14-7-.16 in lieu of 335-14-6 for the accumulation of potentially creditable hazardous waste pharmaceuticals and evaluated hazardous waste pharmaceuticals.
- (d) The following hazardous wastes must not be managed at facilities subject to regulation under 335-14-6.
- 1. EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, or F027 unless:
- (i) The wastewater treatment sludge is generated in a surface impoundment as part of the plant's wastewater treatment system;
  - (ii) The waste is stored in tanks or containers;
- (iii) The waste is stored or treated in waste piles that meet the requirements of 335-14-5-.12(1)(c) as well as all other applicable requirements of rule 335-14-6-.12;
- (iv) The waste is burned in incinerators that are certified pursuant to the standards and procedures in 335-14-6-.15(13); or

- (v) The waste is burned in facilities that thermally treat the waste in a device other than an incinerator and that are certified pursuant to the standards and procedures in 335-14-6-.16(14).
- (e) The requirements of 335-14-6 apply to owners or operators of all facilities which treat, store, or dispose of hazardous waste referred to in 335-14-9, and 335-14-9 standards are considered material conditions or requirements of 335-14-6 interim status standards.
- (f) 335-14-7-.13(6) identifies when the requirements of 335-14-6-.01 apply to the storage of military munitions classified as solid waste under 335-14-7-.13(3). The treatment and disposal of hazardous waste military munitions are subject to the applicable permitting, procedural, and technical standards in 335-14-1 through 335-14-9.
  - (2) [Reserved]
  - (3) [Reserved]
  - (4) <u>Imminent hazard action</u>.
- (5) Notwithstanding any other provisions of these rules, enforcement actions may be brought pursuant to Section 7003 of RCRA.

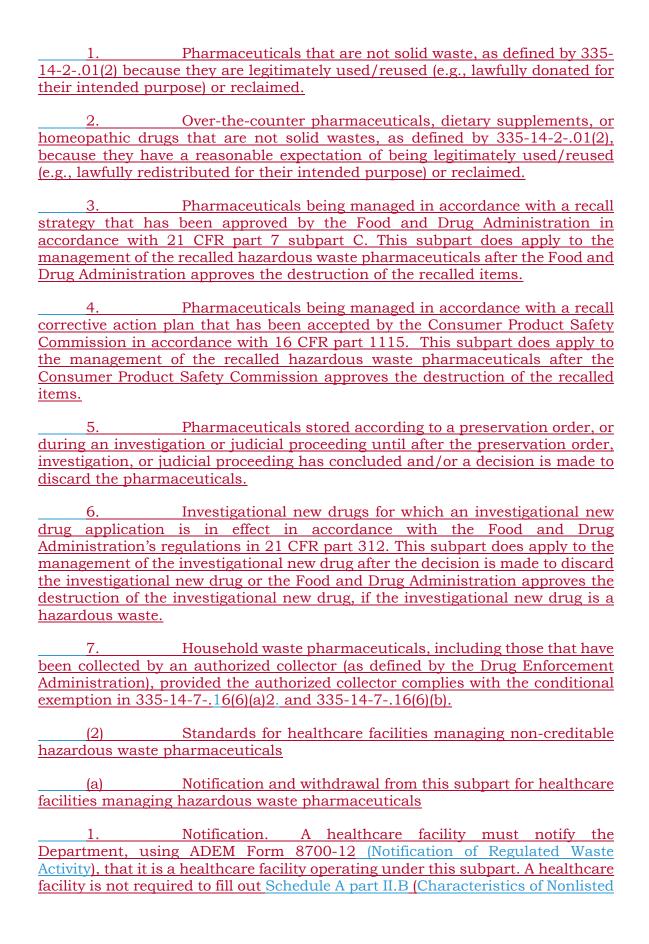
**Author:** Stephen C. Maurer; Steven O. Jenkins; Amy P. Zachry; Lynn T. Roper; C. Edwin Johnston; Bradley N. Curvin; Theresa A. Maines; Vernon H. Crockett; Sonja B. Favors; Brent A. Watson.

**Statutory Authority:** Code of Alabama 1975, §§ 22-30-11 and 22-30-16.

History: November 19, 1980. Amended: Effective: April 9, 1986; Amended: Effective: August 24, 1989; Amended: Effective: December 6, 1990; Amended: Effective: January 25, 1992; Amended: Effective: January 5, 1995; Amended: Effective: April 28, 1995; Amended: Effective: January 12, 1996; Amended: Effective: March 27, 1998; Amended: Effective: April 2, 1999; Amended: Effective: March 31, 2000; Amended: Effective: April 13, 2001; Amended: Effective: March 15, 2002; Amended: Effective: April 17, 2003; Amended: Effective: March 31, 2005; Amended: Effective: April 4, 2006; Amended: Effective: April 3, 2007; Amended: Effective: March 31, 2017; Amended: Effective: Proposed: October 21, 2019.

# 335-14-7-.16 Hazardous Waste Pharmaceuticals (1) Applicability A healthcare facility that is a very small quantity generator when counting all of its hazardous waste, including both its hazardous waste pharmaceuticals and its non-pharmaceutical hazardous waste, remains subject to 335-14-3-.01(4) and is not subject to 335-14-7-.16, except for 335-14-7-.16(5) and 335-14-7-.16(7) and the optional provisions of 335-14-7-.16(4). (b) A healthcare facility that is a very small quantity generator when counting all of its hazardous waste, including both its hazardous waste pharmaceuticals and its non-pharmaceutical hazardous waste, has the option of complying with 335-141-7-.16(1)(d) for the management of its hazardous waste pharmaceuticals as an alternative to complying with 335-14-3-.01(4) and the optional provisions of 335-14-7-.16(4). A healthcare facility or reverse distributor remains subject to all applicable hazardous waste regulations with respect to the management of its non-pharmaceutical hazardous waste. With the exception of healthcare facilities identified in 335-14-7-.16(1)(a), a healthcare facility is subject to the following in lieu of 335-14-3 through 335-14-6: Sections 335-14-7-.16(2) and 335-14-7-.16(5) through 335-14-7-.16(8) with respect to the management of: (i) Non-creditable hazardous waste pharmaceuticals, and Potentially creditable hazardous waste pharmaceuticals if they are not destined for a reverse distributor. 335-14-7-.16(2)(a), 335-14-7-.16(3), 335-14-7-.16(5) through 335-14-7-.16(7) and 335-14-7-.16(9) with respect to the management of potentially creditable hazardous waste pharmaceuticals that are prescription pharmaceuticals and are destined for a reverse distributor. A reverse distributor is subject to 335-14-7-.16(5) through 335-14-7-.16(10) in lieu of 335-14-3 through 335-14-6 with respect to the management of hazardous waste pharmaceuticals. Hazardous waste pharmaceuticals generated or managed by entities other than healthcare facilities and reverse distributors (e.g., pharmaceutical manufacturers and reverse logistics centers) are not subject to this subpart. Other generators are subject to 335-14-3 for the generation and accumulation of hazardous wastes, including hazardous waste pharmaceuticals. The following are not subject to 335-14-1 through 335-14-(g)

11, except as specified:



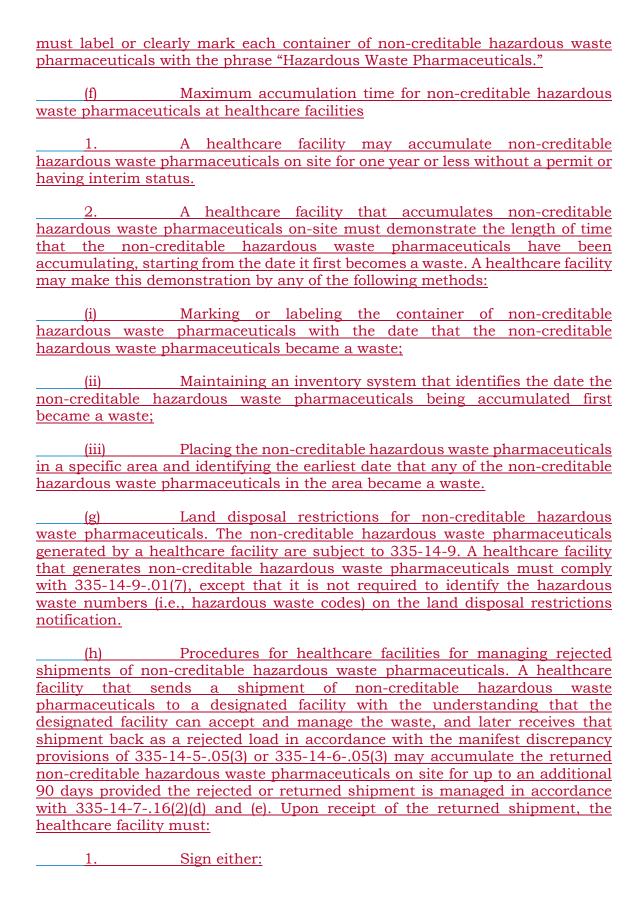
Hazardous Waste) and II.C (Listed Hazardous Wastes) of the Notification of Regulated Waste Activity with respect to its hazardous waste pharmaceuticals. A healthcare facility must submit a separate notification (Notification of Regulated Waste Activity) for each site or EPA identification number. A healthcare facility that already has an EPA identification number must notify the Department that it is a healthcare facility as part of its next Notification of Regulated Waste Activity, if it is required to submit one; or if not required to submit a Notification of Regulated Waste Activity, within 60 days of the effective date of this subpart, or within 60 days of becoming subject to this subpart. A healthcare facility that does not have an EPA identification number must obtain one by notifying the Department that it is a healthcare facility as part of its next Notification of Regulated Waste Activity, if it is required to submit one; or if not required to submit a Notification of Regulated Waste Activity, within 60 days of the effective date of this subpart, or within 60 days of becoming subject to this subpart. A healthcare facility must keep a copy of its notification on file for as long as the healthcare facility is subject to 335-14-7-.16. Withdrawal. A healthcare facility that operated under 335-14-7-.16 but is no longer subject to 335-14-7-.16, because it is a very small quantity generator under 335-14-3-.01(4), and elects to withdraw from 335-14-7-.16, must notify the Department using ADEM Form 8700-12 (Notification of Regulated Waste Activity) that it is no longer operating under 335-14-7-.16. A healthcare facility is not required to fill out Schedule A part II.B (Characteristics of Nonlisted Hazardous Waste) and II.C (Listed Hazardous Wastes) of the Notification of Regulated Waste Activity with respect to its hazardous waste pharmaceuticals. A healthcare facility must submit a separate notification (Notification of Regulated Waste Activity) for each EPA identification number. A healthcare facility must submit the Notification of Regulated Waste Activity notifying that it no longer intends to operate subject to 335-14-7-.16 before it begins operating under the conditional exemption of 335-14-3-.01(4). A healthcare facility must keep a copy of its withdrawal on file for three years from the date of signature on the notification of its withdrawal. Training of personnel managing non-creditable hazardous waste pharmaceuticals at healthcare facilities. A healthcare facility must ensure that all personnel that manage non-creditable hazardous waste pharmaceuticals are thoroughly familiar with proper waste handling and emergency procedures relevant to their responsibilities during normal facility operations and emergencies.

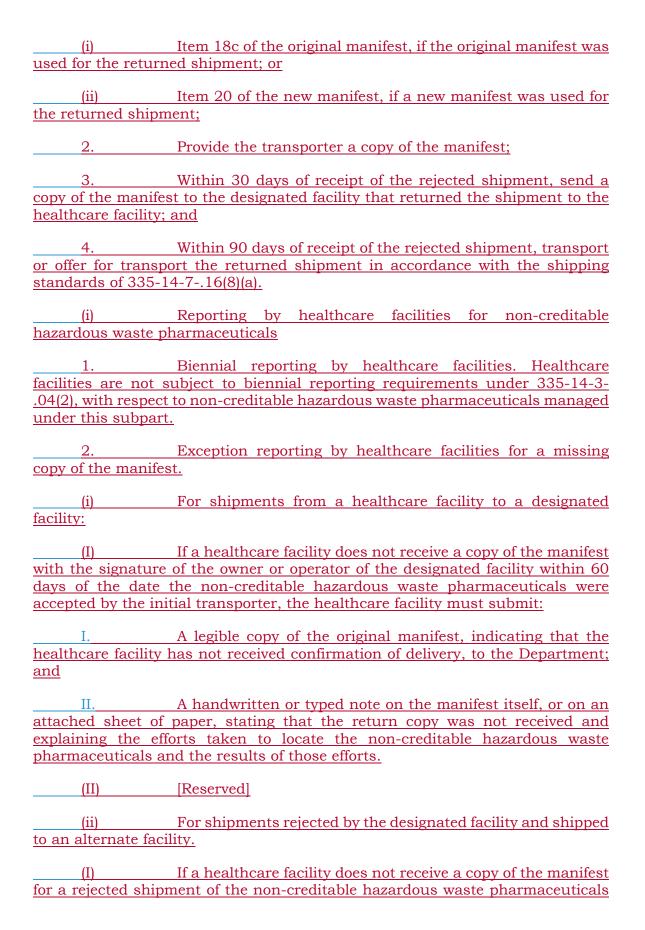
Hazardous waste determination for non-creditable

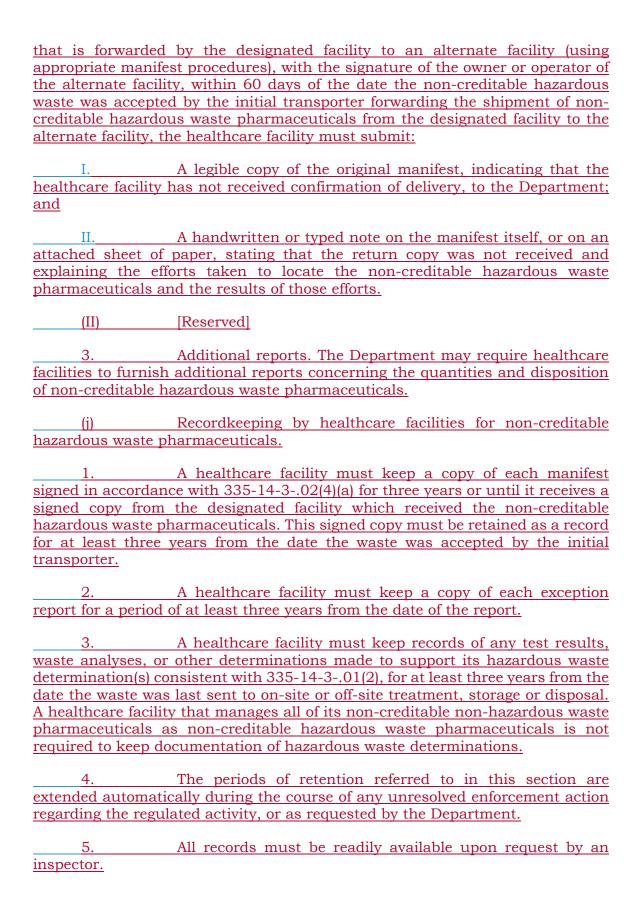
pharmaceuticals. A healthcare facility that generates a solid waste that is a non-

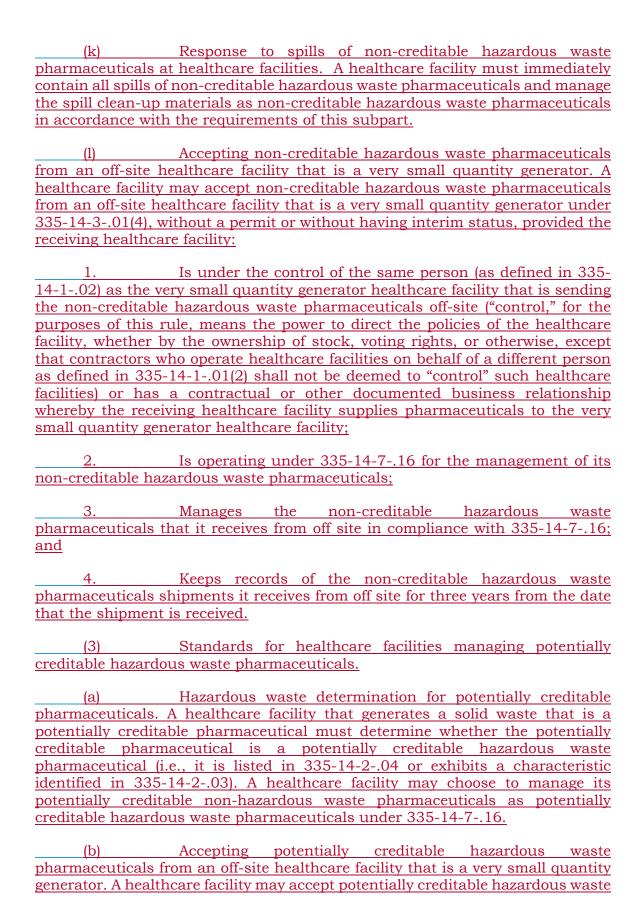
hazardous waste pharmaceutical (i.e., it exhibits a characteristic identified in 335-14-2-.03 or is listed in 335-14-2-.04) in order to determine whether the waste is subject to 335-14-7-.16. A healthcare facility may choose to manage its nonhazardous waste pharmaceuticals as non-creditable hazardous waste pharmaceuticals under 335-14-7-.16. Standards for containers used to accumulate non-creditable hazardous waste pharmaceuticals at healthcare facilities. A healthcare facility must place non-creditable hazardous waste pharmaceuticals in a container that is structurally sound, compatible with its contents, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions. A healthcare facility that manages ignitable or reactive noncreditable hazardous waste pharmaceuticals, or that mixes or commingles incompatible non-creditable hazardous waste pharmaceuticals must manage the container so that it does not have the potential to: Generate extreme heat or pressure, fire or explosion, or violent reaction; Produce uncontrolled toxic mists, fumes, dusts, or gases in (ii) sufficient quantities to threaten human health; Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions; Damage the structural integrity of the container of noncreditable hazardous waste pharmaceuticals; or Through other like means threaten human health or the environment. A healthcare facility must keep containers of non-creditable hazardous waste pharmaceuticals closed and secured in a manner that prevents unauthorized access to its contents. A healthcare facility may accumulate non-creditable hazardous waste pharmaceuticals and non-hazardous non-creditable waste pharmaceuticals in the same container, except that non-creditable hazardous waste pharmaceuticals prohibited from being combusted because of the dilution prohibition of 40 CFR 268.3(c) must be accumulated in separate containers and labeled with all applicable hazardous waste numbers (i.e., hazardous waste codes). Labeling containers used to accumulate non-creditable hazardous waste pharmaceuticals at healthcare facilities. A healthcare facility

creditable pharmaceutical must determine whether that pharmaceutical is a

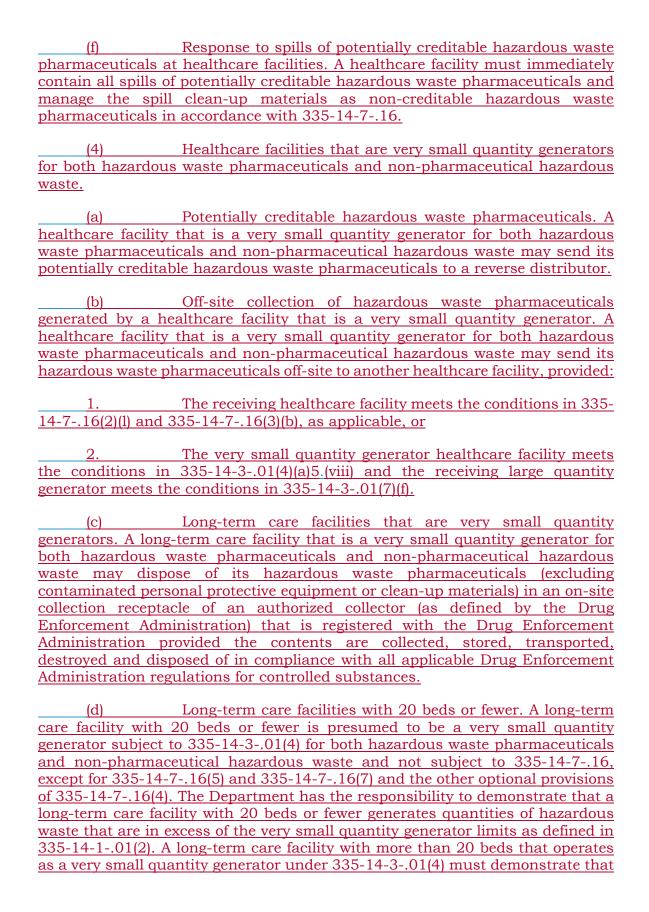








pharmaceuticals from an off-site healthcare facility that is a very small quantity generator under 335-14-301(4), without a permit or without having interim status, provided the receiving healthcare facility:		
1. Is under the control of the same person, as defined in 335-14-101(2), as the very small quantity generator healthcare facility that is sending the potentially creditable hazardous waste pharmaceuticals off site, or has a contractual or other documented business relationship whereby the receiving healthcare facility supplies pharmaceuticals to the very small quantity generator healthcare facility;		
2. Is operating under potentially creditable hazardous waster	r 335-14-716 for the management of its pharmaceuticals;	
	otentially creditable hazardous waste off site in compliance with 335-14-716;	
	the potentially creditable hazardous wastes from off site for three years from the date	
	hcare facilities are prohibited from sending otentially creditable hazardous waste for.	
facilities are not subject to biennial	ng by healthcare facilities. Healthcare reporting requirements under 335-14-3-ditable hazardous waste pharmaceuticals	
(e) Recordkeeping by	healthcare facilities.	
1. A healthcare facility that initiates a shipment of potentially creditable hazardous waste pharmaceuticals to a reverse distributor must keep the following records (paper or electronic) for each shipment of potentially creditable hazardous waste pharmaceuticals for three years from the date of shipment:		
(i) The confirmation	of delivery; and	
(ii) The shipping pap part 172 subpart C, if applicable.	ers prepared in accordance with 49 CFR	
	ention referred to in this rule are extended y unresolved enforcement action regarding by the Department.	
3. All records must Department.	be readily available upon request by the	

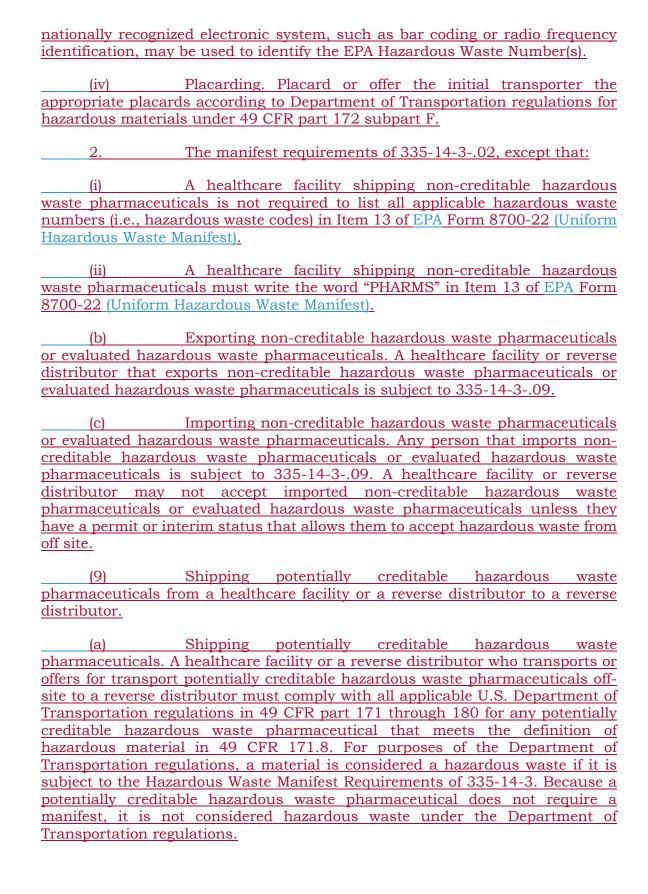


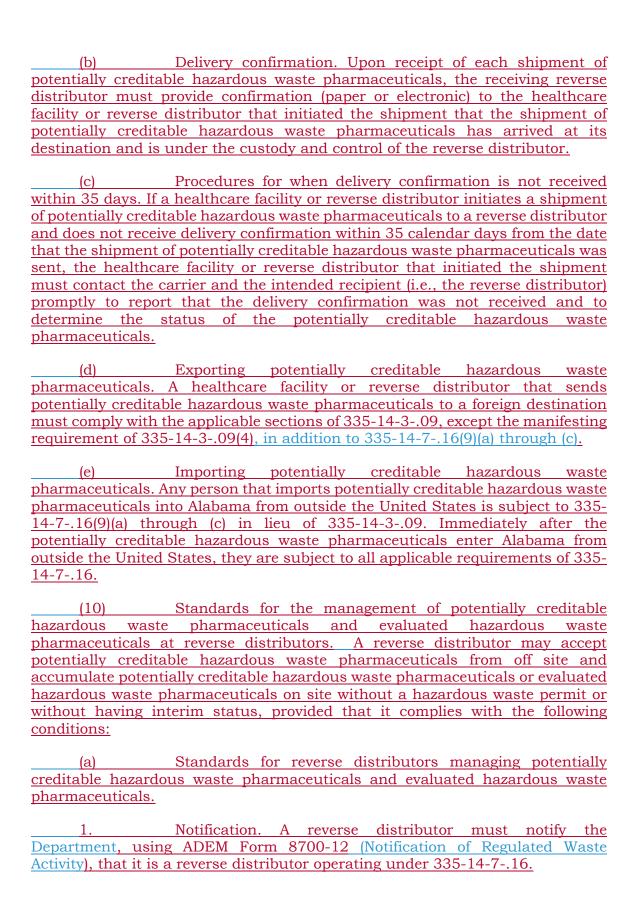
it generates quantities of hazardous waste that are within the very small quantity generator limits as defined by 335-14-1-.01(2). Prohibition of sewering hazardous waste pharmaceuticals. All healthcare facilities—including very small quantity generators operating under 335-14-3-.01(4) in lieu of 335-14-7-.16—and reverse distributors are prohibited from discharging hazardous waste pharmaceuticals to a sewer system that passes through to a publicly-owned treatment works. Healthcare facilities and reverse distributors remain subject to the prohibitions in 40 CFR 403.5(b)(1). Conditional exemptions for hazardous pharmaceuticals that are also controlled substances and household waste pharmaceuticals collected in a take-back event or program. Conditional exemptions. Provided the conditions of 335-14-7-.16(6)(b) are met, the following are exempt from 335-14-2 through 335-14-11: Hazardous waste pharmaceuticals that are also listed on a schedule of controlled substances by the Drug Enforcement Administration in 21 CFR part 1308, and Household waste pharmaceuticals that are collected in a take-back event or program, including those that are collected by an authorized collector (as defined by the Drug Enforcement Administration) registered with the Drug Enforcement Administration that commingles the household waste pharmaceuticals with controlled substances from an ultimate user (as defined by the Drug Enforcement Administration). (b) Conditions for exemption. The hazardous pharmaceuticals must be: Managed in compliance with the sewer prohibition of 335-14-7-.16(5); and Collected, stored, transported, and disposed of in compliance with all applicable Drug Enforcement Administration regulations for controlled substances; and Destroyed by a method that Drug Enforcement Administration has publicly deemed in writing to meet their non-retrievable standard of destruction or combusted at one of the following: A permitted large municipal waste combustor, subject to 40 CFR part 62 subpart FFF or applicable state plan for existing large municipal waste combustors, or 40 CFR part 60 subparts Eb for new large municipal waste combustors; or A permitted small municipal waste combustor, subject to 40 CFR part 62 subpart JJJ or applicable state plan for existing small municipal

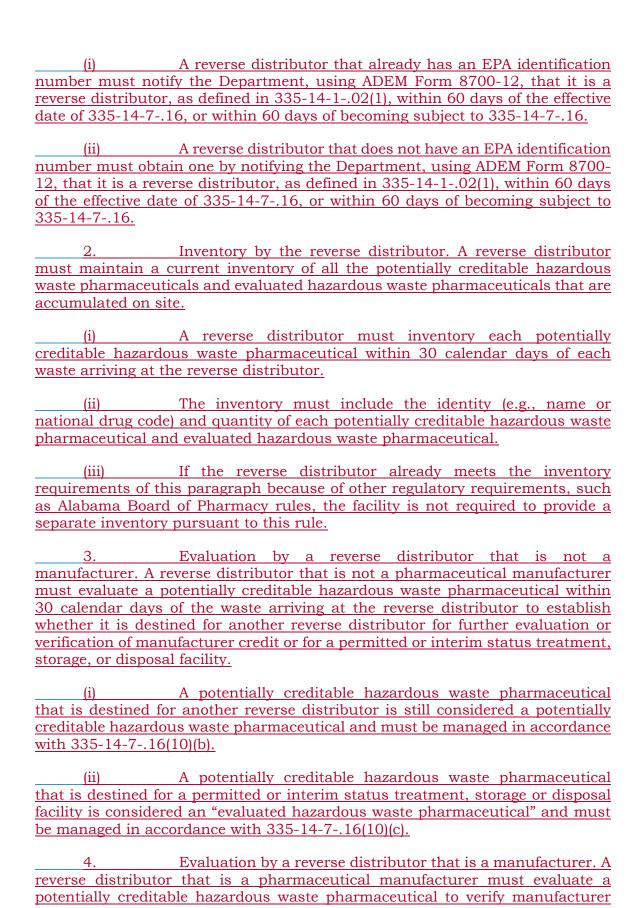
waste combustors; or A permitted hospital, medical and infectious waste incinerator, subject to 40 CFR part 62 subpart HHH or applicable state plan for existing hospital, medical and infectious waste incinerators, or 335-3-3-.04 for new hospital, medical and infectious waste incinerators. A permitted commercial and industrial solid waste incinerator, subject to 40 CFR part 62 subpart III or applicable state plan for existing commercial and industrial solid waste incinerators, or 335-3-3-.05 for new commercial and industrial solid waste incinerators. A permitted hazardous waste combustor subject to 40 CFR part 63 subpart EEE. Residues of hazardous waste pharmaceuticals in empty containers. Stock, dispensing and unit-dose containers. A stock bottle, dispensing bottle, vial, or ampule (not to exceed 1 liter or 10,000 pills); or a unitdose container (e.g., a unit-dose packet, cup, wrapper, blister pack, or delivery device) is considered empty and the residues are not regulated as hazardous waste provided the pharmaceuticals have been removed from the stock bottle, dispensing bottle, vial, ampule, or the unit-dose container using the practices commonly employed to remove materials from that type of container. Syringes. A syringe is considered empty and the residues are not regulated as hazardous waste under this subpart provided the contents have been removed by fully depressing the plunger of the syringe. If a syringe is not empty, the syringe must be placed with its remaining hazardous waste pharmaceuticals into a container that is managed and disposed of as a noncreditable hazardous waste pharmaceutical under this subpart and any applicable federal, state, and local requirements for sharps containers and medical waste. (c) Intravenous (IV) bags. An IV bag is considered empty and the residues are not regulated as hazardous waste provided the pharmaceuticals in the IV bag have been fully administered to a patient. If an IV bag is not empty, the IV bag must be placed with its remaining hazardous waste pharmaceuticals into a container that is managed and disposed of as a non-creditable hazardous waste pharmaceutical under this subpart, unless the IV bag held non-acute hazardous waste pharmaceuticals and is empty as defined in 335-14-2-.01(7)(b)1. Other containers, including delivery devices. Hazardous waste pharmaceuticals remaining in all other types of unused, partially administered, or fully administered containers must be managed as noncreditable hazardous waste pharmaceuticals under this subpart, unless the container held non-acute hazardous waste pharmaceuticals and is empty as

waste combustors, or 40 CFR part 60 subparts AAAA for new small municipal

defined in 335-14-201(7)(b)1. or 2. This includes, but is not limited to, residues	
in inhalers, aerosol cans, nebulizers, tubes of ointments, gels, or creams.	
(8) Shipping non-creditable hazardous waste pharmaceuticals from a healthcare facility or evaluated hazardous waste pharmaceuticals from a	
reverse distributor.	
reverse distributor.	
(a) Shipping non-creditable hazardous waste pharmaceuticals	
or evaluated hazardous waste pharmaceuticals. A healthcare facility must ship	
non-creditable hazardous waste pharmaceuticals and a reverse distributor must	
ship evaluated hazardous waste pharmaceuticals off-site to a designated facility (such as a permitted or interim status treatment, storage, or disposal facility) in	
compliance with:	
compliance with.	
1. The following pre-transport requirements, before	
transporting or offering for transport off-site:	
(i) Packaging. Package the waste in accordance with the	
applicable Department of Transportation regulations on hazardous materials under 49 CFR parts 173, 178, and 180.	
dider +7 CFR parts 175, 176, and 160.	
(ii) Labeling. Label each package in accordance with the	
applicable Department of Transportation regulations on hazardous materials	
under 49 CFR part 172 subpart E.	
(iii) Marking.	
(I) Mark each package of hazardous waste pharmaceuticals in	
accordance with the applicable Department of Transportation (DOT) regulations	
on hazardous materials under 49 CFR part 172 subpart D;	
· · · · · · · · · · · · · · · · · · ·	
(II) Mark each container of 119 gallons or less used in such	
transportation with the following words and information in accordance with the	
requirements of 49 CFR 172.304:	
HAZARDOUS WASTE—Federal Law Prohibits Improper Disposal. If found,	
contact the nearest police or public safety authority or the U.S.	
Environmental Protection Agency.	
Healthcare Facility's or Reverse distributor's Name and Address	
Healthcare Facility's or Reverse distributor's EPA Identification	
Number	
<del></del>	
<u>Manifest Tracking Number</u> .	
(III) Lab packs that will be incinerated in compliance with 335-	
14-904(3) are not required to be marked with EPA Hazardous Waste Number(s), except D004, D005, D006, D007, D008, D010, and D011, where applicable. A	



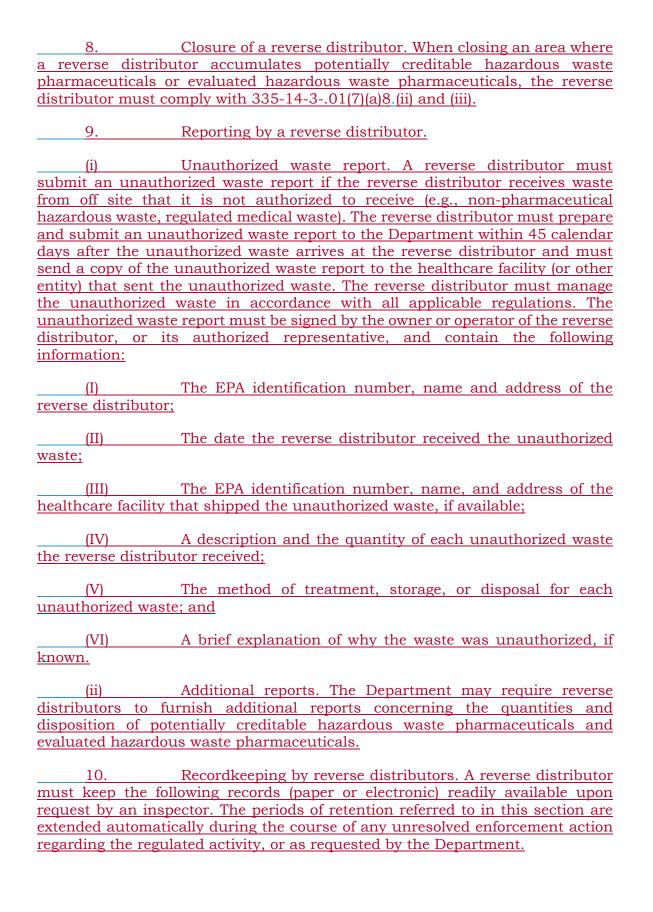


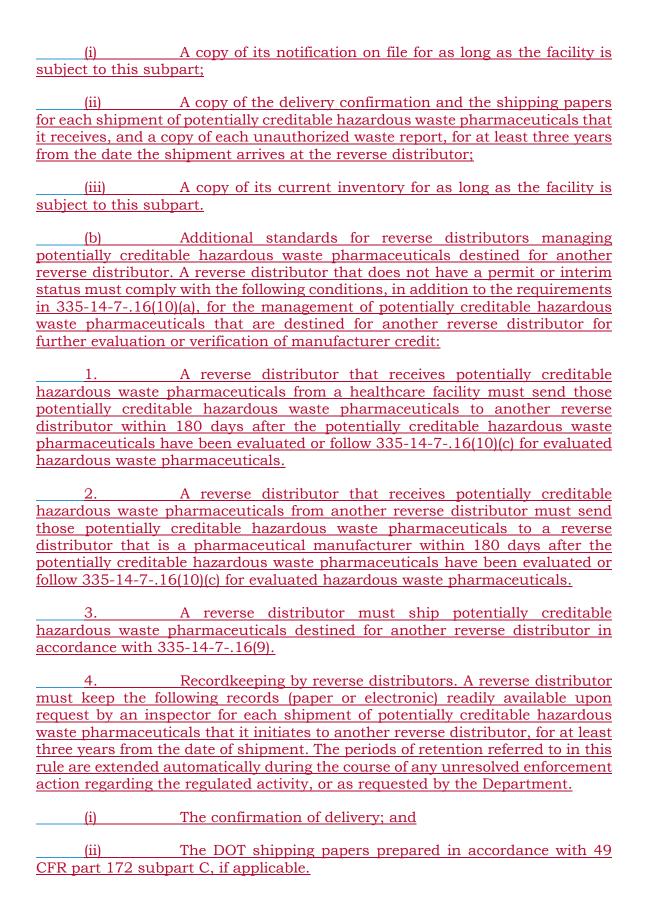


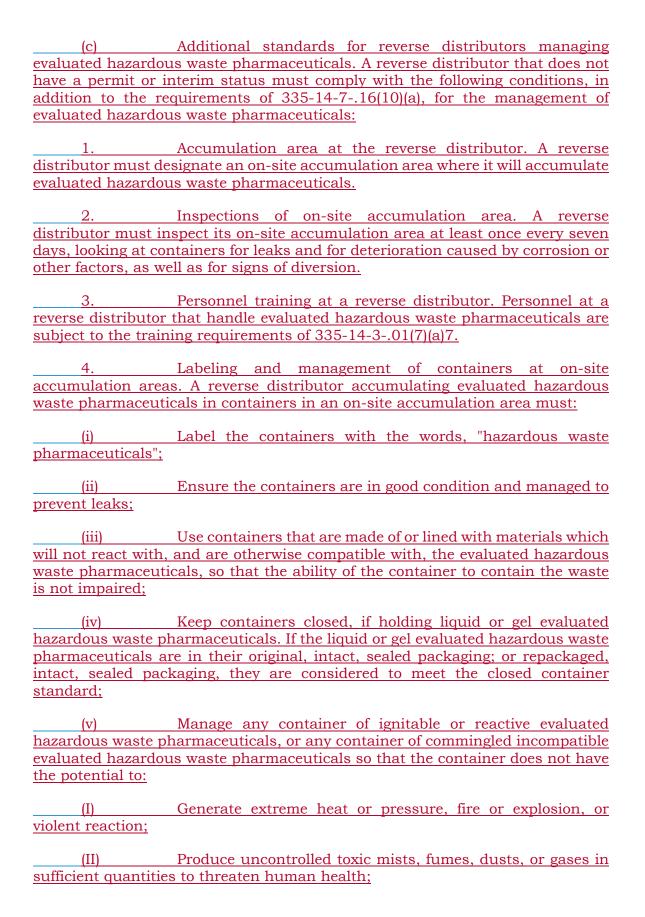
the evaluation must manage the evaluated hazardous waste pharmaceuticals in accordance with 335-14-7-.16(10)(c). Maximum accumulation time for hazardous waste pharmaceuticals at a reverse distributor. A reverse distributor may accumulate potentially creditable hazardous waste pharmaceuticals and evaluated hazardous waste pharmaceuticals on site for 180 calendar days or less. The 180 days start after the potentially creditable hazardous waste pharmaceutical has been evaluated and applies to all hazardous waste pharmaceuticals accumulated on site, regardless of whether they are destined for another reverse distributor (i.e., potentially creditable hazardous waste pharmaceuticals) or a permitted or interim status treatment, storage, or disposal facility (i.e., evaluated hazardous waste pharmaceuticals). Aging pharmaceuticals. Unexpired pharmaceuticals that are otherwise creditable but are awaiting their expiration date (i.e., aging in a holding morgue) can be accumulated for up to 180 days after the expiration date. provided that the unexpired pharmaceuticals are managed in accordance with paragraph (a) of this section and the container labeling and management standards in 335-14-7-.16(10)(c)4.(i) through (vi). Security at the reverse distributor facility. A reverse distributor must prevent unknowing entry and minimize the possibility for the unauthorized entry into the portion of the facility where potentially creditable hazardous waste pharmaceuticals and evaluated hazardous waste pharmaceuticals are kept. Examples of methods that may be used to prevent unknowing entry and minimize the possibility for unauthorized entry include, but are not limited to: A 24-hour continuous monitoring surveillance system; (II) An artificial barrier such as a fence; or (III) A means to control entry, such as keycard access. If the reverse distributor already meets the security requirements of this paragraph because of other regulatory requirements, such as Drug Enforcement Administration or Alabama Board of Pharmacy rules, the facility is not required to provide separate security measures pursuant to this section. Contingency plan and emergency procedures at a reverse distributor. A reverse distributor that accepts potentially creditable hazardous waste pharmaceuticals from off-site must prepare a contingency plan and comply

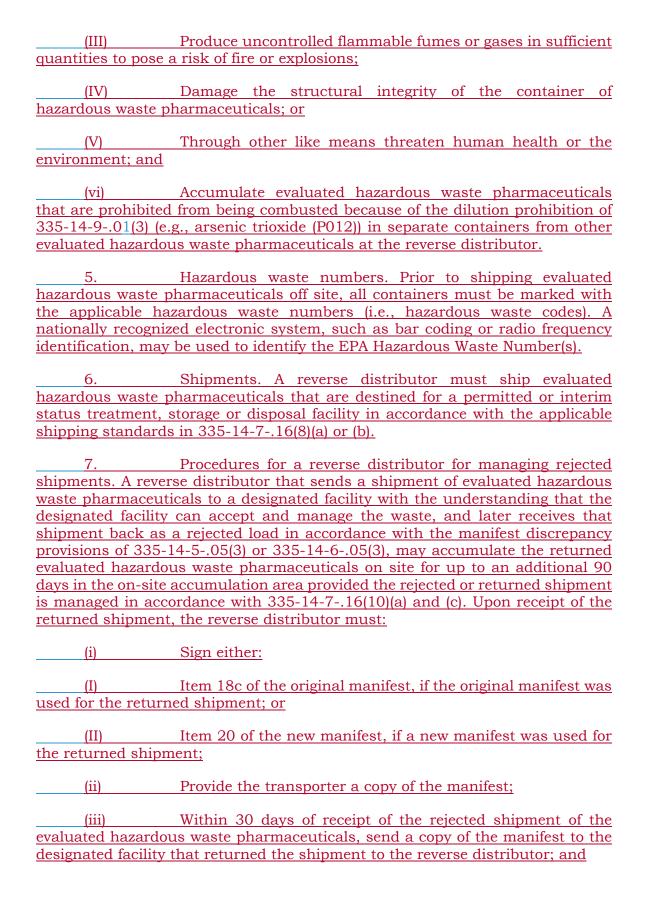
with the other requirements of 335-14-3-.14.

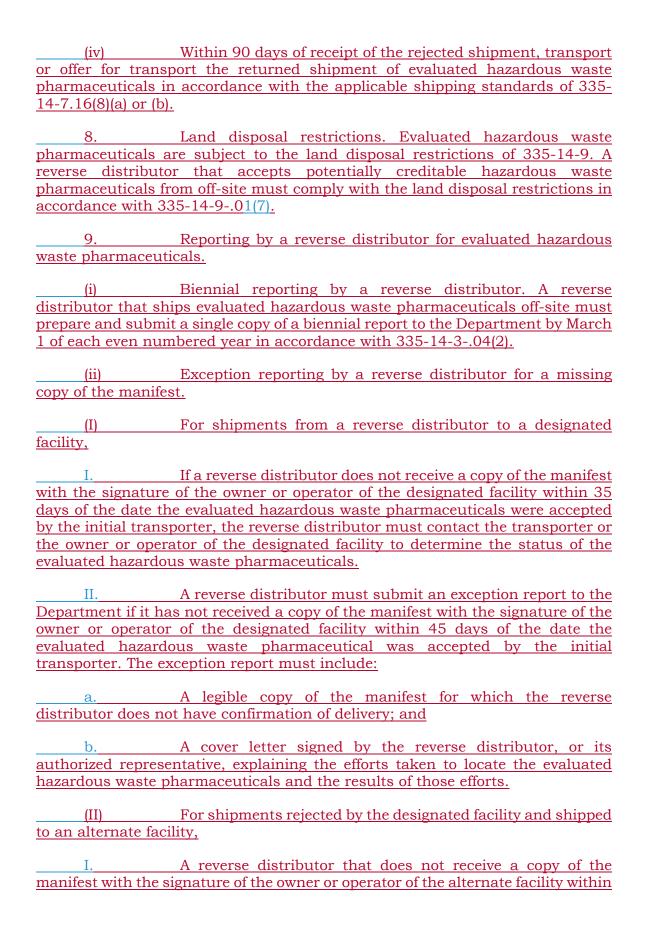
credit within 30 calendar days of the waste arriving at the facility and following

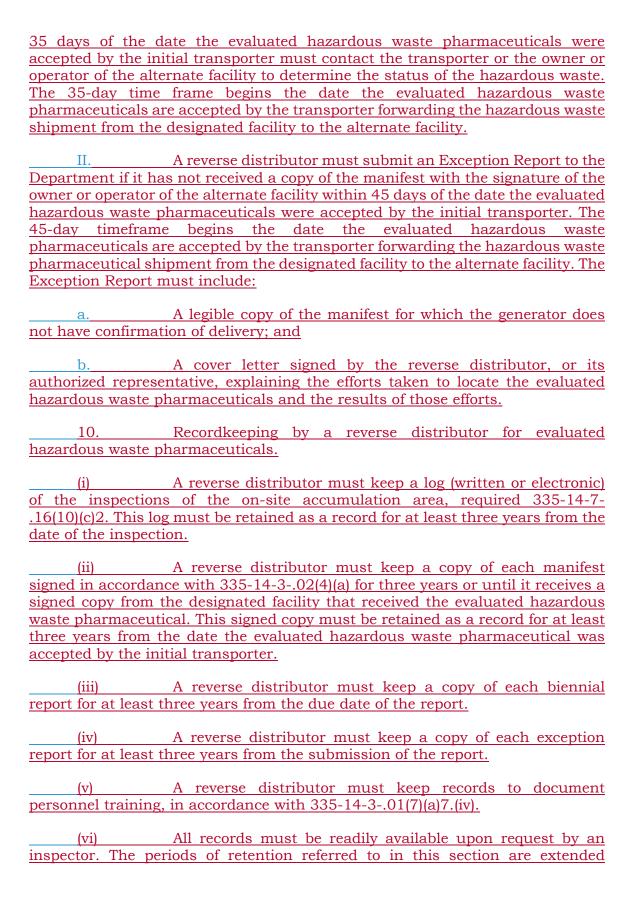












<u>automatically during the course of any unresolved enforcement action regarding the regulated activity, or as requested by the Department.</u>

- (d) When a reverse distributor must have a permit. A reverse distributor is an operator of a hazardous waste treatment, storage, or disposal facility and is subject to the requirements of 335-14-5, 335-14-6, and the permit requirements of 335-14-8, if the reverse distributor:
- 1. Does not meet the conditions of this section;
  - 2. Accepts manifested hazardous waste from off site; or
- 3. Treats or disposes of hazardous waste pharmaceuticals on site.

**Author:** Sonja B. Favors; Brent A. Watson<del>Vernon H. Crockett</del> **Statutory Authority:** Code of Alabama 1975, §§ 22-30-10, 22-30-11, 22-30-12, 22-30-14, 22-30-15, 22-30-16, 22-30-19, 22-30-20.

**History:** Proposed: October 21, 2019.

### 335-14-8-.01 General Information.

- (1) <u>Purpose and scope</u>.
- (a) Coverage.
- 1. These permit regulations establish the procedures for obtaining a permit to transport, store, treat, or dispose of hazardous waste in compliance with the AHWMMA. The technical standards used to determine the requirements of any permit are set out in Chapters 335-14-3, 335-14-4, 335-14-5 and 335-14-7. These permit regulations also apply to the denial of a permit for the active life of <a href="mailto:aan">aan</a> AHWMMA hazardous waste management facility or unit under 335-14-8-.02(20).
- 2. Unless they qualify for interim status under rule 335-14-8-.07, all owners and operators of hazardous waste treatment, storage, and disposal facilities and all transporters of hazardous waste must apply for and receive a permit from the Department before the construction of any facility or the transportation of any hazardous waste.
  - (b) [Reserved]
- Scope of the AHWMMA permit requirement. AHWMMA requires a permit for the "treatment", "storage", and "disposal" of any "hazardous waste" as identified or listed in Chapter 335-14-2. The terms "treatment", "storage", "disposal", and "hazardous waste" are defined in rule 335-14-1-.02. Owners and operators of hazardous waste management units must have permits during the active life (including the closure period) of the unit. Owners or operators of surface impoundments, landfills, land treatment units, and waste pile units that received wastes after July 26, 1982, or that certified closure (according to 335-14-6-.07(6)) after January 26, 1983, must have post-closure permits, unless they demonstrate closure by removal as provided under 335-14-8-.01(1)(c)5. and 6., or obtain an enforceable post-closure document, as provided under 335-14-8-.01(1)(c)7. If a post-closure permit is required, the permit must address applicable Chapter 335-14-5 requirements (Groundwater Unsaturated Zone Monitoring, Corrective Action, and Post-Closure Care). The denial of a permit for the active life of a hazardous waste management facility or unit does not affect the requirement to obtain a post-closure permit under 335-14-8-.01(1).
  - 1. [Reserved]
- 2. Specific exclusions. The following persons are among those who are not required to obtain <u>aan</u> AHWMMA permit:
- (i) Generators who accumulate hazardous waste on-site in compliance with all of the conditions for exemption provided in 335-14-3-.01(4) through (7);

- (ii) Farmers who dispose of hazardous waste pesticides from their own use as provided in 335-14-3-.07(1);
- (iii) Persons who own or operate facilities solely for the treatment, storage or disposal of hazardous waste excluded from regulation under 335-14-8 by 335-14-2-.01(4) or 335-14-3-.01(4) (very small quantity generator exemption);
- (iv) Owners or operators of totally enclosed treatment facilities as defined in rule 335-14-1-.02;
- (v) Owners and operators of elementary neutralization units or wastewater treatment units as defined in rule 335-14-1-.02 which manage only wastes and/or wastewaters generated on-site, or which are POTWs or privatized municipal wastewater treatment facilities;
- [**Note:** Commercial treatment, or treatment except by the generator, of wastes and/or wastewaters in elementary neutralization or wastewater treatment units are not exempt from the requirement to obtain an AHWMMA permit.]
- (vi) Transporters storing manifested shipments of hazardous waste in containers meeting the requirements of 335-14-3-.03(1) at a transfer facility for a period of ten days or less are not required to obtain a storage facility permit but must have a transporter permit;
- (vii) Persons adding absorbent material to waste in a container and persons adding waste to absorbent material in a container, provided that these actions occur at the time waste is first placed in the container, and 335-14-6-.02(8)(b) and 335-14-6-.09(2) and (3) are complied with;
- (viii) Generators treating on-site generated hazardous wastes by evaporation in tanks or containers provided that:
- (I) The generator complies with the applicable requirements of Chapter 335-14-3,
- (II) Such treatment does not result in the emission or discharge of hazardous wastes or hazardous constituents into the environment in excess of any standard(s) promulgated by the Department or the Environmental Protection Agency,
- (III) With respect to treatment, the generator complies with the applicable requirements of rules 335-14-6-.02(5), 335-14-6-.02(6), 335-14-6-.02(7), 335-14-6-.02(8), 335-14-6-.03, 335-14-6-.04, 335-14-6-.07(2), 335-14-6-.09 and 335-14-6-.10,
- (IV) Such treatment minimizes the amount of hazardous wastes which are subsequently generated, treated, and/or disposed, and
- (V) The generator provides the Department with written notice of intent to treat such hazardous wastes on or before the effective date of 335-14-8-.01 or at least 60 days prior to the initiation of waste treatment, which ever date occurs

- last. This notice must provide documentation of compliance with the requirements of 335-14-8-.01(1)(c)2.(viii)(II), (III), and (IV), and must be maintained for the life of the facility and be available for inspection;
- (ix) Universal waste handlers and universal waste transporters [as defined in 335-14-1-.02] managing the wastes listed below. These handlers are subject to regulation under Chapter 335-14-11:
  - (I) Batteries as described in 335-14-11-.01(2),
  - (II) Pesticides as described in 335-14-11-.01(3),
- (III) Mercury-containing equipment as described in 335-14-11-.01(4), and
  - (IV) Lamps as described in 335-14-11-.01(5);
- (x) Generators treating on-site generated hazardous wastes in tanks or containers by physical or mechanical processes (e.g., compacting rags, crushing fluorescent lamps) solely for the purpose of reducing the bulk volume of the waste which must be subsequently managed as a hazardous waste provided that:
- (I) The generator complies with the applicable requirements of Chapter 335-14-3;
- (II) The treatment process does not result in a change in the chemical composition of the waste(s) treated;
  - (III) No mixing of different waste streams occurs;
- (IV) No free liquids are included in the waste(s) to be treated or generated by the treatment process;
- (V) The potential for ignition and/or reaction of the waste during treatment and/or as the result of treatment does not exist;
- (VI) The treatment reduces the volume of hazardous waste which must be subsequently managed;
- (VII) Such treatment does not result in the emission or discharge of hazardous wastes or hazardous constituents into the environment in excess of any standard(s) promulgated by the Department, the Environmental Protection Agency, or the Occupational Safety and Health Administration (OSHA). Generators treating on-site generated hazardous wastes in fluorescent bulb/lamp units must maintain the following documents on-site:
- I. A copy of the manufacturer's equipment operations manual and specifications;
- II. A copy of all applicable equipment operation and maintenance records;

- III. A copy of all applicable OSHA compliance demonstrations and records: and
  - IV. Documents/records demonstrating emissions compliance.
- (VIII) With respect to treatment, the generator complies with the applicable requirements of rules 335-14-6-.02(5), 335-14-6-.02(6), 335-14-6-.02(7), 335-14-6-.02(8), 335-14-6-.03, 335-14-6-.04, 335-14-6-.07(2), 335-14-6-.07(5), 335-14-6-.09, 335-14-6-.10; and
- (IX) The generator provides the Department with written notice of intent to treat such hazardous wastes on or before the effective date of 335-14-8-.01 or at least 60 days prior to the initiation of waste treatment, whichever date occurs last. This notice must provide documentation of compliance with the requirements of 335-14-8-.01(1)(c)2.(x)(II), (III), (IV), (V), (VI), (VII), and (VIII), and must be maintained for the life of the facility and be available for inspection.
- (xi) Persons deploying intact airbag modules and seatbelt pretensioners provided that:
- (I) Prior to treatment, the items are managed in accordance with all applicable requirements of Division 335-14; and
- (II) The items are deployed using a method approved by the automotive industry or the manufacturer.
- (xii) Reverse distributors accumulating potentially creditable hazardous waste pharmaceuticals and evaluated hazardous waste pharmaceuticals, as defined 335-14-1-.02(1). Reverse distributors are subject to regulation under 335-14-7-.16 for the accumulation of potentially creditable hazardous waste pharmaceuticals and evaluated hazardous waste pharmaceuticals.
  - 3. Further exclusions.
- (i) A person is not required to obtain a permit under 335-14-8 for treatment or containment activities taken during immediate response to any of the following situations:
  - (I) A discharge of a hazardous waste;
- (II) An imminent and substantial threat of a discharge of hazardous waste;
- (III) A discharge of a material which, when discharged, becomes a hazardous waste; or
- (IV) An immediate threat to human health, public safety, property, or the environment from the known or suspected presence of military munitions, other explosive material, or an explosive device, as determined by an explosive or munitions emergency response specialist as defined in 335-14-1-.02.

- (ii) Transporters are not required to obtain a permit in accordance with 335-14-8 in order to provide emergency transportation from cleanup of a discharge under 335-14-8-.01(1)(c)3(i).
- (iii) In the case of emergency responses involving military munitions, the responding military emergency response specialist's organizational unit must retain records for three years identifying the dates of the response, the responsible persons responding, the type and description of material addressed, and its disposition.
- (iv) Any person who continues or initiates hazardous waste treatment, containment, or transportation activities after the immediate response is over is subject to all applicable requirements of 335-14-8 for those activities.
- (v) A person who receives hazardous waste from off-site for the purpose of reclamation/recycling in a unit or process which is exempted from regulation pursuant to 335-14-2-.01(6) is not required to obtain a permit under 335-14-8 for storage of the waste prior to introduction into the exempt reclamation/recycling process provided that:
- (I) The hazardous waste is introduced into the exempt process within three days of receipt at the facility; and
- (II) The hazardous waste is managed in containers, tanks, or containment buildings and the owner/operator complies with all applicable requirements of 335-14-6-.02, 335-14-6-.03, 335-14-6-.04, 335-14-6-.05, 335-14-6-.07(2), 335-14-6-.07(5), 335-14-6-.09, 335-14-6-.10, 335-14-6-.27, 335-14-6-.28, 335-14-6-.29, and 335-14-6-.30.
- 4. Permits for less than an entire facility. The Department may issue or deny a permit for one or more units at a facility without simultaneously issuing or denying a permit to all of the units at the facility. The Department may issue or deny a permit for a particular unit(s) at a facility without affecting the interim status permit(s) for other units at the facility.
- 5. Closure by removal. Owners/operators of surface impoundments, land treatment units, and waste piles closing by removal or decontamination under Chapter 335-14-6 standards must obtain a post-closure permit unless they can demonstrate to the Department that the closure met the standards for closure by removal or decontamination in 335-14-5-.11(9), 335-14-5-.13(11)(e), or 335-14-5-.12(9), respectively. The demonstration may be made in the following ways:
- (i) If the owner/operator has submitted a Part B application for a post-closure permit, the owner/operator may request a determination, based on information contained in the application, that Chapter 335-14-5 closure by removal standards were met. If the Department believes that Chapter 335-14-5 standards were met, the Department will notify the public of this proposed decision, allow for public comment, and reach a final determination according to the procedures in 335-14-8-.01(1)(c)6.

- (ii) If the owner/operator has not submitted a Part B application for a post-closure permit, the owner/operator may petition the Department for a determination that a post-closure permit is not required because the closure met the applicable Chapter 335-14-5 closure standards.
- (I) The petition must include data demonstrating that closure by removal or decontamination standards were met or exceeded under the applicable Chapter 335-14-5 closure-by-removal standard.
- (II) The Department shall approve or deny the petition according to the procedures outlined in 335-14-8-.01(1)(c)6.
  - 6. Procedures for closure equivalency determination.
- (i) If a facility owner/operator seeks an equivalency demonstration under 335-14-8-.01(1)(c)5., the Department will provide the public, through a newspaper notice, the opportunity to submit written comments on the information submitted by the owner/operator within 30 days from the date of the notice. The Department will also, in response to a request or at its own discretion, hold a public hearing whenever such a hearing might clarify one or more issues concerning the equivalence of the Chapter 335-14-6 closure to a Chapter 335-14-5 closure. The Department will give public notice of the hearing at least 30 days before it occurs. (Public notice of the hearing may be given at the same time as notice of the opportunity for the public to submit written comments, and the two notices may be combined.)
- (ii) The Department will determine whether the Chapter 335-14-6 closure met Chapter 335-14-5 closure by removal or decontamination requirements within 90 days of its receipt. If the Department finds that the closure did not meet the applicable Chapter 335-14-5 standards, it will provide the owner/operator with a written statement of the reasons why the closure failed to meet Chapter 335-14-5 standards. The owner/operator may submit additional information in support of an equivalency demonstration within 30 days after receiving such written statement. The Department will review any additional information submitted and make a final determination within 60 days.
- (iii) If the Department determines that the facility did not close in accordance with Chapter 335-14-5 closure by removal standards, the facility is subject to post-closure permitting requirements.
- 7. Enforceable documents for post-closure care. At the Department's discretion, an owner or operator may obtain an enforceable document for post-closure care imposing the requirements of 335-14-6-.07(12). "Enforceable document" means an order, a plan, or other document issued, or approved, by EPA or the Department under an authority that meets the requirements of 40 CFR 271.16(e) including, but not limited to, a corrective action order issued by EPA or the Department under section 3008(h) of RCRA, a CERCLA remedial action, or a closure or post-closure plan.

## (2) [Reserved]

- (3) <u>Considerations under federal law</u>. The following is a list of Federal laws that may apply to the issuance of permits under these rules. When any of these laws is applicable, its procedures must be followed. When the applicable law requires consideration or adoption of particular permit conditions or requires the denial of a permit, those requirements also must be followed:
  - (a) The Wild and Scenic Rivers Act, 16 U.S.C. 1273 et seg.
- (b) The National Historic Preservation Act of 1966, 16 U.S.C. 470 et seq.
  - (c) The Endangered Species Act, 16 U.S.C. 1531 et seq.
  - (d) The Coastal Zone Management Act, 16 U.S.C. 661 et seq.
  - (4) Effect of permit.
- (a) 1. Compliance with an AHWMMA permit during its term constitutes compliance, for purposes of enforcement, with Subtitle C of RCRA except for those requirements not included in the permit which:
  - (i) Become effective by statute;
- (ii) Are promulgated under Chapter 335-14-9 restricting the placement of hazardous wastes in or on the land;
- (iii) Are promulgated under Chapter 335-14-5 regarding leak detection systems for new and replacement surface impoundment, waste pile, and landfill units and lateral expansions of surface impoundment, waste pile, and landfill units. The leak detection system requirements include double liners, CQA programs, monitoring, action leakage rates, and response action plans, and will be implemented through the procedures of rule 335-14-8-.04; or
- (iv) Are promulgated under rules 335-14-6-.27 or 335-14-6-.28 limiting air emissions.
- 2. A permit may be modified, revoked and reissued, or terminated during its term for cause as set forth in 335-14-8-.04(2) and 335-14-8-.04(4), or the permit may be modified up on the request of the permittee as set forth in 335-14-8-.04(2)(a)3.(ii).
- (b) The issuance of a permit does not convey any property rights of any sort, or any exclusive privilege.
- (c) The issuance of a permit does not authorize any injury to persons or property or invasion of other private rights, or any infringement of Federal, State of Alabama or local laws or regulations.
  - (5) Effect of non-compliance.

- (a) Substantial non-compliance, as determined by the Department, of another facility within the State of Alabama owned or operated by the permittee requesting reissuance of a permit, will be grounds for denial of permit reissuance until such non-compliance is corrected.
- (b) A determination may be made by the Department to deny a permit application if the applicant operates other permitted facilities within the State of Alabama which are in substantial non-compliance, as determined by the Department, until such non-compliance is corrected or if the Department determines that a permit that results in compliance with applicable hazardous waste standards could not be issued or, if issued, could not be complied with.

**Author:** Stephen C. Maurer; Michael B. Jones; Michael Champion; Amy P. Zachry; Stephen A. Cobb; C. Edwin Johnston; Vernon H. Crockett; Bradley N. Curvin; Heather M. Jones; Jonah Harris; Theresa A. Maines; Heather M. Jones; James K. Burgess; Sonja B. Favors; Brent A. Watson.

Statutory Authority: Code of Alabama 1975, §§ 22-30-11 and 22-30-12.

History: July 19, 1982. Amended: Effective: April 9, 1986; Amended: Effective: September 29, 1986; Amended: Effective: August 24, 1989; Amended: Effective: December 6, 1990; Amended: Effective: January 25, 1992; Amended: Effective: January 1, 1993; Amended: Effective: January 5, 1995; Amended: Effective: January 12, 1996; Amended: Effective: March 8, 1996; Amended: Effective: March 28, 1997; Amended: Effective: March 27, 1998; Amended: Effective: March 31, 2000; Amended: Effective: April 13, 2001; Amended: Effective: March 15, 2002; Amended: Effective: April 17, 2003; Amended: Effective: March 31, 2005; Amended: Effective: April 4, 2006Amended: Effective:; April 3, 2007; Amended: Effective: May 27, 2008; Amended: Effective: March 31, 2011; Amended: Effective: April 3, 2012; Amended: Effective: April 6, 2018; Amended: Proposed: October 21, 2019.

#### 335-14-9-.01 Subpart A - General.

- (1) 40 CFR § 268.1 Purpose, scope and applicability (as published by EPA on November 7, 1986; June 4, 1987, and as amended on July 19, 1988; August 17, 1988; September 6, 1989; June 1, 1990; May 24, 1993; September 19, 1994; May 11, 1995; April 8, 1996; June 28, 1996; May 12, 1997; July 6, 1999; August 5, 2005; and November 28, 2016), excluding the provisions of § 268.1(c)(3).
- (2) 40 CFR § 268.2 Definitions applicable in this part (as published by EPA on June 1, 1990, and as amended on January 31, 1991; August 18, 1992; February 16, 1993; May 24, 1993; September 19, 1994; January 3, 1995; April 8, 1996; June 28, 1996; May 26, 1998; November 30, 1998; May 11, 1999; and July 14, 2006).
- (3) 40 CFR § 268.3 Dilution prohibited as a substitute for treatment (as published by EPA on April 8, 1996, as amended at June 28, 1996; and May 26, 1998).
- (4) 40 CFR § 268.4 Treatment surface impoundment exemption (as published by EPA on November 7, 1986; June 4, 1987, and as amended on July 8, 1987; August 17, 1988; May 12, 1997; May 26, 1998; and July 14, 2006).
- (5) 40 CFR § 268.5 Procedures for case-by-case extensions to an effective date (as published by EPA on November 7, 1986; June 4, 1987, and as amended on July 8, 1987; September 6, 1989; June 13, 1990; and August 18, 1992).
- (6) 40 CFR § 268.6 Petitions to allow land disposal of a waste prohibited under Subpart C of Part 268(as published by EPA on November 7, 1986; June 4, 1987, and as amended July 8, 1987; August 17, 1988; September 6, 1989; and July 14, 2006).
- (7) 40 CFR § 268.7 Testing, tracking, and recordkeeping requirements for generators, reverse distributors, treaters, and disposal facilities (as published by EPA on November 7, 1986, June 4, 1987, and November 28, 2016, and February 22, 2019).

### (8) § 268.8 [Reserved]

(9) § 268.9 Special rules regarding wastes that exhibit a characteristic (as published by EPA on June 1, 1990, and as amended on January 31, 1991; August 18, 1992; May 24, 1993; September 19, 1994; January 3, 1995; April 8, 1996; May 12, 1997; May 11, 1999; and April 4, 2006).

Author: Stephen C. Maurer; Amy P. Zachry; Lynn T. Roper; Vernon H. Crockett; Sonja B. Favors; Brent A. Watson.

**Statutory Authority:** Code of Alabama 1975, §§ 22-30-4, 22-30-6, 22-30-11. History: August 24, 1989. Amended: Effective: December 6, 1990; Amended: Effective: January 25, 1992; Amended: Effective: January 1, 1993; Amended: Effective: January 5, 1995; Amended: Effective: April 28, 1995; Amended: Effective: January 12, 1996; Amended: Effective: March 28, 1997; Amended: Effective: March 27, 1998; Amended: Effective: April 2, 1999; Amended: Effective: March 31, 2000; Amended: Effective: April 13, 2001; Amended: Effective: March 31, 2005; Amended: Effective: March 31, 2017 Amended:

Proposed: October 21, 2019.

## 335-14-11-.02 <u>Standards for Small Quantity Handlers of Universal</u> Waste.

- (1) <u>Applicability.</u> 335-14-11-.02 applies to small quantity handlers of universal waste [as defined in rule 335-14-1-.02].
  - (2) <u>Prohibitions.</u> A small quantity handler of universal waste is:
  - (a) Prohibited from disposing of universal waste; and
- (b) Prohibited from diluting or treating universal waste, except by responding to releases as provided in 335-14-11-.02(8); or by managing specific wastes as provided in 335-14-11-.02(4) or 335-14-8-.01(1)(c)2.(x).
- (3) <u>Notification.</u> A small quantity handler of universal waste is not required to notify the Department of universal waste handling activities.
  - (4) <u>Waste management.</u>
- (a) Universal waste batteries. A small quantity handler of universal waste must manage universal waste batteries in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:
- 1. A small quantity handler of universal waste must contain any universal waste battery that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions in a container. The container must be closed, structurally sound, compatible with the contents of the battery, and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.
- 2. A small quantity handler of universal waste may conduct the following activities as long as the casing of each individual battery cell is not breached and remains intact and closed (except that cells may be opened to remove electrolyte but must be immediately closed after removal):
  - (i) Sorting batteries by type;
  - (ii) Mixing battery types in one container;
  - (iii) Discharging batteries so as to remove the electric charge;
  - (iv) Regenerating used batteries;
- (v) Disassembling batteries or battery packs into individual batteries or cells;
  - (vi) Removing batteries from consumer products; or

- (vii) Removing electrolyte from batteries.
- 3. A small quantity handler of universal waste who removes electrolyte from batteries, or who generates other solid waste (e.g., battery pack materials, discarded consumer products) as a result of the activities listed above, must determine whether the electrolyte and/or other solid waste exhibit a characteristic of hazardous waste identified in rule 335-14-2-.03.
- (i) If the electrolyte and/or other solid waste exhibit a characteristic of hazardous waste, it is subject to all applicable requirements of 335-14-1 through 335-14-9. The handler is considered the generator of the hazardous electrolyte and/or other waste and is subject to 335-14-3.
- (ii) If the electrolyte or other solid waste is not hazardous, the handler may manage the waste in any way that is in compliance with applicable federal, State of Alabama, or local solid waste regulations.
- (b) Universal waste pesticides. A small quantity handler of universal waste must manage universal waste pesticides in a way that prevents releases of any universal waste or component of a universal waste to the environment. The universal waste pesticides must be contained in one or more of the following:
- 1. A container that remains closed, structurally sound, compatible with the pesticide, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions; or
- 2. A container that does not meet the requirements of 335-14-11-.02(4)(b)1., provided that the unacceptable container is overpacked in a container that does meet the requirements of 335-14-11-.02(4)(b)1.; or
- 3. A tank that meets the requirements of rule 335-14-6-.10, except for 335-14-6-.10(8)(e), (11), and (12); or
- 4. A transport vehicle or vessel that is closed, structurally sound, compatible with the pesticide, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.
- (c) Universal waste mercury-containing equipment. A small quantity handler of universal waste must manage universal waste mercury-containing equipment in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:
- 1. A small quantity handler of universal waste must place in a container any universal waste mercury-containing equipment with non-contained elemental mercury or that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions. The container must be closed, structurally sound, compatible with the contents of the device, must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions, and must be reasonably

designed to prevent the escape of mercury into the environment by volatilization or any other means.

- 2. A small quantity handler of universal waste may remove mercury-containing ampules from universal waste mercury-containing equipment provided the handler:
- (i) Removes and manages the ampules in a manner designed to prevent breakage of the ampules;
- (ii) Removes ampules only over or in a containment device (e.g., tray or pan sufficient to collect and contain any mercury released from an ampule in case of breakage);
- (iii) Ensures that a mercury clean-up system is readily available to immediately transfer any mercury resulting from spills or leaks from broken ampules, from that containment device to a container that meets the requirements of 335-14-3-.01(6)(b)2.;
- (iv) Immediately transfers any mercury resulting from spills or leaks from broken ampules from the containment device to a container that meets the requirements of rule 335-14-3-.01(65)(b)2.;
- (v) Ensures that the area in which ampules are removed is well ventilated and monitored to ensure compliance with applicable OSHA exposure levels for mercury;
- (vi) Ensures that employees removing ampules are thoroughly familiar with proper waste mercury handling and emergency procedures, including transfer of mercury from containment devices to appropriate containers;
- (vii) Stores removed ampules in closed, non-leaking containers that are in good condition;
- (viii) Packs removed ampules in the container with packing materials adequate to prevent breakage during storage, handling, and transportation;
- 3. A small quantity handler of universal waste mercury-containing equipment that does not contain an ampule may remove the open original housing holding the mercury from universal waste mercury-containing equipment provided the handler:
- (i) Immediately seals the original housing holding the mercury with an air-tight seal to prevent the release of any mercury to the environment; and
- (ii) Follows all requirements for removing ampules and managing removed ampules under paragraph (c)2. of this section;

- 4. (i) A small quantity handler of universal waste who removes mercury-containing ampules from mercury-containing equipment or seals mercury from mercury-containing equipment in its original housing must determine whether the following exhibit a characteristic of hazardous waste identified in rule 335-14-2-.03:
- (I) Mercury or clean-up residues resulting from spills or leaks; and/or
- (II) Other solid waste generated as a result of the removal of mercury-containing ampules or housings (e.g., the remaining mercury-containing device).
- (ii) If the mercury, residues, and/or other solid waste exhibits a characteristic of hazardous waste, it must be managed in compliance with all applicable requirements of 335-14-1 through 335-14-9. The handler is considered the generator of the mercury, residues, and/or other waste and must manage it in compliance with 335-14-3.
- (iii) If the mercury, residues, and/or other solid waste is not hazardous, the handler may manage the waste in any way that is in compliance with applicable federal, State of Alabama or local solid waste regulations.
- (d) Lamps. A small quantity handler of universal waste must manage lamps in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:
- 1. A small quantity handler of universal waste must contain any lamp in containers or packages that are structurally sound, adequate to prevent breakage, and compatible with the contents of the lamps. Such containers and packages must remain closed and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.
- 2. A small quantity handler of universal waste must immediately clean up and place in a container any lamp that is broken and must place in a container any lamp that shows evidence of breakage, leakage, or damage that could cause the release of mercury or other hazardous constituents to the environment. Containers must be closed, structurally sound, compatible with the contents of the lamps and must lack evidence of leakage, spillage or damage that could cause leakage or releases of mercury or other hazardous constituents to the environment under reasonable foreseeable conditions.
- (5) <u>Labeling/marking.</u> A small quantity handler of universal waste must label or mark the universal waste to identify the type of universal waste as specified below:
- (a) Universal waste batteries (i.e., each battery), or a container in which the batteries are contained, must be labeled or marked clearly with any

one of the following phrases: "Universal Waste—\_\_\_Battery(ies)", or "Waste Battery(ies)", or "Used Battery(ies)";

- (b) A container, (or multiple container package unit), tank, transport vehicle or vessel in which recalled universal waste pesticides as described in 335-14-11-.01(3)(a)1. are contained must be labeled or marked clearly with:
- 1. The label that was on or accompanied the product as sold or distributed; and
- 2. The words "Universal Waste\_-\_Pesticide(s)" or "Waste-Pesticide(s)";
- (c) A container, tank, or transport vehicle or vessel in which unused pesticide products as described in 335-14-11-.01(3)(a)2. are contained must be labeled or marked clearly with:
- 1. (i) The label that was on the product when purchased, if still legible;
- (ii) If using the labels described in 335-14-11-.02(5)(c)1.(i) is not feasible, the appropriate label as required under the Department of Transportation regulation 49 CFR Part 172;
- (iii) If using the labels described in 335-14-11-.02(5)(c)1.(i) and (ii) is not feasible, another label prescribed or designated by the waste pesticide collection program administered or recognized by a State; and
- 2. The words "Universal Waste Pesticide(s)" or "Waste Pesticide(s)".
- (d) (i) Universal waste mercury-containing equipment (i.e., each device), or a container in which the equipment is contained, must be labeled or marked clearly with any one of the following phrases: "Universal Waste\_\_-\_Mercury-Containing Equipment", "Waste Mercury-Containing Equipment", or "Used Mercury-Containing Equipment".
- (ii) A universal waste mercury-containing thermostat or container containing only universal waste mercury-containing thermostats may be labeled or marked clearly with any of the following phrases: "Universal Waste\_-\_Mercury Thermostat(s)," "Waste Mercury Thermostat(s)," or "Used Mercury Thermostat(s)."
- (e) Each lamp or a container or package in which the lamps are contained must be labeled or marked clearly with any one of the following phrases: "Universal Waste Lamp(s)", or "Waste Lamp(s)", or "Used Lamp(s)".
  - (6) <u>Accumulation time limits.</u>

- (a) A small quantity handler of universal waste may accumulate universal waste for no longer than one year from the date the universal waste is generated, or received from another handler, unless the requirements of 335-14-11-.02(6)(b) are met.
- (b) A small quantity handler of universal waste may accumulate universal waste for longer than one year from the date the universal waste is generated, or received from another handler, if such activity is solely for the purpose of accumulation of such quantities of universal waste as necessary to facilitate proper recovery, treatment, or disposal. However, the handler bears the burden of proving that such activity is solely for the purpose of accumulation of such quantities of universal waste as necessary to facilitate proper recovery, treatment, or disposal.
- (c) A small quantity handler of universal waste who accumulates universal waste must be able to demonstrate the length of time that the universal waste has been accumulated from the date it becomes a waste or is received. The handler may make this demonstration by:
- 1. Placing the universal waste in a container and marking or labeling the container with the earliest date that any universal waste in the container became a waste or was received;
- 2. Marking or labeling each individual item of universal waste (e.g., each battery or thermostat) with the date it became a waste or was received;
- 3. Maintaining an inventory system on-site that identifies the date each universal waste became a waste or was received;
- 4. Maintaining an inventory system on-site that identifies the earliest date that any universal waste in a group of universal waste items or a group of containers of universal waste became a waste or was received;
- 5. Placing the universal waste in a specific accumulation area and identifying the earliest date that any universal waste in the area became a waste or was received; or
- 6. Any other method which clearly demonstrates the length of time that the universal waste has been accumulated from the date it becomes a waste or is received.
- (7) <u>Employee training.</u> A small quantity handler of universal waste must inform all employees who handle or have responsibility for managing universal waste. The information must describe proper handling and emergency procedures appropriate to the type(s) of universal waste handled at the facility.
  - (8) Response to releases.

- (a) A small quantity handler of universal waste must immediately contain all releases of universal wastes and other residues from universal wastes.
- (b) A small quantity handler of universal waste must determine whether any material resulting from the release is hazardous waste, and if so, must manage the hazardous waste in compliance with all applicable requirements of 335-14-1 through 335-14-9. The handler is considered the generator of the material resulting from the release, and must manage it in compliance with 335-14-3.

### (9) <u>Off-site shipments.</u>

- (a) A small quantity handler of universal waste is prohibited from sending or taking universal waste to a place other than another universal waste handler, a destination facility, or a foreign destination.
- (b) If a small quantity handler of universal waste self-transports universal waste off-site, the handler becomes a universal waste transporter for those self-transportation activities and must comply with the transporter requirements of rule 335-14-11-.04 while transporting the universal waste.
- (c) If a universal waste being offered for off-site transportation meets the definition of hazardous materials under 49 CFR Parts 171 through 180, a small quantity handler of universal waste must package, label, mark and placard the shipment, and prepare the proper shipping papers in accordance with the applicable Department of Transportation regulations under 49 CFR Parts 172 through 180;
- (d) Prior to sending a shipment of universal waste to another universal waste handler, the originating handler must ensure that the receiving handler agrees to receive the shipment.
- (e) If a small quantity handler of universal waste sends a shipment of universal waste to another handler or to a destination facility and the shipment is rejected by the receiving handler or destination facility, the originating handler must either:
- 1. Receive the waste back when notified that the shipment has been rejected, or
- 2. Agree with the receiving handler on a destination facility to which the shipment will be sent.
- (f) A small quantity handler of universal waste may reject a shipment containing universal waste, or a portion of a shipment containing universal waste that he has received from another handler. If a handler rejects a shipment or a portion of a shipment, he must contact the originating handler to notify him of the rejection and to discuss reshipment of the load. The handler must:

- 1. Send the shipment back to the originating handler, or
- 2. If agreed to by both the originating and receiving handler, send the shipment to a destination facility.
- (g) If a small quantity handler of universal waste receives a shipment containing hazardous waste that is not a universal waste, the handler must immediately notify the Department of the illegal shipment, and provide the name, address, and phone number of the originating shipper. The Department will provide instructions for managing the hazardous waste.
- (h) If a small quantity handler of universal waste receives a shipment of non-hazardous, non-universal waste, the handler may manage the waste in any way that is in compliance with applicable federal, State of Alabama, or local solid waste regulations.
- (10) <u>Tracking universal waste shipments.</u> A small quantity handler of universal waste is not required to keep records of shipments of universal waste.
- (11) <u>Exports.</u> A small quantity handler of universal waste who sends universal waste to a foreign destination is subject to the requirements of 335-14-3-.09

**Author:** Amy P. Zachry; C. Edwin Johnston; Michael B. Jones; Lynn T. Roper; Michael B. Champion; Bradley N. Curvin; Theresa A. Maines; Dustin R. Land; Vernon H. Crockett; Sonja B. Favors; Brent A. Watson.

**Statutory Authority:** Code of Alabama 1975, §§ 22-30-11, 22-30-14, 22-30-15, and 22-30-16.

History: January 12, 1996. Amended: Effective: March 28, 1997; Amended: Effective: March 27, 1998; Amended: Effective: April 13, 2001; Amended: Effective: March 15, 2002; Amended: Effective: April 17, 2003; Amended: Effective: March 31, 2005; Amended: Effective: April 4, 2006; Amended: Effective: April 3, 2007; Amended: Effective: March 31, 2009; Amended: Effective: March 30, 2010; Amended: Effective: March 31, 2017; Amended:

Effective: April 6, 2018: Amended: Proposed: October 21, 2019.

# 335-14-11-.07 <u>Petitions to Include Other Wastes Under Chapter</u> 335-14-11.

- (1) <u>General.</u>
- (a) Except as provided in 335-14-11-.07(1)(d), Aany person seeking to add a hazardous waste or a category of hazardous waste to 335-14-11 may petition for a regulatory amendment under 335-14-11-.07 and 335-14-1-.03(3).
- (b) To be successful, the petitioner must demonstrate to the satisfaction of the Director that regulation under the universal waste regulations of 335-14-11 is: appropriate for the waste or category of waste; will improve management practices for the waste or category of waste; and will improve implementation of the hazardous waste program. The petition must include the information required by 335-14-1-.03(3)(b). The petition should also address as many of the factors listed in 335-14-11-.07(2) as are appropriate for the waste or waste category addressed in the petition.
- (c) The Director will evaluate petitions using the factors listed in 335-14-11-.07(2). The Director will grant or deny a petition using the factors listed in 335-14-11-.07(2). The decision will be based on the weight of evidence showing that regulation under Chapter 335-14-11 is appropriate for the waste or category of waste, will improve management practices for the waste or category of waste, and will improve implementation of the hazardous waste program.
- (d) Hazardous waste pharmaceuticals are regulated by 335-14-7-.16 and may not be added as a category of hazardous waste for management under this part.
- (2) <u>Factors for petitions to include other wastes under Chapter</u> 335-14-11.
- (a) The waste or category of waste, as generated by a wide variety of generators, is listed in rule 335-14-2-.04, or (if not listed) a proportion of the waste stream exhibits one or more characteristics of hazardous waste identified in rule 335-14-2-.03. [When a characteristic waste is added to the universal waste regulations of Chapter 335-14-11 by using a generic name to identify the waste category (e.g., batteries), the definition of universal waste in rule 335-14-1-.02 will be amended to include only the hazardous waste portion of the waste category (e.g., hazardous waste batteries).] Thus, only the portion of the waste stream that does exhibit one or more characteristics (i.e., is hazardous waste) is subject to the universal waste regulations of Chapter 335-14-11;
- (b) The waste or category of waste is not exclusive to a specific industry or group of industries, is commonly generated by a wide variety of types of establishments (including, for example, households, retail and commercial businesses, office complexes, very small quantity generators, small businesses, government organizations, as well as large industrial facilities);

- (c) The waste or category of waste is generated by a large number of generators (e.g., more than 1,000 nationally) and is frequently generated in relatively small quantities by each generator;
- (d) Systems to be used for collecting the waste or category of waste (including packaging, marking, and labeling practices) would ensure close stewardship of the waste;
- (e) The risk posed by the waste or category of waste during accumulation and transport is relatively low compared to other hazardous wastes, and specific management standards proposed or referenced by the petitioner (e.g., waste management requirements appropriate to be added to rules 335-14-11-.02(4), 335-14-11-.03(4), and 335-14-11-.04(3); and/or applicable Department of Transportation requirements) would be protective of human health and the environment during accumulation and transport;
- (f) Regulation of the waste or category of waste under Chapter 335-14-11 will increase the likelihood that the waste will be diverted from non-hazardous waste management systems (e.g., the municipal waste stream, non-hazardous industrial or commercial waste stream, municipal sewer or stormwater systems) to recycling, treatment, or disposal in compliance with Subtitle C of RCRA.
- (g) Regulation of the waste or category of waste under Chapter 335-14-11 will improve implementation of and compliance with the hazardous waste regulatory program; and/or
  - (h) Such other factors as may be appropriate.

**Author:** Amy P. Zachry; Lynn T. Roper; Bradley N. Curvin; Vernon H. Crockett; Sonja B. Favors; Brent A. Watson.

**Statutory Authority:** Code of Alabama 1975, §§ 22-30-11, 22-30-14, 22-30-15, and 22-30-16.

**History:** January 12, 1996. **Amended:** Effective: March 28, 1997; **Amended:** Effective: April 13, 2001; **Amended:** Effective: March 31, 2005; **Amended:** Effective: April 4, 2006; **Amended:** Effective: April 6, 2018 **Amended:** Proposed: October 21, 2019.