# ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT LAND DIVISION - HAZARDOUS WASTE PROGRAM ADMINISTRATIVE CODE

## CHAPTER 335-14-2 IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

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**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 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 Code of Ala. 1975, §22-30-3(11), and a

hazardous waste within the meaning of Code of Ala. 1975, §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-1ike", 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., or 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 335-14-2-.01 (2)(c)1.** | **Energy/ recovery fuel 335-14-2-.01 (2) (c)2.** | **Reclamation 335-14-2-.01 (2)(c)3., (except as provided in 335-14-2-.01 (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 335-14-2-.01 (2)(c)4.** |
|---|---|---|---|---|
| | 1 | 2 | 3 | 4 |
| Spent Materials | (*) | (*) | (*) | (*) |
| Sludges (listed in 335-14-2-.04(2) or (3)) | (*) | (*) | (*) | (*) |
| Sludges exhibiting a characteristic of hazardous waste | (*) | (*) | - - - - | (*) |
| By-products (listed in 335-14-2-.04(2) or (3)) | (*) | (*) | (*) | (*) |
| By-products exhibiting a characteristic of hazardous waste | (*) | (*) | - - - - | (*) |

| | **Use constituting disposal 335-14-2-.01 (2)(c)1.** | **Energy/ recovery fuel 335-14-2-.01 (2) (c)2.** | **Reclamation 335-14-2-.01 (2)(c)3., (except as provided in 335-14-2-.01 (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 335-14-2-.01 (2)(c)4.** |
|---|---|---|---|---|
| Commercial chemical products listed in 335-14-2-.04(4) | (*) | (*) | - - - - | - - - - |
| Scrap metal that is not excluded under 335-14-2-.01(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-1ike 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:

(I) 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

(II) One or more of the following spent solvents listed in 335-14-2-.04(2)—methylene chloride, 1,1,1-trichloroethane, chlorobenzene, o-dichlorobenzene, cresols, cresylic acid, nitrobenzene, toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, spent chlorofluorocarbon solvents, 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-1ine 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

(VI) 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

(VII) Wastewaters derived from the treatment of one of more 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) — 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 ("Director" as defined in 40 CFR 270.2). 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)I. 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 sample--TCLP (mg/l)** |
|---|---|
| Generic exclusion levels for K061 and K062 nonwastewater HTMR residues | |
| Antimony | 0.10 |
| Arsenic | 0.50 |

| **Constituent** | **Maximum for any single composite sample--TCLP (mg/l)** |
|---|---|
| Barium | 1.7 |
| Beryllium | 0.0110 |
| 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 nonwastewater HTMR residues | |
| Antimony | 0.10 |
| Arsenic | 0.50 |
| Barium | 7.6 |
| Beryllium | 0.010 |
| Cadmium | 0.050 |
| Chromium (total) | 0.33 |
| Generic exclusion levels for F006 nonwastewater HTMR residues | |
| 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 |

II. A one-time notification and certification must be placed in the facility's files and sent to EPA Region 4 and 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) Exclusions.

(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);

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(1);

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 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, 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)(a)17., 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-1ocated 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 handler'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 335-14-2-.01(4) 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**

| **Fertilizer,, Constituent (ppm)** | **Maximum Allowable Total Concentration in per Unit (1%) of Zinc** |
|---|---|
| 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 335-14-2-.01(4)(a)23.(i) and (ii):

(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

(II) 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." "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

(III) The hazardous secondary material is generated pursuant to a 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). "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 335-14-2-.01(4)(a) 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 three factors in 335-14-1-.03(23)(a) and how the factor in 335-14-1-.03(23)(b) was considered. 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, 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. 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.

(II) 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) and have they notified the appropriate authorities that the financial assurance condition is satisfied per 335-14-2-.01(4)(a)24.(vi)(VI)? 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 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 an AHWMMA 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 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. 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 amended on May 30, 2018 and August 9, 2023) 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-1eaking, 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 the ADEM Division 14 Administrative Code; 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) 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) 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), 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), 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 335-14-2-.27 (vents), 335-14-2-.28 (equipment) and 335-14-2-.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 335-14-2-.27 (vents), 335-14-2-.28 (equipment) and 335-14-2-.29 (tank storage); and

(VI) Ensure that no hazardous secondary materials are speculatively accumulated as defined in 335-14-1-.02.

(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.(i) 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 40 CFR § 266.112 [incorporated by reference at 335-14-7-.08(13)] for facilities that burn or process hazardous waste.

(ii) The following wastes generated primarily from processes that support the combustion of coal or other fossil fuels that are co-disposed with the wastes in 335-14-2-.01(4)(b)(4)(i), except as provided by 40 CFR § 266.112 [incorporated by reference at 335-14-7-.08(13)] for facilities that burn or process hazardous waste:

I. Coal pile run-off. For purposes of 335-14-2-.01(4)(b)(4), coal pile run-off means any precipitation that drains off coal piles.

II. Boiler cleaning solutions. For purposes of 335-14-2-.01(4)(b)(4), boiler cleaning solutions means water solutions and chemical solutions used to clean the fire-side and waterside of the boiler.

III. Boiler blowdown. For purposes of 335-14-2-.01(4)(b)(4), boiler blowdown means water purged from boilers used to generate steam.

IV. Process water treatment and demineralizer regeneration wastes. For purposes of 335-14-2-.01(4)(b)(4), process water treatment and demineralizer regeneration wastes means sludges, rinses, and spent resins generated from processes to remove dissolved gases, suspended solids, and dissolved chemical salts from combustion system process water.

V. Cooling tower blowdown. For purposes of 335-14-2-.01(4)(b)(4), cooling tower blowdown means water purged from a closed cycle cooling system. Closed cycle cooling systems include cooling towers, cooling ponds, or spray canals.

VI. Air heater and precipitator washes. For purposes of 335-14-2-.01(4)(b)(4), air heater and precipitator washes means wastes from cleaning air preheaters and electrostatic precipitators.

VII. Effluents from floor and yard drains and sumps. For purposes of 335-14-2-.01(4)(b)(4), effluents from floor and yard drains and sumps means wastewaters, such as wash water, collected by or from floor drains, equipment drains, and sumps located inside the power plant

building; and wastewaters, such as rain runoff, collected by yard drains and sumps located outside the power plant building.

VIII. Wastewater treatment sludges. For purposes of 335-14-2-.01(4)(b)(4), wastewater treatment sludges refers to sludges generated from the treatment of wastewaters specified in 335-14-2-.01(4(b)(4)(ii)(I)through (VI).

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 TiO2 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 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) 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-1eaking, 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 the ADEM Division 14 Administrative Code 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 Chapters 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 Chapters 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) Samples.

1. Except as provided in 335-14-2-.01(4)(d)2. and 4., a sample of solid waste or a sample of water, soil, or air which is collected for the sole purpose of testing 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. and 4., 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) and the accumulation limits of 335-14-3-.01(4)(a)3., 335-14-3-.01(4)(a)4. and 335-14-3-.01(6)(b)1., 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.

4. In order to qualify for the exemption in 335-14-2-.01(4)(e)1.(i), the mass of a sample that will be exported to a foreign laboratory or testing facility, or that will be imported to a U.S. laboratory or testing facility from a foreign source must additionally not exceed 25 kg.

(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 non-hazardous 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 year 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;

(iii) 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) The final disposition of residues and unused sample from each treatability study.

10. The facility determines whether any unused sample or residues generated by the treatability study are hazardous waste under 335-14-2-.01(3) and, if so, are subject to 335-14-2 through 335-14-9, unless the residues and unused samples are returned to the sample originator under the 335-14-2-.01(4)(e) exemption.

11. The facility notifies the State Director by letter when the facility is no longer planning to conduct any treatability studies at the site.

(g) Dredged material that is not a hazardous waste. Dredged material that is subject to the requirements of a permit that has been issued under §404 of the Federal Water Pollution Control Act (33 U.S.C. 1344) or section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C. 1413) is not a hazardous waste. For 335-14-2-.01(4)(g), the following definitions apply:

1. The term “dredged material” has the same meaning as defined in 40 DFR 232.2;

2. The term “permit” means:

(i) A permit issued by the U.S. Army Corps of Engineers (Corps) or an approved State under section 404 of the Federal Water Pollution Control Act (33 U.S.C. 1344);

(ii) A permit issued by the Corps under section 103 of the marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C. 1413); or

(iii) In the case of Corps civil works projects, the administrative equivalent of the permits referred to in 335-14-2-.01(4)(g)2.(i) and (ii), as provided for in Corps regulation (for example, see 33 CPR 336.1, 336.2, and 337.6)

(h) Carbon Dioxide Stream Injected for Geologic Sequestration. Carbon dioxide streams that are captured and transported for purposes of injection into an underground injection well subject to the requirements for Class VI Underground Injection Control wells, including the requirements in 40 CFR Parts 144 and 146 of the Underground Injection Control Program of the Safe Drinking Water Act, are not a hazardous waste, provided the following conditions are met:

1. Transportation of the carbon dioxide stream must be in compliance with U.S. Department of Transportation requirements, including the pipeline safety laws (49 U.S.C. § 60101 et seq.) and regulations (49 C.F.R. Parts 190-199) of the U.S. Department of Transportation, and pipeline safety regulations adopted and administered by a state authority pursuant to a certification under 49 U.S.C. § 60105, as applicable.

2. Injection of the carbon dioxide stream must be in compliance with the applicable requirements for Class VI Underground Injection Control wells, including the applicable requirements in 40 CFR Parts 144 and 146;

3. No hazardous wastes shall be mixed with, or otherwise co-injected with, the carbon dioxide stream; and

4.(i) Any generator of a carbon dioxide stream, who claims that a carbon dioxide stream is excluded under 335-14-2-.01(4)(h), must have an authorized representative (as defined in 335-14-1-.02(1)) sign a certification statement worded as follows:

I certify under penalty of law that the carbon dioxide stream that I am claiming to be excluded under 335-14-2-.01(4)(h) has not been mixed with hazardous wastes, and I have transported the carbon dioxide stream in compliance with (or have contracted with a pipeline operator or transporter to transport the carbon dioxide stream in

compliance with) Department of Transportation requirements, including the pipeline safety laws (49 U.S.C. § 60101 et seq.) and regulations (49 C.F.R. Parts 190-199) of the U.S. Department of Transportation, and the pipeline safety regulations adopted and administered by a state authority pursuant to a certification under 49 U.S.C. § 60105, as applicable, for injection into a well subject to the requirements for the Class VI Underground Injection Control Program of the Safe Drinking Water Act.

(ii) Any Class VI Underground Injection Control well owner or operator, who claims that a carbon dioxide stream is excluded under 335-14-2-.01(4)(h), must have an authorized representative [as defined in 335-14-1-.02(1)] sign a certification statement worded as follows:

I certify under penalty of law that the carbon dioxide stream that I am claiming to be excluded under 335-14-2-.01(4)(h) has not been mixed with, or otherwise co-injected with, hazardous waste at the Underground Injection Control (UIC) Class VI permitted facility, and that injection of the carbon dioxide stream is in compliance with the applicable requirements for UIC Class VI wells, including the applicable requirements in 40 CFR Parts 144 and 146.

(iii) The signed certification statement must be kept on-site for no less than three years, and must be made available within 72 hours of a written request from the Administrator, Regional Administrator, or the Director, or their designee. The signed certification statement must be renewed every year that the exclusion is claimed, by having an authorized representative (as defined in 335-14-1-.02(1)) annually prepare and sign a new copy of the certification statement within one year of the date of the previous statement. The signed certification statement must also be readily accessible on the facility's publicly-available website (if such website exists) as a public notification with the title of "Carbon Dioxide Stream Certification" at the time the exclusion is claimed.

(i) [Reserved]

(j) Airbag waste.

1. Airbag waste at the airbag waste handler or during transport to an airbag waste collection facility or designated facility is not subject to regulation under 335-14-3 through 335-14-9, and is not subject to the notification requirements of section 3010 of RCRA provided that:

(i) The airbag waste is accumulated in a quantity of no more than 250 airbag modules or airbag inflators, for no longer than 180 days;

(ii) The airbag waste is packaged in a container designed to address the risk posed by the airbag waste and labeled "Airbag Waste – Do Not Reuse;"

(iii) The airbag waste is sent directly to either:

(I) An airbag waste collection facility in the United States under the control of a vehicle manufacturer or their authorized representative, or under the control of an authorized party administering a remedy program in response to a recall under the National Highway Traffic Safety Administration, or

(II) A designated facility as defined in 335-14-1-.02(1);

(iv) The transport of the airbag waste complies with all applicable U.S. Department of Transportation regulations in 49 CFR part 171 through 180 during transit;

(v) The airbag waste handler maintains at the handler facility for no less than three (3) years records of all off-site shipments of airbag waste and all confirmations of receipt from the receiving facility. For each shipment, these records must, at a minimum, contain the name of the transporter and date of the shipment; name and address of receiving facility; and the type and quantity of airbag waste (i.e., airbag modules or airbag inflators) in the shipment. Confirmations of receipt must include the name and address of the receiving facility; the type and quantity of the airbag waste (i.e., airbag modules and airbag inflators) received; and the date which it was received. Shipping records and confirmations of receipt must be made available for inspection and may be satisfied by routine business records (e.g., electronic or paper financial records, bills of lading, copies of DOT shipping papers, or electronic confirmations of receipt).

2. Once the airbag waste arrives at an airbag waste collection facility or designated facility, it becomes subject to all applicable hazardous waste regulations, and the facility receiving airbag waste is considered the hazardous waste generator for the purposes of the hazardous waste regulations and must comply with the requirements of 335-14-3.

3. Reuse in vehicles of defective airbag modules or defective airbag inflators subject to a recall under the National Highway Traffic Safety Administration is considered sham recycling and prohibited under 335-14-2-.01(2)(g).

(5) [Reserved]

(6) Requirements for recyclable materials.

(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-.17 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).

(v) Ignitable spent refrigerants recycled for reuse (335-14-7-.17).

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) 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) 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 an exporter in 40 CFR § 262.83 [incorporated by reference in 335-14-3-.09(4)] with the exception of 40 CFR § 262.83(c);

(II) Transporters transporting a shipment for export or import must comply with the movement document requirements listed in 335-14-4-.02(1)(a)2. and (1)(c).

(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.

(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 Rules 335-14-5-.01 through 335-14-5-.12, 335-14-5-.27, 335-14-5-.28, 335-14-5-.29, 335-14-5-.30, 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) 335-14-6-.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 Rules 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 335-14-2-.01(7), 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);

(d) Lamps as described in 335-14-11-.01(5), and

(e) Aerosol cans described in 335-14-11-.01(6).

(10) Residues of hazardous waste in empty tanks.

(a) 335-14-2-.01 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.]

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## 335-14-2-.02 Criteria For Identifying The Characteristics Of Hazardous Waste And For Listing Hazardous Waste.

(1) Criteria for identifying the characteristics of hazardous waste.

(a) The Department shall identify and define a characteristic of hazardous waste in Rule 335-14-2-.03 only upon determining that:

1. A solid waste that exhibits the characteristic may:

(i) Cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or

(ii) Pose a substantial present or potential hazard to human health or the environment when it is

improperly treated, stored, transported, disposed of, or otherwise managed; and

2. The characteristic can be:

(i) Measured by an available standardized test method which is reasonably within the capability of generators of solid waste or private sector laboratories that are available to serve generators of solid waste; or

(ii) Reasonably detected by generators of solid waste through their knowledge of their waste.

(2) Criteria for listing hazardous waste.

(a) The Department shall list a solid waste as a hazardous waste only upon determining that the solid waste meets one of the following criteria:

1. It exhibits any of the characteristics of hazardous waste identified in Rule 335-14-2-.03.

2. It has been found to be fatal to humans in low doses or, in the absence of data on human toxicity, it has been shown in studies to have an oral LD 50 toxicity (rat) of less than 50 milligrams per kilogram, an inhalation LC 50 toxicity (rat) of less than 2 milligrams per liter, or a dermal LD 50 toxicity (rabbit) of less than 200 milligrams per kilogram or is otherwise capable of causing or significantly contributing to an increase in serious irreversible, or incapacitating reversible, illness. (Waste listed in accordance with these criteria will be designated Acute Hazardous Waste.)

3. It contains any of the toxic constituents listed in 335-14-2-Appendix VIII, and after considering the following factors, the Department concludes that the waste is capable of posing a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed:

(i) The nature of the toxicity presented by the constituent;

(ii) The concentration of the constituent in the waste;

(iii) The potential of the constituent or any toxic degradation product of the constituent to migrate from the waste into the environment under the types

of improper management considered in 335-14-2-.02(a)3.(vii);

(iv) The persistence of the constituent or any toxic degradation product of the constituent;

(v) The potential for the constituent or any toxic degradation product of the constituent to degrade into nonharmful constituents and the rate of degradation;

(vi) The degree to which the constituent or any degradation product of the constituent bioaccumulates in ecosystems;

(vii) The plausible types of improper management to which the waste could be subjected;

(viii) The quantities of the waste generated at individual generation sites or on a regional or national basis;

(ix) The nature and severity of the human health and environmental damage that has occurred as a result of the improper management of wastes containing the constituent;

(x) Action taken by other governmental agencies or regulatory programs based on the health or environmental hazard posed by the waste or waste constituent;

(xi) Such other factors as may be appropriate.

4. Substances will be listed in 335-14-2-Appendix VIII only if they have been shown in scientific studies to have toxic, carcinogenic, mutagenic, or teratogenic effects on humans or other life forms. (Wastes listed in accordance with these criteria will be designated Toxic wastes.)

(b) The Department may list classes or types of solid waste as hazardous waste if it has reason to believe that individual wastes, within the class or type of waste, typically or frequently are hazardous under the definition of hazardous waste found in Section 22-30-3(5) of the AHWMMA.

**Author:** Stephen C. Maurer; Amy P Zachry
**Statutory Authority:** Code of Ala. 1975, §§22-30-10, 22-30-11.
**History:** November 19, 1980. **Amended:** April 9, 1986; February 15, 1988; August 24, 1989; December 6, 1990. **Amended:** Filed February 20, 1998; effective March 27, 1998. **Amended:** Filed March 9,

2001; effective April 13, 2001. **Amended:** Filed February 28, 2012; effective April 03, 2012. **Amended:** Published December 31, 2025; effective February 14, 2026.

**335-14-2-.03 Characteristics Of Hazardous Waste.**

(1) General.

(a) A solid waste, as defined in 335-14-2-.01(2), which is not excluded from regulation as a hazardous waste under 335-14-2-.01(4)(b), is a hazardous waste if it exhibits any of the characteristics identified in 335-14-2-.03.

(b) A hazardous waste which is identified by a characteristic in 335-14-2-.03 is assigned every EPA Hazardous Waste Number that is applicable as set forth in 335-14-2-.03. This number must be used in complying with the notification requirements of Section 3010 of the RCRA and all applicable recordkeeping and reporting requirements under Chapters 335-14-3 through 335-14-6, 335-14-8 and 335-14-9.

(c) For purposes of 335-14-2-.03, the Department will consider a sample obtained using any of the applicable sampling methods specified in 335-14-2-Appendix I to be a representative sample within the meaning of Chapter 335-14-1.

(2) Characteristic of ignitability.

(a) A solid waste exhibits the characteristic of ignitability if a representative sample of the waste has any of the following properties:

1. It is a liquid, other than a solution containing less than 24 percent alcohol by volume and at least 50 percent water by weight, that has a flash point less than 60°C (140° F), as determined by using one of the following ASTM standards: D--93-79, D--93-80, D--3278-78, D-8174-18, or D-8175-18 as specified in SW-846 Test Methods 1010B or 1020C [incorporated by reference in 335-14-1-.02(2)].

2. It is not a liquid and is capable, under standard temperature and pressure, of causing fire through friction, absorption of moisture, or spontaneous chemical changes and, when ignited, burns so vigorously and persistently that it creates a hazard.

3. It is an ignitable compressed gas.

(i) The term “compressed gas” shall designate any material or mixture having in the container an

absolute pressure exceeding 40 p.s.i. at 70°F or, regardless of the pressure at 70°F, having an absolute pressure exceeding 104 p.s.i. at 130°F; or any liquid flammable material having a vapor pressure exceeding 40 p.s.i. absolute at 100°F as determined by ASTM Test D – 323.

(ii) A compressed gas shall be characterized as ignitable if any one of the following occurs:

(I) Either a mixture of 13 percent or less (by volume) with air forms a flammable mixture or the flammable range with air is wider than 12 percent regardless of the lower limit. These limits shall be determined at atmospheric temperature and pressure. The method of sampling and test procedure shall be the ASTM E 681-85 [incorporated by reference in 335-14-1-.02(2)], or other equivalent methods approved by the Associate Administrator, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation.

(II) It is determined to be flammable or extremely flammable using 49 CFR 173.115(l).

(III) Using the Bureau of Explosives' Open Drum Apparatus (see Note 1), there is any significant propagation of flame away from the ignition source.

(IV) Using the Bureau of Explosives' Closed Drum Apparatus (see Note 1), there is any explosion of the vapor-air mixture in the drum.

4. It is an oxidizer. An oxidizer for the purpose of 335-14-2-.03(2) is a substance such as a chlorate, permanganate, inorganic peroxide, or a nitrate, that yields oxygen readily to stimulate the combustion of organic matter.

(i) An organic compound containing the bivalent -O-O- structure and which may be considered a derivative of hydrogen peroxide where one or more of the hydrogen atoms have been replaced by organic radicals must be classed as an organic peroxide unless:

(I) The material meets the definition of a Division 1.1, 1.2 or 1.3 explosive, as defined in 335-14-2-.03(4)(a)8., in which case it must be classed as an explosive,

(II) The material is forbidden to be offered for transportation according to 49 CFR 172.101 and 49 CFR 173.21,

(III) It is determined that the predominant hazard of the material containing an organic peroxide is other than that of an organic peroxide, or

(IV) According to data on file with the Pipeline and Hazardous Materials Safety Administration in the U.S. Department of Transportation, it has been determined that the material does not present a hazard in transportation.

(b) A solid waste that exhibits the characteristic of ignitability has the EPA Hazardous Waste Number of D001.

(3) Characteristic of corrosivity.

(a) A solid waste exhibits the characteristic of corrosivity if a representative sample of the waste has either of the following properties:

1. It is aqueous and has a pH less than or equal to 2 or greater than or equal to 12.5, as determined by a pH meter using Method 9040 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference in Rule 335-14-1-.02(297).

2. It is a liquid and corrodes steel (SAE 1020) at a rate greater than 6.35 mm (0.250 inch) per year at a test temperature of 55°C (130°F) as determined by Method 1110A in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, and as incorporated by reference in Rule 335-14-1-.02(297).

(b) A solid waste that exhibits the characteristic of corrosivity has the EPA Hazardous Waste Number of D002.

(4) Characteristic of reactivity.

(a) A solid waste exhibits the characteristic of reactivity if a representative sample of the waste has any of the following properties:

1. It is normally unstable and readily undergoes violent change without detonating.

2. It reacts violently with water.

3. It forms potentially explosive mixtures with water.

4. When mixed with water, it generates toxic gases, vapors, or fumes in a quantity sufficient to present a danger to human health or the environment.

5. It is a cyanide or sulfide bearing waste which, when exposed to pH conditions between 2 and 12.5, can generate toxic gases, vapors, or fumes in a quantity sufficient to present a danger to human health or the environment.

6. It is capable of detonation or explosive reaction if it is subjected to a strong initiating source or if heated under confinement.

7. It is readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure.

8. It is a forbidden explosive as defined in 49 CFR §173.54, or is a Division 1.1, 1.2, or 1.3 explosive as defined in 49 CFR §§173.50 and 173.53.

(b) A solid waste that exhibits the characteristic of reactivity has the EPA Hazardous Waste Number of D003.

(5) Characteristic of Toxicity.

(a) A solid waste, except manufactured gas plant waste, exhibits the characteristic of toxicity if, using the Toxicity Characteristic Leaching Procedure, test Method 1311 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA publication SW-846, as incorporated by reference in Rule 335-14-1-.02(297), the extract from a representative sample of the waste contains any of the contaminants listed in Table 1 at the concentration equal to or greater than the respective value given in that Table. Where the waste contains less than 0.5 percent filterable solids, the waste itself, after filtering using the methodology outlined in Method 1311, is considered to be the extract for the purpose of 335-14-2-.03(5).

(b) A solid waste that exhibits the Characteristic of toxicity has the EPA Hazardous Waste Number specified in Table 1 which corresponds to the toxic contaminant causing it to be hazardous.

**TABLE 1**

**MAXIMUM CONCENTRATION OF CONTAMINANTS FOR THE TOXICITY CHARACTERISTIC**

| EPA HW No.[1] | Contaminant | CAS No.[2] | Regulatory Level (mg/L) |
|---|---|---|---|

| | | | |
|---|---|---|---|
| D004 | Arsenic | 7440-38-2 | 5.0 |
| D005 | Barium | 7440-39-3 | 100.0 |
| D018 | Benzene | 71-43-2 | 0.5 |
| D006 | Cadmium | 7440-43-9 | 1.0 |
| D019 | Carbon tetrachloride | 56-23-5 | 0.5 |
| D020 | Chlordane | 57-74-9 | 0.03 |
| D021 | Chlorobenzene | 108-90-7 | 100.0 |
| D022 | Chloroform | 67-66-3 | 6.0 |
| D007 | Chromium | 7440-47-3 | 5.0 |
| D023 | o-Cresol | 95-48-7 | 200.0[4] |
| D024 | m-Cresol | 108-39-4 | 200.0[4] |
| D025 | p-Cresol | 106-44-5 | 200.0[4] |
| D026 | Cresol | ---- | 200.0[4] |
| D016 | 2,4-D | 94-75-7 | 10.0 |
| D027 | 1,4-Dichlorobenzene | 106-46-7 | 7.5 |
| D028 | 1,2-Dichloroethane | 107-06-2 | 0.5 |
| D029 | 1,1-Dichloroethylene | 75-35-4 | 0.7 |
| D030 | 2,4-Dinitrotoluene | 121-14-2 | 0.13[3] |
| D012 | Endrin | 72-20-8 | 0.02 |
| D031 | Heptachlor (and itsepoxide | 76-44-8 | 0.008 |
| D032 | Hexachlorobenzene | 118-74-1 | 0.13[3] |
| D033 | Hexachlorobutadiene | 87-68-3 | 0.5 |
| D034 | Hexachloroethane | 67-72-1 | 3.0 |
| D008 | Lead | 7439-92-1 | 5.0 |
| D013 | Lindane | 58-89-9 | 0.4 |
| D009 | Mercury | 7439-97-6 | 0.2 |
| D014 | Methoxychlor | 72-43-5 | 10.0 |
| D035 | Methyl ethyl ketone | 78-93-3 | 200.0 |
| D036 | Nitrobenzene | 98-95-3 | 2.0 |
| D037 | Pentachlorophenol | 87-86-5 | 100.0 |
| D038 | Pyridine | 110-86-1 | 5.0[3] |
| D010 | Selenium | 7782-49-2 | 1.0 |
| D011 | Silver | 7440-22-4 | 5.0 |
| D039 | Tetrachloroethylene | 127-18-4 | 0.7 |

| | | | |
|---|---|---|---|
| D015 | Toxaphene | 8001-35-2 | 0.5 |
| D040 | Trichloroethylene | 79-01-6 | 0.5 |
| D041 | 2,4,5-Trichlorophenol | 95-95-4 | 400.0 |
| D042 | 2,4,6-Trichlorophenol | 88-06-2 | 2.0 |
| D017 | 2,4,5-TP (Silvex) | 93-72-1 | 1.0 |
| D043 | Vinyl chloride | 75-01-4 | 0.2 |

[1]Hazardous waste number.

[2]Chemical abstracts service number.

[3]Quantitation limit is greater than the calculated regulatory level. The quantitation limit therefore becomes the regulatory level.

[4]If o-, m-, and p-Cresol concentrations cannot be differentiated, the total cresol (D026) concentration is used. The regulatory level of total cresol is 200 mg/l.

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## 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 Chapters 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 generator category limits for acutely hazardous wastes established in 335-14-3-.01(3): 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 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, | (T) |

| Hazardous Waste Number | Hazardous Waste | Hazard Code |
|---|---|---|
| | 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. | |
| 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: 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. | (I,T) |
| F006 | operations except from the following processes: (1) sulfuric acid anodizing 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/ | (T) |

| Hazardous Waste Number | Hazardous Waste | Hazard Code |
|---|---|---|
| | stripping associated with tin, zinc and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum. | |
| F007 | Spent cyanide plating bath solutions from electroplating operations. | (R,T) |
| F008 | Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process | (R,T) |
| F009 | Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process. | (R,T) |
| F010 | Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process. | (R,T) |
| F011 | Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations. | (R,T) |
| F012 | Quenching wastewater treatment sludges from metal heat treating operations where cyanides are used in the process. | (T) |
| F019 | Wastewater treatment sludges from the chemical conversion 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, ADEM Administrative Code r. 335-14-5-.14(2), or 335-14-6-.14(2). For the purposes of this listing, motor vehicle manufacturing as defined in 335-14-1-.02 and 335-14-2-.04(2)(b)4.(i) describes the recordkeeping requirements for motor vehicle manufacturing facilities. | (T) |
| F020 | Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a | (H) |

| Hazardous Waste Number | Hazardous Waste | Hazard Code |
|---|---|---|
| | 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 Hexachlorophene from highly purified 2,4,5-trichlorophenol.) | |
| F021 | Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of pentachlorophenol, or of intermediates used to produce its derivatives. | (H) |
| F022 | Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzenes under alkaline conditions. | (H) |
| F023 | Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on 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.) | (H) |
| F024 | 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 catalysts, and wastes listed in 335-14-2-.04(2) or 335-14-2-.04(3).) | (T) |
| F025 | Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated | (T) |

| Hazardous Waste Number | Hazardous Waste | Hazard Code |
|---|---|---|
| | 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 | 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 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. | (T) |
| F034 | Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes | (T) |

| Hazardous Waste Number | Hazardous Waste | Hazard Code |
|---|---|---|
| | 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 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. | (T) |
| F037 | Petroleum refinery primary oil/water/solids separation 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. | (T) |
| F038 | Petroleum refinery secondary (emulsified) oil/water/solids separation sludge - Any sludge and/or float generated from the | (T) |

| Hazardous Waste Number | Hazardous Waste | Hazard Code |
|---|---|---|
| | 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 wastes) resulting from the disposal of more than one restricted waste classified as hazardous under Rule 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.) | (T) |

* (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 contractor 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 units 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 providing 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 335-14-1-.03(2) and listed in 335-14-2-Appendix IX.

| **Hazardous Waste Number** | **Hazardous Waste** | **Hazard Code** |
|---|---|---|
| Wood preservation: | | |
| K001 | Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or penta-chlorophenol. | (T) |
| Inorganic pigmits: | | |
| 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 pigments. | (T) |
| K005 | Wastewater treatment sludge from the production of chrome green pigments. | (T) |
| K006 | Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated). | (T) |
| K007 | Wastewater treatment sludge from the production of iron blue pigments. | (T) |

| Hazardous Waste Number | Hazardous Waste | Hazard Code |
|---|---|---|
| K008 | Oven residue from the production of chrome oxide green pigments. | (T) |
| Organic chemicals: | | |
| K009 | Distillation bottoms from the production of acetaldehyde from ethylene. | (T) |
| K010 | 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 from cumene. | (T) |

| Hazardous Waste Number | Hazardous Waste | Hazard Code |
|---|---|---|
| K023 | Distillation light ends from the production of phthalic anhydride from naphthalene. | (T) |
| K024 | Distillation bottoms from the production of phthalic anhydride from naphthalene. | (T) |
| 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 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 production of chlorobenzenes. | (T) |
| K093 | Distillation light ends from the production of phthalic anhydride from ortho-xylene. | (T) |
| K094 | Distillation bottoms from the production of phthalic anhydride from ortho-xylene. | (T) |
| K095 | Distillation bottoms from the production of 1,1,1-trichloroethane. | (T) |
| K096 | Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane. | (T) |
| K103 | Process residues from aniline extraction from the production of aniline. | (T) |

| Hazardous Waste Number | Hazardous Waste | Hazard Code |
|---|---|---|
| K104 | Combined wastewater streams generated from nitrobenzene/aniline production. | (T) |
| K105 | Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes. | (T) |
| K107 | Column bottoms from product separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides. | (C,T) |
| K108 | Condensed column overheads from product separation and condensed reactor vent gases from the production of 1-1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides. | (I,T) |
| K109 | Spent filter cartridges from product purification from the production of 1,1-dimethyl-hydrazine (UDMH) from carboxylic acid hydrazides. | (T) |
| K110 | Condensed column overheads from intermediate separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides. | (T) |
| 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) |

| Hazardous Waste Number | Hazardous Waste | Hazard Code |
|---|---|---|
| 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) |

| Hazardous Waste Number | Hazardous Waste | Hazard Code |
|---|---|---|
| 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) |

| Hazardous Waste Number | Hazardous Waste | Hazard Code |
|---|---|---|
| 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 | Organics from the treatment of thiocarbamate wastes. | (T) |
| K161 | Purification solids (including filtration, evaporation, and centrifugation solids), bag house dust and floor sweepings from the production of dithiocarbamate acids and their salts. (This listing does not include K125 or K126. | (R,T) |

| Hazardous Waste Number | Hazardous Waste | Hazard Code |
|---|---|---|
| K174 | 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 non-hazardous 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) |

| Hazardous Waste Number | Hazardous Waste | Hazard Code |
|---|---|---|
| K175 | Wastewater treatment sludges from the production of vinyl chloride monomer using mercuric chloride catalyst in an acetylene-based process. | (T) |
| Inorganic chemicals: | | |
| 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 335-14-2-.04(3)(c) of this section that are equal to or greater than the corresponding 335-14-2-.04(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 335-13-4-.11, (ii) disposed in a Subtitle C landfill unit subject to either 335-14-5-.14(2) or 335-14-6-.14(2), (iii) disposed in other Subtitle D landfill units that meet the design criteria in 335-13-4-.11, 335-14-5-.14(2), or 335-14-6-.14(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 335-14-2-.03(3)(b). 335-14-2-.03(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 335-14-2-.03(2) through 335-14-2-.03(5) and 335-14-2-.04(2) through 335-14-2-.04(4) at the point of generation. Also, the listing does not apply to wastes generated before any annual mass loading limit is met. | (T) |

| Hazardous Waste Number | Hazardous Waste | Hazard Code |
|---|---|---|
| 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 | Wastewater treatment sludges from the production of disulfoton. | (T) |
| K038 | Wastewater from the washing and stripping of phorate production. | (T) |
| K039 | Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate. | (T) |
| K040 | Wastewater treatment sludge from the production of phorate. | (T) |
| K041 | Wastewater treatment sludge from the production of toxaphene. | (T) |
| K042 | Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T. | (T) |
| K043 | 2,6-Dichlorophenol waste from the production of 2,4-D. | (T) |

| Hazardous Waste Number | Hazardous Waste | Hazard Code |
|---|---|---|
| K097 | Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane. | (T) |
| K098 | Untreated process wastewater from the production of toxaphene. | (T) |
| K099 | Untreated wastewater from the production of 2,4-D. | (T) |
| K123 | Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenebisdithiocarbamic acid and its salts. | (T) |
| K124 | Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salts. | (C,T) |
| K125 | Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts. | (T) |
| K126 | Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenebisdithiocarbamic acid and its salts. | (T) |
| K131 | Wastewater from the reactor and spent sulfuric acid from the acid dryer from the production of methyl bromide. | (C,T) |
| K132 | Spent absorbent and wastewater separator solids from the production of methyl bromide. | (T) |
| Explosives: | | |
| K044 | Wastewater treatment sludges from the manufacturing and processing of explosives. | (R) |
| K045 | Spent carbon from the treatment of wastewater containing explosives. | (R) |

| Hazardous Waste Number | Hazardous Waste | Hazard Code |
|---|---|---|
| K046 | Wastewater treatment sludges from the manufacturing, formulation, and loading of lead-based initiating compounds. | (T) |
| K047 | Pink/red water from TNT operations. | (R) |
| Petroleum refining: | | |
| K048 | Dissolved air flotation (DAF) float from the petroleum refining industry. | (T) |
| K049 | Slop oil emulsion solids from the petroleum refining industry. | (T) |
| K050 | Heat exchanger bundle cleaning sludge from the petroleum refining industry. | (T) |
| K051 | API separator sludge from the petroleum refining industry. | (T) |
| K052 | Tank bottoms (leaded) from the petroleum refining industry. | (T) |
| K169 | Crude oil storage tank sediment from petroleum refining operations | (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 support media). | (I,T) |
| K172 | 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 Steel: | | |

| Hazardous Waste Number | Hazardous Waste | Hazard Code |
|---|---|---|
| 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 aluminum: | | |
| K088 | Spent potliners from primary aluminum reduction. | (T) |
| Secondary lead: | | |
| K069 | Emission control dust/sludge from secondary lead smelting. NOTE: This listing does not include sludge generated from secondary acid scrubber systems provided the primary air pollution control system is properly operated and maintained. Exempt sludge must be evaluated to determine if it exhibits a characteristic of a hazardous waste. | (T) |
| K100 | Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting. | (T) |
| Veterinary pharmaceuticals: | | |
| 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 from arsenic or organo-arsenic compounds. | (T) |

| Hazardous Waste Number | Hazardous Waste | Hazard Code |
|---|---|---|
| K102 | 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 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). | (T) |
| K142 | Tar storage tank residues from the production of coke from coal or from the recovery of coke by-products produced from coal. | (T) |
| K143 | Process residues from the recovery of light oil, including, but not limited to, those generated in stills, decanters, and wash oil recovery units from the recovery of coke by-products produced from coal. | (T) |

| Hazardous Waste Number | Hazardous Waste | Hazard Code |
|---|---|---|
| K144 | Wastewater sump residues from light oil refining, including, but not limited to, intercepting or contamination sump sludges from the recovery | (T) |
| K145 | Residues from naphthalene collection and recovery operations from the recovery of coke by-products produced from coal. | (T) |
| K147 | Tar storage tank residues from coal tar refining. | (T) |
| K148 | Residues from coal tar distillation, including but not limited to, still bottoms. | (T) |

(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 | Chemcial 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) Procedures for demonstrating that dyes and/or pigment nonwastewaters are not K181. 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. nts

1. Determination based on no K181 constituents. 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)] 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. Determination for generated quantities of 1,000 MT/yr or less for wastes that contain K181 constituents. 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. Determination for generated quantities greater than 1,000 MT/yr for wastes that contain K181 constituents. 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 non-wastewaters generated.

(IV) The calculations performed to determine annual mass loadings.

(xi) Non-hazardous waste determinations must be conducted annually to verify that the wastes remain non-hazardous.

(I) The annual testing requirements are suspended after three consecutive successful annual demonstrations that the wastes are non-hazardous. 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 non-hazardous 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. Waste holding and handling. 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) Discarded commercial chemical product, off-specification species, container residues, and spill residues thereof. 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 Rule 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:

| **Hazardous Waste No.** | **Chemical Abstracts No.** | **Substance** |
|---|---|---|
| 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) |

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|---|---|---|
| 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 $H_3AsO_4$ |
| P012 | 1327-53-3 | Arsenic oxide $As_2O_3$ |
| P011 | 1303-28-2 | Arsenic oxide $As_2O_5$ |
| 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)- |
| 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-trimethylphyrolo[2,3-b]indol-5-yl methylcarbamate ester (1:1) |
| P001 | [1]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 |

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|---|---|---|
| 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 |
| P189 | 55285-14-8 | Carbamic acid, [(dibutylamino)-thio]methyl- 2,3-dihydro-2,2-dimethyl-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 |
| P037 | 60-57-1 | Dieldrin |

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|---|---|---|
| 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, 4alpha,4abeta,5alpha,8alpha,8abeta)- |
| P060 | 465-73-6 | 1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a- hexahydro-, (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, 3beta,6beta, 6alpha,7beta,7alpha)- |
| P051 | [1]72-20-8 | 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)-, & metabolites |
| P044 | 60-51-5 | 60-51-5 |
| P046 | 122-09-8 | alpha, alpha-Dimethylphenethylamine |
| P191 | 644-64-4 | Dimetilan |
| P047 | [1]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 |

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|---|---|---|
| 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 |
| 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 |
| P197 | 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- |

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| 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]phenyl]-monohydrochloride |
| P197 | 17702-57-7 | Methanimidamide, N,N-dimethyl-N'-[2- methyl-4-[[(methylamino)carbonyl] 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, 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 |
| P072 | 86-88-4 | alpha-Naphthylthiourea |
| P073 | 13463-39-3 | Nickel carbonyl |
| P073 | 13463-39-3 | Nickel carbonyl $Ni(C0)_4$, (T-4)- |
| P074 | 557-19-7 | Nickel cyanide |
| P074 | 557-19-7 | Nickel cyanide $Ni(CN)_2$ |

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| P075 | [1]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 $NO_2$ |
| 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 OsO4, (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 | [1]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 |

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| 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 |
| P043 | 55-91-4 | Phosphorofluoridic acid, bis(1- methylethyl) ester |
| P089 | 56-38-2 | Phosphorothioic acid, 0,0-diethyl 0-(4-nitrophenyl) 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 |

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| 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, l-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-l-ol |
| P008 | 504-24-5 | 4-Pyridinamine |
| P075 | [1]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-counter nicotine replacement therapies) |
| P204 | 57-47-6 | Pyrrolo[2,3-b]indol-5-ol,1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)- |
| P114 | 12039-52-0 | Selenious acid, dithallium(l+) salt |
| P103 | 630-10-4 | Selenourea |
| P104 | 506-64-9 | Silver cyanide |
| P104 | 506-64-9 | Silver cyanide (Ag(CN) |
| P105 | 26628-22-8 | Sodium azide |
| P106 | 143-33-9 | Sodium cyanide |
| P106 | 143-33-9 | Sodium cyanide Na(CN) |
| P108 | [1]57-24-9 | Strychnidin-10-one, and salts |
| P118 | 357-57-3 | Strychnidin-10-one, 2,3-dimethoxy- |
| P108 | [1]57-24-9 | Strychnine, & salts |

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| P115 | 7446-18-6 | Sulfuric acid, dithallium(1+) 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 $Tl_2O_3$ |
| P114 | 12039-52-0 | Thallium(1) selenite |
| P115 | 7446-18-6 | Thallium(1) sulfate |
| P109 | 3689-24-5 | Thiodiphosphoric acid, tetraethyl ester |
| P045 | 39196-18-4 | Thiofanox |
| P049 | 541-53-7 | Thioimidodicarbonic diamide $[(H_2N)C(S)_2NH$ |
| P014 | 108-98-5 | Thiophenol |
| P116 | 79-19-6 | Thiosemicarbazide |
| P026 | 5344-82-1 | Thiourea, (2-chlorophenyl)- |
| P072 | 86-88-4 | Thiourea, 1-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 $V_2O_5$ |
| P120 | 1314-62-1 | Vanadium pentoxide |
| P084 | 4549-40-0 | Vinylamine, N-methyl-N-nitroso- |
| P001 | [1]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 $Zn(CN)_2$ |

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|---|---|---|
| P122 | 1314-84-7 | Zinc phosphide $Zn_3P_2$, when present at concentrations greater than 10% (R,T) |
| P205 | 137-30-4 | Ziram |

[1]CAS Number given for parent compound only.

(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 and are subject to the small quantity exclusion defined in 335-14-2-.01(5)(a) and (g).

These wastes and their corresponding EPA Hazardous Waste Numbers are:

| **Hazardous Waste No.** | **Chemical 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 | [1]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(1+)salt |

| Hazardous Waste No. | Chemical Abstracts No. | Substance |
|---|---|---|
| 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 |

| Hazardous Waste No. | Chemical Abstracts No. | Substance |
|---|---|---|
| U010 | 50-07-7 | Azirino[2,3:3,4]pyrrolo[1,2-a] indole-4,7-dione, 6-amino-8-[[(aminocarb onyl)oxy]methyl]-1,1a,2,8,8a,8b-hexahydro-8a -methoxy-5-methyl-,[1aS-(1aalpha,8beta,8aalpha,8balpha)]- |
| U280 | 101-27-9 | Barban |
| U278 | 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-(1,1-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-dimethyl- |
| U049 | 3165-93-3 | Benzenamine,4-chloro-2-methyl-, hydrochloride |

| Hazardous Waste No. | Chemical Abstracts No. | Substance |
|---|---|---|
| U093 | 60-11-7 | Benzenamine,N,N-dimethyl-4-(phenylazo)- |
| U328 | 95-53-4 | Benzenamine,2-methyl- |
| 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-chlorophenyl)-alpha-hydroxy-, ethylester |
| U030 | 101-55-3 | Benzene,l-bromo-4-phenoxy- |
| U035 | 305-03-3 | 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 |

| Hazardous Waste No. | Chemical Abstracts No. | Substance |
|---|---|---|
| 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, l-methyl-2,4-dinitro- |
| U106 | 606-20-2 | Benzene, 2-methyl-1,3-dinitro- |
| U055 | 98-82-8 | Benzene, (l-methylethyl)-(I) |

| Hazardous Waste No. | Chemical Abstracts No. | Substance |
|---|---|---|
| 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 |
| 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- |

| Hazardous Waste No. | Chemical Abstracts No. | Substance |
|---|---|---|
| U090 | 94-58-6 | 1,3-Benzodioxole, 5-propyl- |
| U064 | 189-55-9 | Benzo[rst]pentaphene |
| U248 | [1] 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 | [l,l'-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 | [l,l'-Biphenyl]-4,4-diamine,3,3'- dimethyl- |
| U225 | 75-25-2 | Bromoform |
| U030 | 101-55-3 | 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- |

| Hazardous Waste No. | Chemical Abstracts No. | Substance |
|---|---|---|
| U031 | 71-36-3 | l-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]methyl]-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 ester |
| U271 | 17804-35-2 | Carbamic acid, [1-[butylamino)carbonyl]-1H-benzimidazol-2-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 |

| Hazardous Waste No. | Chemical Abstracts No. | Substance |
|---|---|---|
| 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)-, S-(2,3,3-trichloro-2-propenyl)ester |
| U387 | 52888-80-9 | Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester |
| U114 | [1] 111-54-6 | Carbamodithioic acid, 1,2-ethane- diylbis-, salts & esters |
| U062 | 2303-16-4 | Carbamothioic acid, bis(1- 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 |

| Hazardous Waste No. | Chemical Abstracts No. | Substance |
|---|---|---|
| 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 $H_2CrO_4$, calciumsalt |
| U050 | 218-01-9 | Chrysene |
| U051 | | Creosote |

| Hazardous Waste No. | Chemical Abstracts No. | Substance |
|---|---|---|
| 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 | [1] 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 |

| Hazardous Waste No. | Chemical Abstracts No. | Substance |
|---|---|---|
| U063 | 53-70-3 | Dibenz[a,h]anthracene |
| U064 | 189-55-9 | Dibenzo[a,i]pyrene |
| U066 | 96-12-8 | 1,2-Dibromo-3-chloropropane |
| U069 | 84-74-2 | Dibutylphthalate |
| U070 | 95-50-1 | o-Dichlorobenzene |
| U071 | 541-73-1 | m-Dichlorobenzene |
| U072 | 106-46-7 | p-Dichlorobenzene |
| U073 | 91-94-1 | 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 |
| U027 | 108-60-1 | Dichloroisopropylether |
| U024 | 111-91-1 | Dichloromethoxyethane |
| U081 | 120-83-2 | 2,4-Dichlorophenol |

| Hazardous Waste No. | Chemical Abstracts No. | Substance |
|---|---|---|
| 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 |

| Hazardous Waste No. | Chemical Abstracts No. | Substance |
|---|---|---|
| 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 |
| Ull0 | 142-84-7 | Dipropylamine (I) |
| Ulll | 621-64-7 | Di-n-propylnitrosamine |
| U041 | 106-89-8 | Epichlorohydrin |
| U001 | 75-07-0 | Ethanal (I) |

| Hazardous Waste No. | Chemical Abstracts No. | Substance |
|---|---|---|
| U404 | 121-44-8 | Ethanamine, N,N-diethyl- |
| 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, l,l-dichloro- |
| U077 | 107-06-2 | Ethane, 1,2-dichloro- |
| U131 | 67-72-1 | Ethane,hexachloro- |
| U024 | 111-91-1 | Ethane,l,l'-[methylenebis(oxy)] bis[2-chloro- |
| U117 | 60-29-7 | Ethane, l,l'-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 | Ethane, 1,1,2,2-tetrachloro- |
| U218 | 62-55-5 | Ethanethioamide |

| Hazardous Waste No. | Chemical Abstracts No. | Substance |
|---|---|---|
| U226 | 71-55-6 | Ethane, l,l,l-trichloro- |
| U227 | 79-00-5 | Ethane, 1,1,2-trichloro- |
| U410 | 59669-26-0 | Ethanimidothioic acid, N,N'-[thiobis[(methylimino) carbonyloxy]]bis-, dimethyl ester |
| U394 | 30558-43-1 | Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-, methyl ester |
| U359 | 110-80-5 | Ethanol, 2-ethoxy- |
| U173 | [1] 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, l,l-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) |

| Hazardous Waste No. | Chemical Abstracts No. | Substance |
|---|---|---|
| U113 | 140-88-5 | Ethyl acrylate (I) |
| U238 | 51-79-6 | Ethyl carbamate (urethane) |
| U117 | 60-29-7 | Ethyl ether (I) |
| U114 | [1] 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 |
| U122 | 50-00-0 | Formaldehyde |
| U123 | 64-18-6 | Formic acid( C,T) |
| U124 | 110-00-9 | Furan (I) |

| Hazardous Waste No. | Chemical Abstracts No. | Substance |
|---|---|---|
| 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) |

| Hazardous Waste No. | Chemical Abstracts No. | Substance |
|---|---|---|
| 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 $H_2S$ |
| 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 |

| Hazardous Waste No. | Chemical Abstracts No. | Substance |
|---|---|---|
| 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 |
| 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- |

| Hazardous Waste No. | Chemical Abstracts No. | Substance |
|---|---|---|
| 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- octachloro-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 |

| Hazardous Waste No. | Chemical Abstracts No. | Substance |
|---|---|---|
| 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) |

| Hazardous Waste No. | Chemical Abstracts No. | Substance |
|---|---|---|
| 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 |
| 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, 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 |

| Hazardous Waste No. | Chemical Abstracts No. | Substance |
|---|---|---|
| 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 |

| Hazardous Waste No. | Chemical Abstracts No. | Substance |
|---|---|---|
| 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- |

| Hazardous Waste No. | Chemical Abstracts No. | Substance |
|---|---|---|
| U089 | 56-53-1 | Phenol, 4,4’-(1,2-diethyl-1,2-ethenediyl)bis-,(E)- |
| U101 | 105-67-9 | Phenol, 2,4-dimethyl- |
| 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 | Phosphoric acid, lead(2+) salt(2:3) |
| U087 | 3288-58-2 | Phosphorodithioic acid, O,O-diethyl S-methylester |
| U189 | 1314-80-3 | Phosphorous sulfide (R) |

| Hazardous Waste No. | Chemical Abstracts No. | Substance |
|---|---|---|
| U190 | 85-44-9 | Phthalic anhydride |
| U191 | 109-06-8 | 2-Picoline |
| U179 | 100-75-4 | Piperidine, l-nitroso- |
| U192 | 23950-58-5 | Pronamide |
| U194 | 107-10-8 | l-Propanamine (I,T) |
| U111 | 621-64-7 | l-Propanamine, N-nitroso-N-propyl- |
| U110 | 142-84-7 | l-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 | l-Propanol, 2-methyl-(I,T) |

| Hazardous Waste No. | Chemical Abstracts No. | Substance |
|---|---|---|
| U002 | 67-64-1 | 2-Propanone (I) |
| U007 | 79-06-1 | 2-Propenamide |
| U084 | 542-75-6 | l-Propene, 1,3-dichloro- |
| U243 | 1888-71-7 | l-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 | Propoxur |
| 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- |

| Hazardous Waste No. | Chemical Abstracts No. | Substance |
|---|---|---|
| U196 | 110-86-1 | Pyridine |
| U191 | 109-06-8 | Pyridine, 2-methyl- |
| 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-thioxo- |
| 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 |

| Hazardous Waste No. | Chemical Abstracts No. | Substance |
|---|---|---|
| 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 |
| U208 | 95-94-3 | 1,1,1,2-Tetrachloroethane |
| U209 | 630-20-6 | 1,1,2,2-Tetrachloroethane |
| U210 | 127-18-4 | Tetrachloroethylene |
| SeeF027 | 58-90-2 | 2,3,4,6-Tetrachlorophenol |
| U213 | 109-99-9 | Tetrahydrofuran(I) |
| U214 | 563-68-8 | Thallium(I) acetate |
| U215 | 6533-73-9 | Thallium(I) carbonate |
| U216 | 7791-12-0 | Thallium(I) chloride |
| U216 | 7791-12-0 | Thallium chloride TlCl |
| U217 | 10102-45-1 | Thallium(I) nitrate |
| U218 | 62-55-5 | Thioacetamide |
| U410 | 59669-26-0 | Thiodicarb |

| Hazardous Waste No. | Chemical Abstracts No. | Substance |
|---|---|---|
| U153 | 74-93-1 | Thiomethanol(I,T) |
| U244 | 137-26-8 | Thioperoxydicarbonic diamide[$(H_2N)C(S)]2S2$,tetrameth |
| U409 | 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 |
| U227 | 79-00-5 | 1,1,2-Trichloroethane |
| U228 | 79-01-6 | Trichloroethylene |
| U121 | 75-69-4 | Trichloromonofluoromethane |

| Hazardous Waste No. | Chemical Abstracts No. | Substance |
|---|---|---|
| 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 | [1] 81-81-2 | Warfarin, & salts, when present at concentrations of 0.3% or less |
| U239 | 1330-20-7 | Xylene(I) |
| U200 | 50-55-5 | Yohimban-16-carboxylicacid,11,17-dimethoxy-18-[(3,4,5-trimethoxy- benzoyl)oxy]-,methylester, (3beta, 16beta,17alpha,18beta,20alpha)- |
| U249 | 1314-84-7 | Zincphosphide,Zn3P2,when present at concentrations of 10% or less |

[1] CAS Number given for parent compound only.

(5) [Reserved]

(6) Deletion of Certain Hazardous Waste Codes Following Equipment Cleaning and Replacement.

(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

(iii) Document cleaning and replacement in accordance with 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;

(III) The solvent to be used in cleaning;

(IV) How solvent rinses will be tested; and

(V) How cleaning residues will be disposed.

(ii) Equipment must be cleaned as follows:

(I) Remove all visible residues from process equipment;

(II) Rinse process equipment with an appropriate solvent until dioxins and dibenzofurans are not detected in the final solvent rinse.

(iii) Analytical requirements.

(I) Rinses must be tested by using an appropriate method.

(II) "Not detected" means at or below the following lower method calibration limits (MCLs): The 2,3,7,8-TCDD-based MCL-0.01 parts per trillion (ppt), sample weight of 1000g, IS µspiking level of 1 ppt, final extraction volume of 10-50 L. 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.

(iv) The generator must manage all residues from the cleaning process as F032 waste.

3. Replacement requirements.

(i) Prepare and sign a written equipment replacement plan that describes:

(I) The equipment to be replaced;

(II) How the equipment will be replaced; and

(III) How the equipment will be disposed.

(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]

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**335-14-2-.05 Exclusions/Exemptions.**

(1) Conditional exclusion for used, broken cathode ray tubes (CRTs) and processed CRT glass undergoing recycling. Used, broken CRTs are not solid wastes if they meet the following conditions:

(a) Prior to processing: These materials are not solid wastes if they are destined for recycling and if they meet the following requirements:

1. Storage. The broken CRTs must be either:

(i) Stored in a building with a roof, floor, and walls, or

(ii) Placed in a container (i.e., a package or a vehicle) that is constructed, filled, and closed to minimize releases to the environment of CRT glass (including fine solid materials).

2. Labeling. Each container in which the used, broken CRT is contained must be labeled or marked clearly with one of the following phrases: ''Used cathode ray tube(s) - contains leaded glass'' or ''Leaded glass from televisions or computers.'' It must also be labeled: ''Do not mix with other glass materials.''

3. Transportation. The used, broken CRTs must be transported in a container meeting the requirements of 335-14-2-.05(1)(a)1.(ii) and (a)2.

4. Speculative accumulation and use constituting disposal. The used, broken CRTs are subject to the limitations on speculative accumulation as defined in 335-14-1-.02. If they are used in a manner constituting disposal, they must comply with the applicable requirements of 335-14-7-.03 instead of the requirements of 335-14-2-.05(1).

5. Exports. In addition to the applicable conditions specified in 335-14-2-.05(1)(a)1. – 4., exporters of used, broken CRTs must comply with the following requirements:

(i) Notify EPA of an intended export before the CRTs are scheduled to leave the United States. A complete notification should be submitted sixty (60) days before the initial shipment is intended to be shipped off-site. This notification may cover export activities extending over a twelve (12) month or lesser period. The notification must be in writing, signed by the exporter, and include the following information:

(I) Name, site address, telephone number and EPA ID number (if applicable) of the exporter of the CRTs.

(II) The estimated frequency or rate at which the CRTs are to be exported and the period of time over which they are to be exported.

(III) The estimated total quantity of CRTs specified in kilograms.

(IV) All points of entry to and departure from each foreign country through which the CRTs will pass.

(V) A description of the means by which each shipment of the CRTs will be transported [e.g., mode of transportation vehicle (air, highway, rail, water, etc.), type(s) of container (drums, boxes, tanks, etc.)].

(VI) The name and site address of the recycler or recyclers and the estimated quantity of used CRTs to be sent to each facility, as well as the names of any alternate recyclers.

(VII) A description of the manner in which the CRTs will be recycled in the foreign country that will be receiving the CRTs.

(VIII) The name of any transit country through which the CRTs will be sent and a description of the approximate length of time the CRTs will remain in such country and the nature of their handling while there.

(ii) Notifications must be submitted electronically using EPA's Waste Import Export Tracking System (WIETS), or its successor system.

(iii) Upon request by EPA, the exporter shall furnish to EPA any additional information which a receiving country requests in order to respond to a notification.

(iv) EPA will provide a complete notification to the receiving country and any transit countries. A notification is complete when EPA receives a notification which EPA determines satisfies the requirements of 335-14-2-.05(1)(a)5.(i).

(v) The export of CRTs is prohibited unless all of the following occur:

(I) The receiving country consents to the intended export. When the receiving country consents in writing to the receipt of the CRTs, EPA will forward an Acknowledgment of Consent to Export CRTs to the exporter. Where the receiving country objects to receipt of the CRTs or withdraws a prior consent, EPA will notify the exporter in writing. EPA will also notify the exporter of any responses from transit countries.

(II) The exporter or a U.S. authorized agent must:

A. Submit Electronic Export Information (EEI) for each shipment to the Automated Export System (AES) or its successor system, under the International Trade Data System (ITDS) platform, in accordance with 15 CFR 30.4(b).

B. Include the following items in the EEI, along with the other information required under 15 CFR 30.6:

I. EPA license code;

II. Commodity classification code per 15 CFR 30.6(a)(12);

III. EPA consent number;

IV. Country of ultimate destination per 15 CFR 30.6(a)(5);

V. Date of export per 15 CFR 30.6(a)(2);

VI. Quantity of waste in shipment and units for reported quantity, if required reporting units established by value for the reported commodity classification number are in units of weight or volume per 15 CFR 30.6(a)(15); or

VII. EPA net quantity reported in units of kilograms, if required reporting units established by value for the reported commodity classification number are not in units of weight or volume.

(vi) When the conditions specified on the original notification change, the exporter must provide EPA with a written renotification of the change using the allowable methods listed in 335-14-2-.05(1)(a)5.(ii), except for changes to the telephone number in 335-14-2-.05(1)(a)5.(i)(I) and decreases in the quantity indicated pursuant to 335-14-2-.05(1)(a)5.(i)(III). The shipment cannot take place until consent of the receiving country to the changes has been obtained [except for changes to information about points of entry and departure and transit countries pursuant to 335-14-2-.05(1)(a)5.(i)(IV) and (VIII)] and the exporter of CRTs receives from EPA a copy of the Acknowledgment of Consent to Export CRTs reflecting the receiving country's consent to the changes.

(vii) A copy of the Acknowledgment of Consent to Export CRTs must accompany the shipment of CRTs. The shipment must conform to the terms of the Acknowledgment.

(viii) If a shipment of CRTs cannot be delivered for any reason to the recycler or the alternate recycler, the exporter of CRTs must renotify EPA of a change in the conditions of the original notification to allow shipment to a new recycler in accordance with 335-14-2-.05(1)(a)5.(vi) and obtain another Acknowledgment of Consent to Export CRTs.

(ix) Exporters must keep copies of notifications and Acknowledgments of Consent to Export CRTs for a period of three years following receipt of the Acknowledgment. Exporters may satisfy this recordkeeping requirement by retaining electronically

submitted notifications or electronically generated Acknowledgements in the CRT exporter's account on EPA's Waste Import Export Tracking System (WIETS), or its successor system, provided that such copies are readily available for viewing and production if requested by any EPA or authorized state inspector. No CRT exporter may be held liable for the inability to produce a notification or Acknowledgement for inspection under 335-14-2-.05(1) if the CRT exporter can demonstrate that the inability to produce such copies are due exclusively to technical difficulty with EPA's Waste Import Export Tracking System (WIETS), or its successor system for which the CRT exporter bears no responsibility.

(x) CRT exporters must file with EPA no later than March 1 of each year, an annual report summarizing the quantities (in kilograms), frequency of shipment, and ultimate destination(s) (i.e., the facility or facilities where the recycling occurs) of all used CRTs exported during the previous calendar year. Such reports must also include the following:

(I) The name, EPA ID number (if applicable), and mailing and site address of the exporter;

(II) The calendar year covered by the report;

(III) A certification signed by the CRT exporter that states:

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

(xi) Annual reports must be submitted to the EPA using the allowable methods specified in paragraph (a)(5)(ii) of 335-14-2-.05(1). Exporters must keep copies of each annual report for a period of at least three years from the due date of the report. Exporters may satisfy this recordkeeping requirement by retaining electronically submitted annual reports in the CRT exporter's account on the EPA's Waste Import Export Tracking System (WIETS), or its successor system, provided that a copy is readily available for viewing and production if requested by

the EPA or any authorized State inspector. No CRT exporter may be held liable for the inability to produce an annual report for inspection under 335-14-2-.05(1) if the CRT exporter can demonstrate that the inability to produce the annual report is due exclusively to technical difficulty with the EPA's Waste Import Export Tracking System (WIETS), or its successor system for which the CRT exporter bears no responsibility.

(b) Requirements for used CRT processing: Used, broken CRTs undergoing CRT processing as defined in 335-14-1-.02 are not solid wastes if they meet the following requirements:

1. Storage. Used, broken CRTs undergoing processing are subject to the requirement of 335-14-2-.05(1)(a)4.

2. Processing.

(i) All activities specified in paragraphs (b) and (c) of the definition of ''CRT processing'' in 335-14-1-.02 must be performed within a building with a roof, floor, and walls; and

(ii) No activities may be performed that use temperatures high enough to volatilize lead from CRTs.

(c) Processed CRT glass sent to CRT glass making or lead smelting: Glass from used CRTs that is destined for recycling at a CRT glass manufacturer or a lead smelter after processing is not a solid waste unless it is speculatively accumulated as defined in 335-14-1-.02.

(d) Use constituting disposal: Glass from used CRTs that is used in a manner constituting disposal must comply with the requirements of 335-14-7-.03 instead of the requirements of 335-14-2-.05(1).

(2) Conditional exclusion for used, intact cathode ray tubes (CRTs) exported for recycling. Used, intact CRTs exported for recycling are not solid wastes if they meet the notice and consent conditions of 335-14-2-.05(1)(a)5., and if they are not speculatively accumulated as defined in 335-14-1-.02.

(3) Notification and Recordkeeping for Used, Intact Cathode Ray Tubes (CRTs) Exported for Reuse.

(a) CRT exporters who export used, intact CRTs for reuse must send a notification to EPA. This notification may cover export activities extending over a twelve (12) month or lesser period.

1. The notification must be in writing, signed by the exporter, and include the following information:

(i) Name, mailing address, telephone number, and EPA ID number (if applicable) of the exporter of the used, intact CRTs;

(ii) The estimated frequency or rate at which the used, intact CRTs are to be exported for reuse and the period of time over which they are to be exported;

(iii) The estimated total quantity of used, intact CRTs specified in kilograms;

(iv) All points of entry to and departure from each transit country through which the used, intact CRTs will pass, a description of the approximate length of time the used, intact CRTs will remain in such country, and the nature of their handling while there;

(v) A description of the means by which each shipment of the used, intact CRTs will be transported (e.g., mode of transportation vehicle (air, highway, rail, water, etc.), type(s) of container (drums, boxes, tanks, etc.));

(vi) The name and address of the ultimate destination facility or facilities where the used, intact CRTs will be reused, refurbished, distributed, or sold for reuse and the estimated quantity of used, intact CRTs to be sent to each facility, as well as the name of any alternate destination facility or facilities;

(vii) A description of the manner in which the used, intact CRTs will be reused (including reuse after refurbishment) in the foreign country that will be receiving the used, intact CRTs; and

(viii) A certification signed by the CRT exporter that states:

"I certify under penalty of law that the CRTs described in this notice are intact and fully functioning or capable of being functional after refurbishment and that the used CRTs will be reused or refurbished and reused. I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the

submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

2. Notifications required by Division 335-14 shall be addressed to the following:

Mail:

Office of Enforcement and Compliance Assurance,
Office of Federal Activities
International Compliance Assurance Division, (Mail Code 2254A),
Environmental Protection Agency
1200 Pennsylvania Ave, NW.
Washington, DC 20460

Hand Delivery:

Office of Enforcement and Compliance Assurance,
Office of Federal Activities
International Compliance Assurance Division, (Mail Code 2254A),
Environmental Protection Agency, Management
William Jefferson Clinton Building, Room 6144
1200 Pennsylvania Ave, NW.
Washington, DC 20460.

In both cases, the following shall be prominently displayed on the front of the envelope: "Attention: Notification of Intent to Export CRTs."

(b) CRT exporters of used, intact CRTs sent for reuse must keep copies of normal business records, such as contracts, demonstrating that each shipment of exported used, intact CRTs will be reused. This documentation must be retained for a period of at least three years from the date the CRTs were exported. If the documents are written in a language other than English, CRT exporters of used, intact CRTs sent for reuse must provide both the original, non-English version of the normal business records as well as a third-party translation of the normal business records into English within 30 days upon request by EPA.

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**335-14-2-.06 [Reserved].**
**Author:**
**Statutory Authority:** Code of Ala. 1975,
**History:**

**335-14-2-.07 [Reserved].**
**Author:**
**Statutory Authority:** Code of Ala. 1975,
**History:**

**335-14-2-.08 Financial Requirements For Management Of Excluded Hazardous Secondary Materials.**

(1) Applicability

(a) The requirements of 335-14-2-.08 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 335-14-2-.08.

(b) States and the Federal government are exempt from the financial assurance requirements of 335-14-2-.08.

(2) Definitions of terms as used in 335-14-2-.08. Some terms used in this section are defined in 335-14-1-.02 and 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 Survey of Current Business, 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 adjustments 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 by 335-14-2-.01(4)(a)24. He must choose from the options as specified in 335-14-2-.08(4)(a) through (e).

(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 335-14-2-.08.

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.

7. 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 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 335-14-2-.08 in accordance with 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 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 alternatefinancial 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), 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 335-14-2-.08 in accordance with 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 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 335-14-2-.08(4)(f). 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.

5. 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. 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. 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;

(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, 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, 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 finds, 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).

10. An owner or operator may meet the requirements of 335-14-2-.08(4) 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, etc.; 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) **Liability requirements**.

(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, 2, 3, 4, 5, or 6:

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)(b) 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)(b) 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)(b) 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)(b) 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)(b). 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 non-sudden 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.

(b) Coverage for non-sudden accidental occurrences. An owner or 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 non-sudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator must have and maintain liability coverage for non-sudden 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 335-14-2-.08 may combine the required per-occurrence coverage levels for sudden and non-sudden accidental occurrences into a single per-occurrence level, and combine the required annual aggregate coverage levels for sudden and non-sudden accidental occurrences into a single annual aggregate level. Owners or operators who combine coverage levels for sudden and non-sudden 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., 2., 3., 4., 5., or 6.:

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 non-sudden 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 non-sudden 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

(III) 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, 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 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 Department 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 non-sudden 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 the Department 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 the Department 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 the Department 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. "The full amount of the liability coverage to be provided" means the amount of coverage for sudden and/or non-sudden 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)(l).

(9) Incapacity of owners or operators, guarantors, or financial institutions.

(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 335-14-2-.08. 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. et seq.80a-1 , 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 its 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 Department, or by the Trustee and the 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. 335-14-2-.08(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. 335-14-2-.08(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 co-sureties, 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 the 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.,

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.

**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: $_____

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

**Irrevocable Standby Letter of Credit**

Director

Alabama Department of Environmental Management

Dear Sir or Madam: We hereby establish our Irrevocable Standby Letter of Credit No._____ in your favor, in the event that the hazardous secondary materials at the covered reclamation or intermediary facility(ies) no longer meet the conditions of the exclusion under ADEM Admin. Code r. 335-14-2-.01(4)(a)24., at the request and for the account of [owner's or operator's name and address] up to the aggregate amount of [in words] U.S. dollars $_____, available upon presentation of

(1) your sight draft, bearing reference to this letter of credit No._____, and

(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."

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]

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)(d), 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**

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. 335-14-2-.08(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. 335-14-2-.08(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 subpart H of 40 CFR part 261, 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 EPA, the Department, or another authorized 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: _____.

6. 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 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].

8. In States where EPA is not administering the financial requirements of subpart H of 40 CFR part 264 or 265, 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: _____.

9. 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 EPA, the Department, or another authorized state 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.(i). Fill in Alternative II if the criteria of 335-14-2-.08(4)(e)1.(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 assets $_____

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

15. Tangible net worth [if any portion of the cost stimates is included in "total liabilities" on your firm's financial statements, you may add the amount of that portion to 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 line10. 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 335-14-2-.08(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. 335-14-2-.08(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. 335-14-2-.08(8) [insert "and costs assured under ADEM Admin. Code r. 335-14-2-.08(4)(e)" if applicable] as specified in ADEM Admin. Code r. 335-14-2-.08.

[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 "non-sudden" or "both sudden and nonsudden"] accidental occurrences is being demonstrated through the financial test specified in ADEM Admin. Code r. 335-14-2-.08: _____ The firm identified above guarantees, through the guarantee specified in ADEM Admin. Code r. 335-14-2-.08, liability coverage for [insert "sudden" or "non-sudden" 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 "non-sudden" or "both sudden and nonsudden"] accidental occurrences is being demonstrated through the financial test specified ADEM Admin. Code r. 335-14-5-.08 and 335-14-6-.08: _____

The firm identified above guarantees, through the guarantee specified in ADEM Admin. Code r. 335-14-5-.08 and 335-14-6-.08, liability coverage for [insert "sudden" or "non-sudden" or "both sudden and non-sudden"] 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. 335-14-2-.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), 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. 335-14-2-.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 the U.S. EPA or some designated authority is administering the financial requirements of subpart H of 40 CFR part 261, 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 subpart H of 40 CFR part 261. 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 EPA, the Department, or another authorized state through the financial test or any other financial assurance mechanism specified in subpart H of 40 CFR part 261. 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: _____.

6. 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 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].

8. 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 post-closure care of the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in subpart H of 40 CFR part 264 and 265. The current closure and/or post-closure cost estimates covered by such a test are shown for each facility: _____.

9. 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 $_____

6. If less than 90% of assets are located in the U.S. give total U.S. assets. $ Yes_____ No_____

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 line10. 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. 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. Total liabilities (if any portion of your cost 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 firm's 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 of bond _____

6. Date of maturity of 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.335-14-5 or 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 the 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 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-1isted 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 non-sudden] 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 "non-sudden" or "both sudden and non-sudden"] 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 non-sudden] 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 non-sudden] 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-1isted 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 non-sudden] 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 non-sudden 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. 335-14-2-.08(12)(g)2. 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 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," "non-sudden accidental occurrences," or "sudden and non-sudden 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 non-sudden 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 _____, 20__. The effective date of said policy is _____ day of _____, 20__.

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," "non-sudden accidental occurrences," or "sudden and non-sudden 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.

(e) Any other termination of the insurance 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.

I hereby certify that the wording of this instrument is identical to the wording specified in ADEM Admin. Code r. 335-14-2-.08(12)(i) 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]

(j) A letter of credit, 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:

**Irrevocable Standby Letter of Credit**

Name and Address of Issuing Institution

_____

Regional Administrator(s)

_____

Region(s)

_____

U.S. Environmental Protection Agency

_____

Dear Sir or Madam: We hereby establish our Irrevocable Standby Letter of Credit No. _____ in the favor of ["any and all third-party liability claimants" or insert name of trustee of the standby trust fund], at the request and for the account of [owner or operator's name and address] for third-party liability awards or settlements up to [in words] U.S. dollars $_____ per occurrence and the annual aggregate amount of [in words] U.S. dollars $_____, for sudden accidental occurrences and/or for third-party liability awards or settlements up to the amount of [in words] U.S. dollars $_____ per occurrence, and the annual aggregate amount of [in words] U.S. dollars $_____, for non-sudden accidental occurrences available upon presentation of a sight draft bearing reference to this letter of credit No. _____, and [insert the following language if the letter of credit is being used without a standby trust fund:

(1) a signed certificate reading as follows:

**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 non-sudden] 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:

(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 any 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.

[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 non-sudden

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 guaranteed by this bond:

| | Sudden accidental occurrences | Non-sudden 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 "non-sudden"] 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, 335-14-6, 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 “non-sudden”] 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 non-sudden] accidental occurrence arising from operating [Principal's] facility should be paid in the amount of $[_____].

[Signature]

Principal

[Notary]

Date

[Signature(s)]

Claimant(s)

[Notary]

Date

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

(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 Department, 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. 335-14-2-.08(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 non-sudden accidental occurrences arising from operations of the facility or group of facilities.

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 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 non-sudden] 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 non-sudden 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 non-sudden] 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 non-sudden 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)(l) 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 trust fund as specified in ADEM Admin. Code r. 335-14-2-.08(8)(h).

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]

(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 non-sudden 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 non-sudden] 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 non-sudden 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 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 should be paid in the amount of $[_____]

[Signature]

_____

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 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.

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 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 hereto by like order.

_____

[Signature of Notary Public]

**Author:** Bradley N. Curvin, Vernon H. Crockett, Sonja B Favors, Brent A. Watson; Jonah L. Harris
**Statutory Authority:** Code of Ala. 1975, §§22-30-11.
**History: New Rule:** Filed February 23, 20016; effective April 8, 2016. **Amended:** Filed February 14, 2017; effective March 31, 2017. **Amended:** Filed February 19, 2019; effective April 6, 2019. **Amended:** Published February 28, 2020; effective April 13, 2020. **Amended:** Published December 31, 2020; effective February 14, 2021. **Amended:** Published April 28, 2023; effective June 12, 2023. **Amended:** Published December 31, 2025; effective February 14, 2026.

## 335-14-2-.09 Use And Management Of Containers.

(1) Applicability. 335-14-2-.09 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 335-14-2-.09.

(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 container 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 335-14-2-.09(6)(b).

(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 335-14-2-.09(6)

(b)(3) 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. Jonah L. Harris.
**Statutory Authority:** Code of Ala. 1975, §§22-30-11.
**History: New Rule:** Filed February 23, 20016; effective April 8, 2016. **Amended:** Published February 28, 2020; effective April 13, 2020. **Amended:** Published April 28, 2023; effective June 12, 2023.

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

(1) Applicability

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

(b) Tank systems, including sumps, as defined in 335-14-1-.02(1), that serve as part of a secondary containment system to

collect or contain releases of hazardous secondary materials are exempted from the requirements in 335-14-2-.10(4)(a).

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

(a) Tank systems must meet the secondary containment requirements of 335-14-2-.10(4), or the remanufacturer or other person that handles the hazardous secondary material must determine that the tank system is not leaking or is unfit for use. Except as provided in 335-14-2-.10(2)(c), 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 335-14-2-.10(2)(a), 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 335-14-2-.10(4)(a), 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) except for:

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

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

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

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

(5) General operating requirements

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

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

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

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

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

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

(6) [Reserved].

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

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

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

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

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

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

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

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

(d) *Notifications, reports*.

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

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

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

(ii) Immediately contained and cleaned up.

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

(i) Likely route of migration of the release;

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

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

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

(v) Description of response actions taken or planned.

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

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

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

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

4. If the source of the release was a leak to the environment from a component of a tank system without secondary containment, the remanufacturer or other person that stores or treats the hazardous secondary material

must provide the component of the system from which the leak occurred with secondary containment that satisfies the requirements of 335-14-2-.10(4) before it can be returned to service, unless the source of the leak is an aboveground portion of a tank system that can be inspected visually. If the source is an aboveground component that can be inspected visually, the component must be repaired and may be returned to service without secondary containment as long as the requirements of 335-14-2-.10(7)(f) 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 335-14-2-.10(7)(e), and the repair has been extensive ( e.g., installation of an internal liner; repair of a ruptured primary containment or secondary containment vessel), the tank system must not be returned to service unless the remanufacturer or other person that stores or treats the hazardous secondary material has obtained a certification by a qualified Professional Engineer that the repaired system is capable of handling hazardous secondary materials without release for the intended life of the system. This certification must be kept on file at the facility and maintained until closure of the facility.

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

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

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

(9) Special requirements for ignitable or reactive materials.

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

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

(10) Special requirements for incompatible materials.

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

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

(11) Air emission standards. The remanufacturer or other person that stores or treats the hazardous secondary material shall manage all hazardous secondary material placed in a tank in accordance with the applicable requirements of subparts AA [incorporated by reference in 335-14-2-.27], BB [incorporated by reference in 335-14-2-.28], and CC [incorporated by reference in 335-14-2-.29].
**Author:** Bradley N. Curvin, Metz P. Duites, Sonja B. Favors, Brent A Watson, Jonah L. Harris.
**Statutory Authority:** Code of Ala. 1975, §§22-30-11.
**History:** **New Rule:** Filed February 23, 20016; effective April 8, 2016. **Amended:** Published February 28, 2020; effective April 13, 2020. **Amended:** Published April 28, 2023; effective June 12, 2023.

**335-14-2-.11 [Reserved].**
**Author:**
**Statutory Authority:**
**History:**

**335-14-2-.12 [Reserved].**
**Author:**
**Statutory Authority:**
**History:**

## 335-14-2-.13 Emergency Preparedness And Response For Management Of Excluded Hazardous Secondary Materials.

(1) Applicability. The requirements of 335-14-2-.13 apply to (1) those areas of an entity managing hazardous secondary materials excluded under 335-14-2-.01(4)(a)23. and/or 335-14-2-.01(4)(a)24. where such materials are generated or accumulated on site, and (2) facilities regulated under the standards at 335-14-7-.17 that receive ignitable spent refrigerant from off-site and that are not transfer facilities that store the refrigerants for less than ten (10) days.

(a) A generator of hazardous secondary material, or an intermediate or reclamation facility, that accumulates 6000 kg or less of hazardous secondary material at any time must comply with 335-14-2-.13(11) and 335-14-2-.13(12).

(b) A generator of hazardous secondary material, or an intermediate or reclamation facility, that accumulates more than 6000 kg of hazardous secondary material at any time must comply with 335-14-2-.13(11) and 335-14-2-.13(21).

(c) Facilities receiving refrigerant from off-site under 335-14-7-.17 that are not transfer facilities that store the refrigerants for less than ten (10) days must comply with 335-14-2-.13(11) and 335-14-2-.13(21).

(2) through (10) [Reserved].

(11) Preparedness and prevention.

(a) Maintenance and operation of facility Facilities generating or accumulating hazardous secondary material must be maintained and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous secondary materials or hazardous secondary material constituents to air, soil, or surface water which could threaten human health or the environment.

(b) Required equipment All facilities generating or accumulating hazardous secondary material must be equipped with the following, unless none of the hazards posed by hazardous secondary material handled at the facility could require a particular kind of equipment specified below:

1. An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel;

2. 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 police departments, fire departments, or state or local emergency response teams;

3. 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

4. Water at adequate volume and pressure to supply water hose streams, or foam producing equipment, or automatic sprinklers, or water spray systems. .

(c) Testing and maintenance of equipment All facility 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. .

(d) Access to communications or alarm system

1. Whenever hazardous secondary material is being poured, mixed, spread, or otherwise handled, all personnel involved in the operation must have immediate 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 335-14-2-.13(11)(b).

2. If there is ever just one employee on the premises while the facility is operating, he must have immediate 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 335-14-2-.13(11)(b).

(e) Required aisle space. The hazardous secondary material generator or intermediate or reclamation facility 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.

(f) Arrangements with local authorities

1. The hazardous secondary material generator or an intermediate or reclamation facility must attempt to make the following arrangements, as appropriate for the type

of waste handled at his facility and the potential need for the services of these organizations:

(i) Arrangements to familiarize police, fire departments, and emergency response teams with the layout of the facility, properties of hazardous secondary material 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;

(ii) Where more than one police and fire department might respond to an emergency, agreements designating primary emergency authority to a specific police and a specific fire department, and agreements with any others to provide support to the primary emergency authority;

(iii) Agreements with state emergency response teams, emergency response contractors, and equipment suppliers; and

(iv) Arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries or illnesses which could result from fires, explosions, or releases at the facility.

2. Where state or local authorities decline to enter into such arrangements, the hazardous secondary material generator or an intermediate or reclamation facility must document the refusal in the operating record.

(12) Emergency procedures for facilities generating or accumulating 6000 kg or less of hazardous secondary material. A generator or an intermediate or reclamation facility that generates or accumulates 6000 kg or less of hazardous secondary material must comply with the following requirements:

(a) At all times there must be at least one employee i.e., either on the premises or on call (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 335-14-2-.13(12)(d). This employee is the emergency coordinator.

(b) The generator or intermediate or reclamation facility must post the following information next to the telephone:

1. The name and telephone number of the emergency coordinator;

2. Location of fire extinguishers and spill control material, and, if present, fire alarm; and

3. The telephone number of the fire department, unless the facility has a direct alarm.

(c) The generator or an intermediate or reclamation facility 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;

(d) The emergency coordinator or his designee must respond to any emergencies that arise. The applicable responses are as follows:

1. In the event of a fire, call the fire department or attempt to extinguish it using a fire extinguisher;

2. In the event of a spill, contain the flow of hazardous waste to the extent possible, and as soon as is practicable, clean up the hazardous waste and any contaminated materials or soil;

3. In the event of a fire, explosion, or other release which could threaten human health outside the facility or when the generator or an intermediate or reclamation facility has knowledge that a spill has reached surface water, the generator or an intermediate or reclamation facility 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 facility;

(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.

(13) through (20) [Reserved].

(21) Contingency planning and emergency procedures for facilities generating or accumulating more than 6,000 kg of hazardous secondary material or receiving ignitable spent

refrigerants. A generator or an intermediate or reclamation facility that generates or accumulates more than 6,000 kg of hazardous secondary material, or a facility receiving refrigerant from off-site under 335-14-7-.17, that is not a transfer facility that stores the refrigerants for less than ten (10) days must comply with the following requirements:

(a) Purpose and implementation of contingency plan.

1. Each generator or an intermediate or reclamation facility that accumulates more than 6000 kg of hazardous secondary material must have a contingency plan for his facility. The contingency plan must be designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous secondary material or hazardous secondary material constituents to air, soil, or surface water.

2. The provisions of the plan must be carried out immediately whenever there is a fire, explosion, or release of hazardous secondary material or hazardous secondary material constituents which could threaten human health or the environment.

(b) Content of contingency plan.

1. The contingency plan must describe the actions facility personnel must take to comply with paragraphs 335-14-2-.13(21)(a) and 335-14-2-.13(21)(f) in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous secondary material or hazardous secondary material constituents to air, soil, or surface water at the facility.

2. If the generator or an intermediate or reclamation facility accumulating more than 6000 kg of hazardous secondary material has already prepared a Spill Prevention, Control, and Countermeasures (SPCC) Plan in accordance with 40 CFR Part 112, or some other emergency or contingency plan, he need only amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of 335-14-2-.13(21). The hazardous secondary material generator or an intermediate or reclamation facility may develop one contingency plan which meets all regulatory requirements. EPA recommends that the plan be based on the National Response Team's Integrated Contingency Plan Guidance (“One Plan”). When modifications are made to non-RCRA provisions in an integrated contingency plan, the

changes do not trigger the need for a RCRA permit modification.

3. The plan must describe arrangements agreed to by local police departments, fire departments, hospitals, contractors, and State and local emergency response teams to coordinate emergency services, pursuant to 335-14-2-.13(11)(f).

4. The plan must list names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinator [see 335-14-2-.13(21)(e)], and this list must be kept up to date. Where more than one person is listed, one must be named as primary emergency coordinator and others must be listed in the order in which they will assume responsibility as alternates.

5. The plan must include a list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment), where this equipment is required. This list must be kept up to date. In addition, the plan must include the location and a physical description of each item on the list, and a brief outline of its capabilities.

6. The plan must include an evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. This plan must describe signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes (in cases where the primary routes could be blocked by releases of hazardous waste or fires).

(c) Copies of contingency plan. A copy of the contingency plan and all revisions to the plan must be:

1. Maintained at the facility; and

2. Submitted to all local police departments, fire departments, hospitals, and State and local emergency response teams that may be called upon to provide emergency services.

(d) Amendment of contingency plan. The contingency plan must be reviewed, and immediately amended, if necessary, whenever:

1. Applicable regulations are revised;

2. The plan fails in an emergency;

3. The facility changes—in its design, construction, operation, maintenance, or other circumstances—in a way that materially increases the potential for fires, explosions, or releases of hazardous secondary material or hazardous secondary material constituents, or changes the response necessary in an emergency;

4. The list of emergency coordinators changes; or

5. The list of emergency equipment changes.

(e) Emergency coordinator. At all times, there must be at least one employee either on the facility 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. This 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. The emergency coordinator's responsibilities are more fully spelled out in paragraph (f). Applicable responsibilities for the emergency coordinator vary, depending on factors such as type and variety of hazardous secondary material(s) handled by the facility, and type and complexity of the facility.

(f) Emergency procedures.

1. Whenever there is an imminent or actual emergency situation, the emergency coordinator (or his designee when the emergency coordinator is on call) must immediately:

(i) Activate internal facility alarms or communication systems, where applicable, to notify all facility personnel; and

(ii) Notify appropriate State or local agencies with designated response roles if their help is needed.

2. Whenever there is a release, fire, or explosion, the emergency coordinator must immediately identify the character, exact source, amount, and areal extent of any released materials. He may do this by observation or review of facility records or manifests and, if necessary, by chemical analysis.

3. Concurrently, the emergency coordinator must assess possible hazards to human health or the environment that may result from the release, fire, or explosion. This assessment must consider both direct and indirect effects of the release, fire, or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water run-offs from water or chemical agents used to control fire and heat-induced explosions).

4. If the emergency coordinator determines that the facility has had a release, fire, or explosion which could threaten human health, or the environment, outside the facility, he must report his findings as follows:

(i) If his assessment indicates that evacuation of local areas may be advisable, he must immediately notify appropriate local authorities. He must be available to help appropriate officials decide whether local areas should be evacuated; and

(ii) He must immediately notify either the government official designated as the on-scene coordinator for that geographical area, or the National Response Center (using their 24-hour toll free number 800/424-8802). The report must include:

(I) Name and telephone number of reporter;

(II) Name and address of facility;

(III) Time and type of incident (e.g., release, fire);

(IV) Name and quantity of material(s) involved, to the extent known;

(V) The extent of injuries, if any; and

(VI) The possible hazards to human health, or the environment, outside the facility.

5. During an emergency, the emergency coordinator must take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous secondary material at the facility. These measures must include, where applicable, stopping processes and

operations, collecting and containing released material, and removing or isolating containers.

6. If the facility stops operations in response to a fire, explosion or release, the emergency coordinator must monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.

7. Immediately after an emergency, the emergency coordinator must provide for treating, storing, or disposing of recovered secondary material, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility. Unless the hazardous secondary material generator can demonstrate, in accordance with 335-14-2-.01(3)(c) or (d), that the recovered material is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of 335-14-3, 335-14-4, and 335-14-6.

8. The emergency coordinator must ensure that, in the affected area(s) of the facility:

(i) No secondary material that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and

(ii) All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.

9. The hazardous secondary material generator must note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within 15 days after the incident, he must submit a written report on the incident to the Department. The report must include:

(i) Name, address, and telephone number of the hazardous secondary material generator;

(ii) Name, address, and telephone number of the facility;

(iii) Date, time, and type of incident (e.g., fire, explosion);

(iv) Name and quantity of material(s) involved;

(v) The extent of injuries, if any;

(vi) An assessment of actual or potential hazards to human health or the environment, where this is applicable; and

(vii) Estimated quantity and disposition of recovered material that resulted from the incident.

(g) Personnel training. All employees must be thoroughly familiar with proper waste handling and emergency procedures relevant to their responsibilities during normal facility operations and emergencies.

**Author:** Bradley N. Curvin; Vernon H. Crockett; Jonah L. Harris
**Statutory Authority:** Code of Ala. 1975, §§22-30-11.
**History:** **New Rule:** Filed February 23, 20016; effective April 8, 2016. **Amended:** Filed February 20, 2018; effective April 7, 2018. **Amended:** Filed February 19, 2019; effective April 6, 2019. **Amended:** Published April 28, 2023; effective June 12, 2023. **Amended:** Published December 31, 2025; effective February 14, 2026.

**335-14-2-.14 [Reserved].**
**Author:**
**Statutory Authority:**
**History:**

**335-14-2-.15 [Reserved].**
**Author:**
**Statutory Authority:**
**History:**

**335-14-2-.16 [Reserved].**
**Author:**
**Statutory Authority:**
**History:**

**335-14-2-.17 [Reserved].**
**Author:**
**Statutory Authority:**
**History:**

**335-14-2-.18 [Reserved].**

Author:
Statutory Authority:
History:

335-14-2-.19 [Reserved].
Author:
Statutory Authority:
History:

335-14-2-.20 [Reserved].
Author:
Statutory Authority:
History:

335-14-2-.21 [Reserved].
Author:
Statutory Authority:
History:

335-14-2-.22 [Reserved].
Author:
Statutory Authority:
History:

335-14-2-.23 [Reserved].
Author:
Statutory Authority:
History:

335-14-2-.24 [Reserved].
Author:
Statutory Authority:
History:

335-14-2-.25 [Reserved].
Author:
Statutory Authority:
History:

**335-14-2-.26 [Reserved].**
**Author:**
**Statutory Authority:**
**History:**

**335-14-2-.27 Subpart AA – Air Emission Standards For Process Vents.**

The Environmental Protection Agency Regulations set forth in 40 CFR, Part 261, Subpart AA (as published by EPA on January 13, 2015), are incorporated herein by reference. In the event that any Code of Federal Regulations Rule(s) incorporated herein by reference refers to or cites another Code of Federal Regulations Rule(s), other than 40 CFR Part 261, Subpart AA, such reference to the other Code of Federal Regulations Rule(s) is not incorporated in the ADEM Administrative Code and the ADEM Administrative Code rule specifically addressing said issue or circumstance shall take precedence, be applicable and govern.

The materials incorporated by reference are available for purchase and inspection at the Department's offices at 1400 Coliseum Boulevard, Montgomery, Alabama 36110-2059.

(1) §261.1030 Applicability (as published by EPA on January 13, 2015).

(2) §261.1031 Definitions (as published by EPA on January 13, 2015).

(3) §261.1032 Standards: Process vents (as published by EPA on January 13, 2015).

(4) §261.1033 Standards: Closed-vent systems and control devices (as published by EPA on January 13, 2015 and amended on August 9, 2023).

(5) §261.1034 Test methods and procedures(as published by EPA on January 13, 2015).

(6) §261.1035 Recordkeeping requirements (as published by EPA on January 13, 2015).

(7) through (20) §§261.1036 - 214.1049 **[Reserved]**.

**Author:** Bradley N. Curvin, Vernon H. Crockett, Jonah L. Harris
**Statutory Authority:** Code of Ala. 1975, §§22-30-11.
**History: New Rule:** Filed February 23, 20016; effective April 8, 2016. **Amended:** Filed February 14, 2017; effective March 31,

2017. **Amended:** Published April 28, 2023; effective June 12, 2023. **Amended:** Published December 31, 2025; effective February 14, 2026.

**335-14-2-.28** **Subpart BB - Air Emission Standards For Equipment Leaks.**

The Environmental Protection Agency Regulations, as set forth in 40 CFR, Part 261, Subpart BB (as published by EPA on January 13, 2015), are incorporated herein by reference. In the event that any Code of Federal Regulations Rule(s) incorporated herein by reference refers to or cites another Code of Federal Regulations Rule(s), other than 40 CFR Part 261, Subpart BB, such reference to the other Code of Federal Regulations Rule(s) is not incorporated in the ADEM Administrative Code and the ADEM Administrative Code rule specifically addressing said issue or circumstance shall take precedence, be applicable and govern.

The materials incorporated by reference are available for purchase and inspection at the Department's offices at 1400 Coliseum Boulevard, Montgomery, Alabama 36110-2400.

(1) §261.1050 Applicability (as published by EPA on January 13, 2015).

(2) §261.1051 Definitions (as published by EPA on January 13, 2015).

(3) §261.1052 Standards: Pumps in light liquid service (as published by EPA on January 13, 2015).

(4) §261.1053 Standards: Compressors (as published by EPA on January 13, 2015).

(5) §261.1054 Standards: Pressure relief devices in gas/vapor service (as published by EPA on January 13, 2015).

(6) §261.1055 Standards: Sampling connecting systems (as published by EPA on January 13, 2015).

(7) §261.1056 Standards: Open-ended valves or lines (as published by EPA on January 13, 2015).

(8) §261.1057 Standards: Valves in gas/vapor service or in light liquid service (as published by EPA on January 13, 2015).

(9) §261.1058 Standards: Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors (as published by EPA on January 13, 2015).

(10) §261.1059 Standards: Delay of repair (as published by EPA on January 13, 2015).

(11) §261.1060 Standards: Closed-vent systems and control devices (as published by EPA on January 13, 2015).

(12) §261.1061 Alternative standards for valves in gas/vapor service or in light liquid service: percentage of valves allowed to leak (as published by EPA on January 13, 2015).

(13) §261.1062 Alternative standards for valves in gas/vapor service or in light liquid service: skip period leak detection and repair (as published by EPA on January 13, 2015).

(14) §261.1063 Test methods and procedures (as published by EPA on January 13, 2015).

(15) §261.1064 Recordkeeping requirements (as published by EPA on January 13, 2015).

(16) through (31) **[Reserved]**.

**Author:** Bradley N. Curvin, Vernon H. Crockett, Jonah L. Harris
**Statutory Authority:** Code of Ala. 1975, §§22-30-11.
**History: New Rule:** Filed February 23, 20016; effective April 8, 2016. **Amended:** Filed February 14, 2017; effective March 31, 2017. **Amended:** Published April 28, 2023; effective June 12, 2023. **Amended:** Published December 31, 2025; effective February 14, 2026.

## 335-14-2-.29 Subpart CC - Air Emission Standards For Tanks And Containers.

The Environmental Protection Agency Regulations, as set forth in 40 CFR, Part 261, Subpart CC (as published by EPA on January 13, 2015), are incorporated herein by reference.

In the event that any Code of Federal Regulations Rule(s) incorporated herein by reference refers to or cites another Code of Federal Regulations Rule(s), other than 40 CFR Part 261, Subpart CC, such reference to the other Code of Federal Regulations Rule(s) is not incorporated in this ADEM Administrative Code and the ADEM Administrative Code rule specifically addressing said issue or circumstance shall take precedence, be applicable and govern.

The materials incorporated by reference are available for purchase and inspection at the Department's offices at 1400 Coliseum Boulevard, Montgomery, Alabama 36110-2400.

(1) §261.1080 Applicability (as published by EPA on January 13, 2015).

(2) §261.1081 Definitions (as published by EPA on January 13, 2015).

(3) §261.1082 Standards: General (as published by EPA on January 13, 2015).

(4) §261.1083 Material determination procedures (as published by EPA on January 13, 2015 and amended on August 9, 2023).

(5) §261.1084 Standards: Tanks (as published by EPA on January 13, 2015, and amended August 9, 2023).

(6) **[Reserved].**

(7) §261.1086 Standards: Containers (as published by EPA on January 13, 2015).

(8) §261.1087 Standards: Closed-vent systems and control devices (as published by EPA on January 13, 2015).

(9) §261.1088 Inspection and monitoring requirements (as published by EPA on January 13, 2015).

(10) §261.1089 Recordkeeping requirements (as published by EPA on January 13, 2015, and amended on August 9, 2023).

(11) **[Reserved].**

**Author:** Bradley N. Curvin, Vernon H. Crockett, Jonah L. Harris
**Statutory Authority:** Code of Ala. 1975, §§22-30-11.
**History: New Rule:** Filed February 23, 20016; effective April 8, 2016. **Amended:** Filed February 14, 2017; effective March 31, 2017. **Amended:** Published April 28, 2023; effective June 12, 2023. **Amended:** Published December 31, 2025; effective February 14, 2026.

## 335-14-2-A1 Appendix I Representative Sampling Methods.

**NOTE:** The Representative Sampling Methods published by the Environmental Protection Agency as set forth in 40 CFR, Part 261, Appendix I are incorporated herein by reference.

The list of materials incorporated by reference are available for purchase and inspection at the Department's offices at 1400 Coliseum Boulevard, Montgomery, Alabama 36110-2059.
**Author:** Stephen C. Maurer, C. Edwin Johnston, Bradley N. Curvin
**Statutory Authority:** Code of Ala. 1975, §§22-30-10, 22-30-11.
**History:** November 19, 1980. **Amended:** August 24, 1989, January 25, 1992; January 1, 1993. **Amended:** Filed November 30, 1994; effective January 5, 1995. **Amended:** Filed December 8, 1995; effective January 12, 1996. **Amended:** Filed March 9, 2001; effective April 13, 2001. **Amended:** Filed February 24, 2005;

effective March 31, 2005. **Amended:** Filed February 28, 2006; effective April 4, 2006.

**335-14-2-A2 Appendix II - [Reserved].**
**Author:** Stephen C. Maurer, C. Edwin Johnston
**Statutory Authority:** Code of Ala. 1975, §§22-30-10, 22-30-11.
**History:** November 19, 1980. **Amended:** August 24, 1989; December 6, 1990; January 25, 1992; January 1, 1993. **Amended:** Filed November 30, 1994; effective January 5, 1995. **Amended:** Filed December 8, 1995; effective January 12, 1996. **Amended:** Filed March 9, 2001; effective April 13, 2001. **Amended:** Filed February 24, 2005; effective March 31, 2005. **Repealed:** Filed February 28, 2006; effective April 4, 2006.

**335-14-2-A3 Appendix III - [Reserved].**
**Author:** Stephen C. Maurer; C. Edwin Johnston, Bradley N. Curvin
**Statutory Authority:** Code of Ala. 1975, §§22-30-10, 22-30-11.
**History:** November 19, 1980. **Amended:** April 9, 1986; September 29, 1986; August 24, 1989; December 6, 1990; January 25, 1992; January 1, 1993. **Amended:** Filed November 30, 1994; effective January 5, 1995. **Amended:** Filed December 6, 1995; effective January 12, 1996. **Amended:** Filed March 9, 2001; effective April 13, 2001. **Amended:** Filed February 24, 2005; effective March 31, 2005. **Repealed:** Filed February 28, 2006; effective April 4, 2006.

**335-14-2-A4 Appendix IV - [Reserved For Radioactive Waste Test Methods].**
**Author:**
**Statutory Authority:** Code of Ala. 1975,
**History:**

**335-14-2-A5 Appendix V - [Reserved For Infectious Waste Treatment Specifications].**
**Author:**
**Statutory Authority:** Code of Ala. 1975,
**History:**

**335-14-2-A6 Appendix VI - [Reserved For Etiological Agents].**
**Author:**
**Statutory Authority:** Code of Ala. 1975,
**History:**

**335-14-2-A7 Appendix VII - Basis For Listing Hazardous Waste.**

| EPA Hazardous Waste No. | Hazardous Constituents for Which Listed |
|---|---|
| F001 | Tetrachloroethylene, methylene chloride trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, chlorinated fluorocarbons. |
| F002 | Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane. |
| F003 | N.A. |
| F004 | Cresols and cresylic acid, nitrobenzene. |
| F005 | Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, 2-ethoxyethanol, benzene, 2-nitropropane. |
| F006 | Cadmium, hexavalent chromium, nickel, cyanide (complexed). |
| F007 | Cyanide (salts). |
| F008 | Cyanide (salts). |
| F009 | Cyanide (salts). |
| F010 | Cyanide (salts). |
| F011 | Cyanide (salts). |
| F012 | Cyanide (complexed). |
| F019 | Hexavalent chromium, cyanide (complexed). |
| F020 | Tetra- and pentachlorodibenzo-p-dioxins; tetra- and pentachlorodibenzofurans; tri- and tetrachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts. |
| F021 | Penta- and hexachlorodibenzo-p-dioxins; penta- and hexachlorodibenzofurans; pentachlorophenol and its derivatives. |
| F022 | Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta- and hexachlorodibenzofurans. |
| F023 | Tetra- and pentachlorodibenzo-p-dioxins; tetra- and pentachlorodibenzofurans; tri- and tetrachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts. |

| | |
|---|---|
| F024 | Chloromethane, dichloromethane, trichloromethane, carbon tetrachloride, chloroethylene, 1,1-dichloroethane, 1,2-dichloroethane, trans-1-2-dichloroethylene, 1,1-dichloroethylene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethylene, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, tetrachloroethylene, pentachloroethane, hexachloroethane, allyl chloride (3-chloropropene), dichloropropane, dichloropropene, 2-chloro-1,3-butadiene, hexachloro-1,3-butadiene, hexachlorocyclopentadiene, hexachlorocyclohexane, benzene, chlorbenzene, dichlorobenzenes, 1,2,4-trichlorobenzene, tetrachlorobenzene, pentachlorobenzene, hexachlorobenzene, toluene, naphthalene. |
| F025 | Chloromethane; Dichloromethane; Trichloromethane; Carbon tetrachloride; Chloroethylene; 1,1-Dichloroethane; 1,2-Dichloroethane; trans-1,2-Dichloroethylene; 1,1-Dichloroethylene; 1,1,1-Trichloroethane; 1,1,2-Trichloroethane; Trichloroethylene; 1,1,1,2-Tetrachloroethane; 1,1,2,2-Tetrachloroethane; Tetrachloroethylene; Pentachloroethane; Hexachloroethane; Allyl chloride (3-Chloropropene); Dichloropropane; Dichloropropene; 2-Chloro-1,3-butadiene; Hexachloro-1,3-butadiene; Hexachlorocyclopentadiene; Benzene; Chlorobenzene; Dichlorobenzene; 1,2,4-Trichlorobenzene; Tetrachlorobenzene; Pentachlorobenzene; Hexachlorobenzene; Toluene; Naphthalene. |
| F026 | Tetra-, penta- and hexachlorodibenzo-p-dioxins; tetra-, penta- and hexachlorodibenzofurans. |
| F027 | Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta- and hexachlorodibenzofurans; tri-, tetra-, and pentachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts. |
| F028 | Tetra-, penta- and hexachlorodibenzo-p-dioxins; tetra-, penta- and hexachlorodibenzofurans; tri-, tetra-, and pentachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts. |
| F032 | Benz(a)anthracene, benzo(a)pyrene, dibenz(a,h)-anthracene, indeno(1,2,3-cd)pyrene, penta-chlorophenol, arsenic, chromium, tetra-, penta-, hexa-, heptachlorodibenzo-p-dioxins, tetra-, penta-, hexa-, heptachloro-dibenzofurans. |

| | |
|---|---|
| F034 | Benz(a)anthracene, benzo(k)fluoranthene, benzo(a)pyrene, dibenz(a,h)anthracene indeno(1,2,3-cd)pyrene, napthalene, arsenic, chromium. |
| F035 | Arsenic, chromium, lead. |
| F037 | Benzene, benzo(a)pyrene, chrysene, lead, chromium. |
| F038 | Benzene, benzo(a)pyrene, chrysene, lead, chromium. |
| F039 | All constituents for which treatment standards are specified for multi-source leachate (wastewaters and non-wastewaters) under 335-14-9-.04(4), Table CCW. |
| K001 | Pentachlorophenol, phenol, 2-chlorophenol, p-chloro-m-cresol, 2,4-dimethylphenol, 2,4-dinitrophenol, trichlorophenols, tetrachlorophenols, 2,4-dinitrophenol, creosote, chrysene, naphthalene, fluoranthene, benzo(b)fluoranthene, benzo(a)pyrene, ideno(1,2,3-cd)pyrene, benz(a)anthracene, dibenz(a)anthracene, acenaphthalene. |
| K002 | Hexavalent chromium, lead. |
| K003 | Hexavalent chromium, lead. |
| K004 | Hexavalent chromium. |
| K005 | Hexavalent chromium, lead. |
| K006 | Hexavalent chromium. |
| K007 | Cyanide (complexed), hexavalent chromium. |
| K008 | Hexavalent chromium. |
| K009 | Chloroform, formaldehyde, methylenechloride, methyl chloride, paraldehyde, formic acid. |
| K010 | Chloroform, formaldehyde, methylenechloride, methyl chloride, paraldehyde, formic acid, chloroacetaldehyde. |
| K011 | Acrylonitrile, acetonitrile, hydrocyanic acid. |
| K013 | Hydrocyanic acid, acrylonitrile, acetonitrile. |
| K014 | Acetonitrile, acrylamide. |
| K015 | Benzyl chloride, chlorobenzene, toluene, benzotrichloride. |
| K016 | Hexachlorobenzene, hexachlorobutadiene, carbon tetrachloride, hexachloroethane, perchloroethylene. |
| K017 | Epichlorohydrin, chloroethers [bis (chloromethyl) ether and bis (2-chloroethyl) ethers], trichloropropane, dichloropropanols. |
| K018 | 1,2-dichloroethane, trichloroethylene, hexachlorobutadiene, hexachlorobenzene. |

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| K019 | Ethylene dichloride, 1,1,1-trichloroethane, 1,1,2-trichloroethane, tetrachloroethanes (1,1,2,2-tetrachloroethane and 1,1,1,2-tetrachloroethane), trichloroethylene, tetrachloroethylene, carbon tetrachloride, chloroform, vinyl chloride, vinylidene chloride. |
| K020 | Ethylene dichloride, 1,1,1-trichloroethane, 1,1,2-trichloroethane, tetrachloroethanes (1,1,2,2-tetrachloroethane and 1,1,1,2-tetrachloroethane), trichloroethylene, tetrachloroethylene, carbon tetrachloride, chloroform, vinyl chloride, vinylidene chloride. |
| K021 | Antimony, carbon tetrachloride, chloroform. |
| K022 | Phenol, tars (polycyclic aromatic hydrocarbons). |
| K023 | Phthalic anhydride, maleic anhydride. |
| K024 | Phthalic anhydride, 1,4-naphthoquinone. |
| K025 | Meta-dinitrobenzene, 2,4-dinitrotoluene. |
| K026 | Paraldehyde, pyridines, 2-picoline. |
| K027 | Toluene diisocyanate, toluene-2, 4-diamine. |
| K028 | 1,1,1-trichloroethane, vinyl chloride. |
| K029 | 1,2-dichloroethane, 1,1,1-trichloroethane, vinyl chloride, vinylidene chloride, chloroform. |
| K030 | Hexachlorobenzene, hexachlorobutadiene, hexachloroethane, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, ethylene dichloride. |
| K031 | Arsenic. |
| K032 | Hexachlorocyclopentadiene. |
| K033 | Hexachlorocyclopentadiene. |
| K034 | Hexachlorocyclopentadiene. |
| K035 | Creosote, chrysene, naphthalene, fluoranthene benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, benzo(a)anthracene, dibenzo(a)anthracene, acenaphthalene. |
| K036 | Toluene, phosphorodithioic and phosphorothioic acid esters. |
| K037 | Toluene, phosphorodithioic and phosphorothioic acid esters. |
| K038 | Phorate, formaldehyde, phosphorodithioic and phosphorothioic acid esters. |
| K039 | Phosphorodithioic and phosphorothioic acid esters. |
| K040 | Phorate, formaldehyde, phosphorodithioic and phosphorothioic acid esters. |
| K041 | Toxaphene. |
| K042 | Hexachlorobenzene, ortho-dichlorobenzene. |
| K043 | 2,4-dichlorophenol, 2,6-dichlorophenol, 2,4,6-trichlorophenol. |

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| K044 | N.A. |
| K045 | N.A. |
| K046 | Lead. |
| K047 | N.A. |
| K048 | Hexavalent chromium, lead. |
| K049 | Hexavalent chromium, lead. |
| K050 | Hexavalent chromium. |
| K051 | Hexavalent chromium, lead. |
| K052 | Lead. |
| K060 | Cyanide, napthalene, phenolic compounds, arsenic. |
| K061 | Hexavalent chromium, lead, cadmium. |
| K062 | Hexavalent chromium, lead. |
| K069 | Hexavalent chromium, lead, cadmium. |
| K071 | Mercury. |
| K073 | Chloroform, carbon tetrachloride, hexachloroethane, trichloroethane, tetrachloroethylene, dichloroethylene, 1,1,2,2-tetrachloroethane. |
| K083 | Aniline, diphenylamine, nitrobenzene, phenylenediamine. |
| K084 | Arsenic. |
| K085 | Benzene, dichlorobenzenes, trichlorobenzenes, tetrachlorobenzenes, pentachlorobenzene, hexachlorobernzene, benzyl chloride. |
| K086 | Lead, hexavalent chromium. |
| K087 | Phenol, naphthalene. |
| K088 | Cyanide (complexes) |
| K093 | Phthalic anhydride, maleic anhydride. |
| K094 | Phthalic anhydride. |
| K095 | 1,1,2-trichloroethane, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane. |
| K096 | 1,2-dichloroethane, 1,1,1-trichloroethane, 1,1,2-trichloroethane. |
| K097 | Chlordane, heptachlor. |
| K098 | Toxaphene. |
| K099 | 2,4-dichlorophenol, 2,4,6-trichlorophenol. |
| K100 | Hexavalent chromium, lead, cadmium. |
| K101 | Arsenic. |
| K102 | Arsenic. |
| K103 | Aniline, nitrobenzene, phenylenediamine. |
| K104 | Aniline, benzene, diphenylamine, nitrobenzene, phenylenediamine. |
| K105 | Benzene, monochlorobenzene, dichlorobenzenes, 2,4,6-trichlorophenol. |
| K106 | Mercury. |
| K107 | 1,1-Dimethylhydrazine (UDMH). |
| K108 | 1,1-Dimethylhydrazine (UDMH). |
| K109 | 1,1-Dimethylhydrazine (UDMH). |
| K110 | 1,1-Dimethylhydrazine (UDMH). |

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| K111 | 2,4-Dinitrotoluene. |
| K112 | 2,4-Toluenediamine, o-toluidine, p-toluidine, aniline. |
| K113 | 2,4-Toluenediamine, o-toluidine, p-toluidine, aniline. |
| K114 | 2,4-Toluenediamine, o-toluidine, p-toluidine. |
| K115 | 2,4-Toluenediamine |
| K116 | Carbon tetrachloride, tetrachloroethylene, chloroform, phosgene. |
| K117 | Ethylene dibromide. |
| K118 | Ethylene dibromide. |
| K123 | Ethylene thiourea. |
| K124 | Ethylene thiourea. |
| K125 | Ethylene thiourea. |
| K126 | Ethylene thiourea. |
| K131 | Dimethyl sulfate, methyl bromide. |
| K132 | Methyl bromide. |
| K136 | Ethylene dibromide. |
| K141 | Benzene, Benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd) pyrene. |
| K142 | Benzene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd) pyrene. |
| K143 | Benzene,benz(a)anthracene,benzo(b) fluoranthene, benzo(k)fluoranthene. |
| K144 | Benzene, benz(a)anthracene, benzo(a) pyrene, benzo(b)fluoranthene, benzo(k) fluoranthene, dibenz(a,h)anthracene. |
| K145 | Benzene, benz(a)anthracene, benzo(a) pyrene, dibenz(a,h)anthrancene, naphthalene. |
| K147 | Benzene, benz(a)anthracene, benzo(a),pyrene, benzo(b) fluoranthene, benzo(k) fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene. |
| K148 | Benz(a)anthracene, benzo(a)pyrene, benzo(b) fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd) pyrene. |
| K149 | Benzotrichloride, benzyl chloride, chloroform, chloromethane, chlorobenzene, 1,4-dichlorobenzene, hexachlorobenzene, pentachlorobenzene, 1,2,4,5-tetrachlorobenzene, toluene. |
| K150 | Carbon tetrachloride, chloroform, chloromethane, 1,4-dichlorobenzene, hexachlorobenzene, pentachlorobenzene, 1,2,4,5-tetrachlorobenzene, 1,1,2,2-tetrachloroethane, tetrachloroethylene, 1,2,4-trichlorobenzene. |
| K151 | Benzene, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene. |
| K156 | |

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| | Benomyl, carbaryl, carbendazim, carbofuran, carbosulfan, formaldehyde, methylene chloride, triethylamine. |
| K157 | Carbon tetrachloride, formaldehyde, methyl chloride, methylene chloride, pyridine, triethylamine. |
| K158 | Benomyl, carbendazim, carbofuran, carbosulfan, chloroform, methylene chloride. |
| K159 | Benzene, butylate, eptc, molinate, pebulate, vernolate. |
| K161 | Antimony, arsenic, metam-sodium, ziram. |
| K169 | Benzene. |
| K170 | Benzo(a)pyrene, dibenz(a,h)anthracene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)Fluoranthene, 3-methylcholanthrene, 7,12-dimethylbenz(a)anthracene. |
| K171 | Benzene, arsenic. |
| K172 | Benzene, arsenic. |
| K174 | 1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (1,2,3,4,6,7,8-HpCDD), 1,2,3,4,6,7,8-Heptachlorodibenzofuran (1,2,3,4,6,7,8-HpCDF), 1,2,3,4,7,8,9-Heptachlorodibenzofuran (1,2,3,6,7,8,9-HpCDF), HxCDDs (All Hexachlorodibenzo-p-dioxins), HxCDFs (All Hexachlorodibenzofurans), PeCDDs (All Pentachlorodibenzo-p-dioxins), OCDD (1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin, OCDF (1,2,3,4,6,7,8,9-Octachlorodibenzofuran), PeCDFs (All Pentachlorodibenzofurans), TCDDs (All tetrachlorodi-benzo-p-dioxins), TCDFs (All tetrachlorodibenzofurans). |
| K175 | Mercury |
| K176 | Arsenic, Lead |
| K177 | Antimony |
| K178 | Thallium |
| K181 | Aniline, 0-anisidine, 4-chloroaniline, p-cresidine, 2,4-dimethylaniline, 1,2-phenylenediamine, 1,3-phenylenediamine |

N.A.--Waste is hazardous because it fails the test for the characteristic of ignitability, corrosivity, or reactivity.
**Author:** Stephen C. Maurer; C. Edwin Johnston; Bradley N. Curvin; Theresa A. Maines
**Statutory Authority:** Code of Ala. 1975, §§22-30-10, 22-30-11.
**History:** November 19, 1980. **Amended:** April 9, 1986; September 29, 1986; August 24, 1989; December 6, 1990; January 25, 1992. **Amended:** Filed Novemeber 30, 1994; effective January 5, 1995. **Amended:** Filed December 8, 1995; effective January 12, 1996. **Amended:** Filed February 20, 1998; effective March 27, 1998. **Amended:** Filed February 26, 1999; effective April 2, 1999. **Amended:** Filed March 9, 2001; effective April 13, 2001. **Amended:** Filed February 8, 2002; effective March 15, 2002. **Amended:** Filed

March 13, 2003; effective April 17, 2003. **Amended:** Filed February 28, 2006; effective April 4, 2006. **Amended:** Filed February 27, 2007; effective April 3, 2007. **Amended:** Filed February 23, 2011; effective March 30, 2011.

## 335-14-2-A8 Appendix VIII - Hazardous Constituents.

| Common name | Chemical abstracts name | Chemical abstracts No. | Hazardous waste No. |
|---|---|---|---|
| A2213 | Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-, methyl ester | 30558-43-1 | U394 |
| Acetonitrile | Same | 75-05-8 | U003 |
| Acetophenone | thanone, 1-phenyl- | 98-86-2 | U004 |
| 2-Acetylaminefluarone | Acetamide, N-9H-fluoren-2-yl- | 53-96-3 | U005 |
| Acetyl chloride | Same | 75-36-5 | U006 |
| 1-Acetyl-2-thiourea | Acetamide, N-(aminothioxomethyl) | 591-08-2 | P002 |
| Acrolein | 2-Propenal | 107-02-8 | P003 |
| Acrylamide | 2-Propenamide | 79-06-1 | U007 |
| Acrylonitrile | 2-Propenenitrile | 107-13-1 | U009 |
| Aflatoxins | Same | 1402-68-2 | |
| Aldicarb | Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino)carbonyl] oxime | 116-06-3 | P070 |
| Aldicarb sulfone | Propanal, 2-methyl-2-(methylsulfonyl)-, O-[(methylamino)-carbonyl] oxime | 1646-88-4 | P203 |
| Aldrin | 1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1alpha, 4alpha, 4abeta,5alpha,8alpha, 8abeta)- | 309-00-2 | P004 |
| Allyl alcohol | 2-Propen-1-ol | 107-18-6 | P005 |
| Allyl chloride | 1-Propane, 3-chloro | 107-05-1 | |
| Aluminum phosphide | Same | 20859-73-8 | P006 |
| 4-Aminobiphenyl | [1,1'-Biphenyl]-4-amine | 92-67-1 | |
| 5-(Aminomethyl)-3-isoxazolol | 3(2H)-Isoxazolone, 5-(aminomethyl)- | 2763-96-4 | P007 |
| 4-Aminopyridine | 4-Pyridinamine | 504-24-5 | P008 |
| Amitrole | 1H-1,2,4-Triazol-3-amine | 61-82-5 | U011 |
| Ammonium vanadate | Vanadic acid, ammonium salt | 7803-55-6 | P119 |
| Aniline | Benzenamine | 62-53-3 | U012 |
| o-Anisidine (2-methoxyaniline) | Benzenamine, 2-Methoxy- | 90-04-0 | |
| Antimony | Same | 7440-36-0 | |
| Antimony compounds, N.O.S.[1] | | | |
| Aramite | Sulfurous acid, 2-chloroethyl 2-[4-(1,1-dimethylethyl)phenoxy]-1-methylethyl ester | 140-57-8 | |
| Arsenic | Same | 7440-38-2 | |
| Arsenic compounds, N.O.S.[1] | | | |

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| Arsenic acid | Arsenic acid $H_3AsO_4$ | 7778-39-4 | P010 |
| Arsenic pentoxide | Arsenic oxide $As_2O_5$ | 1303-28-2 | P011 |
| Arsenic trioxide | Arsenic oxide $As_2O_3$ | 1327-53-3 | P012 |
| Auramine | Benzenamine, 4,4'-carbonimidoylbis[N,N-dimethyl | 492-80-8 | U014 |
| Azaserine | L-Serine, diazoacetate (ester) | 115-02-6 | U015 |
| Barban | Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester | 101-27-9 | U280 |
| Barium | Same | 7440-39-3 | |
| Barium compounds, N.O.S.[1] | | | |
| Barium cyanide | Same | 542-62-1 | P013 |
| Bendiocarb | 1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate | 22781-23-3 | U278 |
| Bediocarb phenol | 1,3-Benzodioxol-4-ol, 2,2-dimethyl-dimethyl- | 22961-82-6 | U364 |
| Benomyl | Carbamic acid, [1-[(butylamino) carbonyl]-1H-benzimidazol-2-yl]-, methyl ester | 17804-35-2 | U271 |
| Benz[c]acridine | Same | 225-51-4 | U016 |
| Benz[a]anthracene | Same | 56-55-3 | U018 |
| Benzal chloride | Benzene, (dichloromethyl)- | 98-87-3 | U017 |
| Benzene | Same | 71-43-2 | U019 |
| Benzenearsonic acid | Arsonic acid, phenyl- | 98-05-5 | |
| Benzidine | [1,1'-Biphenyl]-4,4 1-diamine | 92-87-5 | U021 |
| Benzo[b]fluoranthene | Benz[e]acephenanthrylene | 205-99-2 | |
| Benzo[j]fluoranthene | Same | 205-82-3 | |
| Benzo[k]fluoranthene | Same | 207-08-9 | |
| Benzo[a]pyrene | Same | 50-32-8 | U022 |
| p-Benzoquinone | 2,5-Cyclohexadiene-1,4-dione | 106-51-4 | U197 |
| Benzotrichloride | Benzene, (trichloromethyl)- | 98-07-7 | U023 |
| Benzyl chloride | Benzene, (chloromethyl)- | 100-44-7 | P028 |
| Beryllium compounds, N.O.S.[1] | | | |
| Beryllium powder | Same | 7440-41-7 | P015 |
| Bis(pentamethylene)-thiuram tetrasulfide | Piperidine, 1,1'-(tetrathiodicarbon- othioyl)-bis- | 120-54-7 | P017 |
| Bromoacetone | 2-Propanone, 1-bromo- | 598-31-2 | U225 |
| Bromoform | Methane, tribromo- | 75-25-2 | U030 |
| 4-Bromophenyl phenyl ether | Benzene, 1-bromo-4-phenoxy- | 101-55-3 | P018 |
| Brucine | Strychnidin-10-one, 2,3-dimethoxy- | 357-57-3 | |
| Butyl benzyl phthalate | 1,2-Benzenedicarboxylic acid, butyl phenylmethyl ester | 85-68-7 | |
| Butylate | Carbamothioic acid, bis (2-methylpropyl)-, S-ethyl ester | 2008-41-5 | |

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| Cacodylic acid | Arsinic acid, dimethyl- | 75-60-5 | U136 |
| Cadmium | Same | 7440-43-9 | |
| Cadmium compounds, N.O.S.[1] | | | |
| Calcium chromate | Chromic acid H2CrO4, calcium salt | 13765-19-0 | U032 |
| Calcium cyanide | Calcium cyanide $Ca(CN)_2$ | 592-01-8 | P021 |
| Carbaryl | 1-Naphthalenol, methylcarbamate | 63-25-2 | U279 |
| Carbendazim | Carbamic acid, 1H-benzimidazol-2-yl, methyl ester | 10605-21-7 | U372 |
| Carbofuran | 7-Benzofuranol, 2,3-dihydro- 2,2-dimethyl-, methylcarbamate | 1563-66-2 | P127 |
| Carbofuran phenol | 7-Benzofuranol, 2,3-dihydro-2,2-dimethyl- | 1563-38-8 | U367 |
| Carbon disulfide | Same | 75-15-0 | P022 |
| Carbon oxyfluoride | Carbonic difluoride | 353-50-4 | U033 |
| Carbon tetrachloride | Methane, tetrachloro- | 56-23-5 | U211 |
| Carbosulfan | Carbamic acid, [(dibutylamino) thio] methyl-, 2,3-dihydro-2,2-dimethyl- 7-benzofuranyl ester | 55285-14-8 | P189 |
| Chloral | Acetaldehyde, trichloro- | 75-87-6 | U034 |
| Chlorambucil | Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]- | 305-03-3 | U035 |
| Chlordane | 4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro- | 57-74-9 | U036 |
| Chlordane (alpha and gamma isomers) | | | U036 |
| Chlorinated benzenes, N.O.S.[1] | | | |
| Chlorinated ethane, N.O.S.[1] | | | |
| Chlorinated fluorocarbons, N.O.S.[1] | | | |
| Chlorinated naphthalene, N.O.S.[1] | | | |

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| Chlorinated phenol, N.O.S. 1 | | | |
| Chlornaphazin | Naphthalenamine, N,N'-bis(2-chloroethyl)- | 494-03-1 | U026 |
| Chloroacetaldehyde | Acetaldehyde, chloro- | 107-20-0 | P023 |
| Chloroalkyl ethers, N.O.S. 1 | | | |
| p-Chloroaniline | Benzenamine, 4-chloro- | 106-47-8 | P024 |
| Chlorobenzene | Benzene, chloro- | 108-90-7 | U037 |
| Chlorobenzilate | Benzeneacetic acid, 4-chloro-alpha- (4-chlorophenyl)-alpha-hydroxy-, ethyl ester | 510-15-6 | U038 |
| p-Chloro-m-cresol | Phenol, 4-chloro-3-methyl- | 59-50-7 | U039 |
| 2-Chloroethyl vinyl ether | Ethene, (2-chloroethoxy)- | 110-75-8 | U042 |
| Chloroform | Methane, trichloro- | 67-66-3 | U044 |
| Chloromethyl methyl ether | Methane, chloromethoxy- | 107-30-2 | U046 |
| beta-Chloronaphthalene | Naphthalene, 2-chloro- | 91-58-7 | U047 |
| o-Chlorophenol | Phenol, 2-chloro- | 95-57-8 | U048 |
| 1-(o-Chlorophenyl)-thiourea | Thiourea, (2-chlorophenyl)- | 5344-82-1 | P026 |
| Chloroprene | 1,3-Butadiene, 2-chloro- | 126-99-8 | |
| 3-Chloropropionitrile | Propanenitrile, 3-chloro- | 542-76-7 | P027 |
| Chromium | Same | 7440-47-3 | |
| Chromium compounds, N.O.S. 1 | | | |
| Chrysene | Same | 218-01-9 | U050 |
| Citrus red No. 2 | 2-Naphthalenol, 1-[(2,5-dimethoxyphenyl)azo]- | 6358-53-8 | |
| Coal tar creosote | Same | 8007-45-2 | |
| Copper cyanide | Copper cyanide CuCN | 544-92-3 | P029 |
| | | 137-29-1 | |

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| Copper dimethyldithi-ocarbamat | Copper, bis (dimethylcarbamodi-thioato-S,S')- | | |
| Creosote | Same | | U051 |
| p-Cresidine | 2-Methoxy-5-methylbenzenamine | 120-71-8 | |
| Cresol (Cresylic acid) | Phenol, methyl- | 1319-77-3 | U052 |
| Crotonaldehyde | 2-Butenal | 4170-30-3 | U053 |
| m-Cumenyl methylcarbamate | Phenol, 3-(methylethyl)-, methyl carbamate | 64-00-6 | P202 |
| Cyanides (soluble salts and complexes), N.O.S.[1] | | | P030 |
| Cyanogen | Ethanedinitrile | 460-19-5 | P031 |
| Cyanogen bromide | Cyanogen bromide (CN)Br | 506-68-3 | U246 |
| Cyanogen chloride | Cyanogen chloride (CN)Cl | 506-77-4 | P033 |
| Cycasin | beta-D-Glucopyranoside, (methyl-ONN-azoxy)methyl | 14901-08-7 | |
| Cycloate | Carbamothioic acid, cyclohexyl-ethyl-, S-ethyl ester | 1134-23-2 | |
| 2-Cyclohexyl-4,6-dinitrophenol | Phenol, 2-cyclohexyl-4,6-dinitro- | 131-89-5 | P034 |
| Cyclophosphamide | 2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)-tetrahydro-, 2-oxide | 50-18-0 | U058 |
| 2,4-D | Acetic acid, (2,4-dichlorophenoxy)- | 94-75-7 | U240 |
| 2,4-D, salts, esters | | | U240 |
| Daunomycin | 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-1-methoxy-, (8S-cis)- | 20830-81-3 | U059 |
| Dazomet | 2H-1,3,5-thiadiazine-2-thione, tetrahydro-3,5-dimethyl | 533-74-4 | |
| DDD | Benzene, 1,1'-(2,2-dichloro-ethylidene)bis[4-chloro- | 72-54-8 | U060 |
| DDE | Benzene, 1,1'-(dichloroethenyli-dene)bis[4-chloro- | 72-55-9 | |
| DDT | Benzene, 1,1'-(2,2,2-trichloro-ethylidene)bis[4-chloro- | 50-29-3 | U061 |
| | | 2303-16-4 | U062 |

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| Diallate | Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester | | |
| Dibenz[a,h]acridine | Same | 226-36-8 | |
| Dibenz[a,j]acridine | Same | 224-42-0 | |
| Dibenz[a,h]anthracene | Same | 53-70-3 | U063 |
| 7H-Dibenzo[c,g]- carbazole | Same | 194-59-2 | |
| Dibenzo[a,e]pyrene | Naphtho[1,2,3,4-def] chrysene | 192-65-4 | |
| Dibenzo[a,h]pyrene | Dibenzo[b,def]chrysene | 189-64-0 | |
| Dibenzo[a,i]pyrene | Benzo[rst]pentaphene | 189-55-9 | U064 |
| 1,2-Dibromo-3-chloropropane | Propane, 1,2-dibromo-3-chloro- | 96-12-8 | U066 |
| Dibutyl phthalate | 1,2-Benzenedicarboxylic acid, dibutyl ester | 84-74-2 | U069 |
| o-Dichlorobenzene | Benzene, 1,2-dichloro- | 95-50-1 | U070 |
| m-Dichlorobenzene | Benzene, 1,3-dichloro- | 541-73-1 | U071 |
| p-Dichlorobenzene | Benzene, 1,4-dichloro- | 106-46-7 | U072 |
| Dichlorobenzene, N.O.S.[1] | Benzene, dichloro- | 25321-22-6 | |
| 3,3'-Dichlorobenzidine | [1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro- | 91-94-1 | U073 |
| 1,4-Dichloro-2-butene | 2-Butene, 1,4-dichloro- | 764-41-0 | U074 |
| Dichlorodifluoromethane | Methane, dichlorodifluoro- | 75-71-8 | U075 |
| Dichloroethylene, N.O.S.[1] | Dichloroethylene | 25323-30-2 | |
| 1,1-Dichloroethylene | Ethene, 1,1-dichloro- | 75-35-4 | U078 |
| 1,2-Dichloroethylene | Ethene, 1,2-dichlrol-, (E)- | 156-60-5 | U079 |
| Dichloroethyl ether | Ethane, 1,1'oxybis[2-chloro- | 111-44-4 | U025 |
| Dichloroisopropyl ether | Propane, 2,2'-oxybis[2-chloro- | 108-60-1 | U027 |
| Dichloromethoxy ethane | Ethane, 1,1'-[methylenebis-(oxy)]bis[2-chloro- | 111-91-1 | U024 |
| Dichloromethyl ether | Methane, oxybis[chloro- | 542-88-1 | P016 |
| | Phenol, 2,4-dichloro- | 120-83-2 | U081 |

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| 2,4-Dichlorophenol | | | |
| 2,6-Dichlorophenol | Phenol, 2,6-dichloro- | 87-65-0 | U082 |
| Dichlorophenylarsine | Arsonous dichloride, phenyl- | 696-28-6 | P036 |
| Dichloropropane, N.O.S.[1] | Propane, dichloro- | 26638-19-7 | |
| Dichloropropanol, N.O.S.[1] | Propanol, dichloro- | 26545-73-3 | |
| Dichloropropene, N.O.S.[1] | 1-Propene, dichloro- | 26952-23-8 | |
| 1,3-Dichloropropene | 1-Propene, 1,3-dichloro- | 542-75-6 | U084 |
| Dieldrin | 2,7:3,6-Dimethanonaphth[2,3-b] oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6, 6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta, 6beta,6aalpha,7beta,7aalpha)- | 60-57-1 | P037 |
| 1,2:3,4-Diepoxybutan | 2,2'-Bioxirane | 1464-53-5 | U085 |
| Diethylarsine | Arsine, diethyl- | 692-42-2 | P038 |
| Diethylene glycol, dicarbamate | Ethanol, 2,2'-oxybis-, dicarbamate | 5952-26-1 | U395 |
| 1,4-Diethyleneoxide | 1,4-Dioxane | 123-91-1 | U108 |
| Diethylhexyl phthalate | 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester | 117-81-7 | U028 |
| N,N'-Diethylhydrazine | Hydrazine, 1,2-diethyl- | 1615-80-1 | U086 |
| O,O-Diethyl S-methyl dithiophosphate | Phosphorodithioic acid, O,O-diethyl S-methyl ester | 3288-58-2 | U087 |
| Diethyl-p-nitrophenylphosphate | Phosphoric acid, diethyl 4-nitrophenyl ester | 311-45-5 | P041 |
| Diethyl phthalate | 1,2-Benzenedicarboxylic acid, diethyl ester | 84-66-2 | U088 |
| O,O-Diethyl O-pyra- zinyl phosphorothioate | Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester | 297-97-2 | P040 |
| Diethylstilbesterol | Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)- | 56-53-1 | U089 |
| Dihydrosafrole | 1,3-Benzodioxole, 5-propyl- | 94-58-6 | U090 |
| Diisopropylfluorophos-phate (DFP) | Phosphorofluoridic acid, bis(1-methylethyl) ester | 55-91-4 | P043 |

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| Dimethoate | Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)- 2-oxoethyl] ester | 60-51-5 | P044 |
| 3,3'-Dimethoxybenzi-dine | [1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethoxy- | 119-90-4 | U091 |
| p-Dimethylaminoazo-benzene | Benzenamine, N,N-dimethyl-4-(phenylazo)- | 60-11-7 | U093 |
| 2,4-Dimethylaniline (2,4-xylidine) | Benzenamine, 2,4-dimethyl- | 95-68-1 | |
| 7,12-Dimethylbenz[a]-anthracene | Benz[a]anthracene, 7,12-dimethyl- | 57-97-6 | U094 |
| 3,3'-Dimethylbenzidine | [1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl- | 119-93-7 | U095 |
| Dimethylcarbamoyl chloride | Carbamic chloride, dimethyl- | 79-44-7 | U097 |
| 1,1-Dimethylhydrazine | Hydrazine, 1,1-dimethyl- | 57-14-7 | U098 |
| 1,2-Dimethylhydrazine | Hydrazine, 1,2-dimethyl- | 540-73-8 | U099 |
| alpha,alpha-Dimethyl-phenethylamine | Benzeneethanamine, alpha,alpha-dimethyl- | 122-09-8 | P046 |
| 2,4-Dimethylphenol | Phenol, 2,4-dimethyl- | 105-67-9 | U101 |
| Dimethyl phthalate | 1,2-Benzenedicarboxylic acid, dimethyl ester | 131-11-3 | U102 |
| Dimethyl sulfate | Sulfuric acid, dimethyl ester | 77-78-1 | U103 |
| Dimetilan | Carbamic acid, dimethyl-, 1-[(dimethylamino) carbonyl]-5-methyl-1H-pyrazol-3-yl ester | 644-64-4 | P191 |
| Dinitrobenzene, N.O.S.[1] | Benzene, dinitro- | 25154-54-5 | |
| 4,6-Dinitro-o-cresol | Phenol, 2-methyl-4,6-dinitro- | 534-52-1 | P047 |
| 4,6-Dinitro-o-cresol salts | | | P047 |
| 2,4-Dinitrophenol | Phenol, 2,4-dinitro- | 51-28-5 | P048 |
| 2,4-Dinitrotoluene | Benzene, 1-methyl-2,4-dinitro- | 121-14-2 | U105 |
| 2,6-Dinitrotoluene | Benzene, 2-methyl-1,3-dinitro- | 606-20-2 | U106 |
| Dinoseb | Phenol, 2-(1-methylpropyl)-4,6-dinitro- | 88-85-7 | P020 |
| Di-n-octyl phthalate | 1,2-Benzenedicarboxylic acid, dioctyl ester | 117-84-0 | U017 |

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| Diphenylamine | Benzenamine, N-phenyl- | 122-39-4 | |
| 1,2-Diphenylhydrazine | Hydrazine, 1,2-diphenyl- | 122-66-7 | U109 |
| Di-n-propylnitrosamine | 1-Propanamine, N-nitroso-N-propyl- | 621-64-7 | U111 |
| Disulfiram | Thioperoxydicarbonic diamide, tetraethyl | 97-77-8 | |
| Disulfoton | Phosphorodithioic acid, O,O-diethylS-[2-(ethylthio)ethyl] ester | 298-04-4 | P039 |
| Dithiobiuret | Thioimidodicarbonic diamide $[(H_2N)C(S)]_2NH$ | 541-53-7 | P049 |
| Endosulfan | 6,9-Methano-2,4,3-benzodioxathiepin,6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-,3-oxide | 115-29-7 | P050 |
| Endothall | 7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid | 145-73-3 | P088 |
| Endrin | 2,7:3,6-Dimethanonaphth[2,3-b] oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octa-hydro-, (1aalpha,2beta,2abeta,3alpha, 6alpha,6abeta,7beta,7aalpha)- | 72-20-8 | P051 |
| Endrin metabolites | | | P051 |
| Epichlorohydrin | Oxirane, (chloromethyl)- | 106-89-8 | U041 |
| Epinephrine | 1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-, (R)- | 51-43-4 | P042 |
| EPTC | Carbamothioic acid, dipropyl-, S-ethyl ester | 759-94-4 | |
| Ethyl carbamate (urethane) | Carbamic acid, ethyl ester | 51-79-6 | U238 |
| Ethyl cyanide | Propanenitrile | 107-12-0 | P101 |
| Ethyl ziram | Zinc, bis(diethylcarbamodithioato-S,S')- | 14324-55-1 | |
| Ethylenebisdithiocar-bamic acid | Carbamodithioic acid, 1,2-ethanediylbis- | 111-54-6 | U114 |
| Ethylenebisdithiocarbamic acid, salts and esters | | | U114 |
| Ethylene dibromide | Ethane, 1,2-dibromo- | 106-93-4 | U067 |
| Ethylene dichloride | Ethane, 1,2-dichloro- | 107-06-2 | U077 |
| | Ethanol, 2-ethoxy- | 110-80-5 | U359 |

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| Ethylene glycol monoethyl ether | | | |
| Ethyleneimine | Aziridine | 151-56-4 | P054 |
| Ethylene oxide | Oxirane | 75-21-8 | U115 |
| Ethylenethiourea | 2-Imidazolidinethione | 96-45-7 | U116 |
| Ethylidene dichloride | Ethane, 1,1-dichloro- | 75-34-3 | U076 |
| Ethyl methacrylate | 2-Propenoic acid, 2-methyl-, ethyl ester | 97-63-2 | U118 |
| Ethyl methanesulfonate | Methanesulfonic acid, ethyl ester | 62-50-0 | U119 |
| Famphur | Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl] phenyl]O,O-dimethyl ester | 52-85-7 | P097 |
| Ferbam | Iron, tris (dimethylcarbamo-dithioato-S,S')- | 14484-64-1 | |
| Fluoranthene | Same | 206-44-0 | U120 |
| Fluorine | Same | 7782-41-4 | P056 |
| Fluoroacetamide | Acetamide, 2-fluoro- | 640-19-7 | P057 |
| Fluoroacetic acid, sodium salt | Acetic acid, fluoro-, sodium salt | 62-74-8 | P058 |
| Formaldehyde | Same | 50-00-0 | U122 |
| Formetanate hydrochloride | Methanimidamide, N,N-dimethyl-N'-[3-[[(methylamino)carbonyl] oxy]phenyl]-, monohydrochloride | 23422-53-9 | P198 |
| Formic acid | Same | 64-18-6 | U123 |
| Formparanate | Methanimidamide, N,N-dimethyl-N'-[2-methyl-4-[[(methylamino) carbonyl]oxy]phenyl]- | 17702-57-7 | P197 |
| Glycidylaldehyde | Oxiranecarboxyaldehyde | 765-34-4 | U126 |
| Halomethanes, N.O.S.[1] | | | |
| Heptachlor | 4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a, 4,7,7a-tetrahydro- | 76-44-8 | P059 |
| Heptachlor epoxide | 2,5-Methano-2H-indeno[1,2-b]oxirene, 2,3,4,5,6,7,7-hepta-chloro-1a, 1b,5, 5a,6,6a-hexa- | 1024-57-3 | |

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| | hydro-, (1aalpha,1bbeta,2alpha,-5alpha,5abeta,6beta,6aalpha)- | | |
| Heptachlor epoxide<br><br>(alpha, beta, and gammaisomers) | | | |
| Heptachlorodibenzo-furans | | | |
| Heptachlorodibenzo-p-dioxins | | | |
| Hexachlorobenzene | Benzene, hexachloro- | 118-74-1 | U127 |
| Hexachlorobutadiene | 1,3-Butadiene, 1,1,2,3,4,4-hexachloro- | 87-68-3 | U128 |
| Hexachlorocyclopent-adiene | 1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro- | 77-47-4 | U130 |
| Hexachlorodibenzo-p-dioxins | | | |
| Hexachlorodibenzo-furans | | | |
| Hexachloroethane | Ethane, hexachloro- | 67-72-1 | U131 |
| Hexachlorophene | Phenol, 2,2'-methylenebis [3,4,6-trichloro- | 70-30-4 | U132 |
| Hexachloropropene | 1-Propene, 1,1,2,3,3,3-hexachloro- | 1888-71-7 | U243 |
| Hexaethyl tetraphos-phate | Tetraphosphoric acid, hexaethyl ester | 757-58-4 | P062 |
| Hydrazine | Same | 302-01-2 | U133 |
| Hydrogen cyanide | Hydrocyanic acid | 74-90-8 | P063 |
| Hydrogen fluoride | Hydrofluoric acid | 7664-39-3 | U134 |
| Hydrogen sulfide | Hydrogen sulfide H2S | 7783-06-4 | U135 |
| Indeno[1,2,3-cd]pyrene | Same | 193-39-5 | U137 |
| 3-Iodo-2-propynyl n-butylcarbamate | Carbamic acid, butyl-, 3-iodo-2-propynyl ester | 55406-53-6 | |
| Isobutyl alcohol | 1-Propanol, 2-methyl- | 78-83-1 | U140 |
| Isodrin | 1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4abeta,5beta,8beta,8abeta)- | 465-73-6 | P060 |

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| Isolan | Carbamic acid, dimethyl-, 3-methyl-1-(1-methylethyl)-1H-pyrazol-5-yl ester | 119-38-0 | P192 |
| Isosafrole | 1,3-Benzodioxole, 5-(1-propenyl)- | 120-58-1 | U141 |
| Kepone | 1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one,1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro- | 143-50-0 | U142 |
| Lasiocarpine | 2-Butenoic acid, 2-methyl-,7-[[2,3 -dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy]methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester,[1S-[1alpha(Z),7(2S*,-3R*),7aalpha]]- | 303-34-1 | |
| Lead | Same | 7439-92-1 | |
| Lead compounds, N.O.S.[1] | | | |
| Lead acetate | Acetic acid, lead(2+) salt | 301-04-2 | U144 |
| Lead phosphate | Phosphoric acid, lead(2+) salt (2:3) | 7446-27-7 | U145 |
| Lead subacetate | Lead, bis(acetato-O) tetrahydroxytri | 1335-32-6 | U146 |
| Lindane | Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta, 4alpha,5alpha,6beta)- | 58-89-9 | U129 |
| Maleic anhydride | 2,5-Furandione | 108-31-6 | U147 |
| Maleic hydrazide | 3,6-Pyridazinedione, 1,2-dihydro- | 123-33-1 | U148 |
| Malononitrile | Propanedinitrile | 109-77-3 | U149 |
| Manganese dimethyldithiocarbamate | Manganese, bis (dimethylcarbamodithioato-S,S')- | 15339-36-3 | P196 |
| Melphalan | L-Phenylalanine, 4-[bis(2-chloroethyl)aminol]- | 148-82-3 | U150 |
| Mercury | Same | 7439-97-6 | U151 |
| Mercury compounds, N.O.S.[1] | | | |
| Mercury fulminate | Fulminic acid, mercury(2+) salt | 628-86-4 | P065 |
| Metam sodium | Carbamodithioic acid, methyl-, monosodium salt | 137-42-8 | |
| Methacrylonitrile | 2-Propenenitrile, 2-methyl- | 126-98-7 | U152 |
| | | 91-80-5 | U155 |

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| Methapyrilene | 1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)- | | |
| Methiocarb | Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate | 2032-65-7 | P199 |
| Methomyl | Ethanimidothioic acid, N-[[(methylamino)carbonyl]oxy]-, methyl ester | 16752-77-5 | P066 |
| Methoxychlor | Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-methoxy- | 72-43-5 | U247 |
| Methyl bromide | Methane, bromo- | 74-83-9 | U029 |
| Methyl chloride | Methane, chloro- | 74-87-3 | U045 |
| Methyl chlorocarbonate | Carbonochloridic acid, methyl ester | 79-22-1 | U156 |
| Methyl chloroform | Ethane, 1,1,1-trichloro- | 71-55-6 | U226 |
| 3-Methylcholanthrene | Benz[j]aceanthrylene, 1,2-dihydro-3-methyl- | 56-49-5 | U157 |
| 4,4'-Methylenebis(2-chloroaniline) | Benzenamine, 4,4'-methylenebis[2-chloro- | 101-14-4 | U158 |
| Methylene bromide | Methane, dibromo- | 74-95-3 | U068 |
| Methylene chloride | Methane, dichloro- | 75-09-2 | U080 |
| Methyl ethyl ketone (MEK) | 2-Butanone | 78-93-3 | U159 |
| Methyl ethyl ketoneperoxide | 2-Butanone, peroxide | 1338-23-4 | U160 |
| Methyl hydrazine | Hydrazine, methyl- | 60-34-4 | P068 |
| Methyl iodide | Methane, iodo- | 74-88-4 | U138 |
| Methyl isocyanate | Methane, isocyanato- | 624-83-9 | P064 |
| 2-Methyllactonitrile | Propanenitrile, 2-hydroxy-2-methyl- | 75-86-5 | P069 |
| Methyl methacrylate | 2-Propenoic acid, 2-methyl-, methyl ester | 80-62-6 | U162 |
| Methyl methane-sulfonate | Methanesulfonic acid, methyl ester | 66-27-3 | |
| Methyl parathion | Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester | 298-00-0 | P071 |
| Methylthiouracil | 4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo- | 56-04-2 | U164 |
| Metolcarb | Carbamic acid, methyl, 3-methylphenyl ester | 1129-41-5 | P190 |

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| Mexacarbamate | Phenol, 4-(dimethylamino)- 3,5-dimethyl-, methylcarbamate (ester) | 315-18-4 | P128 |
| Mitomycin C | Azirino[2',3':3,4]pyrrolo[1,2-a]indole-4,7-dione,6-amino-8-[[(aminocarbonyl) oxy]methyl]-1,1a,2,8,8a, 8b-hexahydro-8a-methoxy-5-methyl-, [1aS-(1aalpha, 8beta,8aalpha, 8balpha)]- | 50-07-7 | U010 |
| MNNG | Guanidine, N-methyl-N'-nitro-N-nitroso- | 70-25-7 | U163 |
| Molinate | 1H-Azepine-1-carbothioic acid, hexahydro-, S-ethyl ester | 2212-67-1 | |
| Mustard gas | Ethane, 1,1'-thiobis[2-chloro- | 505-60-2 | |
| Naphthalene | Same | 91-20-3 | U165 |
| 1,4-Naphthoquinone | 1,4-Naphthalenedione | 130-15-4 | U166 |
| alpha-Naphthylamine | 1-Naphthalenamine | 134-32-7 | U167 |
| beta-Naphthylamine | 2-Naphthalenamine | 91-59-8 | U168 |
| alpha-Naphthylthiourea | Thiourea, 1-naphthalenyl- | 86-88-4 | P072 |
| Nickel | Same | 7440-02-0 | |
| Nickel compounds, N.O.S.[1] | | | |
| Nickel carbonyl | Nickel carbonyl $Ni(CO)_4$, (T-4)- | 13463-39-3 | P073 |
| Nickel cyanide | Nickel cyanide $Ni(CN)_2$ | 557-19-7 | P074 |
| Nicotine | Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)- | 54-11-5 | P075 |
| Nicotine salts | | | P075 |
| Nitric oxide | Nitrogen oxide NO | 10102-43-9 | P076 |
| p-Nitroaniline | Benzenamine, 4-nitro- | 100-01-6 | P077 |
| Nitrobenzene | Benzene, nitro- | 98-95-3 | U169 |
| Nitrogen dioxide | Nitrogen oxide $NO_2$ | 10102-44-0 | P078 |
| Nitrogen mustard | Ethanamine, 2-chloro-N- (2-chloroethyl)-N-methyl- | 51-75-2 | |
| Nitrogen mustard, hydrochloride salt | | | |

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| Nitrogen mustard N-oxide | Ethanamine, 2-chloro-N-(2-chloroethyl)-N-methyl-, N-oxide | 126-85-2 | |
| Nitrogen mustard, N-oxide, hydrochloride salt | | | |
| Nitroglycerin | 1,2,3-Propanetriol, trinitrate | 55-63-0 | P081 |
| p-Nitrophenol | Phenol, 4-nitro- | 100-02-7 | U170 |
| 2-Nitropropane | Propane, 2-nitro- | 79-46-9 | U171 |
| Nitrosamines, N.O.S.[1] | | 35576-91-1D | |
| N-Nitrosodi-n-buty-lamine | 1-Butanamine, N-butyl-N-nitroso- | 924-16-3 | U172 |
| N-Nitrosodiethanolamine | Ethanol, 2,2'-(nitrosoimino) bis- | 1116-54-7 | U173 |
| N-Nitrosodiethylamine | Ethanamine, N-ethyl-N-nitroso- | 55-18-5 | U174 |
| N-Nitrosodimethy- lamine | Methanamine, N-methyl-N-nitroso- | 62-75-9 | P082 |
| N-Nitroso-N-ethylurea | Urea, N-ethyl-N-nitroso- | 759-73-9 | U176 |
| N-Nitrosomethyle-thylamine | Ethanamine, N-methyl-N-nitroso- | 10595-95-6 | |
| N-Nitroso-N-methylurea | Urea, N-methyl-N-nitroso- | 684-93-5 | U177 |
| N-Nitroso-N-methylure-thane | Carbamic acid, methylnitroso-, ethyl ester | 615-53-2 | U178 |
| N-Nitrosomethylvin-ylamine | Vinylamine, N-methyl-N-nitroso- | 4549-40-0 | P084 |
| N-Nitrosomorpholine | Morpholine, 4-nitroso- | 59-89-2 | |
| N-Nitrosonornicotine | Pyridine, 3-(1-nitroso-2-pyrrolidinyl)-, (S)- | 16543-55-8 | |
| N-Nitrosopiperidine | Piperidine, 1-nitroso- | 100-75-4 | U179 |
| N-Nitrosopyrrolidine | Pyrrolidine, 1-nitroso- | 930-55-2 | U180 |
| N-Nitrososarcosine | Glycine, N-methyl-N-nitroso- | 13256-22-9 | |
| 5-Nitro-o-toluidine | Benzenamine, 2-methyl-5-nitro- | 99-55-8 | U181 |
| Octachlorodibenzo-p-dioxin (OCDD) | 1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin | 3268-87-9 | |
| Octachlorodibenzofuran (OCDF) | 1,2,3,4,6,7,8,9-Octachlorodi-benofuran | 39001-02-0 | |
| | Diphosphoramide, octamethyl- | 152-16-9 | P085 |

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| Octamethylpyrophosphoramide | | | |
| Osmium tetroxide | Osmium oxide OsO4, (T-4)- | 20816-12-0 | P087 |
| Oxamyl | Ethanimidithioic acid, 2-(dimethylamino)-N-[[(methylamino)-carbonyl]oxy]-2-oxo-, methyl ester | 23135-22-0 | P194 |
| Paraldehyde | 1,3,5-Trioxane, 2,4,6-trimethyl- | 123-63-7 | U182 |
| Parathion | Phosphor- othioic acid, O,O-diethyl O-(4-nitro- phenyl) ester | 56-38-2 | P089 |
| Pebulate | Carbamothioic acid, butylethyl-, S-propyl ester | 1114-71-2 | |
| Pentachlorobenzene | Benzene, pentachloro- | 608-93-5 | U183 |
| Pentachlorodibenzo-p-dioxins | | | |
| Pentachlorodibenzofurans | | | |
| Pentachloroethane | Ethane, pentachloro- | 76-01-7 | U184 |
| Pentachloronitrobenzene (PCNB) | Benzene, pentachloronitro- | 82-68-8 | U185 |
| Pentachlorophenol | Phenol, pentachloro- | 87-86-5 | See F027 |
| Phenacetin | Acetamide, N-(4-ethoxyphenyl)- | 62-44-2 | U187 |
| Phenol | Same | 108-95-2 | U188 |
| 1,2-Phenylenediamine | 1,2-Benzenediamine | 95-54-5 | |
| 1,3-Phenylenediamine | 1,3-Benzenediamine | 108-45-2 | |
| Phenylenediamine | Benzenediamine | 25265-76-3 | |
| Phenylmercury acetate | Mercury, (acetato-O)phenyl- | 62-38-4 | P092 |
| Phenylthiourea | Thiourea, phenyl- | 103-85-5 | P093 |
| Phosgene | Carbonic dichloride | 75-44-5 | P095 |
| Phosphine | Same | 7803-51-2 | P096 |
| Phorate | Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester | 298-02-2 | P094 |
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| Phthalic acid esters, N.O.S.[1] | | | |
| Phthalic anhydride | 1,3-Isobenzofurandione | 85-44-9 | U190 |
| Physostigmine | Pyrrolo[2,3-b]indol-5-01,1,2,3, 3a,8,8a-hexahydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)- | 57-47-6 | P204 |
| Physostigmine salicylate | Benzoic acid, 2-hydroxy-, compd. with (3aS-cis) -1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo [2,3-b]indol-5-yl methylcarbamate ester (1:1) | 57-64-7 | P188 |
| 2-Picoline | Pyridine, 2-methyl- | 109-06-8 | U191 |
| Polychlorinated biphenyls, N.O.S.[1] | | | |
| Potassium cyanide | Potassium cyanide K(CN) | 151-50-8 | P098 |
| Potassium dimethyldi-thiocarbamate | Carbamodithioic acid, dimethyl, potassium salt | 128-03-0 | |
| Potassium n-hydroxymethyl-n-methyl-dithiocarbamate | Carbamodithioic acid, (hydroxymethyl)methyl-, monopotassium salt | 51026-28-9 | |
| Potassium n-methyldi-thiocarbamate | Carbamodithioic acid, methyl-monopotassium salt | 137-41-7 | |
| Potassium pentachlo-rophenate | Pentachlorophenol, potassium salt | 7778-73-6 | |
| Potassium silver cyanide | Argentate(1-), bis(cyano-C)-, potassium | 506-61-6 | P099 |
| Promecarb | Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate | 2631-37-0 | P201 |
| Pronamide | Benzamide, 3,5-dichloro-N- (1,1-dimethyl-2-propynyl)- | 23950-58-5 | U192 |
| 1,3-Propane sultone | 1,2-Oxathiolane, 2,2-dioxide | 1120-71-4 | U193 |
| n-Propylamine | 1-Propanamine | 107-10-8 | U194 |
| Propargyl alcohol | 2-Propyn-1-ol | 107-19-7 | P102 |
| Propham | Carbamic acid, phenyl-, 1-methylethyl ester | 122-42-9 | U373 |
| Propoxur | Phenol, 2-(1-methylethoxy)-, methylcarbamate | 114-26-1 | U411 |
| | Propane, 1,2-dichloro- | 78-87-5 | U083 |

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| Propylene dichloride | | | |
| 1,2-Propylenimine | Aziridine, 2-methyl- | 75-55-8 | P067 |
| Propylthiouracil | 4(1H)-Pyrimidinone, 2,3-dihydro-6-propyl-2-thioxo- | 51-52-5 | |
| Prosulfocarb | Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester | 52888-80-9 | U387 |
| Pyridine | Same | 110-86-1 | U196 |
| Reserpine | Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl) oxy]-smethyl ester,(3beta,16beta,17alpha, 18beta, 20alpha)- | 50-55-5 | U200 |
| Resorcinol | 1,3-Benzenediol | 108-46-3 | U201 |
| Safrole | 1,3-Benzodioxole, 5-(2-propenyl)- | 94-59-7 | U203 |
| Selenium | Same | 7782-49-2 | |
| Selenium compounds, N.O.S.[1] | | | |
| Selenium dioxide | Selenious acid | 7783-00-8 | U204 |
| Selenium sulfide | Selenium sulfide $SeS_2$ | 7488-56-4 | U205 |
| Selenium, tetrakis(dimethyl-dithiocarba-mate) | Carbamodithioic acid, dimethyl-, tetra anhydrosulfide with orthothioselenious acid | 144-34-3 | |
| Selenourea | Same | 630-10-4 | P103 |
| Silver | Same | 7440-22-4 | |
| Silver compounds, N.O.S.[1] | | | |
| Silver cyanide | Silver cyanide Ag(CN) | 506-64-9 | P104 |
| Silvex (2,4,5-TP) | Propanoic acid, 2-(2,4,5-trichlorophenoxy)- | 93-72-1 | See F027 |
| Sodium cyanide | Sodium cyanide Na(CN) | 143-33-9 | P106 |
| Sodium dibutyldithio-arbamate | Carbamodithioic acid, dibutyl-, sodium salt | 136-30-1 | |
| Sodium diethyldithio-carbamate | Carbamodithioic acid, diethyl-, sodium salt | 148-18-5 | |

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| Sodium dimethyldithio-carbamate | Carbamodithioic acid, dimethyl-, sodium salt | 128-04-1 | |
| Sodium pentachloro-phenate | Pentachlorophenol, sodium salt | 131-52-2 | |
| Streptozotocin | D-Glucose, 2-deoxy-2-[[(methyl-nitrosoamino)carbonyl]amino]- | 18883-66-4 | U206 |
| Strychnine | Strychnidin-10-one | 57-24-9 | P108 |
| Strychnine salts | | | P108 |
| Sulfallate | Carbamodithioic acid, diethyl-, 2-chloro-2-propenyl ester | 95-06-7 | |
| TCDD | Dibenzo[b,e][1,4]dioxin, 2,3,7,8-tetrachloro- | 1746-01-6 | |
| Tetrabutylthiuram disulfide | Thioperoxydicarbonic diamide, tetrabutyl | 1634-02-2 | |
| 1,2,4,5-Tetrachlorobenzene | Benzene, 1,2,4,5-tetrachloro- | 95-94-3 | U207 |
| Tetrachlorodibenzo-p-dioxins | | | |
| Tetrachlorodibenzofurans | | | |
| Tetrachloroethane, N.O.S.[1] | Ethane, tetrachloro-, N.O.S | 25322-20-7 | |
| 1,1,1,2-Tetrachloro-ethane | Ethane, 1,1,1,2-tetrachloro- | 630-20-6 | U208 |
| 1,1,2,2-Tetrachloro-ethane | Ethane, 1,1,2,2-tetrachloro- | 79-34-5 | U209 |
| Tetrachloroethylene | Ethene, tetrachloro- | 127-18-4 | U210 |
| 2,3,4,6-Tetrachloro-phenol | Phenol, 2,3,4,6-tetrachloro- | 58-90-2 | See F027 |
| 2,3,4,6-Tetrachloro-phenol, potassium salt | Same | 53535-27-6 | |
| 2,3,4,6-Tetrachloro-phenol, sodium salt | Same | 25567-55-9 | |
| Tetraethyldithiopyrophos phate | Thiodiphosphoric acid, tetraethyl ester | 3689-24-5 | P109 |
| Tetraethyl lead | Plumbane, tetraethyl- | 78-00-2 | P110 |
| Tetraethyl pyrophosphate | Diphosphoric acid, tetraethyl ester | 107-49-3 | P111 |
| Tetramethylthiuram monosulfide | Bis(dimethylthiocarbamoyl) sulfide | 97-74-5 | |

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| Tetranitromethane | Methane, tetranitro- | 509-14-8 | P112 |
| Thallium | Same | 7440-28-0 | |
| Thallium compounds, N.O.S. 1 | | | |
| Thallic oxide | Thallium oxide $Tl_2O_3$ | 1314-32-5 | P113 |
| Thallium(I) acetate | Acetic acid, thallium(1+) salt | 563-68-8 | U214 |
| Thallium(I) carbonate | Carbonic acid, dithallium(1+) salt | 6533-73-9 | U215 |
| Thallium(I) chloride | Thallium chloride TlCl | 7791-12-0 | U216 |
| Thallium(I) nitrate | Nitric acid, thallium(1+) salt | 10102-45-1 | U217 |
| Thallium selenite | Selenious acid, dithallium(1+) salt | 12039-52-0 | P114 |
| Thallium(I) sulfate | Sulfuric acid, dithallium(1+) salt | 7446-18-6 | P115 |
| Thioacetamide | Ethanethioamide | 62-55-5 | U218 |
| Thiodicarb | Ethanimidothioic acid, N,N'[thiobis[(methylimino) carbonyloxy]] bis-, dimethyl ester | 59669-26-0 | U410 |
| Thiofanox | 2-Butanone, 3,3-dimethyl-1-(methylthio)-, 0-[(methyl-amino)carbonyl] oxime | 39196-18-4 | P045 |
| Thiomethanol | Methanethiol | 74-93-1 | U153 |
| Thiophanate-methyl | Carbamic acid, [1,2-phyenylenebis (iminocarbonothioyl)]bis-, dimethyl ester | 23564-05-8 | U409 |
| Thiophenol | Benzenethiol | 108-98-5 | P014 |
| Thiosemicarbazide | Hydrazinecarbothioamide | 79-19-6 | P116 |
| Thiourea | Same | 62-56-6 | U219 |
| Thiram | Thioperoxydicarbonic diamide $[(H_2N)C(S)]_2S_2$, tetramethyl- | 137-26-8 | U244 |
| Tirpate | 1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O-[(methylamino) carbonyl] oxime | 26419-73-8 | P185 |
| Toluene | Benzene, methyl- | 108-88-3 | U220 |
| Toluenediamine | Benzenediamine, ar-methyl- | 25376-45-8 | U221 |
| | 1,3-Benzenediamine, 4-methyl- | 95-80-7 | |

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| Toluene-2,4-diamine | | | |
| Toluene-2,6-diamine | 1,3-Benzenediamine, 2-methyl- | 823-40-5 | |
| Toluene-3,4-diamine | 1,2-Benzenediamine, 4-methyl- | 496-72-0 | |
| Toluene diisocyanate | Benzene, 1,3-diisocyanatomethyl- | 26471-62-5 | U223 |
| o-Toluidine | Benzenamine, 2-methyl- | 95-53-4 | U328 |
| o-Toluidine hydrochloride | Benzenamine, 2-methyl-, hydrochloride | 636-21-5 | U222 |
| p-Toluidine | Benzenamine, 4-methyl- | 106-49-0 | U353 |
| Toxaphene | Same | 8001-35-2 | P123 |
| Triallate | Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2- propenyl) ester | 2303-17-5 | U389 |
| 1,2,4-Trichlorobenzene | Benzene, 1,2,4-trichloro- | 120-82-1 | |
| 1,1,2-Trichloroethane | Ethane, 1,1,2-trichloro- | 79-00-5 | U227 |
| Trichloroethylene | Ethene, trichloro- | 79-01-6 | U228 |
| Trichloromethanethiol | Methanethiol, trichloro- | 75-70-7 | P118 |
| Trichloromonofluoro-methane | Methane, trichlorofluoro- | 75-69-4 | U121 |
| 2,4,5-Trichlorophenol | Phenol, 2,4,5-trichloro- | 95-95-4 | See F027 |
| 2,4,6-Trichlorophenol | Phenol, 2,4,6-trichloro- | 88-06-2 | See F027 |
| 2,4,5-T | Acetic acid, (2,4,5-trichlorophenoxy)- | 93-76-5 | See F027 |
| Trichloropropane, N.O.S.[1] | | 25735-29-9 | |
| 1,2,3-Trichloropropane | Propane, 1,2,3-trichloro- | 96-18-4 | |
| Triethylamine | Ethanamine, N,N-diethyl- | 121-44-8 | U404 |
| O,O,O-Triethyl phosphorothioate | Phosphorothioic acid, O,O,O-triethyl ester | 126-68-1 | |
| 1,3,5-Trinitrobenzene | Benzene, 1,3,5-trinitro- | 99-35-4 | U234 |
| Tris(1-aziridinyl)-phosphine sulfide | Aziridine, 1,1',1”-phosphinothioylidynetris- | 52-24-4 | |
| | | 126-72-7 | U235 |

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| Tris(2,3-dibromopropyl)phosphate | 1-Propanol, 2,3-dibromo-, phosphate (3:1) | | |
| Trypan blue | 2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'-dimethyl[1,1'-biphenyl]-4,4'-diyl)bis(azo)]-bis[5-amino-4-hydroxy-, tetrasodium salt | 72-57-1 | U236 |
| Uracil mustard | 2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]- | 66-75-1 | U237 |
| Vanadium pentoxide | Vanadium oxide $V_2O_5$ | 1314-62-1 | P120 |
| Vernolate | Carbamothioic acid, dipropyl-, S-propyl ester | 1929-77-7 | |
| Vinyl chloride | Ethene, chloro- | 75-01-4 | U043 |
| Warfarin | 2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-,when present at concentrations less than 0.3% | 81-81-2 | U248 |
| Warfarin | 2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-,when present at concentrations greater than 0.3% | 81-81-2 | P001 |
| Warfarin salts, whenpresent at concentrationsless than 0.3% | | | U248 |
| Warfarin salts, whenpresent at concentrationsgreater than 0.3% | | | P001 |
| Zinc cyanide | Zinc cyanide $Zn(CN)_2$ | 557-21-1 | P121 |
| Zinc phosphide | Zinc phosphide Zn3P2, when present at concentrations greater than 10% | 1314-84-7 | P122 |
| Zinc phosphide | Zinc phosphide Zn3P2, when present at concentrations of 10% or less | 1314-84-7 | U249 |
| Ziram | Zinc, bis (dimethylcarbamodi-thioato- S,S')-, (T-4)- | 137-30-4 | P205 |

[1] The abbreviation N.O.S. (not otherwise specified) signifies those members of the general class not specifically listed by name in this appendix.

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**Statutory Authority**: Code of Ala. 1975, §§22-30-10, 22-30-11.
**History**: November 19, 1980. **Amended**: April 9, 1986; September 29, 1986; August 24, 1989; December 6, 1990; January 25, 1992. **Amended**: Filed Novmeber 30, 1994; effective January 5, 1995. **Amended**: Filed December 8, 1995; effective January 12, 1996. **Amended**: Filed February 21, 1997; effective March 28, 1997. **Amended**: Filed February 20, 1998; effective March 27, 1998. **Amended**: Filed February 26, 1999; effective April 2, 1999. **Amended**: Filed March 9, 2001; effective April 13, 2001. **Amended**: Filed February 8, 2002; effective March 15, 2002. **Amended**: Filed February 28, 2006; effective April 4, 2006. **Amended**: Filed February 27, 2007; effective April 3, 2007. **Amended**: Filed April 22, 2008; effective May 27, 2008. **Amended**: Filed February 28, 2012; effective April 3, 2012.

## 335-14-2-A9 Appendix IX - Wastes Excluded Under 335-141-1-.03 (2).

**TABLE 1 - WASTE EXCLUDED FROM NON-SPECIFIC SOURCES**

| Site | Waste Description |
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|---|---|
| Alabama Power<br><br>Company - Barry<br><br>Steam Plant<br><br>Bucks, AL<br><br>ALD082148800 | Boiler chemical cleanout wastewater (EPA HW No. D007) that is generated at the Alabama Power Co. – Barry Steam Plant (APC – Barry) facility. The waste will not be subject to regulation as D007 at the point of generation if it is not placed outside on the land prior to shipment to a facility that is licensed, permitted, or otherwise authorized to accept the exempted wastewater in accordance with ADEM Admin. Code Division 335-13, Solid Waste Program for recycling, for incineration, or for disposal in a lined landfill with leachate collection. The exclusion is effective as of April 8, 2016.<br><br>(1) Hazardous Waste Determination. To demonstrate that the waste continues to be a non-hazardous waste, APC – Barry must verify that the waste contains only trivalent chromium and does not exhibit any other hazardous characteristics by sampling in accordance with 335-14-1-.03(2)(h) during every second boiler clean out event. If at any time the waste is determined to be hazardous, APC – Barry must immediately manage it as a hazardous waste as required by ADEM Admin. Code div. 335-14.<br><br>(2) Records Documentation. Onsite records documentation must include: hazardous waste determinations, 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. These documents must be maintained 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 ADEM.<br><br>(3) Reopener Language.<br><br>(A) If, anytime after disposal of the exempted waste, APC – Barry possesses or is otherwise made aware of any data (including, but not limited, to leachate data or groundwater monitoring data) relevant to the exempted waste at the facility indicating that hexavalent chromium is present in the |

leachate at a concentration higher than the regulatory limit, or is in the groundwater at a concentration higher than the maximum allowable groundwater concentration, then APC – Barry must report such data in writing to ADEM within 10 days of first possessing or being made aware of that data.

(B) Based on the information described in paragraph (A) and any other information received from any source, ADEM will make a preliminary determination as to whether the reported information requires departmental action to protect human health or the environment. Further action may include suspending or revoking the exclusion, or other appropriate response necessary to protect human health and the environment.

(C) If ADEM determines that the reported information does require Department action, ADEM will notify APC – Barry in writing of the actions necessary to protect human health and the environment. The notice shall include a statement of the proposed action and a statement providing APC – Barry with an opportunity to present information as to why the proposed departmental action is not necessary or to suggest an alternative action. APC – Barry shall have 30 days from the date of ADEM's notice to present the information.

(D) If after 30 days APC – Barry presents no further information, ADEM will issue a final written determination describing the Department's actions that are necessary to protect human health or the environment. Any required action described in ADEM's determination shall become effective immediately, unless the Department provides otherwise.

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| Alabama Power<br>Company - E.C.<br>Gaston Steam<br>Plant<br>Wilsonville, AL<br>ALD083742858 | Boiler chemical cleanout wastewater (EPA HW No. D007) that is generated at the Alabama Power Co. – E.C. Gaston Steam Plant (APC – E. C. Gaston) facility. The waste will not be subject to regulation as D007 at the point of generation if it is not placed outside on the land prior to shipment to a facility that is licensed, permitted, or otherwise authorized to accept the exempted wastewater in accordance with ADEM Admin. Code Division 335-13, Solid Waste Program for recycling, for incineration, or for disposal in a lined landfill with leachate collection. The exclusion is effective as of April 8, 2016.<br><br>(1) Hazardous Waste Determination. To demonstrate that the waste continues to be a non-hazardous waste, APC – E.C. Gaston must verify that the waste contains only trivalent chromium and does not exhibit any other hazardous characteristics by sampling in accordance with 335-14-1-.03(2)(h) during every second boiler clean out event. If at any time the waste is determined to be hazardous, APC – Gaston must immediately manage it as a hazardous waste as required by ADEM Admin. Code div. 335-14.<br><br>(2) Records Documentation. Onsite records documentation must include: hazardous waste determinations, 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. These documents must be maintained 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 ADEM.<br><br>(3) Reopener Language.<br><br>(A) If, anytime after disposal of the exempted waste, APC – E. C. Gaston possesses or is otherwise made aware of any data (including but not limited to leachate data or groundwater monitoring data) relevant to the exempted waste at the facility indicating that hexavalent chromium is present in the |

leachate at a concentration higher than the regulatory limit, or is in the groundwater at a concentration higher than the maximum allowable groundwater concentration, then APC – E. C. Gaston must report such data in writing to ADEM within 10 days of first possessing or being made aware of that data.

(B) Based on the information described in paragraph (A) and any other information received from any source, ADEM will make a preliminary determination as to whether the reported information requires departmental action to protect human health or the environment. Further action may include suspending or revoking the exclusion, or other appropriate response necessary to protect human health and the environment.

(C) If ADEM determines that the reported information does require Department action, ADEM will notify APC – E. C. Gaston in writing of the actions the Department believes are necessary to protect human health and the environment. The notice shall include a statement of the proposed action and a statement providing APC – E. C. Gaston with an opportunity to present information as to why the proposed departmental action is not necessary or to suggest an alternative action. APC E.C. Gaston shall have 30 days from the date of ADEM's notice to present the information.

(D) If after 30 days APC – E. C. Gaston presents no further information, ADEM will issue a final written determination describing the Department's actions that are necessary to protect human health or the environment. Any required action described in ADEM's determination shall become effective immediately, unless the Department provides otherwise.

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| Alabama Power<br><br>Company -<br><br>Gadsden Steam<br><br>Plant<br><br>Gadsden, AL<br><br>ALD00061554 | Boiler chemical cleanout wastewater (EPA HW No. D007) that is generated at the Alabama Power Co. - Gadsden Steam Plant (APC – Gadsden) facility. The waste will not be subject to regulation as D007 at the point of generation if it is not placed outside on the land prior to shipment to a facility that is licensed, permitted, or otherwise authorized to accept the exempted wastewater in accordance with ADEM Admin. Code Division 335-13, Solid Waste Program for recycling, for incineration, or for disposal in a lined landfill with leachate collection. The exclusion is effective as of April 8, 2016.<br><br>(1) Hazardous Waste Determination. To demonstrate that the waste continues to be a non-hazardous waste, APC – Gadsden must verify that the waste contains only trivalent chromium and does not exhibit any other hazardous characteristics by sampling in accordance with 335-14-1-.03(2)(h) during every second boiler clean out event. If at any time the waste is determined to be hazardous, APC – Gadsden must immediately manage it as a hazardous waste as required by ADEM Admin. Code div. 335-14.<br><br>(2) Records Documentation. Onsite records documentation must include: hazardous waste determinations, 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. These documents must be maintained 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 ADEM.<br><br>(3) Reopener Language.<br><br>(A) If, anytime after disposal of the exempted waste, APC - Gadsden possesses or is otherwise made aware of any data (including but not limited to leachate data or groundwater monitoring data) relevant to the exempted waste at the facility indicating that hexavalent chromium is present in the |

leachate at a concentration higher than the regulatory limit, or is in the groundwater at a concentration higher than the maximum allowable groundwater concentration, then APC – Gadsden must report such data in writing to ADEM within 10 days of first possessing or being made aware of that data.

(B) Based on the information described in paragraph (A) and any other information received from any source, ADEM will make a preliminary determination as to whether the reported information requires departmental action to protect human health or the environment. Further action may include suspending or revoking the exclusion, or other appropriate response necessary to protect human health and the environment.

(C) If ADEM determines that the reported information does require Department action, ADEM will notify APC - Gadsden in writing of the actions the Department believes are necessary to protect human health and the environment. The notice shall include a statement of the proposed action and a statement providing APC - Gadsden with an opportunity to present information as to why the proposed departmental action is not necessary or to suggest an alternative action. APC - Gadsden shall have 30 days from the date of ADEM's notice to present the information.

(D) If after 30 days APC - Gadsden presents no further information, ADEM will issue a final written determination describing the Department's actions that are necessary to protect human health or the environment. Any required action described in ADEM's determination shall become effective immediately, unless the Department provides otherwise.

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| Alabama Power<br><br>Company - Gorgas<br><br>Steam Plant<br><br>Parrish, AL<br><br>ALD000615567 | Boiler chemical cleanout wastewater, D007, that is generated at the Alabama Power Company Gorgas Steam Plant (APC – Gorgas) facility. The waste will not be subject to regulation as D007 at the point of generation if it is not placed outside on the land prior to shipment to a facility that is licensed, permitted, or otherwise authorized to accept the exempted wastewater in accordance with ADEM Admin. Code Division 335-13, Solid Waste Program for recycling, for incineration, or for disposal in a lined landfill with leachate collection. The exclusion is effective as of April 8, 2016.<br><br>(1) Hazardous Waste Determination. To demonstrate that the waste continues to be a non-hazardous waste, APC – Gorgas must verify that the waste contains only trivalent chromium and does not exhibit any other hazardous characteristics by sampling in accordance with 335-14-1-.03(2)(h) during every second boiler clean out event. If at any time the waste is determined to be hazardous, APC – Gorgas must immediately manage it as a hazardous waste as required by ADEM Admin. Code div. 335-14.<br><br>(2) Records Documentation. Onsite records documentation must include: hazardous waste determinations, 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. These documents must be maintained 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 ADEM.<br><br>(3) Reopener Language.<br><br>(A) If, anytime after disposal of the exempted waste, APC – Gorgas possesses or is otherwise made aware of any data (including but not limited to leachate data or groundwater monitoring data) relevant to the exempted waste at the facility indicating that hexavalent chromium is present in the |

leachate at a concentration higher than the regulatory limit, or is in the groundwater at a concentration higher than the maximum allowable groundwater concentration, then APC – Gorgas must report such data in writing to ADEM within 10 days of first possessing or being made aware of that data.

(B) Based on the information described in paragraph (A) and any other information received from any source, ADEM will make a preliminary determination as to whether the reported information requires departmental action to protect human health or the environment. Further action may include suspending or revoking the exclusion, or other appropriate response necessary to protect human health and the environment.

(C) If ADEM determines that the reported information does require Department action, ADEM will notify APC – Gorgas in writing of the actions the Department believes are necessary to protect human health and the environment. The notice shall include a statement of the proposed action and a statement providing APC – Gorgas with an opportunity to present information as to why the proposed departmental action is not necessary or to suggest an alternative action. APC – Gorgas shall have 30 days from the date of ADEM's notice to present the information.

(D) If after 30 days APC – Gorgas presents no further information, ADEM will issue a final written determination describing the Department's actions that are necessary to protect human health or the environment. Any required action described in ADEM's determination shall become effective immediately, unless the Department provides otherwise.

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| Alabama Power<br><br>Company - Greene<br><br>County Steam<br><br>Plant<br><br>Demopolis, AL<br><br>ALD000615609 | Boiler chemical cleanout wastewater, D007, that is generated at the Alabama Power Co. - Greene County Steam Plant (APC – Greene Co.) facility. The waste will not be subject to regulation as D007 at the point of generation if it is not placed outside on the land prior to shipment to a facility that is licensed, permitted, or otherwise authorized to accept the exempted wastewater in accordance with ADEM Admin. Code Division 335-13, Solid Waste Program for recycling, for incineration, or for disposal in a lined landfill with leachate collection. The exclusion is effective as of April 8, 2016.<br><br>(1) Hazardous Waste Determination. To demonstrate that the waste continues to be a non-hazardous waste, APC – Greene County must verify that the waste contains only trivalent chromium and does not exhibit any other hazardous characteristics by sampling in accordance with 335-14-1-.03(2)(h) during every second boiler clean out event. If at any time the waste is determined to be hazardous, APC – Greene must immediately manage it as a hazardous waste as required by ADEM Admin. Code div. 335-14.<br><br>(2) Records Documentation. Onsite records documentation must include: hazardous waste determinations, 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. These documents must be maintained 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 ADEM.<br><br>(3) Reopener Language.<br><br>(A) If, anytime after disposal of the exempted waste, APC – Greene Co. possesses or is otherwise made aware of any data (including but not limited to leachate data or groundwater monitoring data) relevant to the exempted waste at the facility indicating that hexavalent chromium is present in the |

leachate at a concentration higher than the regulatory limit, or is in the groundwater at a concentration higher than the maximum allowable groundwater concentration, then APC – Greene Co. must report such data in writing to ADEM within 10 days of first possessing or being made aware of that data.

(B) Based on the information described in paragraph (A) and any other information received from any source, ADEM will make a preliminary determination as to whether the reported information requires departmental action to protect human health or the environment. Further action may include suspending or revoking the exclusion, or other appropriate response necessary to protect human health and the environment.

(C) If ADEM determines that the reported information does require Department action, ADEM will notify APC – Greene Co. in writing of the actions the Department believes are necessary to protect human health and the environment. The notice shall include a statement of the proposed action and a statement providing APC – Greene Co. with an opportunity to present information as to why the proposed departmental action is not necessary or to suggest an alternative action. APC – Greene Co. shall have 30 days from the date of ADEM's notice to present the information.

(D) If after 30 days APC – Greene Co. presents no further information, ADEM will issue a final written determination describing the Department's actions that are necessary to protect human health or the environment. Any required action described in ADEM's determination shall become effective immediately, unless the Department provides otherwise.

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| Alabama Power<br><br>Company - Miller<br><br>Steam Plant<br><br>Quinton, AL<br><br>ALD000615658 | Boiler chemical cleanout wastewater, D007, that is generated at the Alabama Power Company - Miller Steam Plant (APC – Miller) facility. The waste will not be subject to regulation as D007 at the point of generation if it is not placed outside on the land prior to shipment to a facility that is licensed, permitted, or otherwise authorized to accept the exempted wastewater in accordance with ADEM Admin. Code Division 335-13, Solid Waste Program for recycling, for incineration, or for disposal in a lined landfill with leachate collection. The exclusion is effective as of April 8. 2016.<br><br>(1) Hazardous Waste Determination. To demonstrate that the waste continues to be a non-hazardous waste, APC – Miller must verify that the waste contains only trivalent chromium and does not exhibit any other hazardous characteristics by sampling in accordance with 335-14-1-.03(2)(h) during every second boiler clean out event. If at any time the waste is determined to be hazardous, APC – Miller must immediately manage it as a hazardous waste as required by ADEM Admin. Code div. 335-14. (2) Records Documentation. Onsite records documentation must include: hazardous waste determinations, 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. These documents must be maintained 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 ADEM.<br><br>(3) Reopener Language.<br><br>(A) If, anytime after disposal of the exempted waste, APC – Miller possesses or is otherwise made aware of any data (including but not limited to leachate data or groundwater monitoring data) relevant to the exempted waste at the facility indicating that hexavalent chromium is present in the leachate at a concentration higher than the |

regulatory limit, or is in the groundwater at a concentration higher than the maximum allowable groundwater concentration, then APC – Miller must report such data in writing to ADEM within 10 days of first possessing or being made aware of that data.

(B) Based on the information described in paragraph (A) and any other information received from any source, ADEM will make a preliminary determination as to whether the reported information requires departmental action to protect human health or the environment. Further action may include suspending or revoking the exclusion, or other appropriate response necessary to protect human health and the environment.

(C) If ADEM determines that the reported information does require Department action, ADEM will notify APC – Miller in writing of the actions the Department believes are necessary to protect human health and the environment. The notice shall include a statement of the proposed action and a statement providing APC – Miller with an opportunity to present information as to why the proposed departmental action is not necessary or to suggest an alternative action. APC – Miller shall have 30 days from the date of ADEM's notice to present the information.

(D) If after 30 days APC – Miller presents no further information, ADEM will issue a final written determination describing the Department's actions that are necessary to protect human health or the environment. Any required action described in ADEM's determination shall become effective immediately, unless the Department provides otherwise.

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| Ampex Recording<br><br>Media Corp.<br><br>Opelika, AL<br><br>ALD 003 297 116 | Solvent recovery residues in the powder or pellet form (EPA Hazardous Waste Nos. F003 and F005) generated from the recovery of spent solvents from the manufacture of tape recording media (generated at a maximum annual rate of 1,000 cubic yards in the powder or pellet form) after August 9, 1993. In order to confirm that the characteristics of the wastes do not change significantly, the facility must, on an annual basis, analyze a representative composite sample of the waste (in its final form) for the constituents listed in Rule 335-14-2-.03(5) using the method specified therein. The annual analytical results, including quality control information, must be compiled, certified according to Rule 335-14-1-.03(2)(i)16., maintained on-site for a minimum of five years, and made available for inspection upon request by any employee or representative of the EPA or the State of Alabama. Failure to maintain the required records on-site will be considered by the EPA, at its discretion, sufficient basis to revoke the exclusion to the extent directed by the EPA. |
| Hoechst Celanese<br><br>Corp.<br><br>Bucks, AL<br><br>ALD 056 113 756 | Distillation bottoms generated (at a maximum annual rate of 31,500 cubic yards) from the production of sodium hydrosulfite (EPA Hazardous Waste No. F003). This exclusion was published by the EPA on July 17, 1990. This exclusion does not include the waste contained in Hoechst Celanese's on-site surface impoundment. |

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| Honda<br><br>Manufacturing of<br><br>Alabama, LLC<br><br>Lincoln, AL<br><br>ALR000016261 | Wastewater treatment sludge, (EPA Hazardous Waste NO. F019) that is generated at the Honda Manufacturing of Alabama, LLC (Honda) facility. The sludge will not be subject to the F019 listing at the point of generation if the wastes are not placed outside on the land prior to shipment to a facility that is licensed, permitted, or otherwise authorized to accept the delisted wastewater treatment sludge in accordance with ADEM Admin. Code Division 335-13, Solid Waste Program for recycling, for incineration, or for disposal in a lined landfill with leachate collection. The exclusion became effective as of December 10, 2007.<br><br>(1) Hazardous Waste Determination. To demonstrate that the waste continues to be non-hazardous waste, Honda must perform a waste determination as required by ADEM Admin. Code r. 335-14-3-.01(2) on the sludge at least every three years. In addition, the waste must be managed according to all requirements found in ADEM Admin. Code r. 335-14-3. If at any time the waste is determined to be hazardous, Honda must immediately manage the sludge as a hazardous waste as required by ADEM Admin. Code Division 335-14.<br><br>(2) Records Documentation. Onsite records documentation must include: hazardous waste determinations, 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. These documents must be maintained 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 ADEM.<br><br>(3) Reopener Language.<br><br>(A) If, anytime after disposal of the delisted waste, Honda possesses or is otherwise made aware of any data (including but not limited to leachate data or groundwater monitoring data) relevant to the |

delisted waste at the facility indicating that any constituent is at a level in the leachate higher than the specified delisting level, or is in the groundwater at a concentration higher than the maximum allowable groundwater concentration, then Honda must report such data in writing to ADEM within 10 days of first possessing or being made aware of that data.

(B) Based on the information described in paragraph (A) and any other information received from any source, ADEM will make a preliminary determination as to whether the reported information requires departmental action to protect human health or the environment. Further action may include suspending or revoking the exclusion, or other appropriate response necessary to protect human health and the environment.

(C) If ADEM determines that the reported information does require Department action, ADEM will notify Honda in writing of the actions the Department believes are necessary to protect human health and the environment. The notice shall include a statement of the proposed action and a statement providing Honda with an opportunity to present information as to why the proposed departmental action is not necessary or to suggest an alternative action. Honda shall have 30 days from the date of the ADEM's notice to present the information.

(D) If after 30 days Honda presents no further information, ADEM will issue a final written determination describing the Department's actions that are necessary to protect human health or the environment. Any required action described in the ADEM's determination shall become effective immediately, unless the Department provides otherwise.

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| ISE Innomotive<br><br>Systems US, Inc.<br><br>Tuscaloosa, AL<br><br>ALR 000 031 773 | Wastewater treatment sludge (EPA Hazardous Waste No. F019) generated at the ISE Innomotive Systems US, Inc. (ISE) facility. The sludge will not be subject to the F019 classification at the point of generation if the waste is not placed outside on the land prior to being legitimately recycled or disposed of in a permitted hazardous waste landfill or a municipal solid waste landfill permitted by the Department. The exclusion became effective as of May 17, 2012.<br><br>(1) Hazardous Waste Determination. To demonstrate that the waste continues to be a non-hazardous waste, ISE must perform a waste determination as required by ADEM Admin. Code r. 335-14-3-.01(2) on the sludge at least every three years. If at any time the waste is determined to be hazardous, ISE must immediately manage the sludge as a hazardous waste as required by ADEM Admin. Code div. 335-14.<br><br>(2) Records Documentation. Onsite records documentation must include: hazardous waste determinations, the volume of waste generated and disposed offsite; documentation showing when the waste volumes were generated and sent offsite; the name and address of the receiving facility; and documentation confirming receipt of the waste by the receiving facility. These documents must be maintained onsite 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 Department.<br><br>(3) Reopener Language.<br><br>(A) If, anytime after disposal of the delisted waste, ISE possesses or is otherwise made aware of any data (including but not limited to leachate data or groundwater monitoring data) relevant to the excluded waste at the facility indicating that any constituent is at a level in the leachate higher than the specified exclusion level, or is in the groundwater at a concentration higher than the maximum allowable groundwater concentration, then ISE must report such data in writing to the Department within 10 days |

of first possessing or being made aware of that data.

(B) Based on the information described in paragraph (A) and any other information received from any source, the Department will make a preliminary determination as to whether the reported information requires departmental action to protect human health or the environment. Further action may include suspending or revoking the exclusion, or other appropriate response necessary to protect human health and the environment.

(C) If the Department determines that the reported information does require Department action, the Department will notify ISE in writing of the actions the Department believes are necessary to protect human health and the environment. The notice shall include a statement of the proposed action and a statement providing ISE with an opportunity to present information as to why the proposed departmental action is not necessary or to suggest an alternative action. ISE shall have 30 days from the date of the Department's notice to present the information.

(D) If, after 30 days, ISE presents no further information, the Department will issue a final written determination describing the Department's actions that are necessary to protect human health or the environment. Any required action described in the Department's determination shall become effective immediately, unless the Department provides otherwise.

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| Mercedes-Benz U.S. International, Inc. Vance, AL ALR00002246 | Wastewater treatment sludge (EPA Hazardous Waste No. F019) generated at the Mercedes-Benz U.S. International, Inc. (MBUSI) facility. The sludge will not be subject to the F019 listing at the point of generation if the wastes are not placed outside on the land prior to shipment to a facility that is licensed, permitted, or otherwise authorized to accept the delisted wastewater treatment sludge in accordance with ADEM Admin. Code Division 335-13, Solid Waste Program for recycling, incineration, or disposal in a lined landfill with leachate collection. The exclusion became effective as of July 20, 2009.<br><br>(1) Hazardous Waste Determination. To demonstrate that the waste continues to be a non-hazardous waste, MBUSI must perform a waste determination as required by ADEM Admin. Code r. 335-14-3-.01(2) on the sludge at least every three years. In addition, the waste must be managed according to all requirements found in ADEM Admin. Code r. 335-14-3. If at any time the waste is determined to be hazardous, MBUSI must immediately manage the sludge as a hazardous waste as required by ADEM Admin. Code div. 335-14.<br><br>(2) Records Documentation. Onsite records documentation must include: hazardous waste determinations, the volume of waste generated and disposed of offsite; 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. These documents must be maintained 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 Department.<br><br>(3) Reopener Language.<br><br>(A) If, anytime after disposal of the delisted waste, MBUSI possesses or is otherwise made aware of any data (including but not limited to leachate data or groundwater monitoring data) relevant to the |

delisted waste at the facility indicating that any constituent is at a level in the leachate higher than the specified delisting level, or is in the groundwater at a concentration higher than the maximum allowable groundwater concentration, then MBUSI must report such data in writing to the Department within 10 days of first possessing or being made aware of that data.

(B) Based on the information described in paragraph (A) and any other information received from any source, the Department will make a preliminary determination as to whether the reported information requires departmental action to protect human health or the environment. Further action may include suspending or revoking the exclusion, or other appropriate response necessary to protect human health and the environment.

(C) If ADEM determines that the reported information does require Department action, ADEM will notify MBUSI in writing of the actions the Department believes are necessary to protect human health and the environment. The notice shall include a statement of the proposed action and a statement providing MBUSI with an opportunity to present information as to why the proposed departmental action is not necessary or to suggest an alternative action. MBUSI shall have 30 days from the date of the Department's notice to present the information.

(D) If after 30 days MBUSI presents no further information, ADEM will issue a final written determination describing the Department's actions that are necessary to protect human health or the environment. Any required action described in the Department's determination shall become effective immediately, unless the Department provides otherwise.

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| Mitsubishi<br><br>Polycrystalline<br><br>Silicon America<br><br>Corporation<br><br>Theodore, AL<br><br>ALR 000 008 110 | Chlorination reactor dust (EPA Hazardous Waste No. D007) generated at the Mitsubishi Polycrystalline Silicon America Corporation (Mitsubishi) facility. The dust will not be subject to the D007 classification at the point of generation if the wastes are not placed outside on the land prior to being legitimately recycled or disposed in a permitted hazardous waste landfill or a municipal solid waste landfill permitted by the Department. The exclusion became effective as of May 11, 2012.<br><br>(1) Hazardous Waste Determination. At least once every three years, Mitsubishi must collect and analyze one representative sample of the chlorination reactor dust to demonstrate that the dust continues to meet the conditions of the exclusion. If at any time the waste is determined to not meet the conditions of the exclusion, Mitsubishi must immediately manage the dust as a hazardous waste as required by ADEM Admin. Code div. 335-14.<br><br>(2) Records Documentation. Onsite records documentation must include: hazardous waste determinations, the volume of waste generated and disposed offsite; documentation showing when the waste volumes were generated and sent offsite; the name and address of the receiving facility; and documentation confirming receipt of the waste by the receiving facility. These documents must be maintained onsite 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 Department.<br><br>(3) Reopener Language.<br><br>(A) If, anytime after disposal of the excluded waste, Mitsubishi possesses or is otherwise made aware of any data (including but not limited to leachate data or groundwater monitoring data) relevant to the excluded waste at the facility indicating that any constituent is at a level in the leachate higher than the specified exclusion level, or is in the groundwater at a concentration higher than the maximum |

allowable groundwater concentration, then Mitsubishi must report such data in writing to the Department within 10 days of first possessing or being made aware of that data.

(B) Based on the information described in paragraph (A) and any other information received from any source, the Department will make a preliminary determination as to whether the reported information requires departmental action to protect human health or the environment. Further action may include suspending or revoking the exclusion, or other appropriate response necessary to protect human health and the environment.

(C) If the Department determines that the reported information does require Department action, the Department will notify Mitsubishi in writing of the actions the Department believes are necessary to protect human health and the environment. The notice shall include a statement of the proposed action and a statement providing Mitsubishi with an opportunity to present information as to why the proposed departmental action is not necessary or to suggest an alternative action. Mitsubishi shall have 30 days from the date of the Department's notice to present the information.

(D) If, after 30 days, Mitsubishi presents no further information, the Department will issue a final written determination describing the Department's actions that are necessary to protect human health or the environment. Any required action described in the Department's determination shall become effective immediately, unless the Department provides otherwise.

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| Reynolds Metals<br><br>Company<br><br>Sheffield, AL<br><br>ALD 053 365 160 | Dewatered wastewater treatment sludges (EPA Hazardous Waste No. F019) generated (at a maximum annual rate of 3,840 cubic yards) from the chemical conversion coating of aluminum after August 15, 1986. |
| SONY Magnetic<br><br>Products of<br><br>America.<br><br>Dothan, AL<br><br>ALD 040 653 636 | Hazardous Waste Nos. F003 and F005) generated from the recovery of spent solvents from the manufacture of tape recording media (generated at a maximum annual rate of 200 cubic yards) after March 31, 2004. In order to confirm that the characteristics of the wastes do not change significantly, the facility must, on an annual basis, analyze a representative composite sample of the waste (in its final form) for the constituents listed in Rule 335-14-2-.03(5) using the method specified therein. The annual analytical results, including quality control information, must be compiled, certified according to Rule 335-14-1-.03(2)(i)16., maintained on-site for a minimum of five years, and made available for inspection upon request by any employee or representative of the EPA or the State of Alabama. Failure to maintain the required records on-site will be considered by the Department, at its discretion, sufficient basis to revoke the exclusion to the extent directed by the Alabama Department of Environmental Management. |
| Universal Oil<br><br>Products<br><br>Decatur, AL<br><br>ALD 053 363 776 | Wastewater treatment sludges EPA Hazardous Waste No. F006) generated from electroplating operations and contained in two on-site lagoons on August 15, 1986. This is a one-time exclusion. |

**TABLE 2 - WASTES EXCLUDED FROM SPECIFIC SOURCES**

| Site | Waste Description |
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| Akzo Chemicals<br><br>Inc. (formerly<br><br>Stauffer Chemical<br><br>Company) Axis, AL ALD 008 161 176 | Brine purification muds generated from their chlor-alkali manufacturing operations (EPA Hazardous Waste No. K071) and disposed of in brine mud pond HWTF: 5 EP-201. |
| Occidental<br><br>Chemical<br><br>Corporation<br><br>Muscle Shoals<br><br>Plant<br><br>Sheffield, AL<br><br>ALD 004 019 642 | Retorted wastewater treatment sludge from the mercury cell process in chlorine production (EPA Hazardous Waste No. K106) after September 19, 1989. This exclusion is conditional upon the submission of data obtained from Occidental's full-scale retort treatment system because Occidental's original data were based on a pilot-scale retort system. To ensure that hazardous constituents are not present in the waste at levels of regulatory concern once the full-scale treatment facility is in operation, Occidental must implement a testing program. All sampling and analyses (including quality control procedures) must be performed using appropriate methods. As applicable to the method-defined parameters of concern, analyse requiring the use of SW-846 methods incorporated by reference in 40 CFR 260.11 must be used without substitution. As applicable, the SW-846 methods might include Methods 0010, 0011, 0020, 0023A, 0030, 0031, 0040, 0050, 0051, 0060, 0061, 1010A, 1020B, 1110A, 1310B, 1311, 1312, 1320, 1330A, 9010C, 9012B, 9040C, 9045D, 9060A, 9070A (uses EPA Method 1664, Rev. A), 9071B, and 9095B. This testing program must meet the following conditions for the exclusion to be valid:<br><br>(1) Initial Testing - During the first four weeks of full-scale retort operation, Occidental must do the following: (A) Collect representative grab samples from every batch of retorted material and composite the grab samples to produce a weekly composite sample. The |

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| | weekly composite samples, prior to disposal or recycling, must be analyzed for the EP leachate concentrations of all the EP toxic metals (except mercury), nickel, and cyanide (using distilled water in the cyanide extractions). Occidental must report the analytical test data, including all quality control data, obtained during this initial period no later than 90 days after the treatment of the first full-scale batch.<br><br>(B) Collect representative grab samples of every batch of retorted material prior to its disposal or recycling and analyze the sample for EP leachate concentration of mercury. Occidental must report the analytical test data, including all quality control data, within 90 days after the treatment of the first full-scale batch.<br><br>(2) Subsequent Testing - After the first four weeks of full-full-scale retort operation, Occidental must do the following:<br><br>(A) Continue to sample and test as described in Condition (1)(A). Occidental must compile and store on-site for a minimum of three years all analytical data and quantity control data. These data must be furnished upon request and made available for inspection by any employee or representative of the EPA or the State of Alabama. These testing requirements shall be terminated by the EPA and the Department when the results of four consecutive weekly composite samples of the petitioned waste, obtained from either the initial testing or subsequent testing show the maximum allowable levels in Condition (3) are not exceeded and the Section Chief, Variances Section, and the Department notifies Occidental that the requirements of this condition have been lifted.<br><br>(B) Continue to sample and test for mercury as described in Condition (1)(B). Occidental must compile and store on-on-site for a minimum of three years all analytical data and quality control data. |

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| | These data must be furnished upon request and made available for inspection by any employee or representative of the EPA or the State of Alabama. These testing requirements shall remain in effect until Occidental provides the EPA and the Department with analytical and quality control data for 30 consecutive batches of retorted material, collected as described in Condition (1)(B), demonstrating that the EP leachable levels of mercury are below the maximum allowable level in Condition (3) and the Section Chief, Variances Section, and the Department notifies Occidental that the testing in Condition (2)(B) may be replaced with (2)(C).<br><br>(C) [If the conditions in (2)(B) are satisfied, the testing requirements for mercury in (2)(B) shall be replaced with the following condition.] Collect representative grab samples from every batch of retorted material on a daily basis and composite the grab samples to produce a weekly composite sample. Occidental must analyze each weekly composite sample prior to its disposal or recycling for the EP leachate concentration of mercury. Occidental must compile and store on-site for a minimum of three years all analytical data and quality control data. These data must be furnished upon request and made available for inspection by an employee or representative of the EPA or the State of Alabama.<br><br>(3) If, under Condition (1) or (2), the EP leachate concentrations for chromium, lead, arsenic, or silver exceed 1.616 mg/l; for barium exceeds 32.3 mg/l; for cadmium or selenium exceed 0.323 mg/l; for mercury exceeds 0.065 mg/l; for nickel exceeds 16.15 mg/l; or for cyanide exceeds 22.61 mg/l, the waste must either be retreated until it meets these levels or managed and disposed of in accordance with Subtitle C of RCRA.<br><br>(4) Within one week of system start-up, Occidental must notify the Section Chief, Variances Section (see address below) and |

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| | the Department when the full-scale retort system is on-line and waste treatment has begun. All data obtained through Condition (1) must be submitted to the Section Chief, Variances Section, PSPD/ OSW (OS-343), U.S. EPA, 401 M Street SW, Washington, DC 20460 and the Director of the Department within the time period specified in Condition (1). At the Section Chief's or the Director's request, Occidental must submit any other analytical data obtained through Condition (2) to the above address, and to the Department within the time period specified by the Section Chief or the Department. Failure to submit the required data will be considered by the Agency or the Department sufficient basis to revoke Occidental's exclusion to the extent directed by the EPA and the Department. All data must be accompanied by the following certification statement:<br><br>"Under civil and criminal penalty of law for the making or submission of false or fraudulent statements or representations (pursuant to the applicable provisions of State of Alabama law and the Federal Code which include, but may not be limited to, 18 U.S.C. 6926), I certify that the information contained in or accompanying this document is true, accurate and complete.<br><br>As to the (those) identified section(s) of this document for which I cannot personally verify its (their) truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate and complete. In the event that any of this information is determined by the EPA or the Department in its sole discretion to be false, inaccurate or incomplete, and upon conveyance of this fact to the company, I recognize and agree that this exclusion of wastes will be void as if it never had effect or to the extent directed by the EPA or the Department and that the company will be liable for any actions |

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| | taken in contravention of the company's AHWMMA, RCRA and CERCLA obligations premised upon the company's reliance on the void exclusion." |

**Author**: Stephen C. Maurer; Philip Woods; Bradley N. Curvin; Theresa A. Maines; James K. Burgess; Ronisha A. Moncrief; Linda Knickerbocker; Metz P. Duites
**Statutory Authority**: Code of Ala. 1975, §§22-30-10, 22-30-11.
**History**: November 19, 1980. **Amended**: February 15, 1988; August 24, 1989; December 6, 1990; January 25, 1992. **Amended**: Filed November 30, 1994; effective January 5, 1995. **Amended**: Filed February 20, 1998; effective March 27, 1998. **Amended**: Filed February 28, 2006; effective April 4, 2006. **Amended**: Filed February 27, 2007; effective April 3, 2007. **Amended**: Filed April 22, 2008; effective May 27, 2008. **Amended**: Filed February 24, 2009; effective March 31, 2009. **Amended**: Filed February 23, 2010; effective March 30, 2010. **Amended**: Filed February 28, 2012; effective April 3, 2012. **Amended**: Filed February 19, 2013; effective March 26, 2013. **Amended**: Filed February 23, 20016; effective April 8, 2016. **Amended**: Filed February 14, 2017; effective March 31, 2017.

**335-14-2-A10** **Appendix X - [Reserved].**
**Author**:
**Statutory Authority**: Code of Ala. 1975,
**History**: