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312 Rosa L. Parks Avenue, 8th Floor Snodgrass/TN Tower

Nashville, TN 37243 Phone: 615-741-2650

Email: publications.information@tn.gov

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Rulemaking Hearing Rule(s) Filing Form

Rulemaking Hearing Rules are rules filed after and as a result of a rulemaking hearing (Tenn. Code Ann. § 4-5-205).

Pursuant to Tenn. Code Ann. § 4-5-229, any new fee or fee increase promulgated by state agency rule shall take effect on July 1, following the expiration of the ninety (90) day period as provided in § 4-5-207. This section shall not apply to rules that implement new fees or fee increases that are promulgated as emergency rules pursuant to § 4-5-208(a) and to subsequent rules that make permanent such emergency rules, as amended during the rulemaking process. In addition, this section shall not apply to state agencies that did not, during the preceding two (2) fiscal years, collect fees in an amount sufficient to pay the cost of operating the board, commission or entity in accordance with § 4-29-121(b).

Agency/Board/Commission:	Environment and Conservation
Division:	Solid Waste Management
Contact Person:	David Moran
Address:	William R. Snodgrass TN Tower 312 Rosa L. Parks Avenue, 14th Floor Nashville, Tennessee
Zip:	37243
Phone:	(615) 532-0875
Email:	David.Moran@tn.gov

Revision Type (check all that apply):

X	Amendment
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___ New Repeal

Rule(s) Revised (ALL chapters and rules contained in filing must be listed here. If needed, copy and paste additional tables to accommodate multiple chapters. Please enter only ONE Rule Number/Rule Title per row)

Chapter Number	Chapter Title
0400-12-01	Hazardous Waste Management
Rule Number	Rule Title
0400-12-0101	Hazardous Waste Management System: General
0400-12-0102	Identification and Listing of Hazardous Waste
0400-12-0103	Notification Requirements and Standards Applicable to Generators of Hazardous Waste
0400-12-0104	Requirements Applicable to Transfer Facilities and Permit Requirements and Standards Applicable to Transporters of Hazardous Waste
0400-12-0105	Interim Status Standards for Owners and Operators of Existing Hazardous Waste Treatment, Storage, and Disposal Facilities
0400-12-0106	Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
0400-12-0107	Permitting of Hazardous Waste Treatment, Storage, and Disposal Facilities
0400-12-0109	Standards for the Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Facilities
0400-12-0110	Land Disposal Restrictions

(Place substance of rules and other info here. Statutory authority must be given for each rule change. For information on formatting rules go to http://state.tn.us/sos/rules/1360/1360.htm)

Chapter 0400-12-01 Hazardous Waste Management

Amendments

Subparagraph (a) of paragraph (2) of Rule 0400-12-01-.01 Hazardous Waste Management System: General is amended by deleting the definition of "Manifest" and substituting instead the following new definition for "Manifest":

"Manifest" means the shipping document EPA Form 8700-22 (including if necessary, EPA Form 8700-22A), or the electronic manifest, originated and signed in accordance with the applicable requirements of Rules 0400-12-01-.03 through 0400-12-01-.06.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subparagraph (a) of paragraph (2) of Rule 0400-12-01-.01 Hazardous Waste Management System: General is amended by adding in alphabetical order the definitions of "Carbon dioxide stream," "CRT exporter:, "Electronic manifest" or "e-manifest," "Electronic manifest system" or "e-manifest system," "No free liquids," "Solvent-contaminated wipe," "Tennessee Air Quality Act," "User of the electronic manifest system," "Water Quality Control Act" and "Wipe" to read as follows:

"Carbon dioxide stream" means carbon dioxide that has been captured from an emission source (e.g., power plant), plus incidental associated substances derived from the source materials and the capture process, and any substances added to the stream to enable or improve the injection process.

"CRT exporter" means any person in the United States who initiates a transaction to send used CRTs outside the United States or its territories for recycling or reuse, or any intermediary in the United States arranging for such export.

"Electronic manifest" or "e-Manifest" means the electronic format of the hazardous waste manifest that is obtained from EPA's national e-Manifest system and transmitted electronically to the system, and that is the legal equivalent of EPA Forms 8700-22 (Manifest) and 8700-22A (Continuation Sheet).

"Electronic manifest system" or "e-Manifest system" means EPA's national information technology system through which the electronic manifest may be obtained, completed, transmitted, and distributed to users of the electronic manifest and to regulatory agencies.

"No free liquids," as used in subparts (1)(d)1(xxv) and (1)(d)2(xvii) of Rule 0400-12-01-.02, means that solvent-contaminated wipes may not contain free liquids as determined by Method 9095B (Paint Filter Liquids Test), included in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (EPA Publication SW-846), which is incorporated by reference in subparagraph (b) of this paragraph, and that there is no free liquid in the container holding the wipes.

"Solvent-contaminated wipe" means:

- 1. A wipe that, after use or after cleaning up a spill, either:
 - (i) Contains one or more of the F001 through F005 solvents listed in subparagraph (4)(b) of Rule 0400-12-01-.02 or the corresponding P- or U- listed solvents found in subparagraph (4)(d) of Rule 0400-12-01-.02;
 - (ii) Exhibits a hazardous characteristic found in paragraph (3) of Rule 0400-12-01-

.02 when that characteristic results from a solvent listed in paragraph (4) of Rule 0400-12-01-.02; and/or

- (iii) Exhibits only the hazardous waste characteristic of ignitability found in subparagraph (3)(b) of Rule 0400-12-01-.02 due to the presence of one or more solvents that are not listed in paragraph (4) of Rule 0400-12-01-.02.
- 2. Solvent-contaminated wipes that contain listed hazardous waste other than solvents, or exhibit the characteristic of toxicity, corrosivity, or reactivity due to contaminants other than solvents, are not eligible for the exclusions at subparts (1)(d)1(xxv) and (1)(d)2(xvii) of Rule 0400-12-01-.02.

"Tennessee Air Quality Act" means the Tennessee Air Quality Act, as amended, T.C.A §§ 68-201-101 et seg.

"User of the electronic manifest system" means a hazardous waste generator, a hazardous waste transporter, an owner or operator of a hazardous waste treatment, storage, recycling, or disposal facility, or any other person that:

- 1. Is required to use a manifest to comply with:
 - (i) Any federal or state requirement to track the shipment, transportation, and receipt of hazardous waste or other waste material that is shipped from the site of generation to an off-site designated facility for treatment, storage, recycling, or disposal; or
 - (ii) Any federal or state requirement to track the shipment, transportation, and receipt of rejected wastes or regulated container residues that are shipped from a designated facility to an alternative facility, or returned to the generator; and
- 2. Elects to use the system to obtain, complete and transmit an electronic manifest format supplied by the EPA electronic manifest system, or
- 3. Elects to use the paper manifest form and submits to the system for data processing purposes a paper copy of the manifest (or data from such a paper copy), in accordance with item (5)(b)1(ii)(V) of Rule 0400-12-01-.05 or item (5)(b)1(ii)(V) of Rule 0400-12-01-.06. These paper copies are submitted for data exchange purposes only and are not the official copies of record for legal purposes.

"Water Quality Control Act" means the Water Quality Control Act of 1977, as amended, T.C.A §§ 69-3-101 et seg.

"Wipe" means a woven or non-woven shop towel, rag, pad, or swab made of wood pulp, fabric, cotton, polyester blends, or other material.

Authority: T.C.A. §§ 68-212-101 et seg. and 4-5-201 et seg.

Part 1 of subparagraph (b) of paragraph (2) of Rule 0400-12-01-.01 Hazardous Waste Management System: General is amended by deleting it in its entirety and substituting instead the following:

1. Here is a list of publications/materials referred to in these rules and where they may be obtained as set forth by EPA in 40 CFR 260.11 and 40 CFR 270.6.

Authority: T.C.A. §§ 68-212-101 et seg. and 4-5-201 et seg.

Part 1 of subparagraph (a) of paragraph (7) of Rule 0400-12-01-.01 Hazardous Waste Management System: General is amended by deleting it in its entirety and substituting instead the following:

1. Purpose, Scope, and Applicability

Except as provided under subparts (i) and (ii) of this part, any information which is supplied to the Department by persons who are subject to these rules and which is designated as proprietary information (as defined in subpart 2(viii) of this subparagraph) shall be handled by the Department as specified in this paragraph to assure that its confidentiality is maintained. Unless it is claimed or designated as proprietary, any information supplied to the Department under or relating to these rules shall be available for public review at any time during the State's normal business hours.

- (i) After the effective date of these rules, no claim of business confidentiality may be asserted by any person with respect to information entered on a Hazardous Waste Manifest (EPA Form 8700-22), a Hazardous Waste Manifest Continuation Sheet (EPA Form 8700-22A), or an electronic manifest format that may be prepared and used in accordance with subpart (3)(a)1(iii) of Rule 0400-12-01-03.
- (ii) The Department will make any electronic manifest that is prepared and used in accordance with subpart (3)(a)1(iii) of Rule 0400-12-01-.03, or any paper manifest that is submitted to the system under item (5)(b)1(ii)(V) of Rule 0400-12-01-.05 or item (5)(b)1(ii)(V) of Rule 0400-12-01-.06 available to the public under this paragraph when the electronic or paper manifest is a complete and final document. Electronic manifests and paper manifests submitted to the system are considered by the Department to be complete and final documents and publicly available information after 90 days have passed since the delivery to the designated facility of the hazardous waste shipment identified in the manifest.

(Note: See 40 CFR 260.2(b) for additional requirements.)

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Item (IV) of subpart (ii) of part 1 of subparagraph (c) of paragraph (1) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

- (IV) It is a mixture of solid waste and one or more hazardous wastes listed in paragraph (4) of this rule and has not been excluded from subpart 1(ii) of this subparagraph under Rule 0400-12-01-.01(3)(a) and (c), parts 7 or 8 of this subparagraph; however, the following mixtures of solid wastes and hazardous wastes listed in paragraph (4) of this rule are not hazardous wastes (except by application of items (I) or (II) of this subpart) if the generator can demonstrate that the mixture consists of wastewater the discharge of which is subject to regulation under T.C.A. §§ 69-3-101 et seq. (including wastewater at facilities which have eliminated the discharge of wastewater) and:
 - ١. One or more of the following spent solvents listed in subparagraph (4)(b) of this rule--benzene, carbon tetrachloride, tetrachloroethylene, trichloroethylene or the scrubber waters derived-from the combustion of these spent solvents - -provided that (1) 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 1 part per million or (2) 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 the Tennessee Air Quality Act and Rule Division 1200-03 or at facilities subject to an enforceable limit in a federal or state 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 Division Director, as defined in Rule 0400-12-01-.01(2)(a). 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

11. One or more of the following spent solvents listed in subparagraph (4)(b) of this rule --methylene chloride, 1,1,1trichloroethane, 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 (1) 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 (2) 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 the Tennessee Air Quality Act and Rule Division 1200-03 or at facilities subject to an enforceable limit in a federal or state 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 Division Director, as defined in Rule 0400-12-01-.01(2)(a). 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 subparagraph (4)(c) of this rule, 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 (Hazardous Waste Code K050), crude oil storage tanks sediment from petroleum refining operations (Hazardous Waste Code K169), clarified slurry oil tank sediment and/or in-line filter/separation solids from petroleum refining operations (Hazardous Waste Code K170), spent hydrotreating catalyst (Hazardous Waste Code K171), and spent hydrorefining catalyst (Hazardous Waste Code K172); or
- IV. A discarded hazardous waste, commercial chemical product, or chemical intermediate listed in subparagraphs (4)(b) through (4) (d) of this rule, arising from de minimis losses of these materials. For purposes of this subitem, 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 subparagraphs (4)(b) through (4)(c) of this rule or any nonmanufacturing facility that claims an exemption for de minimis quantities of wastes listed in paragraph (4) of this rule must either have eliminated the discharge of wastewaters or have included in its Clean Water Act or Tennessee Water Quality Control Act permit application or submission to its pretreatment control authority the constituents for which each waste was listed in Appendix VII of paragraph (5) of this rule; and the constituents in the table "Treatment Standards for Hazardous Wastes" in Rule 0400-12-01-.10(3)(a) 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 or Tennessee Water Quality Control Act permit application or the pretreatment control authority submission. A copy of the Clean Water Act or Tennessee Water Quality Control Act permit application or the submission to the pretreatment control authority must be placed in the facility's onsite files; or
- V. Wastewater resulting from laboratory operations containing toxic (T) wastes listed in paragraph (4) of this rule, 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 pre-treatment 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 pre-treatment 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 subparagraph (4)(c) of this rule -- wastewaters from the production of carbamates and carbamoyl oximes (Hazardous Waste Code No. K157)- provided that (1) 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 (2) 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 the Tennessee Air Quality Act and Rule Division 1200-03 or at facilities subject to an enforceable limit in a federal or state 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 Division Director, as defined in Rule 0400-12-01-.01(2)(a). 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 or more of the following wastes listed in subparagraph (4)(c) of this rule -organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes (Hazardous Waste Code No. K156)—provided that (1) 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 (2) 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 the Tennessee Air Quality Act and Rule Division 1200-03 or at facilities subject to an enforceable limit in a federal or state 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 Division Director, as defined in Rule 0400-12-01-.01(2)(a). 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.

Authority: T.C.A. §§ 68-212-101 et seg. and 4-5-201 et seg.

Subitem III of item (II) of subpart (ii) of part 3 of subparagraph (c) of paragraph (1) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

III. A.

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 items (vi), (vii) and (xiii) of the definition for "Industrial furnace" in Rule 0400-12-01-.01(2)(a) that are disposed in a Class I or Class II Disposal Facility subject to a permit issued in accordance with Chapter 0400-11-01, provided that these residues meet the generic exclusion levels identified in the tables in this paragraph 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 selfimplementing 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	d K062 nonwastewater HTMR residues		
Antimony	0.10		
Arsenic	0.50		

Barium	7.6
Beryllium	0.010
Cadmium	0.050
Chromium (total)	0.33
Lead	0.15
Mercury	0.009
Nickel	1.0
Selenium	0.16
Silver	0.30
Thallium	0.020
Zinc	70

Generic exclusion levels for F006 nonwastewater HTMR residues		
Antimony	0.10	
Arsenic	0.50	
Barium	7.6	
Beryllium	0.010	
Cadmium	0.050	
Chromium (total)	0.33	
Cyanide (total) (mg/kg)	1.8	
Lead	0.15	
Mercury	0.009	
Nickel	1.0	
Selenium	0.16	
Silver	0.30	
Thallium	0.020	
Zinc	70	

B. A one-time notification and certification must be placed in the facility's files and sent to the Division Director 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 a Class I or Class II Disposal Facility subject to a permit issued in accordance with Chapter 0400-11-01. The notification and certification that is placed in the generators or treaters files must be updated if the process or operation generating the waste changes and/or if the Class I or Class II Disposal Facility receiving the waste changes. However, the generator or treater need only notify the Division Director or an authorized state on an annual basis if such changes occur. Such notification and certification should be sent to the Division Director 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 Class I or Class II Disposal Facility receiving the waste shipments; the Hazardous Waste Code(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. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury."

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subpart (ii) of part 1 of subparagraph (d) of paragraph (1) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

(ii) Industrial wastewater discharges that are point source discharges subject to regulation under section 402 of the Clean Water Act, as amended or under the Water Quality Control Act.

(Comment: 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.)

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subpart (xviii) of part 1 of subparagraph (d) of paragraph (1) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

(xviii) Comparable fuels or comparable syngas fuels (i.e., comparable/syngas fuels) that meet the requirements of paragraph (6) of this rule.

Authority: T.C.A. §§ 68-212-101 et seg. and 4-5-201 et seg.

Item (IV) of subpart (xix) of part 1 of subparagraph (d) of paragraph (1) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

- (IV) The Commissioner 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 decision-maker must affirm that pads are designed, constructed and operated to prevent significant releases of the spent material into the environment. Pads must provide the same degree of containment afforded by the tanks, containers and buildings eligible for exclusion as provided in item (III) of the subpart.
 - I. The decision-maker 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 this subpart, the Commissioner must provide public notice and the opportunity for comment to all persons potentially interested in the determination. This shall be accomplished by the owner or operator placing a notice as prepared and required by the Commissioner, of this action in local newspapers, or broadcasting notice over local radio stations. The owner or operator shall provide proof of the completion of all notice requirements to the Commissioner within ten days following conclusion of the public notice procedures.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Part 1 of subparagraph (d) of paragraph (1) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by adding a new subpart, as subpart (xxv), to read as follows:

- (xxv) Solvent-contaminated wipes that are sent for cleaning and reuse are not solid wastes from the point of generation, provided that:
 - (I) The solvent-contaminated wipes, when accumulated, stored, and transported, are contained in non-leaking, closed containers that are labeled "Excluded Solvent-Contaminated Wipes." The containers shall be able to contain free liquids, should free liquids occur. During accumulation, a container is considered closed when there is complete contact between the fitted lid and the rim, except when it is necessary to add or remove solvent-contaminated wipes. When the container is full, or when the solvent-contaminated wipes are no longer being accumulated, or when the container is being transported, the container shall be sealed with all lids properly and securely affixed to the container and all openings tightly bound or closed sufficiently to prevent leaks and emissions;
 - (II) The solvent-contaminated wipes are accumulated by the generator for no more than 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 paragraph (2) of Rule 0400-12-01-.01;

- (IV) Free liquids removed from the solvent-contaminated wipes or from the container holding the wipes shall be managed according to the applicable regulations found in Rules 0400-12-01-.01 through 0400-12-01-.12:
- (V) Generators shall maintain at their site the following documentation:
 - 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 item (II) of this subpart 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; and
- (VI) The solvent-contaminated wipes are sent to a laundry or dry cleaner whose discharge, if any, is regulated under T.C.A. §§ 69-3-101 et seq., or sections 301 and 402 or section 307 of the Clean Water Act.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Item (IV) of subpart (xii) of part 2 of subparagraph (d) of paragraph (1) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

(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 section 402 of the Clean Water Act, as amended or under the Water Quality Control Act; and

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Part 2 of subparagraph (d) of paragraph (1) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by adding a new subpart, as subpart (xvii), to read as follows:

- (xvii) Solvent-contaminated wipes, except for wipes that are hazardous waste due to the presence of trichloroethylene, that are sent for disposal are not hazardous wastes from the point of generation provided that:
 - (I) The solvent-contaminated wipes, when accumulated, stored, and transported, are contained in non-leaking, closed containers that are labeled "Excluded Solvent-Contaminated Wipes." The containers shall be able to contain free liquids, should free liquids occur. During accumulation, a container is considered closed when there is complete contact between the fitted lid and the rim, except when it is necessary to add or remove solvent-contaminated wipes. When the container is full, or when the solvent-contaminated wipes are no longer being accumulated, or when the container is being transported, the container shall be sealed with all lids properly and securely affixed to the container and all openings tightly bound or closed sufficiently to prevent leaks and emissions;
 - (II) The solvent-contaminated wipes are accumulated by the generator for no more than 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 paragraph (2) of Rule 0400-12-01-.01;
- (IV) Free liquids removed from the solvent-contaminated wipes or from the container holding the wipes shall be managed according to the applicable regulations found in Rules 0400-12-01-.01 through 0400-12-01-.12;
- (V) Generators shall 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 item (II) of this subpart 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; and
- (VI) The solvent-contaminated wipes are sent for disposal:
 - I. To a municipal solid waste landfill regulated under Chapter 0400-11-01, including Rule 0400-11-01-.04 regarding a Class I disposal facility, or to a hazardous waste landfill regulated under Rules 0400-12-01-.05 or 0400-12-01-.06; or
 - II. To a municipal waste combustor or other combustion facility regulated under T.C.A. §§ 68-201-101 et seq. or to a hazardous waste combustor, boiler, or industrial furnace regulated under Rules 0400-12-01-.05 or 0400-12-01-.06 or paragraph (8) of Rule 0400-12-01-.09.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subparagraph (d) of paragraph (1) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by adding a new part, as part 8, to read as follows:

- 8. 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 and Chapter 0400-45-06 Underground Injection Control, are not a hazardous waste, provided the following conditions are met:
 - (i) Transportation of the carbon dioxide stream shall 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 CFR 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;
 - (ii) Injection of the carbon dioxide stream shall 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 and Tennessee Chapter 0400-45-06;
 - (iii) No hazardous wastes shall be mixed with, or otherwise co-injected with, the carbon dioxide stream; and

(iv) (I) Any generator of a carbon dioxide stream, who claims that a carbon dioxide stream is excluded under this part, shall have an authorized representative (as defined in subparagraph (2)(a) of Rule 0400-12-01-01) 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 part (1)(d)8 of Rule 0400-12-01-.02 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 CFR 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 and Tennessee Chapter 0400-45-06. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury."

(II) Any Class VI Underground Injection Control well owner or operator, who claims that a carbon dioxide stream is excluded under this part, shall have an authorized representative (as defined in subparagraph (2)(a) of Rule 0400-12-01-.01) 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 part (1)(d)8 of Rule 0400-12-01-.02 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 and Tennessee Chapter 0400-45-06. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury."

(III) The signed certification statement shall be kept on-site for no less than three years, and shall be made available within 72 hours of a written request from the Commissioner. The signed certification statement shall be renewed every year that the exclusion is claimed, by having an authorized representative (as defined in subparagraph (2)(a) of Rule 0400-12-01-.01) 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 shall 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.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Part 10 of subparagraph (e) of paragraph (1) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

- 10. If a conditionally exempt small quantity generator's wastes are mixed with used oil, the mixture is subject to Rule 0400-12-01-.11, provided the resultant mixture does not exhibit the characteristic of ignitability, corrosivity or reactivity, in accordance with subparagraphs (3)(b), (c) or (d) of this rule.
 - (i) Any material derived from such non-hazardous mixture by processing, blending,

or other treatment is also regulated under part (2)(a)5 of Rule 0400-12-01-.11; and

(ii) If the resultant mixture exhibits the characteristic of ignitability, corrosivity or reactivity, in accordance with subparagraphs (3)(b), (c) or (d) of this rule, and if the resultant hazardous waste mixture exceeds the quantity limitations identified in this subparagraph, then the mixture is no longer conditionally exempt under this subparagraph and is subject to regulation under Rules 0400-12-01-.03 through .10.

(NOTE: Any used oil that is not recycled is a solid waste subject to a hazardous waste determination per Rule 0400-12-01-.03(1)(b).)

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

The listing description for F019 of part 1 of subparagraph (b) of paragraph (4) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

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, or a Class I or Class II Disposal Facility subject to a permit issued in accordance with Chapter 0400-11-01, 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 40 CFR 258.40 or the state equivalent, or, if in Tennessee, Chapter 0400-11-01, Rule 0400-12-01-.06(14)(b) or Rule 0400-12-01-.05(14)(b). For the purposes of this listing, motor vehicle manufacturing is defined in item 2(iv)(I) of this subparagraph and item 2(iv)(II) of this subparagraph describes the recordkeeping requirements for motor vehicle manufacturing facilities.

(T)

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

The listing description for K174 of part 1 of subparagraph (c) of paragraph (4) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

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 nonhazardous landfill licensed or permitted by the state or federal government, or, if in Tennessee, in accordance with Rules 0400-12-01-.06 or 0400-12-01-.05, or Chapter 0400-11-01; (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 or the Tennessee Hazardous Waste Management Act 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)

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

The listing description for K181 of part 1 of subparagraph (c) of paragraph (4) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

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 part 3 of this subparagraph that are equal to or greater than the corresponding part 3 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 40 CFR 258.40, or, if in Tennessee, disposed in a Class I or Class II Disposal Facility subject to a permit issued in accordance with Chapter 0400-11-01, (ii) disposed in a Subtitle C landfill unit subject to either 40 CFR 264.301 or 40 CFR 265.301, or, if in Tennessee, subject to either Rule 0400-12-01-.06(14)(b) or Rule 0400-12-01-.05(14)(b); (iii) disposed in other Subtitle D landfill units that meet the design criteria in 40 CFR 258.40, 40 CFR 264.301 or 40 CFR 265.301, or, if in Tennessee, the design criteria in Rule 0400-11-01-.04, Rule 0400-12-01-.06(14)(b), or Rule 0400-12-01-.05(14)(b); or (iv) treated in a combustion unit that is permitted under Subtitle C, or an onsite combustion unit that is permitted under the Clean Air Act, or, if in Tennessee, treated in a combustion unit that is permitted under the Hazardous Waste Management Act, or an onsite combustion unit that is permitted under the Tennessee Air Quality Act. For the purposes of this listing, dyes and/or pigments production is defined in subpart 2(i) of this subparagraph. Part 4 of this subparagraph 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 under subparagraphs (b) through (e) of paragraph (3) of this rule and subparagraphs (b) through (d) of paragraph (4) of this rule at the point of generation. Also, the listing does not apply to wastes generated before any annual mass loading limit is met.

(T)

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subpart (v) of part 4 of subparagraph (c) of paragraph (4) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

(v) 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 requirements of this Chapter during the interim period, the generator could be subject to an enforcement action for improper management.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subitem VI of item (I) of subpart (v) of part 1 of subparagraph (b) of paragraph (6) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

VI. The name and 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.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subpart (v) of part 1 of subparagraph (b) of paragraph (6) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by adding items (X) and (XI) to read as follows:

- (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; and
 - 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 office specified in item (II) of this subpart. Exporters must keep copies of each annual report for a period of at least three years from the due date of the report.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subparagraph (d) of paragraph (6) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

(d) Notification and Recordkeeping for Used, Intact Cathode Ray Tubes (CRTs) Exported for Reuse [40 CFR 261.41]

[Note: The implementation of this subparagraph remains the responsibility of EPA.]

- 1. 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.
 - (i) 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."

- (ii) Notifications submitted by mail should be sent to the following mailing address: Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division, (Mail Code 2254A), Environmental Protection Agency, 1200 Pennsylvania Ave. N.W., Washington, D.C. 20460. Hand-delivered notifications should be sent to: Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division, (Mail Code 2254A), Environmental Protection Agency, William Jefferson Clinton Building, Room 6144, 1200 Pennsylvania Ave. N.W., Washington, D.C. 20004. In both cases, the following shall be prominently displayed on the front of the envelope: "Attention: Notification of Intent to Export CRTs."
- 2. 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.

Authority: T.C.A. §§ 68-212-101 et seg. and 4-5-201 et seg.

Part 4 of subparagraph (a) of paragraph (1) of Rule 0400-12-01-.03 Notification Requirements and Standards Applicable to Generators of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

4. Any person who exports or imports wastes that are considered hazardous under U.S. national procedures to or from the countries listed in subparagraph (7)(i) of this rule for recovery must comply with paragraph (9) of this rule. A waste is considered hazardous under U.S. national procedures if the waste meets the definition of hazardous waste in subparagraph (1)(c) of Rule 0400-12-01-.02 and is subject to either the manifesting requirements at paragraph (3) of this rule, the universal waste management standards of Rule 0400-12-01-.12, or the export requirements in the spent lead-acid battery management standards of part (7)(a)1 of Rule 0400-12-01-.09.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Part 1 of subparagraph (a) of paragraph (3) of Rule 0400-12-01-.03 Notification Requirements and Standards Applicable to Generators of Hazardous Waste is amended by adding a new subpart (iii) to read as follows:

(iii) Electronic manifest.

In lieu of using the manifest form specified in subpart (i) of this part, a person required to prepare a manifest under subpart (i) of this part may prepare and use an electronic manifest, provided that the person:

- Complies with the requirements in subparagraph (e) of this paragraph for use of electronic manifests, and
- (II) Complies with the requirements of 40 CFR 3.10 for the reporting of electronic documents to EPA.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subparagraph (e) of paragraph (3) of Rule 0400-12-01-.03 Notification Requirements and Standards Applicable to Generators of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

- (e) Use of the electronic manifest [40 CFR 262.24]
 - 1. Legal equivalence to paper manifests. Electronic manifests that are obtained, completed, and transmitted in accordance with subpart (a)1(iii) of this paragraph, and used in accordance with this subparagraph in lieu of EPA Forms 8700-22 and 8700-22A are the legal equivalent of paper manifest forms bearing handwritten signatures, and satisfy for all purposes any requirement in these regulations to obtain, complete, sign, provide, use, or retain a manifest.
 - (i) Any requirement in these regulations to sign a manifest or manifest certification by hand, or to obtain a handwritten signature, is satisfied by signing with or obtaining a valid and enforceable electronic signature within the meaning of 40 CFR 262.25(a).
 - (ii) Any requirement in these regulations to give, provide, send, forward, or return to another person a copy of the manifest is satisfied when an electronic manifest is transmitted to the other person by submission to the system.
 - (iii) Any requirement in these regulations for a generator to keep or retain a copy of each manifest is satisfied by retention of a signed electronic manifest in the generator's account on the national e-Manifest system, provided that such copies are readily available for viewing and production if requested by any EPA inspector or the Commissioner.
 - (iv) No generator may be held liable for the inability to produce an electronic manifest for inspection under this subparagraph if the generator can demonstrate that the inability to produce the electronic manifest is due exclusively to a technical difficulty with the electronic manifest system for which the generator bears no responsibility.

- 2. A generator may participate in the electronic manifest system either by accessing the electronic manifest system from its own electronic equipment, or by accessing the electronic manifest system from portable equipment brought to the generator's site by the transporter who accepts the hazardous waste shipment from the generator for off-site transportation.
- 3. Restriction on use of electronic manifests. A generator may prepare an electronic manifest for the tracking of hazardous waste shipments involving any RCRA hazardous waste only if it is known at the time the manifest is originated that all waste handlers named on the manifest participate in the electronic manifest system.
- 4. Requirement for one printed copy. To the extent the Hazardous Materials regulation on shipping papers for carriage by public highway requires shippers of hazardous materials to supply a paper document for compliance with 49 CFR 177.817, a generator originating an electronic manifest must also provide the initial transporter with one printed copy of the electronic manifest.
- 5. Special procedures when electronic manifest is unavailable. If a generator has prepared an electronic manifest for a hazardous waste shipment, but the electronic manifest system becomes unavailable for any reason prior to the time that the initial transporter has signed electronically to acknowledge the receipt of the hazardous waste from the generator, then the generator must obtain and complete a paper manifest and if necessary, a continuation sheet (EPA Forms 8700-22 and 8700-22A) in accordance with the manifest instructions in paragraph (13) of this rule, and use these paper forms from this point forward in accordance with the requirements of subparagraph (d) of this paragraph.
- 6. Special procedures for electronic signature methods undergoing tests. If a generator has prepared an electronic manifest for a hazardous waste shipment, and signs this manifest electronically using an electronic signature method which is undergoing pilot or demonstration tests aimed at demonstrating the practicality or legal dependability of the signature method, then the generator shall also sign with an ink signature the generator/offeror certification on the printed copy of the manifest provided under part 4 of this subparagraph.
- 7. Imposition of user fee. A generator who is a user of the electronic manifest may be assessed a user fee by EPA for the origination of each electronic manifest.

(Note: In accordance with 40 CFR 262.24, EPA shall maintain and update from time-to-time the current schedule of electronic manifest user fees, which shall be determined based on current and projected system costs and level of use of the electronic manifest system. The current schedule of electronic manifest user fees shall be published as an appendix to 40 CFR Part 262.)

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subparagraph (f) of paragraph (3) of Rule 0400-12-01-.03 Notification Requirements and Standards Applicable to Generators of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

(f) Electronic manifest signatures [40 CFR 262.25]

Electronic signature methods for the e-Manifest system shall:

- 1. Be a legally valid and enforceable signature under applicable EPA and other Federal requirements pertaining to electronic signatures; and
- 2. Be a method that is designed and implemented in a manner that EPA considers to be as cost-effective and practical as possible for the users of the manifest.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subparagraph (i) of paragraph (7) of Rule 0400-12-01-.03 Notification Requirements and Standards Applicable to Generators of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

- (i) International Agreements [40 CFR 262.58]
 - 1. Any person who exports or imports wastes that are considered hazardous under U.S. national procedures to or from designated Member countries of the Organization for Economic Cooperation and Development (OECD) as defined in subpart (i) of this part for purposes of recovery is subject to paragraph (9) of this rule. The requirements of this paragraph and paragraph (8) of this rule do not apply to such exports and imports. A waste is considered hazardous under U.S. national procedures if the waste meets the definition of hazardous waste in subparagraph (1)(c) of Rule 0400-12-01-.02 and is subject to either the manifesting requirements at paragraph (3) of this rule, the universal waste management standards of Rule 0400-12-01-.12, or the export requirements in the spent lead-acid battery management standards of part (7)(a)1 of Rule 0400-12-01-.09.
 - (i) For the purpose of paragraph (9) of this rule, the designated OECD Member countries consist of Australia, Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Poland Portugal, the Republic of Korea, the Slovak Republic, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States.
 - (ii) For the purpose of paragraph (9) of this rule, Canada and Mexico are considered OECD Member countries only for the purpose of transit.
 - 2. Any person who exports hazardous waste to or imports hazardous waste from: a designated OECD Member country for purposes other than recovery (e.g., incineration, disposal), Mexico (for any purpose), or Canada (for any purpose) remains subject to the requirements of this paragraph and paragraph (8) of this rule, and is not subject to the requirements of paragraph (9) of this rule.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Paragraph (9) of Rule 0400-12-01-.03 Notification Requirements and Standards Applicable to Generators of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

- (9) Transboundary Movements of Hazardous Waste for Recovery within the OECD [40 CFR 262 Subpart H]
 (Note: The implementation of this paragraph remains the responsibility of EPA.)
 - (a) Applicability
 - The requirements of this paragraph apply to imports and exports of wastes that are considered hazardous under U.S. national procedures and are destined for recovery operations in the countries listed in subpart (7)(i)1(i) of this rule. A waste is considered hazardous under U.S. national procedures if the waste:
 - (i) Meets the definition of hazardous waste in subparagraph (1)(c) of Rule 0400-12-01-.02; and
 - (ii) Is subject to either the manifesting requirements at paragraph (3) of this rule, the universal waste management standards of Rule 0400-12-01-.12, or the export requirements in the spent lead-acid battery management standards of part (7)(a)1 of Rule 0400-12-01-.09
 - 2. Any person (exporter, importer, or recovery facility operator) who mixes two or more wastes (including hazardous and non-hazardous wastes) or otherwise subjects two or

more wastes (including hazardous and non-hazardous wastes) to physical or chemical transformation operations, and thereby creates a new hazardous waste, becomes a generator and assumes all subsequent generator duties under RCRA and any exporter duties, if applicable, under this paragraph.

(b) Definitions

The following definitions apply to this paragraph.

"Competent authority" means the regulatory authority or authorities of concerned countries having jurisdiction over transboundary movements of wastes destined for recovery operations.

"Countries concerned" means the OECD Member countries of export or import and any OECD Member countries of transit.

"Country of export" means any designated OECD Member country listed in subpart (7)(i)1(i) of this rule from which a transboundary movement of hazardous wastes is planned to be initiated or is initiated.

"Country of import" means any designated OECD Member country listed in subpart (7)(i)1(i) of this rule to which a transboundary movement of hazardous wastes is planned or takes place for the purpose of submitting the wastes to recovery operations therein.

"Country of transit" means any designated OECD Member country listed in subparts (7)(i)1(i) and (ii) of this rule other than the country of export or country of import across which a transboundary movement of hazardous wastes is planned or takes place.

"Exporter" means the person under the jurisdiction of the country of export who has, or will have at the time the planned transboundary movement commences, possession or other forms of legal control of the wastes and who proposes transboundary movement of the hazardous wastes for the ultimate purpose of submitting them to recovery operations. When the United States (U.S.) is the country of export, exporter is interpreted to mean a person domiciled in the United States.

"Importer" means the person to whom possession or other form of legal control of the waste is assigned at the time the waste is received in the country of import.

"OECD area" means all land or marine areas under the national jurisdiction of any OECD Member country listed in subparagraph (7)(i) of this rule. When the regulations refer to shipments to or from an OECD Member country, this means OECD area.

"OECD" means the Organization for Economic Cooperation and Development.

"Recognized trader" means a person who, with appropriate authorization of countries concerned, acts in the role of principal to purchase and subsequently sell wastes; this person has legal control of such wastes from time of purchase to time of sale; such a person may act to arrange and facilitate transboundary movements of wastes destined for recovery operations.

"Recovery facility" means a facility which, under applicable domestic law, is operating or is authorized to operate in the country of import to receive wastes and to perform recovery operations on them.

"Recovery operations" means activities leading to resource recovery, recycling, reclamation, direct re-use or alternative uses, which include:

- R1 Use as a fuel (other than in direct incineration) or other means to generate energy.
- R2 Solvent reclamation/regeneration.
- R3 Recycling/reclamation of organic substances which are not used as solvents.

- R4 Recycling/reclamation of metals and metal compounds.
- R5 Recycling/reclamation of other inorganic materials.
- R6 Regeneration of acids or bases.
- R7 Recovery of components used for pollution abatement.
- R8 Recovery of components used from catalysts.
- R9 Used oil re-refining or other reuses of previously used oil.
- R10 Land treatment resulting in benefit to agriculture or ecological improvement.
- R11 Uses of residual materials obtained from any of the operations numbered R1-R10.
- R12 Exchange of wastes for submission to any of the operations numbered R1-R11.
- R13 Accumulation of material intended for any operation numbered R1-R12.

"Transboundary movement" means any movement of wastes from an area under the national jurisdiction of one OECD Member country to an area under the national jurisdiction of another OECD Member country.

(c) General conditions

- Scope. The level of control for exports and imports of waste is indicated by assignment of the waste to either a list of wastes subject to the Green control procedures or a list of wastes subject to the Amber control procedures and by the national procedures of the United States, as defined in part (a)1 of this paragraph. The OECD Green and Amber lists are incorporated by reference in (j)4 of this paragraph.
 - (i) Listed wastes subject to the Green control procedures.
 - (I) Green wastes that are not considered hazardous under U.S. national procedures as defined in part (a)1 of this paragraph are subject to existing controls normally applied to commercial transactions.
 - (II) Green wastes that are considered hazardous under U.S. national procedures as defined in part (a)1 of this paragraph are subject to the Amber control procedures set forth in this paragraph.
 - (ii) Listed wastes subject to the Amber control procedures.
 - (I) Amber wastes that are considered hazardous under U.S. national procedures as defined in part (a)1 of this paragraph are subject to the Amber control procedures set forth in this paragraph.
 - (II) Amber wastes that are considered hazardous under U.S. national procedures as defined in part (a)1 of this paragraph, are subject to the Amber control procedures in the United States, even if they are imported to or exported from a designated OECD Member country listed in subpart (7)(i)1(i) of this rule that does not consider the waste to be hazardous. In such an event, the responsibilities of the Amber control procedures shift as provided:
 - I. For U.S. exports, the United States shall issue an acknowledgement of receipt and assume other responsibilities of the competent authority of the country of import.

- II. For U.S. imports, the U.S. recovery facility/importer and the United States shall assume the obligations associated with the Amber control procedures that normally apply to the exporter and country of export, respectively.
- (III) Amber wastes that are not considered hazardous under U.S. national procedures as defined in part (a)1 of this paragraph, but are considered hazardous by an OECD Member country are subject to the Amber control procedures in the OECD Member country that considers the waste hazardous. All responsibilities of the U.S. importer/exporter shift to the importer/exporter of the OECD Member country that considers the waste hazardous unless the parties make other arrangements through contracts.

(Note: Some wastes subject to the Amber control procedures are not listed or otherwise identified as hazardous under RCRA. and therefore are not subject to the Amber control procedures of this paragraph. Regardless of the status of the waste under RCRA, however, other Federal environmental statutes (e.g., the Toxic Substances Control Act) restrict certain waste imports or exports. Such restrictions continue to apply with regard to this paragraph.)

- (iii) Procedures for mixtures of wastes.
 - (I) A Green waste that is mixed with one or more other Green wastes such that the resulting mixture is not considered hazardous under U.S. national procedures as defined in part (a)1 of this paragraph shall be subject to the Green control procedures, provided the composition of this mixture does not impair its environmentally sound recovery.

(Note: The regulated community should note that some OECD Member countries may require, by domestic law, that mixtures of different Green wastes be subject to the Amber control procedures.)

(II) A Green waste that is mixed with one or more Amber wastes, in any amount, de minimis or otherwise, or a mixture of two or more Amber wastes, such that the resulting waste mixture is considered hazardous under U.S. national procedures as defined in part (a)1 of this paragraph are subject to the Amber control procedures, provided the composition of this mixture does not impair its environmentally sound recovery.

(Note: The regulated community should note that some OECD Member countries may require, by domestic law, that a mixture of a Green waste and more than a de minimis amount of an Amber waste or a mixture of two or more Amber wastes be subject to the Amber control procedures.)

- (iv) Wastes not yet assigned to an OECD waste list are eligible for transboundary movements, as follows:
 - (I) If such wastes are considered hazardous under U.S. national procedures as defined in part (a)1 of this paragraph, such wastes are subject to the Amber control procedures.
 - (II) If such wastes are not considered hazardous under U.S. national procedures as defined in part (a)1 of this paragraph, such wastes are subject to the Green control procedures.
- 2. General conditions applicable to transboundary movements of hazardous waste:

- (i) The waste must be destined for recovery operations at a facility that, under applicable domestic law, is operating or is authorized to operate in the importing country;
- (ii) The transboundary movement must be in compliance with applicable international transport agreements; and
 - (Note: These international agreements include, but are not limited to, the Chicago Convention (1944), ADR (1957), ADNR (1970), MARPOL Convention (1973/1978), SOLAS Convention (1974), IMDG Code (1985), COTIF (1985), and RID (1985).)
- (iii) Any transit of waste through a non-OECD Member country must be conducted in compliance with all applicable international and national laws and regulations.
- 3. Provisions relating to re-export for recovery to a third country:
 - (i) Re-export of wastes subject to the Amber control procedures from the United States, as the country of import, to a third country listed in subpart (7)(i)1(i) of this rule may occur only after an exporter in the United States provides notification to and obtains consent from the competent authorities in the third country, the original country of export, and any transit countries. The notification must comply with the notice and consent procedures in subparagraph (d) of this paragraph for all countries concerned and the original country of export. The competent authorities of the original country of export, as well as the competent authorities of all other countries concerned have thirty (30) days to object to the proposed movement.
 - (I) The thirty (30) day period begins once the competent authorities of both the initial country of export and new country of import issue Acknowledgements of Receipt of the notification.
 - (II) The transboundary movement may commence if no objection has been lodged after the thirty (30) day period has passed or immediately after written consent is received from all relevant OECD importing and transit countries.
 - (ii) In the case of re-export of Amber wastes to a country other than those listed in subpart (7)(i)1(i) of this rule, notification to and consent of the competent authorities of the original OECD Member country of export and any OECD Member countries of transit is required as specified in subpart (i) of this part, in addition to compliance with all international agreements and arrangements to which the first importing OECD Member country is a party and all applicable regulatory requirements for exports from the first country of import.
- 4. Duty to return or re-export wastes subject to the Amber control procedures. When a transboundary movement of wastes subject to the Amber control procedures cannot be completed in accordance with the terms of the contract or the consent(s) and alternative arrangements cannot be made to recover the waste in an environmentally sound manner in the country of import, the waste must be returned to the country of export or reexported to a third country. The provisions of part 3 of this subparagraph apply to any shipments to be re-exported to a third country. The following provisions apply to shipments to be returned to the country of export as appropriate:
 - (i) Return from the United States to the country of export: The U.S. importer must inform EPA at the specified address in item (d)2(i)(l) of this paragraph of the need to return the shipment. EPA will then inform the competent authorities of the countries of export and transit, citing the reason(s) for returning the waste. The U.S. importer must complete the return within ninety (90) days from the time EPA informs the country of export of the need to return the waste, unless

informed in writing by EPA of another timeframe agreed to by the concerned Member countries. If the return shipment will cross any transit country, the return shipment may only occur after EPA provides notification to and obtains consent from the competent authority of the country of transit, and provides a copy of that consent to the U.S. importer.

- (ii) Return from the country of import to the United States: The U.S. exporter must provide for the return of the hazardous waste shipment within ninety (90) days from the time the country of import informs EPA of the need to return the waste or such other period of time as the concerned Member countries agree. The U.S. exporter must submit an exception report to EPA in accordance with part (h)2 of this paragraph.
- 5. Duty to return wastes subject to the Amber control procedures from a country of transit. When a transboundary movement of wastes subject to the Amber control procedures does not comply with the requirements of the notification and movement documents or otherwise constitutes illegal shipment, and if alternative arrangements cannot be made to recover these wastes in an environmentally sound manner, the waste must be returned to the country of export. The following provisions apply as appropriate:
 - (i) Return from the United States (as country of transit) to the country of export: The U.S. transporter must inform EPA at the specified address in item (d)2(i)(l) of this paragraph of the need to return the shipment. EPA will then inform the competent authority of the country of export, citing the reason(s) for returning the waste. The U.S. transporter must complete the return within ninety (90) days from the time EPA informs the country of export of the need to return the waste, unless informed in writing by EPA of another timeframe agreed to by the concerned Member countries.
 - (ii) Return from the country of transit to the United States (as country of export): The U.S. exporter must provide for the return of the hazardous waste shipment within ninety (90) days from the time the competent authority of the country of transit informs EPA of the need to return the waste or such other period of time as the concerned Member countries agree. The U.S. exporter must submit an exception report to EPA in accordance with part (h)2 of this paragraph.
- 6. Requirements for wastes destined for and received by R12 and R13 facilities. The transboundary movement of wastes destined for R12 and R13 operations must comply with all Amber control procedures for notification and consent as set forth in subparagraph (d) of this paragraph and for the movement document as set forth in subparagraph (e) of this paragaph. Additional responsibilities of R12/R13 facilities include:
 - (i) Indicating in the notification document the foreseen recovery facility or facilities where the subsequent R1-R11 recovery operation takes place or may take place.
 - (ii) Within three (3) days of the receipt of the wastes by the R12/R13 recovery facility or facilities, the facility(ies) shall return a signed copy of the movement document to the exporter and to the competent authorities of the countries of export and import. The facility(ies) shall retain the original of the movement document for three (3) years.
 - (iii) As soon as possible, but no later than thirty (30) days after the completion of the R12/R13 recovery operation and no later than one (1) calendar year following the receipt of the waste, the R12 or R13 facility(ies) shall send a certificate of recovery to the foreign exporter and to the competent authority of the country of export and to the Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection Agency, 1200 Pennsylvania Avenue, N.W.,

- Washington, D.C. 20460, by mail, e-mail without digital signature followed by mail, or fax followed by mail.
- (iv) When an R12/R13 recovery facility delivers wastes for recovery to an R1-R11 recovery facility located in the country of import, it shall obtain as soon as possible, but no later than one (1) calendar year following delivery of the waste, a certification from the R1-R11 facility that recovery of the wastes at that facility has been completed. The R12/R13 facility must promptly transmit the applicable certification to the competent authorities of the countries of import and export, identifying the transboundary movements to which the certification pertain.
- (v) When an R12/R13 recovery facility delivers wastes for recovery to an R1-R11 recovery facility located:
 - (I) In the initial country of export, Amber control procedures apply, including a new notification;
 - (II) In a third country other than the initial country of export, Amber control procedures apply, with the additional provision that the competent authority of the initial country of export shall also be notified of the transboundary movement.
- 7. Laboratory analysis exemption. The transboundary movement of an Amber waste is exempt from the Amber control procedures if it is in certain quantities and destined for laboratory analysis to assess its physical or chemical characteristics, or to determine its suitability for recovery operations. The quantity of such waste shall be determined by the minimum quantity reasonably needed to perform the analysis in each particular case adequately, but in no case exceed twenty-five kilograms (25 kg). Waste destined for laboratory analysis must still be appropriately packaged and labeled.
- (d) Notification and consent.
 - 1. Applicability. Consent must be obtained from the competent authorities of the relevant OECD countries of import and transit prior to exporting hazardous waste destined for recovery operations subject to this paragraph. Hazardous wastes subject to the Amber control procedures are subject to the requirements of part 2 of this subparagraph; and wastes not identified on any list are subject to the requirements of part 3 of this subparagraph.
 - 2. Amber wastes. Exports of hazardous wastes from the United States as described in part (a)1 of this paragraph that are subject to the Amber control procedures are prohibited unless the notification and consent requirements of subpart (i) or (ii) of this part are met.
 - (i) Transactions requiring specific consent:
 - Notification. At least forty-five (45) days prior to commencement of each (I) transboundary movement, the exporter must provide written notification in English of the proposed transboundary movement to the Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection Agency, 1200 Pennsylvania Avenue, N.W., Washington, D.C. 20460, with the words "Attention: OECD Export Notification" prominently displayed on the envelope. This notification must include all of the information identified in part 4 of this subparagraph. In cases where wastes having similar physical and chemical characteristics, the same United Nations classification, the same RCRA waste codes, and are to be sent periodically to the same recovery facility by the same exporter, the exporter may submit one general notification of intent to export these wastes in multiple shipments during a period of up to one (1) year. Even when a general notification is used for multiple shipments, each

- shipment still must be accompanied by its own movement document pursuant to subparagraph (e) of this paragraph.
- (II) Tacit consent. If no objection has been lodged by any countries concerned (i.e., exporting, importing, or transit) to a notification provided pursuant to item (I) of this subpart within thirty (30) days after the date of issuance of the Acknowledgement of Receipt of notification by the competent authority of the country of import, the transboundary movement may commence. Tacit consent expires one (1) calendar year after the close of the thirty (30) day period; renotification and renewal of all consents is required for exports after that date.
- (III) Written consent. If the competent authorities of all the relevant OECD importing and transit countries provide written consent in a period less than thirty (30) days, the transboundary movement may commence immediately after all necessary consents are received. Written consent expires for each relevant OECD importing and transit country one (1) calendar year after the date of that country's consent unless otherwise specified; renotification and renewal of each expired consent is required for exports after that date.
- (ii) Transboundary movements to facilities pre-approved by the competent authorities of the importing countries to accept specific wastes for recovery:
 - Notification. The exporter must provide EPA a notification that contains (I) all the information identified in part 4 of this subparagraph in English, at least ten (10) days in advance of commencing shipment to a preapproved facility. The notification must indicate that the recovery facility is pre-approved, and may apply to a single specific shipment or to multiple shipments as described in item (i)(I) of this part. This information must be sent to the Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection Agency, 1200 Pennsylvania Avenue, NW., Washington, DC 20460, with the words "OECD Export Notification—Pre-approved Facility" prominently displayed on the envelope. General notifications that cover multiple shipments as described in item (i)(I) of this part may cover a period of up to three (3) years. Even when a general notification is used for multiple shipments, each shipment still must be accompanied by its own movement document pursuant to subparagraph (e) of this paragraph.
 - (ii) Exports to pre-approved facilities may take place after the elapse of seven (7) working days from the issuance of an Acknowledgement of Receipt of the notification by the competent authority of the country of import unless the exporter has received information indicating that the competent authority of any countries concerned objects to the shipment.
- 3. Wastes not covered in the OECD Green and Amber lists. Wastes destined for recovery operations, that have not been assigned to the OECD Green and Amber lists, incorporated by reference in part (j)4 of this paragraph, but which are considered hazardous under U.S. national procedures as defined in part (a)1 of this paragraph, are subject to the notification and consent requirements established for the Amber control procedures in accordance with part 2 of this subparagraph. Wastes destined for recovery operations, that have not been assigned to the OECD Green and Amber lists incorporated by reference in part (j)4 of this paragraph, and are not considered hazardous under U.S. national procedures as defined by part (a)1 of this paragraph are subject to the Green control procedures.
- 4. Notifications submitted under this section must include the information specified in subparts (i) through (xiv) of this part:

- (i) Serial number or other accepted identifier of the notification document;
- (ii) Exporter name and EPA identification number (if applicable), address, telephone, fax numbers, and e-mail address;
- (iii) Importing recovery facility name, address, telephone, fax numbers, e-mail address, and technologies employed;
- (iv) Importer name (if not the owner or operator of the recovery facility), address, telephone, fax numbers, and e-mail address; whether the importer will engage in waste exchange recovery operation R12 or waste accumulation recovery operation R13 prior to delivering the waste to the final recovery facility and identification of recovery operations to be employed at the final recovery facility;
- (v) Intended transporter(s) and/or their agent(s); address, telephone, fax, and e-mail address;
- (vi) Country of export and relevant competent authority, and point of departure;
- (vii) Countries of transit and relevant competent authorities and points of entry and departure;
- (viii) Country of import and relevant competent authority, and point of entry;
- (ix) Statement of whether the notification is a single notification or a general notification. If general, include period of validity requested;
- (x) Date(s) foreseen for commencement of transboundary movement(s);
- (xi) Means of transport envisaged;
- (xii) Designation of waste type(s) from the appropriate OECD list incorporated by reference in part (j)4 of this paragraph, description(s) of each waste type, estimated total quantity of each, RCRA waste code, and the United Nations number for each waste type;
- (xiii) Specification of the recovery operation(s) as defined in subparagraph (b) of this paragraph.
- (xiv) Certification/Declaration signed by the exporter that states:

"I certify that the above information is complete and correct to the best of my knowledge. I also certify that legally-enforceable written contractual obligations have been entered into, and that any applicable insurance or other financial guarantees are or shall be in force covering the transboundary movement."

Name:			
Signature:	٠		
Date:			

(Note: The United States does not currently require financial assurance for these waste shipments. However, U.S. exporters may be asked by other governments to provide and certify to such assurance as a condition of obtaining consent to a proposed movement.)

5. Certificate of Recovery. As soon as possible, but no later than thirty (30) days after the completion of recovery and no later than one (1) calendar year following receipt of the

waste, the U.S. recovery facility shall send a certificate of recovery to the exporter and to the competent authorities of the countries of export and import by mail, e-mail without a digital signature followed by mail, or fax followed by mail. The certificate of recovery shall include a signed, written and dated statement that affirms that the waste materials were recovered in the manner agreed to by the parties to the contract required under subparagraph (f) of this paragraph.

(e) Movement document.

- 1. All U.S. parties subject to the contract provisions of subparagraph (f) of this paragraph must ensure that a movement document meeting the conditions of part 2 of this subparagraph accompanies each transboundary movement of wastes subject to the Amber control procedures from the initiation of the shipment until it reaches the final recovery facility, including cases in which the waste is stored and/or sorted by the importer prior to shipment to the final recovery facility, except as provided in subparts (i) and (ii) of this part.
 - (i) For shipments of hazardous waste within the United States solely by water (bulk shipments only), the generator must forward the movement document with the manifest to the last water (bulk shipment) transporter to handle the waste in the United States if exported by water, (in accordance with the manifest routing procedures at part (3)(d)3 of this rule.
 - (ii) For rail shipments of hazardous waste within the United States which originate at the site of generation, the generator must forward the movement document with the manifest (in accordance with the routing procedures for the manifest in part (3)(d)4 of this rule to the next non-rail transporter, if any, or the last rail transporter to handle the waste in the United States if exported by rail.
- 2. The movement document must include all information required under subparagraph (d) of this paragraph (for notification), as well as the following subparts (i) through (vii) of this part:
 - (i) Date movement commenced;
 - (ii) Name (if not exporter), address, telephone, fax numbers, and e-mail of primary exporter;
 - (iii) Company name and EPA ID number of all transporters;
 - (iv) Identification (license, registered name or registration number) of means of transport, including types of packaging envisaged;
 - (v) Any special precautions to be taken by transporter(s);
 - (vi) Certification/declaration signed by the exporter that no objection to the shipment has been lodged, as follows:

"I certify that the above information is complete and correct to the best of my knowledge. I also certify that legally-enforceable written contractual obligations have been entered into, that any applicable insurance or other financial guarantees are or shall be in force covering the transboundary movement, and that:

- (I) All necessary consents have been received; OR
- (II) The shipment is directed to a recovery facility within the OECD area and no objection has been received from any of the countries concerned within the thirty (30) day tacit consent period; OR

(III) The shipment is directed to a recovery facility pre-approved for that type of waste within the OECD area; such an authorization has not been revoked, and no objection has been received from any of the countries concerned."

(Delete sentences that are not applicable)
Name:
Signature:

- (vii) Appropriate signatures for each custody transfer (e.g., transporter, importer, and owner or operator of the recovery facility).
- 3. Exporters also must comply with the special manifest requirements of parts (7)(e)1, 2, 3, 5, and 9 of this rule and importers must comply with the import requirements of paragraph (8) of this rule.
- 4. Each U.S. person that has physical custody of the waste from the time the movement commences until it arrives at the recovery facility must sign the movement document (e.g., transporter, importer, and owner or operator of the recovery facility).
- 5. Within three (3) working days of the receipt of imports subject to this paragraph, the owner or operator of the U.S. recovery facility must send signed copies of the movement document to the exporter, to the Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection Agency, 1200 Pennsylvania Avenue, NW., Washington, DC 20460, and to the competent authorities of the countries of export and transit. If the concerned U.S. recovery facility is a R12/R13 recovery facility as defined under subparagraph (b) of this paragraph, the facility shall retain the original of the movement document for three (3) years.

(f) Contracts.

- 1. Transboundary movements of hazardous wastes subject to the Amber control procedures are prohibited unless they occur under the terms of a valid written contract, chain of contracts, or equivalent arrangements (when the movement occurs between parties controlled by the same corporate or legal entity). Such contracts or equivalent arrangements must be executed by the exporter and the owner or operator of the recovery facility, and must specify responsibilities for each. Contracts or equivalent arrangements are valid for the purposes of this subparagraph only if persons assuming obligations under the contracts or equivalent arrangements have appropriate legal status to conduct the operations specified in the contract or equivalent arrangements.
- 2. Contracts or equivalent arrangements must specify the name and EPA ID number, where available, of subparts (i) through (iv) of this part:
 - (i) The generator of each type of waste;
 - (ii) Each person who will have physical custody of the wastes;
 - (iii) Each person who will have legal control of the wastes; and

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(iv) The recovery facility.

Date:

3. Contracts or equivalent arrangements must specify which party to the contract will assume responsibility for alternate management of the wastes if their disposition cannot

be carried out as described in the notification of intent to export. In such cases, contracts must specify that:

- (i) The person having actual possession or physical control over the wastes will immediately inform the exporter and the competent authorities of the countries of export and import and, if the wastes are located in a country of transit, the competent authorities of that country; and
- (ii) The person specified in the contract will assume responsibility for the adequate management of the wastes in compliance with applicable laws and regulations including, if necessary, arranging the return of wastes and, as the case may be, shall provide the notification for re-export.
- 4. Contracts must specify that the importer will provide the notification required in part (c)3 of this paragraph prior to the re-export of controlled wastes to a third country.
- 5. Contracts or equivalent arrangements must include provisions for financial guarantees, if required by the competent authorities of any countries concerned, in accordance with applicable national or international law requirements.

(Note: Financial guarantees so required are intended to provide for alternate recycling, disposal or other means of sound management of the wastes in cases where arrangements for the shipment and the recovery operations cannot be carried out as foreseen. The United States does not require such financial guarantees at this time; however, some OECD Member countries do. It is the responsibility of the exporter to ascertain and comply with such requirements; in some cases, transporters or importers may refuse to enter into the necessary contracts absent specific references or certifications to financial guarantees.)

- 6. Contracts or equivalent arrangements must contain provisions requiring each contracting party to comply with all applicable requirements of this paragraph.
- 7. Upon request by EPA, U.S. exporters, importers, or recovery facilities must submit to EPA copies of contracts, chain of contracts, or equivalent arrangements (when the movement occurs between parties controlled by the same corporate or legal entity). Information contained in the contracts or equivalent arrangements for which a claim of confidentiality is asserted in accordance with 40 CFR 2.203(b) will be treated as confidential and will be disclosed by EPA only as provided in 40 CFR 260.2.

(Note: Although the United States does not require routine submission of contracts at this time, the OECD Decision allows Member countries to impose such requirements. When other OECD Member countries require submission of partial or complete copies of the contract as a condition to granting consent to proposed movements, EPA will request the required information; absent submission of such information, some OECD Member countries may deny consent for the proposed movement.)

- (g) Provisions relating to recognized traders.
 - A recognized trader who takes physical custody of a waste and conducts recovery operations (including storage prior to recovery) is acting as the owner or operator of a recovery facility and must be so authorized in accordance with all applicable Federal laws.
 - 2. A recognized trader acting as an exporter or importer for transboundary shipments of waste must comply with all the requirements of this paragraph associated with being an exporter or importer.
- (h) Reporting and recordkeeping.

- 1. Annual reports. For all waste movements subject to this paragraph, persons (e.g., exporters, recognized traders) who meet the definition of primary exporter in subparagraph (7)(b) of this rule or who initiate the movement documentation under subparagraph (e) of this paragraph shall file an annual report with the Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection Agency, 1200 Pennsylvania Avenue, N.W., Washington, D.C. 20460, no later than March 1 of each year summarizing the types, quantities, frequency, and ultimate destination of all such hazardous waste exported during the previous calendar year. (If the primary exporter or the person who initiates the movement document under subparagraph (e) of this paragraph is required to file an annual report for waste exports that are not covered under this paragraph, he may include all export information in one report provided the following information on exports of waste destined for recovery within the designated OECD Member countries is contained in a separate section.) Such reports shall include all of the following subparts (i) through (vi) of this part specified as follows:
 - (i) The EPA identification number, name, and mailing and site address of the exporter filing the report;
 - (ii) The calendar year covered by the report;
 - (iii) The name and site address of each final recovery facility;
 - (iv) By final recovery facility, for each hazardous waste exported, a description of the hazardous waste, the EPA hazardous waste number (from paragraphs (3) or (4) of Rule 0400-12-01-.02), designation of waste type(s) and applicable waste code(s) from the appropriate OECD waste list incorporated by reference in part (j)4 of this paragraph, DOT hazard class, the name and U.S. EPA identification number (where applicable) for each transporter used, the total amount of hazardous waste shipped pursuant to this paragraph, and number of shipments pursuant to each notification;
 - (v) In even numbered years, for each hazardous waste exported, except for hazardous waste produced by exporters of greater than 100kg but less than 1,000kg in a calendar month, and except for hazardous waste for which information was already provided pursuant to subparagraph (5)(b) of this rule:
 - (I) A description of the efforts undertaken during the year to reduce the volume and toxicity of the waste generated; and
 - (II) A description of the changes in volume and toxicity of the waste actually achieved during the year in comparison to previous years to the extent such information is available for years prior to 1984; and
 - (vi) A certification signed by the person acting as primary exporter or initiator of the movement document under subparagraph (e) of this paragraph 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 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. Exception reports. Any person who meets the definition of primary exporter in subparagraph (7)(b) of this rule or who initiates the movement document under subparagraph (e) of this paragraph must file an exception report in lieu of the requirements of subparagraph (5)(c) of this rule (if applicable) with the Office of Enforcement and Compliance Assurance, Office of Federal Activities, International

Compliance Assurance Division (2254A), Environmental Protection Agency, 1200 Pennsylvania Avenue, N.W., Washington, D.C. 20460, if any of the following occurs:

- (i) He has not received a copy of the RCRA hazardous waste manifest (if applicable) signed by the transporter identifying the point of departure of the waste from the United States, within forty-five (45) days from the date it was accepted by the initial transporter;
- (ii) Within ninety (90) days from the date the waste was accepted by the initial transporter, the exporter has not received written confirmation from the recovery facility that the hazardous waste was received;
- (iii) The waste is returned to the United States.

Recordkeeping.

- (i) Persons who meet the definition of primary exporter in subparagraph (7)(b) of this rule or who initiate the movement document under subparagraph (e) of this paragraph shall keep the following records in items (I) through (IV) of this subpart:
 - (I) A copy of each notification of intent to export and all written consents obtained from the competent authorities of countries concerned for a period of at least three (3) years from the date the hazardous waste was accepted by the initial transporter;
 - (II) A copy of each annual report for a period of at least three (3) years from the due date of the report;
 - (III) A copy of any exception reports and a copy of each confirmation of delivery (i.e., movement document) sent by the recovery facility to the exporter for at least three (3) years from the date the hazardous waste was accepted by the initial transporter or received by the recovery facility, whichever is applicable; and
 - (IV) A copy of each certificate of recovery sent by the recovery facility to the exporter for at least three (3) years from the date that the recovery facility completed processing the waste shipment.
- (ii) The periods of retention referred to in this part are extended automatically during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Administrator.
- (i) Pre-approval for U.S. recovery facilities [Reserved]
- (j) OECD waste lists.
 - 1. General. For the purposes of this paragraph, a waste is considered hazardous under U.S. national procedures, and hence subject to this paragraph, if the waste:
 - (i) Meets the definition of hazardous waste in subparagraph (1)(c) of Rule 0400-12-01-.02; and
 - (ii) Is subject to either the manifesting requirements at paragraph (3) of this rule, the universal waste management standards of Rule 0400-12-01-.12, or the export requirements in the spent lead-acid battery management standards of paragraph (7) of Rule 0400-12-.01-.09.

- 2. If a waste is hazardous under part 1 of this subparagraph, it is subject to the Amber control procedures, regardless of whether it appears in the OECD Amber List, incorporated by reference in part 4 of this subparagraph.
- 3. The appropriate control procedures for hazardous wastes and hazardous waste mixtures are addressed in subparagraph (c) of this paragraph.
- The OECD waste lists, as set forth in Annex B ("Green List") and Annex C ("Amber List") 4. (collectively "OECD waste lists") of the 2009 "Guidance Manual for the Implementation of Council Decision C(2001)107/FINAL, as Amended, on the Control of Transboundary Movements of Wastes Destined for Recovery Operations," are incorporated by reference. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. This material is incorporated as it exists on the date of the approval and a notice of any change in these materials will be published in the FEDERAL REGISTER. The materials are available for inspection at: the U.S. Environmental Protection Agency, Docket Center Public Reading Room, EPA West, Room 3334, 1301 Constitution Avenue NW., Washington, DC 20004 (Docket # EPA-HQ-RCRA-2005-0018) or at the National Archives and Records Administration (NARA), and may be obtained from the Organization for Economic Cooperation and Development, Environment Directorate, 2 rue André Pascal, F-75775 Paris Cedex 16, France. For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html. To contact the EPA Docket Center Public Reading Room, call (202) 566-1744. To contact the OECD, call +33 (0) 1 45 24 81 67.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subpart (i) of part 5 of subparagraph (l) of paragraph (12) of Rule 0400-12-01-.03 Notification Requirements and Standards Applicable to Generators of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

- 5. (i) A generator may accumulate as much as 55 gallons of hazardous waste or one quart of acute hazardous waste listed in Rule 0400-12-01-.02(4)(b) or (4)(d)5, in containers at or near any point of generation where wastes initially accumulate, which is under the control of the operator of the process generating the waste, without a permit or interim status and without complying with part 2 or 6 of this subparagraph provided he:
 - (I) Complies with Rule 0400-12-01-.05(9)(b), (c), and (d)1; and
 - (II) Marks his containers either with the words "Hazardous Waste" or with other words that identify the contents of the containers.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subpart (i) of part 5 of subparagraph (I) of paragraph (12) of Rule 0400-12-01-.03 Notification Requirements and Standards Applicable to Generators of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

(i) Write the words "hazardous waste" on the container label that is affixed or attached to the container, within four (4) calendar days of arriving at the on-site central accumulation area and before the hazardous waste may be removed from the on-site central accumulation area; and

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Part 5 of subparagraph (a) of paragraph (1) of Rule 0400-12-01-.04 Requirements Applicable to Transfer Facilities and Permit Requirements and Standards Applicable to Transporters of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

5. A transporter of hazardous waste subject to the manifesting requirements of Rule 0400-12-01-.03, or subject to the waste management standards of Rule 0400-12-01-.12 that is being imported from or exported to any of the countries listed in subpart (7)(i)1(i) of Rule 0400-12-01-.03 for the purposes of recovery is subject to this paragraph and to all relevant requirements of paragraph (9) of Rule 0400-12-01-.03, including, but not limited to, subparagraph (9)(e) of Rule 0400-12-01-.03.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subparagraph (a) of paragraph (3) of Rule 0400-12-01-.04 Requirements Applicable to Transfer Facilities and Permit Requirements and Standards Applicable to Transporters of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

- (a) The Manifest System [40 CFR 263.20]
 - 1. (i) Manifest requirement.

A transporter may not accept hazardous waste from a generator unless the transporter is also provided with a manifest form (EPA Form 8700-22, and if necessary, EPA Form 8700-22A) signed in accordance with the requirements of subparagraph (3)(d) of Rule 0400-12-01-.03, or is provided with an electronic manifest that is obtained, completed, and transmitted in accordance with subpart (3)(a)1(iii) of Rule 0400-12-01-.03, and signed with a valid and enforceable electronic signature as described in subparagraph (3)(f) of Rule 0400-12-01-.03.

(ii) Exports.

In the case of exports other than those subject to paragraph (9) of Rule 0400-12-01-.03, a transporter may not accept such waste from a primary exporter or other person if he knows the shipment does not conform to the EPA Acknowledgement of Consent; and unless, in addition to a manifest signed by the generator in accordance with this paragraph, the transporter shall also be provided with an EPA Acknowledgement of Consent which, except for shipments by rail, is attached to the manifest (or shipping paper for exports by water (bulk shipment)). For exports of hazardous waste subject to the requirements of paragraph (9) of Rule 0400-12-01-.03, a transporter may not accept hazardous waste without a tracking document that includes all information required by subparagraph (9)(e) of Rule 0400-12-01-.03.

(iii) Compliance date for form revisions.

The revised Manifest form and procedures in subparagraph (2)(a) of Rule 0400-12-01-.01, subparagraph (1)(g) of Rule 0400-12-01-.02, this subparagraph and subparagraph (b) of this paragraph had an effective date of September 5, 2006. The Manifest form and procedures in subparagraph (2)(a) of Rule 0400-12-01-.01, subparagraph (1)(g) of Rule 0400-12-01-.02, this subparagraph and subparagraph (b) of this paragraph, contained in the Rules 0400-12-01-.01 through 0400-12-01-.06, in effect as of July 1, 2004, were applicable until September 5, 2006.

(iv) Use of electronic manifest--legal equivalence to paper forms for participating transporters.

Electronic manifests that are obtained, completed, and transmitted in accordance with subpart (3)(a)1(iii) of Rule 0400-12-01-.03, and used in accordance with this subpart in lieu of EPA Forms 8700-22 and 8700-22A, are the legal equivalent of paper manifest forms bearing handwritten signatures, and satisfy for all purposes any requirement in these regulations to obtain, complete, sign, carry, provide, give, use, or retain a manifest.

- (I) Any requirement in these regulations to sign a manifest or manifest certification by hand, or to obtain a handwritten signature, is satisfied by signing with or obtaining a valid and enforceable electronic signature within the meaning of part (3)(f)1 of Rule 0400-12-01-.03.
- (II) Any requirement in these regulations to give, provide, send, forward, or return to another person a copy of the manifest is satisfied when a copy of an electronic manifest is transmitted to the other person by submission to the system.
- (III) Any requirement in these regulations for a manifest to accompany a hazardous waste shipment is satisfied when a copy of an electronic manifest is accessible during transportation and forwarded to the person or persons who are scheduled to receive delivery of the waste shipment, except that to the extent that the Hazardous Materials regulation on shipping papers for carriage by public highway requires transporters of hazardous materials to carry a paper document to comply with 49 CFR 177.817, a hazardous waste transporter must carry one printed copy of the electronic manifest on the transport vehicle.
- (IV) Any requirement in these regulations for a transporter to keep or retain a copy of a manifest is satisfied by the retention of an electronic manifest in the transporter's account on the e-Manifest system, provided that such copies are readily available for viewing and production if requested by any EPA inspector or the Commissioner.
- (V) No transporter may be held liable for the inability to produce an electronic manifest for inspection under this paragraph if that transporter can demonstrate that the inability to produce the electronic manifest is exclusively due to a technical difficulty with the EPA system for which the transporter bears no responsibility.
- (v) A transporter may participate in the electronic manifest system either by accessing the electronic manifest system from the transporter's own electronic equipment, or by accessing the electronic manifest system from the equipment provided by a participating generator, by another transporter, or by a designated facility.
- (vi) Special procedures when electronic manifest is not available.

If after a manifest has been originated electronically and signed electronically by the initial transporter, and the electronic manifest system should become unavailable for any reason, then:

- (I) The transporter in possession of the hazardous waste when the electronic manifest becomes unavailable shall reproduce sufficient copies of the printed manifest that is carried on the transport vehicle pursuant to item (iv)(III) of this part, or obtain and complete another paper manifest for this purpose. The transporter shall reproduce sufficient copies to provide the transporter and all subsequent waste handlers with a copy for their files, plus two additional copies that will be delivered to the designated facility with the hazardous waste.
- (II) On each printed copy, the transporter shall include a notation in the Special Handling and Additional Description space (Item 14) that the paper manifest is a replacement manifest for a manifest originated in the electronic manifest system, shall include (if not pre-printed on the replacement manifest) the manifest tracking number of the electronic manifest that is replaced by the paper manifest, and shall also include a brief explanation why the electronic manifest was not available for

completing the tracking of the shipment electronically.

- (III) A transporter signing a replacement manifest to acknowledge receipt of the hazardous waste must ensure that each paper copy is individually signed and that a legible handwritten signature appears on each copy.
- (IV) From the point at which the electronic manifest is no longer available for tracking the waste shipment, the paper replacement manifest copies shall be carried, signed, retained as records, and given to a subsequent transporter or to the designated facility, following the instructions, procedures, and requirements that apply to the use of all other paper manifests.
- (vii) Special procedures for electronic signature methods undergoing tests.

If a transporter using an electronic manifest signs this manifest electronically using an electronic signature method which is undergoing pilot or demonstration tests aimed at demonstrating the practicality or legal dependability of the signature method, then the transporter shall sign the electronic manifest electronically and also sign with an ink signature the transporter acknowledgement of receipt of materials on the printed copy of the manifest that is carried on the vehicle in accordance with item (iv)(III) of this part. This printed copy bearing the generator's and transporter's ink signatures shall also be presented by the transporter to the designated facility to sign in ink to indicate the receipt of the waste materials or to indicate discrepancies. After the owner or operator of the designated facility has signed this printed manifest copy with its ink signature, the printed manifest copy shall be delivered to the designated facility with the waste materials.

(viii) Imposition of user fee for electronic manifest use.

A transporter who is a user of the electronic manifest may be assessed a user fee by EPA for the origination or processing of each electronic manifest.

(Note: In accordance with 40 CFR 263.20(a)(8), EPA shall maintain and update from time-to-time the current schedule of electronic manifest user fees, which shall be determined based on current and projected system costs and level of use of the electronic manifest system. The current schedule of electronic manifest user fees shall be published as an appendix to 40 CFR Part 262.)

- 2. Before transporting the hazardous waste, the transporter must sign and date the manifest acknowledging acceptance of the hazardous waste from the generator. The transporter must return a signed copy to the generator before leaving the generator's property
- The transporter must ensure that the manifest accompanies the hazardous waste. In the
 case of exports, the transporter must ensure that a copy of the EPA Acknowledgement of
 Consent also accompanies the hazardous waste.
- 4. A transporter who delivers a hazardous waste to another transporter or to the designated facility must:
 - (i) Obtain the date of delivery and the handwritten signature of that transporter or of the owner or operator of the designated facility on the manifest; and
 - (ii) Retain one copy of the manifest in accordance with subparagraph (c) of this paragraph; and
 - (iii) Give the remaining copies of the manifest to the accepting transporter or designated facility.

- 5. The requirements of parts 3, 4, and 6 of this subparagraph do not apply to water (bulk shipment) transporters if:
 - (i) The hazardous waste is delivered by water (bulk shipment) to the designated facility; and
 - (ii) A shipping paper containing all the information required on the manifest (excluding the Installation Identification Numbers, generator certification, and signatures) and, for exports, an EPA Acknowledgment of Consent accompanies the hazardous waste; and
 - (iii) The delivering transporter obtains the date of delivery and handwritten signature of the owner or operator of the designated facility on either the manifest or the shipping paper; and
 - (iv) The person delivering the hazardous waste to the initial water (bulk shipment) transporter obtains the date of delivery and signature of the water (bulk shipment) transporter on the manifest and forwards it to the designated facility; and
 - (v) A copy of the shipping paper or manifest is retained by each water (bulk shipment) transporter in accordance with subparagraph (c) of this paragraph.
- 6. For shipments involving rail transportation, the requirements of parts 3, 4, and 5 do not apply and the following requirements do apply:
 - (i) When accepting hazardous waste from a non-rail transporter, the initial rail transporter must:
 - Sign and date the manifest acknowledging acceptance of the hazardous waste;
 - (II) Return a signed copy of the manifest to the non-rail transporter;
 - (III) Forward at least three copies of the manifest to:
 - I. The next non-rail transporter, if any; or
 - II. The designated facility, if the shipment is delivered to that facility by rail; or
 - III. The last rail transporter designated to handle the waste in the United States;
 - (IV) Retain one copy of the manifest and rail shipping paper in accordance with subparagraph (c) of this paragraph.
 - (ii) Rail transporters must ensure that a shipping paper containing all the information required on the manifest (excluding the Installation Identification Numbers, generator certification, and signatures) and, for exports an EPA Acknowledgment of Consent accompanies the hazardous waste at all times.

(Note: Intermediate rail transporters are not required to sign either the manifest or shipping paper.)

- (iii) When delivering hazardous waste to the designated facility, a rail transporter must:
 - (I) Obtain the date of delivery and handwritten signature of the owner or operator of the designated facility on the manifest or the shipping paper

(if the manifest has not been received by the facility); and

- (II) Retain a copy of the manifest or signed shipping paper in accordance with subparagraph (c) of this paragraph.
- (iv) When delivering hazardous waste to a non-rail transporter a rail transporter must:
 - (I) Obtain the date of delivery and the handwritten signature of the next nonrail transporter on the manifest; and
 - (II) Retain a copy of the manifest in accordance with subparagraph (c) of this paragraph.
- (v) Before accepting hazardous waste from a rail transporter, a non-rail transporter must sign and date the manifest and provide a copy to the rail transporter.
- 7. Transporters who transport hazardous waste out of the United States must:
 - (i) Sign and date the manifest in the International Shipments block to indicate the date that the shipment left the United States; and
 - (ii) Retain one copy in accordance with part (c)4 of this subparagraph; and
 - (iii) Return a signed copy of the manifest to the generator; and
 - (iv) Give a copy of the manifest to a U.S. Customs official at the point of departure from the United States.
- 8. A transporter transporting hazardous waste from a generator who generates greater than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month need not comply with the requirements of this subparagraph or those of subparagraph (c) of this paragraph provided that:
 - (i) The waste is being transported pursuant to a reclamation agreement as provided for in Rule 0400-12-01-.03(3)(a)5;
 - (ii) The transporter records, on a log or shipping paper, the following information for each shipment:
 - (I) The name, address, and U.S. Installation Identification Number of the generator of the waste:
 - (II) The quantity of waste accepted;
 - (III) All DOT-required shipping information;
 - (IV) The date the waste is accepted; and
 - (iii) The transporter carries this record when transporting waste to the reclamation facility; and
 - (iv) The transporter retains these records for a period of at least three years after termination or expiration of the agreement.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Paragraph (3) of Rule 0400-12-01-.04 Requirements Applicable to Transfer Facilities and Permit Requirements and Standards Applicable to Transporters of Hazardous Waste is amended by adding subparagraphs (d), (e) and (f) to read as follows:

- (d) Reserved
- (e) Reserved
- (f) Electronic manifest signatures [40 CFR 263.25]
 - 1. Electronic manifest signatures shall meet the criteria described in 40 CFR 262.25(a).
 - 2. Reserved

Subpart (ii) of part 1 of subparagraph (c) of paragraph (2) of Rule 0400-12-01-.05 Interim Status Standards for Owners and Operators of Existing Hazardous Waste Treatment, Storage, and Disposal Facilities is amended by deleting it in its entirety and substituting instead the following:

(ii) The owner or operator of a recovery facility that has arranged to receive hazardous waste subject to paragraph (9) of Rule 0400-12-01-.03 must provide a copy of the movement document bearing all required signatures to the foreign exporter, to the Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection Agency, 1200 Pennsylvania Avenue, N.W., Washington, D.C. 20460; and to the competent authorities of all other countries concerned within three (3) working days of receipt of the shipment. The original of the signed movement document must be maintained at the facility for at least three (3) years. In addition, such owner or operator shall, as soon as possible, but no later than thirty (30) days after the completion of recovery and no later than one (1) calendar year following the receipt of the hazardous waste, send a certificate of recovery to the foreign exporter and to the competent authority of the country of export and to EPA's Office of Enforcement and Compliance Assurance at the above address by mail, e-mail without a digital signature followed by mail, or fax followed by mail.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subpart (ii) of part 1 of subparagraph (b) of paragraph (5) of Rule 0400-12-01-.05 Interim Status Standards for Owners and Operators of Existing Hazardous Waste Treatment, Storage, and Disposal Facilities is amended by deleting it in its entirety and substituting instead the following:

- (ii) If a facility receives a hazardous waste shipment accompanied by a manifest, the owner, operator or his/her agent must:
 - (I) Sign and date, by hand, each copy of the manifest;
 - (II) Note any discrepancies (as defined in part (c)1 of this paragraph) on each copy of the manifest;

(Comment: The Department does not intend that the owner or operator of a facility whose procedures under part (2)(d)3 of this rule include waste analysis must perform that analysis before signing the manifest and giving it to the transporter. Part (c)3 of this paragraph, however, requires reporting an unreconciled discrepancy discovered during later analysis.)

- (III) Immediately give the transporter at least one copy of the manifest;
- (IV) Within 30 days of delivery, send a copy (Page 3) of the manifest to the generator;
- (V) Within 30 days of delivery, send the top copy (Page 1) of the Manifest to the e-Manifest system for purposes of data entry and processing. In lieu

of mailing this paper copy to EPA, the owner or operator may transmit to EPA an image file of Page 1 of the manifest, or both a data string file and the image file corresponding to Page 1 of the manifest. Any data or image files transmitted to EPA under this item must be submitted in data file and image file formats that are acceptable to EPA and that are supported by EPA's electronic reporting requirements and by the electronic manifest system; and

(VI) Retain at the facility a copy of each manifest for at least three years from the date of delivery.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Part 4 of subparagraph (b) of paragraph (5) of Rule 0400-12-01-.05 Interim Status Standards for Owners and Operators of Existing Hazardous Waste Treatment, Storage, and Disposal Facilities is amended by deleting it in its entirety and substituting instead the following:

4. Within three (3) working days of the receipt of a shipment subject to paragraph (9) of Rule 0400-12-01-.03, the owner or operator of a facility must provide a copy of the movement document bearing all required signatures to the exporter, to the Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection Agency, 1200 Pennsylvania Avenue, N.W., Washington, D.C. 20460, and to competent authorities of all other countries concerned. The original copy of the movement document must be maintained at the facility for at least three (3) years from the date of signature.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subparagraph (b) of paragraph (5) of Rule 0400-12-01-.05 Interim Status Standards for Owners and Operators of Existing Hazardous Waste Treatment, Storage, and Disposal Facilities is amended by adding new parts 6 through 11 to read as follows:

6. Legal equivalence to paper manifests.

Electronic manifests that are obtained, completed, and transmitted in accordance with subpart (3)(a)1(iii) of Rule 0400-12-01-.03, and used in accordance with this part in lieu of the paper manifest form are the legal equivalent of paper manifest forms bearing handwritten signatures, and satisfy for all purposes any requirement in these regulations to obtain, complete, sign, provide, use, or retain a manifest.

- (i) Any requirement in these regulations for the owner or operator of a facility to sign a manifest or manifest certification by hand, or to obtain a handwritten signature, is satisfied by signing with or obtaining a valid and enforceable electronic signature within the meaning of part (3)(f)1 of Rule 0400-12-01-.03.
- (ii) Any requirement in these regulations to give, provide, send, forward, or to return to another person a copy of the manifest is satisfied when a copy of an electronic manifest is transmitted to the other person.
- (iii) Any requirement in these regulations for a manifest to accompany a hazardous waste shipment is satisfied when a copy of an electronic manifest is accessible during transportation and forwarded to the person or persons who are scheduled to receive delivery of the hazardous waste shipment.
- (iv) Any requirement in these regulations for an owner or operator to keep or retain a copy of each manifest is satisfied by the retention of the facility's electronic manifest copies in its account on the e-Manifest system, provided that such copies are readily available for viewing and production if requested by any EPA inspector or the Commissioner.

- (v) No owner or operator may be held liable for the inability to produce an electronic manifest for inspection under this paragraph if the owner or operator can demonstrate that the inability to produce the electronic manifest is due exclusively to a technical difficulty with the electronic manifest system for which the owner or operator bears no responsibility.
- 7. An owner or operator may participate in the electronic manifest system either by accessing the electronic manifest system from the owner's or operator's electronic equipment, or by accessing the electronic manifest system from portable equipment brought to the owner's or operator's site by the transporter who delivers the waste shipment to the facility.
- 8. Special procedures applicable to replacement manifests.

If a facility receives hazardous waste that is accompanied by a paper replacement manifest for a manifest that was originated electronically, the following procedures apply to the delivery of the hazardous waste by the final transporter:

- (i) Upon delivery of the hazardous waste to the designated facility, the owner or operator must sign and date each copy of the paper replacement manifest by hand in Item 20 (Designated Facility Certification of Receipt) and note any discrepancies in Item 18 (Discrepancy Indication Space) of the replacement manifest.
- (ii) The owner or operator of the facility must give back to the final transporter one copy of the paper replacement manifest,
- (iii) Within 30 days of delivery of the hazardous waste to the designated facility, the owner or operator of the facility must send one signed and dated copy of the paper replacement manifest to the generator, and send an additional signed and dated copy of the paper replacement manifest to the EPA e-Manifest system, and
- (iv) The owner or operator of the facility must retain at the facility one copy of the paper replacement manifest for at least three years from the date of delivery.
- 9. Special procedures applicable to electronic signature methods undergoing tests.

If an owner or operator using an electronic manifest signs this manifest electronically using an electronic signature method which is undergoing pilot or demonstration tests aimed at demonstrating the practicality or legal dependability of the signature method, then the owner or operator shall also sign with an ink signature the facility's certification of receipt or discrepancies on the printed copy of the manifest provided by the transporter. Upon executing its ink signature on this printed copy, the owner or operator shall retain this original copy among its records for at least 3 years from the date of delivery of the waste.

10. Imposition of user fee for electronic manifest use.

An owner or operator who is a user of the electronic manifest format may be assessed a user fee by EPA for the origination or processing of each electronic manifest.

(Note: In accordance with 40 CFR 265.71(j), an owner or operator may also be assessed a user fee by EPA for the collection and processing of paper manifest copies that owners or operators must submit to the electronic manifest system operator under item I(ii)(V) of this subparagraph. EPA shall maintain and update from time-to-time the current schedule of electronic manifest system user fees, which shall be determined based on current and projected system costs and level of use of the electronic manifest system. The current schedule of electronic manifest user fees shall be published as an appendix to 40 CFR Part 262.)

- 11. Electronic manifest signatures.
 - (i) Electronic manifest signatures shall meet the criteria described in 40 CFR 262.25(a).
 - (ii) Reserved

Subpart (ii) of part 1 of subparagraph (c) of paragraph (2) of Rule 0400-12-01-.06 Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities is amended by deleting it in its entirety and substituting instead the following:

(ii) The owner or operator of a recovery facility that has arranged to receive hazardous waste subject to paragraph (9) of Rule 0400-12-01-.03 must provide a copy of the movement document bearing all required signatures to the foreign exporter, to the Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), 1200 Pennsylvania Avenue, N.W., Environmental Protection Agency, Washington, D.C. 20460; and to the competent authorities of all other countries concerned within three (3) working days of receipt of the shipment. The original of the signed movement document must be maintained at the facility for at least three (3) years. In addition, such owner or operator shall, as soon as possible, but no later than thirty (30) days after the completion of recovery and no later than one (1) calendar year following the receipt of the hazardous waste, send a certificate of recovery to the foreign exporter and to the competent authority of the country of export and to EPA's Office of Enforcement and Compliance Assurance at the above address by mail, e-mail without a digital signature followed by mail, or fax followed by mail.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subpart (ii) of part 1 of subparagraph (b) of paragraph (5) of Rule 0400-12-01-.06 Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities is amended by deleting it in its entirety and substituting instead the following:

- (ii) If a facility receives a hazardous waste shipment accompanied by a manifest, the owner, operator or his/her agent must:
 - (I) Sign and date, by hand, each copy of the manifest;
 - (II) Note any discrepancies (as defined in part (c)1 of this paragraph) on each copy of the manifest;

(Comment: The Department does not intend that the owner or operator of a facility whose procedures under part (2)(d)3 of this rule include waste analysis must perform that analysis before signing the manifest and giving it to the transporter. Part (c)2 of this paragraph, however, requires reporting an unreconciled discrepancy discovered during later analysis.)

- (III) Immediately give the transporter at least one copy of the manifest;
- (IV) Within 30 days of delivery, send a copy (Page 3) of the manifest to the generator;
- (V) Within 30 days of delivery, send the top copy (Page 1) of the Manifest to the e-Manifest system for purposes of data entry and processing. In lieu of mailing this paper copy to EPA, the owner or operator may transmit to

the EPA system an image file of Page 1 of the manifest, or both a data string file and the image file corresponding to Page 1 of the manifest. Any data or image files transmitted to EPA under this item must be submitted in data file and image file formats that are acceptable to EPA and that are supported by EPA's electronic reporting requirements and by the electronic manifest system; and

(VI) Retain at the facility a copy of each manifest for at least three years from the date of delivery.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Part 4 of subparagraph (b) of paragraph (5) of Rule 0400-12-01-.06 Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities is amended by deleting it in its entirety and substituting instead the following:

Within three (3) working days of the receipt of a shipment subject to paragraph (9) of Rule 0400-12-01-.03, the owner or operator of a facility must provide a copy of the movement document bearing all required signatures to the exporter, to the Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection Agency, 1200 Pennsylvania Avenue, N.W., Washington, D.C. 20460, and to competent authorities of all other countries concerned. The original copy of the movement document must be maintained at the facility for at least three (3) years from the date of signature.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subparagraph (b) of paragraph (5) of Rule 0400-12-01-.06 Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities is amended by adding new parts 6 through 11 to read as follows:

6. Legal equivalence to paper manifests.

Electronic manifests that are obtained, completed, and transmitted in accordance with subpart (3)(a)1(iii) of Rule 0400-12-01-.03, and used in accordance with this part in lieu of the paper manifest form are the legal equivalent of paper manifest forms bearing handwritten signatures, and satisfy for all purposes any requirement in these regulations to obtain, complete, sign, provide, use, or retain a manifest.

- (i) Any requirement in these regulations for the owner or operator of a facility to sign a manifest or manifest certification by hand, or to obtain a handwritten signature, is satisfied by signing with or obtaining a valid and enforceable electronic signature within the meaning of part (3)(f)1 of Rule 0400-12-01-.03.
- (ii) Any requirement in these regulations to give, provide, send, forward, or to return to another person a copy of the manifest is satisfied when a copy of an electronic manifest is transmitted to the other person.
- (iii) Any requirement in these regulations for a manifest to accompany a hazardous waste shipment is satisfied when a copy of an electronic manifest is accessible during transportation and forwarded to the person or persons who are scheduled to receive delivery of the hazardous waste shipment.
- (iv) Any requirement in these regulations for an owner or operator to keep or retain a copy of each manifest is satisfied by the retention of the facility's electronic manifest copies in its account on the e-Manifest system, provided that such copies are readily available for viewing and production if requested by any EPA or authorized state inspector.

- (v) No owner or operator may be held liable for the inability to produce an electronic manifest for inspection under this paragraph if the owner or operator can demonstrate that the inability to produce the electronic manifest is due exclusively to a technical difficulty with the electronic manifest system for which the owner or operator bears no responsibility.
- 7. An owner or operator may participate in the electronic manifest system either by accessing the electronic manifest system from the owner's or operator's electronic equipment, or by accessing the electronic manifest system from portable equipment brought to the owner's or operator's site by the transporter who delivers the waste shipment to the facility.
- 8. Special procedures applicable to replacement manifests.

If a facility receives hazardous waste that is accompanied by a paper replacement manifest for a manifest that was originated electronically, the following procedures apply to the delivery of the hazardous waste by the final transporter:

- (i) Upon delivery of the hazardous waste to the designated facility, the owner or operator must sign and date each copy of the paper replacement manifest by hand in Item 20 (Designated Facility Certification of Receipt) and note any discrepancies in Item 18 (Discrepancy Indication Space) of the replacement manifest,
- (ii) The owner or operator of the facility must give back to the final transporter one copy of the paper replacement manifest,
- (iii) Within 30 days of delivery of the hazardous waste to the designated facility, the owner or operator of the facility must send one signed and dated copy of the paper replacement manifest to the generator, and send an additional signed and dated copy of the paper replacement manifest to the EPA e-Manifest system, and
- (iv) The owner or operator of the facility must retain at the facility one copy of the paper replacement manifest for at least three years from the date of delivery.
- 9. Special procedures applicable to electronic signature methods undergoing tests.

If an owner or operator using an electronic manifest signs this manifest electronically using an electronic signature method which is undergoing pilot or demonstration tests aimed at demonstrating the practicality or legal dependability of the signature method, then the owner or operator shall also sign with an ink signature the facility's certification of receipt or discrepancies on the printed copy of the manifest provided by the transporter. Upon executing its ink signature on this printed copy, the owner or operator shall retain this original copy among its records for at least 3 years from the date of delivery of the waste

10. Imposition of user fee for electronic manifest use.

An owner or operator who is a user of the electronic manifest format may be assessed a user fee by EPA for the origination or processing of each electronic manifest.

(Note: In accordance with 40 CFR 264.71(j), an owner or operator may also be assessed a user fee by EPA for the collection and processing of paper manifest copies that owners or operators must submit to the electronic manifest system operator under item 1(ii)(V) of this subparagraph. EPA shall maintain and update from time-to-time the current schedule of electronic manifest system user fees, which shall be determined based on current and projected system costs and level of use of the electronic manifest system. The current schedule of electronic manifest user fees shall be published as an appendix to 40 CFR Part 262.)

- 11. Electronic manifest signatures.
 - (i) Electronic manifest signatures shall meet the criteria described in part (3)(f)1 of Rule 0400-12-01-.03.
 - (ii) Reserved

Part 10 of subparagraph (I) of paragraph (10) of Rule 0400-12-01-.07 Permitting of Hazardous Waste Treatment, Storage, and Disposal Facilities is amended by deleting it in its entirety and substituting instead the following:

10. Changes to RCRA permit provisions needed to support transition to 40 CFR 63 (Subpart EEE—National Emission Standards for Hazardous Air Pollutants From Hazardous Waste Combustors), provided the procedures of Rule 0400-12-01-.07(9)(c)5(xi) are followed.

11

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Part 1 of subparagraph (a) of paragraph (7) of Rule 0400-12-01-.09 Standards for the Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Facilities is amended by deleting it in its entirety and substituting instead the following:

Are spent lead-acid batteries exempt from hazardous waste management requirements?
If you generate, collect, transport, store, or regenerate lead-acid batteries for reclamation
purposes, you may be exempt from certain hazardous waste management requirements.
Use the following table to determine which requirements apply to you. Alternatively, you
may choose to manage your spent lead-acid batteries under the "Universal Waste" rule in
Rule 0400-12-01-.12.

If your batteries	And if you	Then you	And you
(i) Will be reclaimed through regeneration (such as by electrolyte replacement).		are exempt from Rules 0400-12-0103 (except for .03(1)(b)) through .07, .09, and .10 including the notification requirement of Rule 0400-12-0103(2).	are subject to Rules 0400-12-0102 and .03(1)(b).
(ii) Will be reclaimed other than through regeneration.	generate, collect, and/or transport these batteries.	are exempt from Rules 0400-12-0103 (except for .03(1)(b)) through .07 and .09, including the notification requirement of Rule 0400-12-0103(2).	are subject to Rules 0400-12-0102 and .03(1)(b),and applicable provisions under Rule 0400-12- 0110.
(iii) Will be reclaimed other than through regeneration.	store these batteries but you aren't the reclaimer.	are exempt from Rules 0400-12-0103 (except for .03(1)(b)) through .07 and .09, including the notification requirement of Rule 0400-12-0103(2).	are subject to Rules 0400-12-0102, .03(1)(b),and applicable provisions under Rule 0400-12- 0110.
(iv) Will be reclaimed other than through	store these batteries before you reclaim	must comply with part 2 of this subparagraph	are subject to Rules 0400-12-0102,

rogonoration	thom	and as annuantite	02/1\/b\ and
regeneration.	them.	and as appropriate other regulator provisions described in part 2 of this subparagraph.	.03(1)(b),and applicable provisions under Rule 0400-12- 0110.
(v) Will be reclaimed other than through regeneration.	don't store these batteries before you reclaim them.	are exempt from Rules 0400-12-0103 (except for .03(1)(b)) through .07 and .09, including the notification requirement of Rule 0400-12-0103(2).	are subject to Rules 0400-12-0102, .03(1)(b),and applicable provisions under Rule 0400-12- 0110.
(vi) Will be reclaimed through regeneration or any other means.	Export these batteries for reclamation in a foreign country.	are exempt from Rules 0400-12-0104 through .07, .09 and .10, including the notification requirement of Rule 0400-12-0103(2). You are also exempt from 0400-12-0103 (except for .03(1)(b)), and except for the applicable requirements in either (I) paragraph (9) of Rule 0400-12-0103; or (II) subparagraph (7)(d) of Rule 0400-12-0103 "Notification of Intent to Export", subparts (7)(g)1(i) through (iv) and (vi) and part (7)(g)2 of Rule 0400-12-0103 "Annual Reports", and subparagraph (7)(h) of Rule 0400-12-0103 "Recordkeeping".	are subject to Rules 0400-12-0102 and .03(1)(b), and either must comply with paragraph (9) of Rule 0400-12-0103 (if shipping to one of the OECD countries specified in subpart (7)(i)1(i) of Rule 0400-12-0103, or must: (I) Comply with the requirements applicable to a primary exporter in subparagraph (7)(d), subparts (7)(g)1(i) through (iv) and (vi), part (7)(g)2, and subparagraph (7)(h) of Rule 0400-12-0103; and (II) Export these batteries only upon consent of the receiving country and in conformance with the EPA Acknowledgement of Consent as defined in paragraph (7) of Rule 0400-12-0103; and (III) Provide a copy of the EPA Acknowledgement of Consent for the shipment to the transporter transporting the shipment for export.
(vii) Will be reclaimed through regeneration or any other means.	Transport these batteries in the U.S. to export them for reclamation in a foreign country.	are exempt from Rules 0400-12-0104 through .07, .09 and .10 including the notification requirements of Rule 0400-12-0103(2).	must comply with applicable requirements in paragraph (9) of Rule 0400-12-0103 (if shipping to one of the OECD countries

	specified in subpart (7)(i)1(i) of Rule 0400-12-0103, or must comply with the following: (I) you may not accept a shipment if you know the shipment does not conform to the EPA Acknowledgement of Consent; (II) you must ensure that a copy of the EPA acknowledgement of Consent accompanies the shipment; and (III) you must ensure that the shipment is
	(III) you must ensure
	person initiating the shipment.

Appendix IX of paragraph (30) of Rule 0400-12-01-.09 Standards for the Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Facilities is amended by deleting it in its entirety and substituting instead the following:

Appendix IX - Methods Manual for Compliance With the BIF Regulations

The Methods Manual for Compliance with the BIF Regulations presents required methods for demonstrating compliance with Tennessee's Hazardous Waste Regulations for boilers and industrial furnaces (BIFs) burning hazardous waste.

(Note: A copy of this Methods Manual may be obtained by contacting the Division Director at the following address:

Division Director
Division of Solid Waste Management
Tennessee Department of Environment and Conservation
William R. Snodgrass TN Tower
312 Rosa L. Parks Avenue, 14th Floor
Nashville, Tennessee 37243

or calling 615-532-0780. The "Methods Manual for Compliance With the BIF Regulations" may also be found at 40 CFR 266 Appendix IX or by searching the U.S. Government Printing Office's website http://www.gpo.gov/fdsys/.)

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Waste code K157 of the Table "Treatment Standards for Hazardous Wastes" following part 10 of subparagraph (a) of paragraph (3) of Rule 0400-12-01-.10 Land Disposal Restrictions is amended by deleting the last sentence in the second column so that, as amended, it reads as follows:

K157	Wastewaters (including scrubber waters, condenser waters, and separation waters) from the production of carbamates and carbamoyl oximes.	Carbon tetrachloride	56-23-5	0.057	6.0
		Chloroform	67-66-3	0.046	6.0
		Chloromethane	74-87-3	0.19	30
		Methomyl ¹⁰	16752-77-5	0.028; or CMBST, CHOXD, BIODG or CARBN	0.14; or CMBST
		Methylene chloride	75-09-2	0.089	30
		Methyl ethyl ketone	78-93-3	0.28	36
		Pyridine	110-86-1	0.014	16
		Triethylamine	121-44-8	0.081; or CMBST, CHOXD, BIODG or CARBN	1.5; or CMBST

* If a roll-call vote was necessary, the vote by the Agency on these rulemaking hearing rules was as follows:

Board Member	Aye	No	Abstain	Absent	Signature (if required)
Marty Calloway	X				
(Petroleum Business with at least 15 Underground					
Storage Tanks)					
Stacey Cothran	Х				
(Solid/Hazardous Waste Management Industry)					
Kenneth L. Donaldson	X				
(Municipal Government)					
Dr. George Hyfantis, Jr.	X				
(Institution of Higher Learning)					
Bhag Kanwar				X	
(Single Facility with less than 5 Underground Storage					
Tanks)					
Alan Leiserson	X				
Environmental Interests					
Jared L. Lynn	X				
(Manufacturing experienced with Solid/Hazardous Waste)					
David Martin	,X				
(Working in a field related to Agriculture)					
Beverly Philpot	X				
(Manufacturing experienced with Underground Storage					
Tanks/Hazardous Materials)					
DeAnne Redman	X	İ			
(Petroleum Management Business)					
Mayor A. Franklin Smith, III				Χ	
(County Government)					
Mark Williams	X				
(Small Generator of Solid/Hazardous Materials					
representing Automotive Interests)					

I certify that this is an accurate and complete copy of rulemaking hearing rules, lawfully promulgated and adopted by the Underground Storage Tanks and Solid Waste Disposal Control Board on 02/04/2015, and is in compliance with the provisions of T.C.A. § 4-5-222.

I further certify the following:

Notice of Rulemaking Hearing filed with the Departm	nent of State on: 12/11/14
Rulemaking Hearing(s) Conducted on: (add more da	ites). 02/02/15
Date:	February 4, 2015
Signature:	Stacey Cother
Name of Officer:	Stacey Cothran
Title of Officer:	Board Chair
Subscribed and sworn to be	fore me on: Jebruary 4, 2015
Notary Public	: Signature: Law Signature
My commission	expires on: June 21, 2016

Rules of the Undergrou	nd Storage Tanks and Solid Waste Disposal Control Board
	azardous Waste Management System: General
	entification and Listing of Hazardous Waste
	otification Requirements and Standards Applicable to Generators of Hazardous Waste
	equirements Applicable to Transfer Facilities and Permit Requirements and Standards
	oplicable to Transporters of Hazardous Waste
	terim Status Standards for Owners and Operators of Existing Hazardous Waste
	eatment, Storage, and Disposal Facilities andards for Owners and Operators of Hazardous Waste Treatment, Storage, and
	isposal Facilities
	ermitting of Hazardous Waste Treatment, Storage, and Disposal Facilities
	andards for the Management of Specific Hazardous Wastes and Specific Types of
	azardous Waste Management Facilities
Rule 0400-12-0110 La	and Disposal Restrictions
•	
State of Tennessee and	rules provided for herein have been examined by the Attorney General and Reporter of the dare approved as to legality pursuant to the provisions of the Administrative Procedures annotated, Title 4, Chapter 5.
	Hubert H. Slatzul Herbert H. Slatery III
	Llambart II design III
	Attorney General and Reporter
	7/i/vº15
	Date
Department of State U	se Only
	Filed with the Department of State on: $0.7 - 10 - 15$

Effective on:

Tre Hargett Secretary of State

SECRETARY OF STATE PUBLICATIONS

10:6 WY 01 70 SIO

BECEINED

Public Hearing Comments

One copy of a document containing responses to comments made at the public hearing must accompany the filing pursuant to T.C.A. § 4-5-222. Agencies shall include only their responses to public hearing comments, which can be summarized. No letters of inquiry from parties questioning the rule will be accepted. When no comments are received at the public hearing, the agency need only draft a memorandum stating such and include it with the Rulemaking Hearing Rule filing. Minutes of the meeting will not be accepted. Transcripts are not acceptable.

Comment:

A commenter suggested that proposed new subparts (1)(d)1(xxv) and (1)(d)2(xvii) of Rule 0400-12-01-.02 be amended to make it clear that to maintain the exclusion regarding solvent-contaminated wipes on-site accumulation be limited to 180 days. The suggested language is consistent with the intent of EPA's rule and avoids the ambiguity created by the "may" in the proposed language.

Response:

The Department agrees and has changed the proposed rule as suggested by the commenter.

Comment:

The commenter pointed out that in 2012 the Office of General Counsel and the Attorney General agreed that the following sentence be added to certification statements: "As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury." They suggested that the sentence be added to the certification statements in three places: Rule 0400-12-01-.02(1)(d)8(iv)(I) and (II), and 0400-12-01-.02(1)(c)3(ii)(II)III.

Response:

The Department agrees and has added the sentence in the three places suggested by the commenter.

Comment:

The commenter pointed out a typographical error in proposed amendment to subpart (3)(a)1(iii) of Rule 0400-12-01-.04.

Response:

The typographical error has been corrected as suggested.

Comment:

A commenter pointed out that EPA nomenclature was not converted to the state required numbering at Item (6)(b)1(v)(X) of Rule 0400-12-01-.02.

Response:

The item was changed to state numbering.

Comment:

A commenter pointed out that proposed regulations incorporating EPA's language regarding electronic manifests that in seven places in the proposed rules the Department converted an EPA rule citation to conform to the comparable state citation. However, to obtain authorization from EPA, the state is required to use the EPA citation. The commenter identified the following proposed rules that need changing: subpart (3)(e)1(i) in Rule 0400-12-01-.03; Item (3)(a)1(iv)(l) and part (3)(f)1 in Rule 0400-12-01-.04; subpart (5)(b)6(i) and subpart (5)(b)11(i) in Rule 0400-12-01-.06.

Response:

The Department agrees with the commenter and the identified rules were changed to include the required EPA citation.

Comment:

A commenter questioned changing the federal references from the Clean Air Act and Clean Water Act to the analogous state statutes in the amendments to Item (1)(c)1(ii)(IV), subpart (1)(d)1(ii) and item (1)(d)2(xii)(IV) of Rule 0400-12-01-.02. The commenter was concerned about whether the change in reference would change the scope of the exemption in the regulation.

Response:

The proposed change was made in response to EPA's comments regarding program authorization reviews of past rulemakings. Many of the changes proposed in this rulemaking, in addition to the amendments that concern the commenter, are being made to address EPA's concerns regarding the suitability of regulations to support additional authorization. There is no intention to either expand or narrow the scope of the exemptions cited by the commenter. To ensure that the exemption does not change its scope the proposed rules are being changed in response to this comment to include references to both the applicable federal and state laws.

Comment:

A commenter wanted to know why the proposed rules include the regulatory language regarding Transboundary Movements of Hazardous Waste for Recovery with the OECD if EPA was going to the agency implementing them.

Response:

The department acknowledges that EPA is the agency to implement the transboundary movements of hazardous waste for recovery with the "Organization of Economic Cooperation and Development". A previous version of the regulations simply referenced the EPA as the implementing agency and during an authorization review of those regulations EPA informed the department that Tennessee was required to adopt and spell out the federal regulations, including any internal federal statutory or regulatory references. To support additional authorization we are adding the regulatory language as EPA requires.

Comment:

A commenter noticed that the hazardous waste listing for Commercial Chemical Products at part (4)(d)6 of Rule 0400-12-01-.02 did not also include the chemical name 1,1,1-Trichloroethane for U226 and suggested it be added and asked for additional changes to make the listing easier to use.

Response:

This rulemaking did not propose to amend the listings found at part (4)(d)6 of Rule 0400-12-01-.02 and will be considered in a future rulemaking. The U226 listing already includes the chemical in question by two of its names: Ethane, 1,1,1-trichloro- and Methyl chloroform.

Regulatory Flexibility Addendum

Pursuant to T.C.A. §§ 4-5-401 through 4-5-404, prior to initiating the rule making process as described in T.C.A. § 4-5-202(a)(3) and T.C.A. § 4-5-202(a), all agencies shall conduct a review of whether a proposed rule or rule affects small businesses.

The primary intent of this rulemaking is to update the hazardous waste regulations by incorporating the following federal changes that EPA published as final rules in the Federal Register from July 1, 2013 to June 30, 2014: (1) the definition of solid waste was amended to conditionally exempt solvent-contaminated wipes that are cleaned and reused and revised the definition of hazardous waste to conditionally exempt solvent-contaminated wipes that are disposed; (2) to conditionally exclude carbon dioxide (CO₂) streams that are hazardous from the definition of hazardous waste provided these CO₂ streams are captured from emission sources and injected into Class VI injection wells for the purpose of geologic sequestration; (3) to allow the use an electronic hazardous waste manifesting system; and (4) to amend the export provisions of Cathode Ray Tube recycling.

This rulemaking is also intended to correct language EPA identified while reviewing our requests for additional program authorization. These corrections are necessary to obtain additional program authorization and include amending the rules to include state citations where several federal citations are used, if appropriate and to add language regarding transboundary movement of hazardous waste for recovery with the Organization for Economic Cooperation and Development although EPA is responsible to its implementation.

The amendments identified above substantially codify existing federal law and are exempt from the requirements of the Regulatory Flexibility Act of 2007, T.C.A. §§ 4-5-401 et seq. The following amendments are not exempt: (1) The restoration of language regarding mixtures of used oil and hazardous waste from conditionally exempt small quantity generators that was inadvertently deleted from the regulations during renumbering; (2) the addition of a perjury statement to three certification statements; and (3) the correction of typographical errors.

- (1) The type or types of small business and an identification and estimate of the number of small businesses subject to the proposed rule that would bear the cost of, or directly benefit from the proposed rule.
 - There are many small businesses that generate used oil and that also generate hazardous waste in quantities of less than 220 pounds per calendar month. These types of used oil and hazardous waste generators are not required by existing regulations to notify the Department of their generating activities. Therefore, we have no reliable estimate of the number of affected small businesses. Nevertheless, this regulatory amendment is necessary in order to protect public health, welfare and the environment. It is doubtful that any small business will be impacted by the amended certification statements added to the carbon dioxide stream injected for geologic sequestration requirement or to the high temperature metals recovery (HTMR) processing regulations.
- (2) The projected reporting, recordkeeping, and other administrative costs required for compliance with the proposed rule, including the type of professional skills necessary for preparation of the report or record.
 - If the conditionally exempt small quantity generator avoids adding any hazardous waste to his used oil that could result in a mixture that exhibits the characteristic ignitability, corrosivity or reactivity, which is the intent of the amendment, then there are no additional reporting, recordkeeping or other administrative costs.
- (3) A statement of the probable effect on impacted small businesses and consumers.
 - The probable effect is the desired effect, that conditionally exempt small quantity generator will be careful to not mix their hazardous waste with their used oil, if the resultant mixture continues to be ignitable, corrosive or reactive. Mixtures of used oil and hazardous waste that are ignitable, corrosive or reactive, without this amendment, would not be effectively managed in a manner that is protective of public health, welfare or the environment.
- (4) A description of any less burdensome, less intrusive or less costly alternative methods of achieving the purpose and objectives of the proposed rule that may exist, and to what extent the alternative means might be less burdensome to small business.

The Department is not aware of any alternative that will achieve the protection being sought with the used oil hazardous waste mixture amendment.

- (5) A comparison of the proposed rule with any federal or state counterparts.
 - The current regulations are identical to the federal regulations. The amendment will bring the regulations in line with other states' interpretation of how these used oil hazardous waste mixture must be managed.
- (6) Analysis of the effect of the possible exemption of small businesses from all or any part of the requirements contained in the proposed rule.

Exempting small businesses from this proposed rule is equivalent to keeping the existing rules unchanged. The amendment is necessary to enhance protection of public health, welfare and the environment and is designed to ensure that hazardous waste and used oil mixtures are appropriately managed.

Impact on Local Governments

Pursuant to T.C.A. §§ 4-5-220 and 4-5-228 "any rule proposed to be promulgated shall state in a simple declarative sentence, without additional comments on the merits of the policy of the rules or regulation, whether the rule or regulation may have a projected impact on local governments." (See Public Chapter Number 1070 (http://state.tn.us/sos/acts/106/pub/pc1070.pdf) of the 2010 Session of the General Assembly)

The Department does not anticipate an impact on local governments.

Additional Information Required by Joint Government Operations Committee

All agencies, upon filing a rule, must also submit the following pursuant to T.C.A. § 4-5-226(i)(1).

(A) A brief summary of the rule and a description of all relevant changes in previous regulations effectuated by such rule;

The primary intent of this rulemaking is to update the hazardous waste regulations by incorporating the following federal changes that EPA published as final rules in the Federal Register from July 1, 2013 to June 30, 2014:

- The definition of solid waste was amended to conditionally exempt solvent-contaminated wipes that are cleaned and reused and revise the definition of hazardous waste to conditionally exempt solvent-contaminated wipes that are disposed. This proposed rulemaking provides a consistent regulatory framework that is appropriate to the level of risk posed by solvent-contaminated wipes in a way that is protective of human health and the environment and reduces cost.
- To conditionally exclude carbon dioxide (CO₂) streams that are hazardous from the definition of hazardous waste provided these CO₂ streams are captured from emission sources and injected into Class VI injection wells for the purpose of geologic sequestration.
- To allow the use an electronic hazardous waste manifesting system.
- To update the export provisions of Cathode Ray Tube recycling to reflect applicable federal rules.

This rulemaking also updates the rules in order to maintain continued program authorization and includes recently adopted federal exemptions, and exclusions. The rules are also amended to include state citations in addition to existing federal citations regarding transboundary movement of hazardous waste for recovery in cooperation with the Organization for Economic Cooperation and Development.

This rulemaking also restores language regarding mixtures of used oil and hazardous waste from conditionally exempt small quantity generators that was inadvertently deleted from the regulations; adds a perjury statement to three certification statements following the advice of the attorney general; and corrects typographical errors.

(B) A citation to and brief description of any federal law or regulation or any state law or regulation mandating promulgation of such rule or establishing guidelines relevant thereto;

These rules are being promulgated under the authority of T.C.A. §§ 68-212-101 et seq. These amendments will bring the state hazardous waste regulations more in line with the federal regulations and surrounding states.

(C) Identification of persons, organizations, corporations or governmental entities most directly affected by this rule, and whether those persons, organizations, corporations or governmental entities urge adoption or rejection of this rule;

Generators, Transporters, Treatment, Storage and Disposal Facilities of Hazardous Waste or directly affected by this rulemaking.

(D) Identification of any opinions of the attorney general and reporter or any judicial ruling that directly relates to the rule;

The Department is not aware of any opinions or judicial rulings that directly relate to this rule.

(E) An estimate of the probable increase or decrease in state and local government revenues and expenditures, if any, resulting from the promulgation of this rule, and assumptions and reasoning upon which the estimate is based. An agency shall not state that the fiscal impact is minimal if the fiscal impact is more than two percent (2%) of the agency's annual budget or five hundred thousand dollars (\$500,000), whichever is less;

This rulemaking will not impact state or local government revenues or expenditures.

(F) Identification of the appropriate agency representative or representatives, possessing substantial knowledge and understanding of the rule;

Jackie Okoreeh-Baah Division of Solid Waste Management William R. Snodgrass Tennessee Tower 312 Rosa L. Parks Avenue, 14th Floor Nashville, Tennessee 37243 (615) 532-0825 Jackie.Okoreeh-Baah@tn.gov

(G) Identification of the appropriate agency representative or representatives who will explain the rule at a scheduled meeting of the committees;

Jenny Howard Deputy General Counsel Office of General Counsel

(H) Office address, telephone number, and email address of the agency representative or representatives who will explain the rule at a scheduled meeting of the committees; and

Office of General Counsel
Tennessee Department of Environment and Conservation
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 2nd Floor
Nashville, Tennessee 37243
(615) 532-8685
Jenny Howard@tn.gov

(I) Any additional information relevant to the rule proposed for continuation that the committee requests.

The Department is not aware of any additional relevant information.

Department of State Division of Publications

312 Rosa L. Parks Avenue, 8th Floor Snodgrass/TN Tower

Nashville, TN 37243 Phone: 615-741-2650

Email: publications.information@tn.gov

For Department of State Use Only

Sequence Number: 07-10-15

Rule ID(s): 5980

File Date: ()7

Effective Date: / ()

Rulemaking Hearing Rule(s) Filing Form

Rulemaking Hearing Rules are rules filed after and as a result of a rulemaking hearing (Tenn. Code Ann. § 4-5-205).

Pursuant to Tenn. Code Ann. § 4-5-229, any new fee or fee increase promulgated by state agency rule shall take effect on July 1, following the expiration of the ninety (90) day period as provided in § 4-5-207. This section shall not apply to rules that implement new fees or fee increases that are promulgated as emergency rules pursuant to § 4-5-208(a) and to subsequent rules that make permanent such emergency rules, as amended during the rulemaking process. In addition, this section shall not apply to state agencies that did not, during the preceding two (2) fiscal years, collect fees in an amount sufficient to pay the cost of operating the board, commission or entity in accordance with § 4-29-

Agency/Board/Commission:	Environment and Conservation	
Division:	Solid Waste Management	
Contact Person:	David Moran	
Address:	William R. Snodgrass TN Tower	
	312 Rosa L. Parks Avenue, 14th Floor	
	Nashville, Tennessee	
Zip:	37243	
Phone:	(615) 532-0875	-
Email:	David.Moran@tn.gov	

Revision Type (check all that apply):

X Amendment

New

Repeal

Rule(s) Revised (ALL chapters and rules contained in filing must be listed here. If needed, copy and paste additional tables to accommodate multiple chapters. Please enter only ONE Rule Number/Rule Title per row)

Chapter Number	Chapter Title
0400-12-01	Hazardous Waste Management
Rule Number	Rule Title
0400-12-0101	Hazardous Waste Management System: General
0400-12-0102	Identification and Listing of Hazardous Waste
0400-12-0103	Notification Requirements and Standards Applicable to Generators of Hazardous Waste
0400-12-0104	Requirements Applicable to Transfer Facilities and Permit Requirements and Standards Applicable to Transporters of Hazardous Waste
0400-12-0105	Interim Status Standards for Owners and Operators of Existing Hazardous Waste Treatment, Storage, and Disposal Facilities
0400-12-0106	Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
0400-12-0107	Permitting of Hazardous Waste Treatment, Storage, and Disposal Facilities
0400-12-0109	Standards for the Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Facilities
0400-12-0110	Land Disposal Restrictions

(Place substance of rules and other info here. Statutory authority must be given for each rule change. For information on formatting rules go to http://state.tn.us/sos/rules/1360/1360.htm)

Chapter 0400-12-01 Hazardous Waste Management

Amendments

Subparagraph (a) of paragraph (2) of Rule 0400-12-01-.01 Hazardous Waste Management System: General is amended by deleting the definition of "Manifest" and substituting instead the following new definition for "Manifest":

"Manifest" means the shipping document EPA Form 8700-22 (including if necessary, EPA Form 8700-22A), or the electronic manifest, originated and signed by the generator or offeror in accordance with the instructions in Appendix I of Rule 0400-12-01-.03(9)(a) and the applicable requirements of Rules 0400-12-01-.03 through 0400-12-01-.06.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subparagraph (a) of paragraph (2) of Rule 0400-12-01-.01 Hazardous Waste Management System: General is amended by adding in alphabetical order the definitions of "Carbon dioxide stream," "CRT exporter:, "Electronic manifest" or "e-manifest," "Electronic manifest system" or "e-manifest system," "No free liquids," "Solvent-contaminated wipe," "Tennessee Air Quality Act," "User of the electronic manifest system," "Water Quality Control Act" and "Wipe" to read as follows:

"Carbon dioxide stream" means carbon dioxide that has been captured from an emission source (e.g., power plant), plus incidental associated substances derived from the source materials and the capture process, and any substances added to the stream to enable or improve the injection process.

"CRT exporter" means any person in the United States who initiates a transaction to send used CRTs outside the United States or its territories for recycling or reuse, or any intermediary in the United States arranging for such export.

"Electronic manifest" or "e-Manifest" means the electronic format of the hazardous waste manifest that is obtained from EPA's national e-Manifest system and transmitted electronically to the system, and that is the legal equivalent of EPA Forms 8700-22 (Manifest) and 8700-22A (Continuation Sheet).

"Electronic manifest system" or "e-Manifest system" means EPA's national information technology system through which the electronic manifest may be obtained, completed, transmitted, and distributed to users of the electronic manifest and to regulatory agencies.

"No free liquids," as used in subparts (1)(d)1(xxv) and (1)(d)2(xvii) of Rule 0400-12-01-.02, means that solvent-contaminated wipes may not contain free liquids as determined by Method 9095B (Paint Filter Liquids Test), included in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (EPA Publication SW-846), which is incorporated by reference in subparagraph (b) of this paragraph, and that there is no free liquid in the container holding the wipes.

"Solvent-contaminated wipe" means:

- 1. A wipe that, after use or after cleaning up a spill, either:
 - (i) Contains one or more of the F001 through F005 solvents listed in subparagraph
 (4)(b) of Rule 0400-12-01-.02 or the corresponding P- or U- listed solvents found in subparagraph (4)(d) of Rule 0400-12-01-.02;

- (ii) Exhibits a hazardous characteristic found in paragraph (3) of Rule 0400-12-01-.02 when that characteristic results from a solvent listed in paragraph (4) of Rule 0400-12-01-.02; and/or
- (iii) Exhibits only the hazardous waste characteristic of ignitability found in subparagraph (3)(b) of Rule 0400-12-01-.02 due to the presence of one or more solvents that are not listed in paragraph (4) of Rule 0400-12-01-.02.
- Solvent-contaminated wipes that contain listed hazardous waste other than solvents, or exhibit the characteristic of toxicity, corrosivity, or reactivity due to contaminants other than solvents, are not eligible for the exclusions at subparts (1)(d)1(xxv) and (1)(d)2(xvii) of Rule 0400-12-01-.02.

"Tennessee Air Quality Act" means the Tennessee Air Quality Act, as amended, T.C.A §§ 68-201-101 et seq.

"User of the electronic manifest system" means a hazardous waste generator, a hazardous waste transporter, an owner or operator of a hazardous waste treatment, storage, recycling, or disposal facility, or any other person that:

- 1. Is required to use a manifest to comply with:
 - (i) Any federal or state requirement to track the shipment, transportation, and receipt of hazardous waste or other waste material that is shipped from the site of generation to an off-site designated facility for treatment, storage, recycling, or disposal; or
 - (ii) Any federal or state requirement to track the shipment, transportation, and receipt of rejected wastes or regulated container residues that are shipped from a designated facility to an alternative facility, or returned to the generator; and
- Elects to use the system to obtain, complete and transmit an electronic manifest format supplied by the EPA electronic manifest system, or
- 3. Elects to use the paper manifest form and submits to the system for data processing purposes a paper copy of the manifest (or data from such a paper copy), in accordance with item (5)(b)1(ii)(V) of Rule 0400-12-01-.05 or item (5)(b)1(ii)(V) of Rule 0400-12-01-.06. These paper copies are submitted for data exchange purposes only and are not the official copies of record for legal purposes.

"Water Quality Control Act" means the Water Quality Control Act of 1977, as amended, T.C.A §§ 69-3-101 et seq.

"Wipe" means a woven or non-woven shop towel, rag, pad, or swab made of wood pulp, fabric, cotton, polyester blends, or other material.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Part 1 of subparagraph (b) of paragraph (2) of Rule 0400-12-01-.01 Hazardous Waste Management System: General is amended by deleting it in its entirety and substituting instead the following:

1. <u>Here is a list of Publications publications/materials referred to in these rules</u> and where they may be obtained or referred to in these rules are as set forth by EPA in 40 CFR 260.11 and 40 CFR 270.6.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Part 1 of subparagraph (a) of paragraph (7) of Rule 0400-12-01-.01 Hazardous Waste Management System: General is amended by deleting it in its entirety and substituting instead the following:

Purpose, Scope, and Applicability

Any Except as provided under subparts (i) and (ii) of this part, any information which is supplied to the Department by persons who are subject to these rules or by other governmental agencies and which is designated as proprietary information (as defined in subpart 2(viii) of this subparagraph) shall be handled by the Department as specified in this paragraph to assure that its confidentiality is maintained. Unless it is claimed or designated as proprietary, any information supplied to the Department under or relating to these rules shall be available for public review at any time during the State's normal business hours.

- (i) After the effective date of these rules, no claim of business confidentiality may be asserted by any person with respect to information entered on a Hazardous Waste Manifest (EPA Form 8700-22), a Hazardous Waste Manifest Continuation Sheet (EPA Form 8700-22A), or an electronic manifest format that may be prepared and used in accordance with subpart (3)(a)1(iii) of Rule 0400-12-01-03.
- (ii) The Department will make any electronic manifest that is prepared and used in accordance with subpart (3)(a)1(iii) of Rule 0400-12-01-.03, or any paper manifest that is submitted to the system under item (5)(b)1(ii)(V) of Rule 0400-12-01-.05 or item (5)(b)1(ii)(V) of Rule 0400-12-01-.06 available to the public under this paragraph when the electronic or paper manifest is a complete and final document. Electronic manifests and paper manifests submitted to the system are considered by the Department to be complete and final documents and publicly available information after 90 days have passed since the delivery to the designated facility of the hazardous waste shipment identified in the manifest.

(Note: See 40 CFR 260.2(b) for additional requirements.)

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Item (IV) of subpart (ii) of part 1 of subparagraph (c) of paragraph (1) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

- (IV) It is a mixture of solid waste and one or more hazardous wastes listed in paragraph (4) of this rule and has not been excluded from subpart 1(ii) of this subparagraph under Rule 0400-12-01-.01(3)(a) and (c), parts 7 or 8 of this subparagraph; however, the following mixtures of solid wastes and hazardous wastes listed in paragraph (4) of this rule are not hazardous wastes (except by application of items (I) or (II) of this subpart) if the generator can demonstrate that the mixture consists of wastewater the discharge of which is subject to regulation under T.C.A. §§ 69-3-101 et seq. (including wastewater at facilities which have eliminated the discharge of wastewater) and:
 - I. One or more of the following spent solvents listed in subparagraph (4)(b) of this rule--benzene, carbon tetrachloride, tetrachloroethylene, trichloroethylene or the scrubber waters derived-from the combustion of these spent solvents -provided that (1) 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 1 part per million or (2) 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 the Tennessee Air Quality Act and Rule Division 1200-03 or at facilities subject to

an enforceable limit in a federal or state 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 Division Director, as defined in Rule 0400-12-01-.01(2)(a). A facility must file a copy of a revised sampling and analysis plan only if the initial plan is rendered inaccurate by changes in the facility's operations. The sampling and analysis plan must include the monitoring point location (headworks), the sampling frequency and methodology, and a list of constituents to be monitored. A facility is eligible for the direct monitoring option once they receive confirmation that the sampling and analysis plan has been received by the Director. The Director may reject the sampling and analysis plan if he/she finds that, the sampling and analysis plan fails to include the above information; or the plan parameters would not enable the facility to calculate the weekly average concentration of these chemicals accurately. If the Director rejects the sampling and analysis plan or if the Director finds that the facility is not following the sampling and analysis plan, the Director shall notify the facility to cease the use of the direct monitoring option until such time as the bases for rejection are corrected; or

One or more of the following spent solvents listed in subparagraph (4)(b) of this rule --methylene chloride, 1,1,1trichloroethane, 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 (1) 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 (2) 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 the Tennessee Air Quality Act and Rule Division 1200-03 or at facilities subject to an enforceable limit in a federal or state 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 Division Director, as defined in Rule 0400-12-01-.01(2)(a). 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

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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 subparagraph (4)(c) of this rule, 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 (Hazardous Waste Code K050), crude oil storage tanks sediment from petroleum refining operations (Hazardous Waste Code K169), clarified slurry oil tank sediment and/or in-line filter/separation solids from petroleum refining operations (Hazardous Waste Code K170), spent hydrotreating catalyst (Hazardous Waste Code K171), and spent hydrorefining catalyst (Hazardous Waste Code K172); or
- IV. A discarded hazardous waste, commercial chemical product, or chemical intermediate listed in subparagraphs (4)(b) through (4) (d) of this rule, arising from de minimis losses of these materials. For purposes of this subitem, 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 subparagraphs (4)(b) through (4)(c) of this rule or any nonmanufacturing facility that claims an exemption for de minimis quantities of wastes listed in paragraph (4) of this rule must either have eliminated the discharge of wastewaters or have included in its Clean Water Act or Tennessee Water Quality Control Act permit application or submission to its pretreatment control authority the constituents for which each waste was listed in Appendix VII of paragraph (5) of this rule; and the constituents in the table "Treatment Standards for Hazardous Wastes" in Rule 0400-12-01-.10(3)(a) 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 or Tennessee Water Quality Control Act permit application or the pretreatment control authority submission. A copy of the Clean Water Act or Tennessee Water Quality Control Act permit application or the submission to the pretreatment control authority must be placed in the facility's onsite files: or
- V. Wastewater resulting from laboratory operations containing toxic (T) wastes listed in paragraph (4) of this rule, 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 pre-treatment 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 pre-treatment 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 subparagraph (4)(c) of this rule -- wastewaters from the production of carbamates and carbamovl oximes (Hazardous Waste Code No. K157)- provided that (1) 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 (2) 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 the Tennessee Air Quality Act and Rule Division 1200-03 or at facilities subject to an enforceable limit in a federal or state 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 Division Director, as defined in Rule 0400-12-01-.01(2)(a). 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 or more of the following wastes listed in subparagraph (4)(c) of this rule -- organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes (Hazardous Waste Code No. K156)—provided that (1) 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 (2) 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 the Tennessee Air Quality Act and Rule Division 1200-03

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or at facilities subject to an enforceable limit in a federal or state 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 Division Director, as defined in Rule 0400-12-01-.01(2)(a). 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.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subitem III of item (II) of subpart (ii) of part 3 of subparagraph (c) of paragraph (1) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

III. A.

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 items (vi), (vii) and (xiii) of the definition for "Industrial furnace" in Rule 0400-12-01-.01(2)(a) that are disposed in nonhazardous solid waste (Subtitle D) units a Class I or Class II Disposal Facility subject to a permit issued in accordance with Chapter 0400-11-01, provided that these residues meet the generic exclusion levels identified in the tables in this paragraph 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 selfimplementing 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 c TCLP (mg	
 Generic exclusion levels for K061 and	K062 nonwastewater HTMR re	esidues
 	_	

Antimony	0.10
Arsenic	0.50
Barium	7.6
Beryllium	0.010
Cadmium	0.050
Chromium (total)	0.33
Lead	0.15
Mercury	0.009
Nickel	1.0
Selenium	0.16
Silver	0.30
Thallium	0.020
Zinc	70

Generic exclusion levels for F006 nonwastewater HTMR residues			
Antimony	0.10		
Arsenic	0.50		
Barium	7.6		
Beryllium	0.010		
Cadmium	0.050		
Chromium (total)	0.33		
Cyanide (total) (mg/kg)	1.8		
Lead	0.15		
Mercury	0.009		
Nickel	1.0		
Selenium	0.16		
Silver	0.30		
Thallium	0.020		
Zinc	70		

B. A one-time notification and certification must be placed in the facility's files and sent to the Division Director 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 nonhazardous solid waste (Subtitle D) units a Class I or Class II Disposal Facility subject to a permit issued in accordance with Chapter 0400-11-01. The notification and certification that is placed in the generators or treaters files must be updated if the process or operation generating the waste changes and/or if the nonhazardous solid waste (Subtitle D) units Class I or

Class II Disposal Facility receiving the waste changes. However, the generator or treater need only notify the Division Director or an authorized state on an annual basis if such changes occur. Such notification and certification should be sent to the Division Director 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 nonhazardous solid waste (Subtitle D) unit Class I or Class II Disposal Facility receiving the waste shipments; the Hazardous Waste Code(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. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury."

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subpart (ii) of part 1 of subparagraph (d) of paragraph (1) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

(ii) Industrial wastewater discharges that are point source discharges subject to regulation under section 402 of the Clean Water Act, as amended or under the Water Quality Control Act.

(Comment: 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.)

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subpart (xviii) of part 1 of subparagraph (d) of paragraph (1) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

(xviii) Comparable fuels or comparable syngas fuels (i.e., comparable/syngas fuels) that meet the requirements of subparagraph (4)(i) paragraph (6) of this rule.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Item (IV) of subpart (xix) of part 1 of subparagraph (d) of paragraph (1) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

(IV) The Commissioner 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 decision-maker must affirm that pads are designed, constructed and operated to prevent significant releases of the spent material into the

environment. Pads must provide the same degree of containment afforded by the non-RCRA tanks, containers and buildings eligible for exclusion as provided in item (III) of the subpart.

- I. The decision-maker 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 this subpart, the Commissioner must provide public notice and the opportunity for comment to all persons potentially interested in the determination. This shall be accomplished by the owner or operator placing a notice as prepared and required by the Commissioner, of this action in local newspapers, or broadcasting notice over local radio stations. The owner or operator shall provide proof of the completion of all notice requirements to the Commissioner within ten days following conclusion of the public notice procedures.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Part 1 of subparagraph (d) of paragraph (1) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by adding a new subpart, as subpart (xxv), to read as follows:

(xxv) Solvent-contaminated wipes that are sent for cleaning and reuse are not solid wastes from the point of generation, provided that:

- The solvent-contaminated wipes, when accumulated, stored, and transported, are contained in non-leaking, closed containers that are labeled "Excluded Solvent-Contaminated Wipes." The containers shall be able to contain free liquids, should free liquids occur. During accumulation, a container is considered closed when there is complete contact between the fitted lid and the rim, except when it is necessary to add or remove solvent-contaminated wipes. When the container is full, or when the solvent-contaminated wipes are no longer being accumulated, or when the container is being transported, the container shall be sealed with all lids properly and securely affixed to the container and all openings tightly bound or closed sufficiently to prevent leaks and emissions;
- (II) The solvent-contaminated wipes are accumulated by the generator for no more than 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 paragraph (2) of Rule 0400-12-01-.01;
- (IV) Free liquids removed from the solvent-contaminated wipes or from the container holding the wipes shall be managed according to the applicable regulations found in Rules 0400-12-01-.01 through 0400-12-01-.12;
- (V) Generators shall maintain at their site the following documentation:
 - Name and address of the laundry or dry cleaner that is receiving the solvent-contaminated wipes;
 - Documentation that the 180-day accumulation time limit in item
 (II) of this subpart 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; and
- (VI) The solvent-contaminated wipes are sent to a laundry or dry cleaner whose discharge, if any, is regulated under T.C.A. §§ 69-3-101 et seq., or sections 301 and 402 or section 307 of the Clean Water Act

Item (IV) of subpart (xii) of part 2 of subparagraph (d) of paragraph (1) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

(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 section 402 of the Clean Water Act, as amended or under the Water Quality Control Act; and

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Part 2 of subparagraph (d) of paragraph (1) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by adding a new subpart, as subpart (xvii), to read as follows:

- (xvii) Solvent-contaminated 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:
 - The solvent-contaminated wipes, when accumulated, stored, and transported, are contained in non-leaking, closed containers that are labeled "Excluded Solvent-Contaminated Wipes." The containers shall be able to contain free liquids, should free liquids occur. During accumulation, a container is considered closed when there is complete contact between the fitted lid and the rim, except when it is necessary to add or remove solvent-contaminated wipes. When the container is full, or when the solvent-contaminated wipes are no longer being accumulated, or when the container is being transported, the container shall be sealed with all lids properly and securely affixed to the container and all openings tightly bound or closed sufficiently to prevent leaks and emissions;

- (II) The solvent-contaminated wipes are accumulated by the generator for no more than 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 paragraph (2) of Rule 0400-12-01-.01;
- (IV) Free liquids removed from the solvent-contaminated wipes or from the container holding the wipes shall be managed according to the applicable regulations found in Rules 0400-12-01-.01 through 0400-12-01-.12:
- (V) Generators shall maintain at their site the following documentation:
 - 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 item (II) of this subpart 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; and
- (VI) The solvent-contaminated wipes are sent for disposal:
 - I. To a municipal solid waste landfill regulated under Chapter 0400-11-01, including Rule 0400-11-01-.04 regarding a Class I disposal facility, or to a hazardous waste landfill regulated under Rules 0400-12-01-.05 or 0400-12-01-.06; or
 - II. To a municipal waste combustor or other combustion facility regulated under T.C.A. §§ 68-201-101 et seq. or to a hazardous waste combustor, boiler, or industrial furnace regulated under Rules 0400-12-01-.05 or 0400-12-01-.06 or paragraph (8) of Rule 0400-12-01-.09.

Subparagraph (d) of paragraph (1) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by adding a new part, as part 8, to read as follows:

- 8. 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 and Chapter 0400-45-06 Underground Injection Control, are not a hazardous waste, provided the following conditions are met:
 - (i) Transportation of the carbon dioxide stream shall 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 CFR 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;
 - (ii) Injection of the carbon dioxide stream shall 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 and Tennessee Chapter 0400-45-06;
- (iii) No hazardous wastes shall be mixed with, or otherwise co-injected with, the carbon dioxide stream; and
- (I) Any generator of a carbon dioxide stream, who claims that a carbon dioxide stream is excluded under this part, shall have an authorized representative (as defined in subparagraph (2)(a) of Rule 0400-12-01-01) 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 part (1)(d)8 of Rule 0400-12-01-.02 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 CFR 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 and Tennessee Chapter 0400-45-06. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury."

(II) Any Class VI Underground Injection Control well owner or operator, who claims that a carbon dioxide stream is excluded under this part, shall have an authorized representative (as defined in subparagraph (2)(a) of Rule 0400-12-01-.01) 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 part (1)(d)8 of Rule 0400-12-01-.02 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 and Tennessee Chapter 0400-45-06. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury."

three years, and shall be made available within 72 hours of a written request from the Commissioner. The signed certification statement shall be renewed every year that the exclusion is claimed, by having an authorized representative (as defined in subparagraph (2)(a) of Rule 0400-12-01-.01) 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 shall 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.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Part 10 of subparagraph (e) of paragraph (1) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

10. If a conditionally exempt small quantity generator's wastes are mixed with used oil, the

mixture is subject to Rule 0400-12-01-.11, provided the resultant mixture does not exhibit the characteristic of ignitability, corrosivity or reactivity, in accordance with subparagraphs (3)(b), (c) or (d) of this rule.

- Any material produced derived from such a non-hazardous mixture by processing, blending, or other treatment is also so regulated under part (2)(a)5 of Rule 0400-12-01-.11; and
- (ii) If the resultant mixture exhibits the characteristic of ignitability, corrosivity or reactivity, in accordance with subparagraphs (3)(b), (c) or (d) of this rule, and if the resultant hazardous waste mixture exceeds the quantity limitations identified in this subparagraph, then the mixture is no longer conditionally exempt under this subparagraph and is subject to regulation under Rules 0400-12-01-.03 through .10.

(NOTE: Any used oil that is not recycled is a solid waste subject to a hazardous waste determination per Rule 0400-12-01-.03(1)(b).)

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

The listing description for F019 of part 1 of subparagraph (b) of paragraph (4) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

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, or a Class I or Class II Disposal Facility subject to a permit issued in accordance with Chapter 0400-11-01, 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 40 CFR 258.40 or the state equivalent, or, if in Tennessee, Chapter 0400-11-01, Rule 1200-01-11-06 0400-12-01-.06(14)(b) or Rule 1200-01-11-05 0400-12-01-.05(14)(b). For the purposes of this listing, motor vehicle manufacturing is defined in item 2(iv)(I) of this subparagraph describes the recordkeeping requirements for motor vehicle manufacturing facilities.

(T)

Authority: T.C.A. §§ 68-212-101 et seg. and 4-5-201 et seg.

The listing description for K174 of part 1 of subparagraph (c) of paragraph (4) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

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 nonhazardous landfill licensed or permitted by the state or federal government, or, if in Tennessee, in accordance with Rules 0400-12-01-.06 or 0400-12-01-.05, or Chapter 0400-11-01; (ii) they are not otherwise placed on the land prior to final disposal; and (iii) the generator maintains documentation domonstrating 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 or the Tennessee Hazardous Waste Management Act 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)

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

The listing description for K181 of part 1 of subparagraph (c) of paragraph (4) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

Nonwastewaters from the production of dyes and/or pigments (including nonwastewaters commingled at the point of generation with nonwastewaters from

K181

other processes) that, at the point of generation, contain mass loadings of any of the constituents identified in part 3 of this subparagraph that are equal to or greater than the corresponding part 3 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 40 CFR 258.40, or, if in Tennessee, disposed in a Class I or Class II Disposal Facility subject to a permit issued in accordance with Chapter 0400-11-01, (ii) disposed in a Subtitle C landfill unit subject to either 40 CFR 264.301 or 40 CFR 265.301, or, if in Tennessee, subject to either Rule 0400-12-01-.06(14)(b) or Rule 0400-12-01-.05(14)(b); (iii) disposed in other Subtitle D landfill units that meet the design criteria in 40 CFR 258.40, § 40 CFR 264.301 or § 40 CFR 265.301, or, if in Tennessee, the design criteria in Rule 0400-11-01-.04, Rule 0400-12-01-.06(14)(b), or Rule 0400-12-01-.05(14)(b); or (iv) treated in a combustion unit that is permitted under Subtitle C, or an onsite combustion unit that is permitted under the Clean Air Act, or, if in Tennessee, treated in a combustion unit that is permitted under the Hazardous Waste Management Act, or an onsite combustion unit that is permitted under the Tennessee Air Quality Act. For the

purposes of this listing, dyes and/or pigments production is defined in subpart 2(i) of this subparagraph. Part 4 of this subparagraph 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 under subparagraphs (b) through (e) of paragraph (3) of this rule and subparagraphs (b) through (d) of paragraph (4) of this rule at the point of generation. Also, the listing does not apply to

wastes generated before any annual mass loading limit is met.

(T)

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subpart (v) of part 4 of subparagraph (c) of paragraph (4) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

(v) 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 <u>Subtitle C</u> requirements <u>of this Chapter</u> during the interim period, the generator could be subject to an enforcement action for improper management.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subitem VI of item (I) of subpart (v) of part 1 of subparagraph (b) of paragraph (6) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

VI. The name and 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.

Authority: T.C.A. §§ 68-212-101 et seg. and 4-5-201 et seg.

Subpart (v) of part 1 of subparagraph (b) of paragraph (6) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by adding items (X) and (XI) to read as follows:

- (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:
 - The name, EPA ID number (if applicable), and mailing and site address of the exporter;
 - The calendar year covered by the report; and
 - 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 office specified in item (II) of this subpart. Exporters must keep copies of each annual report for a period of at least three years from the due date of the report.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subparagraph (d) of paragraph (6) of Rule 0400-12-01-.02 Identification and Listing of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

(d) Notification and Recordkeeping for Used, Intact Cathode Ray Tubes (CRTs) Exported for Reuse [40 CFR 261.41]

[Note: The implementation of this subparagraph remains the responsibility of EPA.]

- 1. Persons who export used, intact CRTs for reuse must send a one time notification to the Regional Administrator. The notification must include a statement that the notifier plans to export used, intact CRTs for reuse, the notifier's name, address, and EPA ID number (if applicable) and the name and phone number of a contact person. 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.
 - (i) 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."
 - (ii) Notifications submitted by mail should be sent to the following mailing address:

 Office of Enforcement and Compliance Assurance, Office of Federal Activities,
 International Compliance Assurance Division, (Mail Code 2254A), Environmental
 Protection Agency, 1200 Pennsylvania Ave. N.W., Washington, D.C. 20460.
 Hand-delivered notifications should be sent to: Office of Enforcement and

Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division, (Mail Code 2254A), Environmental Protection Agency, William Jefferson Clinton Building, Room 6144, 1200 Pennsylvania Ave. N.W., Washington, D.C. 20004. In both cases, the following shall be prominently displayed on the front of the envelope: "Attention: Notification of Intent to Export CRTs."

Persons who export used, intact CRTs for reuse must keep copies of normal business records, such as contracts, demonstrating that each shipment of exported CRTs will be reused. This documentation must be retained for a period of at least three years from the date the CRTs were exported. 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.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Part 4 of subparagraph (a) of paragraph (1) of Rule 0400-12-01-.03 Notification Requirements and Standards Applicable to Generators of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

4. Any person who exports or imports wastes that are considered hazardous under U.S. national procedures to or from the countries listed in subparagraph (7)(i) subpart (7)(i)1(i) of this rule for recovery must comply with 40 CFR Part 262, Subpart H paragraph (9) of this rule. A waste is considered hazardous under U.S. national procedures if the waste meets the Federal definition of hazardous waste in 40 CFR 261.3 subparagraph (1)(c) of Rule 0400-12-01-.02 and is subject to either the Federal RCRA manifesting requirements at 40 CFR Part 262, Subpart B paragraph (3) of this rule, the universal waste management standards of 40 CFR Part 273 or Rule 0400-12-01-.12 Rule 0400-12-01-.12, or the export requirements in the spent lead-acid battery management standards of 40 CFR Part 266, Subpart G, or part (7)(a)1 of Rule 0400-12-01-.09.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Part 1 of subparagraph (a) of paragraph (3) of Rule 0400-12-01-.03 Notification Requirements and Standards Applicable to Generators of Hazardous Waste is amended by adding a new subpart (iii) to read as follows:

(iii) Electronic manifest.

In lieu of using the manifest form specified in subpart (i) of this part, a person required to prepare a manifest under subpart (i) of this part may prepare and use an electronic manifest, provided that the person:

- (I) Complies with the requirements in subparagraph (e) of this paragraph for use of electronic manifests, and
- (II) Complies with the requirements of 40 CFR 3.10 for the reporting of electronic documents to EPA.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subparagraph (e) of paragraph (3) of Rule 0400-12-01-.03 Notification Requirements and Standards Applicable to Generators of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

(e) (RESERVED) Use of the electronic manifest [40 CFR 262.24]

- 1. Legal equivalence to paper manifests. Electronic manifests that are obtained, completed, and transmitted in accordance with subpart (a)1(iii) of this paragraph, and used in accordance with this subparagraph in lieu of EPA Forms 8700-22 and 8700-22A are the legal equivalent of paper manifest forms bearing handwritten signatures, and satisfy for all purposes any requirement in these regulations to obtain, complete, sign, provide, use, or retain a manifest.
 - (i) Any requirement in these regulations to sign a manifest or manifest certification by hand, or to obtain a handwritten signature, is satisfied by signing with or obtaining a valid and enforceable electronic signature within the meaning of 40 CFR 262.25(a).
 - (ii) Any requirement in these regulations to give, provide, send, forward, or return to another person a copy of the manifest is satisfied when an electronic manifest is transmitted to the other person by submission to the system.
 - (iii) Any requirement in these regulations for a generator to keep or retain a copy of each manifest is satisfied by retention of a signed electronic manifest in the generator's account on the national e-Manifest system, provided that such copies are readily available for viewing and production if requested by any EPA inspector or the Commissioner.
 - (iv) No generator may be held liable for the inability to produce an electronic manifest for inspection under this subparagraph if the generator can demonstrate that the inability to produce the electronic manifest is due exclusively to a technical difficulty with the electronic manifest system for which the generator bears no responsibility.
- A generator may participate in the electronic manifest system either by accessing the electronic manifest system from its own electronic equipment, or by accessing the electronic manifest system from portable equipment brought to the generator's site by the transporter who accepts the hazardous waste shipment from the generator for off-site transportation.
- 3. Restriction on use of electronic manifests. A generator may prepare an electronic manifest for the tracking of hazardous waste shipments involving any RCRA hazardous waste only if it is known at the time the manifest is originated that all waste handlers named on the manifest participate in the electronic manifest system.
- 4. Requirement for one printed copy. To the extent the Hazardous Materials regulation on shipping papers for carriage by public highway requires shippers of hazardous materials to supply a paper document for compliance with 49 CFR 177.817, a generator originating an electronic manifest must also provide the initial transporter with one printed copy of the electronic manifest.
- 5. Special procedures when electronic manifest is unavailable. If a generator has prepared an electronic manifest for a hazardous waste shipment, but the electronic manifest system becomes unavailable for any reason prior to the time that the initial transporter has signed electronically to acknowledge the receipt of the hazardous waste from the generator, then the generator must obtain and complete a paper manifest and if necessary, a continuation sheet (EPA Forms 8700-22 and 8700-22A) in accordance with the manifest instructions in paragraph (13) of this rule, and use these paper forms from this point forward in accordance with the requirements of subparagraph (d) of this paragraph.
- 6. Special procedures for electronic signature methods undergoing tests. If a generator has prepared an electronic manifest for a hazardous waste shipment, and signs this manifest electronically using an electronic signature method which is undergoing pilot or demonstration tests aimed at demonstrating the practicality or legal dependability of the signature method, then the generator shall also sign with an ink signature the

generator/offeror certification on the printed copy of the manifest provided under part 4 of this subparagraph.

7. Imposition of user fee. A generator who is a user of the electronic manifest may be assessed a user fee by EPA for the origination of each electronic manifest.

(Note: In accordance with 40 CFR 262.24, EPA shall maintain and update from time-to-time the current schedule of electronic manifest user fees, which shall be determined based on current and projected system costs and level of use of the electronic manifest system. The current schedule of electronic manifest user fees shall be published as an appendix to 40 CFR Part 262.)

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subparagraph (f) of paragraph (3) of Rule 0400-12-01-.03 Notification Requirements and Standards Applicable to Generators of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

(f) (RESERVED) Electronic manifest signatures [40 CFR 262.25]

Electronic signature methods for the e-Manifest system shall:

- Be a legally valid and enforceable signature under applicable EPA and other Federal requirements pertaining to electronic signatures; and
- Be a method that is designed and implemented in a manner that EPA considers to be as cost-effective and practical as possible for the users of the manifest.

Authority: T.C.A. §§ 68-212-101 et seg. and 4-5-201 et seg.

Subparagraph (i) of paragraph (7) of Rule 0400-12-01-.03 Notification Requirements and Standards Applicable to Generators of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

- (i) International Agreements [40 CFR 262.58]
 - 1. Any person who exports or imports wastes that are considered hazardous under U.S. national procedures to or from designated Member countries of the Organization for Economic Cooperation and Development (OECD) as defined in subpart (i) of the this part for purposes of recovery is subject to 40 CFR Part 262, Subpart H paragraph (9) of this rule. The requirements of this paragraph and paragraph (8) of this rule do not apply to such exports and imports. A waste is considered hazardous under U.S. national procedures if the waste meets the Federal definition of hazardous waste in 40 CFR 261.3 subparagraph (1)(c) of Rule 0400-12-01-.02 and is subject to either the Federal RCRA manifesting requirements at 40 CFR Part 262, Subpart B paragraph (3) of this rule, the universal waste management standards of 40 CFR Part 273 (Rule 0400-12-01-.12), or the export requirements in the spent lead-acid battery management standards of 40 CFR Part 266, Subpart G (part (7)(a)1 of Rule 0400-12-01-.09).
 - (i) For the purpose of 40 CFR Part 262, Subpart H paragraph (9) of this rule, the designated OECD Member countries consist of Australia, Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Poland Portugal, the Republic of Korea, the Slovak Republic, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States.
 - (ii) For the purpose of 40 CFR 262, Subpart H paragraph (9) of this rule, Canada and Mexico are considered OECD Member countries only for the purpose of transit.
 - 2. Any person who exports hazardous waste to or imports hazardous waste from: A a designated OECD Member country for purposes other than recovery (e.g., incineration,

disposal), Mexico (for any purpose), or Canada (for any purpose) remains subject to the requirements of this paragraph and paragraph (8) of this rule, and is not subject to the requirements of 40 CFR Part 262, Subpart H paragraph (9) of this rule.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Paragraph (9) of Rule 0400-12-01-.03 Notification Requirements and Standards Applicable to Generators of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

(9) (Reserved) Transboundary Movements of Hazardous Waste for Recovery within the OECD [40 CFR 262 Subpart H]

(Note: Subpart H is administered by The implementation of this paragraph remains the responsibility of EPA.)

(a) Applicability

- 1. The requirements of this paragraph apply to imports and exports of wastes that are considered hazardous under U.S. national procedures and are destined for recovery operations in the countries listed in subpart (7)(i)1(i) of this rule. A waste is considered hazardous under U.S. national procedures if the waste:
 - (i) Meets the definition of hazardous waste in subparagraph (1)(c) of Rule 0400-12-01-.02; and
 - (ii) Is subject to either the manifesting requirements at paragraph (3) of this rule, the universal waste management standards of Rule 0400-12-01-.12, or the export requirements in the spent lead-acid battery management standards of part (7)(a)1 of Rule 0400-12-01-.09
- 2. Any person (exporter, importer, or recovery facility operator) who mixes two or more wastes (including hazardous and non-hazardous wastes) or otherwise subjects two or more wastes (including hazardous and non-hazardous wastes) to physical or chemical transformation operations, and thereby creates a new hazardous waste, becomes a generator and assumes all subsequent generator duties under RCRA and any exporter duties, if applicable, under this paragraph.

(b) Definitions

The following definitions apply to this paragraph.

"Competent authority" means the regulatory authority or authorities of concerned countries having jurisdiction over transboundary movements of wastes destined for recovery operations.

"Countries concerned" means the OECD Member countries of export or import and any OECD Member countries of transit.

"Country of export" means any designated OECD Member country listed in subpart (7)(i)1(i) of this rule from which a transboundary movement of hazardous wastes is planned to be initiated or is initiated.

"Country of import" means any designated OECD Member country listed in subpart (7)(i)1(i) of this rule to which a transboundary movement of hazardous wastes is planned or takes place for the purpose of submitting the wastes to recovery operations therein.

"Country of transit" means any designated OECD Member country listed in subparts (7)(i)1(i) and (ii) of this rule other than the country of export or country of import across which a transboundary movement of hazardous wastes is planned or takes place.

"Exporter" means the person under the jurisdiction of the country of export who has, or will have at the time the planned transboundary movement commences, possession or other forms of legal control of the wastes and who proposes transboundary movement of the hazardous wastes for the ultimate purpose of submitting them to recovery operations. When the United States (U.S.) is the country of export, exporter is interpreted to mean a person domiciled in the United States.

"Importer" means the person to whom possession or other form of legal control of the waste is assigned at the time the waste is received in the country of import.

"OECD area" means all land or marine areas under the national jurisdiction of any OECD Member country listed in subparagraph (7)(i) of this rule. When the regulations refer to shipments to or from an OECD Member country, this means OECD area.

"OECD" means the Organization for Economic Cooperation and Development.

"Recognized trader" means a person who, with appropriate authorization of countries concerned, acts in the role of principal to purchase and subsequently sell wastes; this person has legal control of such wastes from time of purchase to time of sale; such a person may act to arrange and facilitate transboundary movements of wastes destined for recovery operations.

"Recovery facility" means a facility which, under applicable domestic law, is operating or is authorized to operate in the country of import to receive wastes and to perform recovery operations on them.

"Recovery operations" means activities leading to resource recovery, recycling, reclamation, direct re-use or alternative uses, which include:

- R1 Use as a fuel (other than in direct incineration) or other means to generate energy.
- R2 Solvent reclamation/regeneration.
- R3 Recycling/reclamation of organic substances which are not used as solvents.
- R4 Recycling/reclamation of metals and metal compounds.
- R5 Recycling/reclamation of other inorganic materials.
- R6 Regeneration of acids or bases.
- R7 Recovery of components used for pollution abatement.
- R8 Recovery of components used from catalysts.
- R9 Used oil re-refining or other reuses of previously used oil.
- R10 Land treatment resulting in benefit to agriculture or ecological improvement.
- R11 Uses of residual materials obtained from any of the operations numbered R1-R10.
- R12 Exchange of wastes for submission to any of the operations numbered R1-R11.
- R13 Accumulation of material intended for any operation numbered R1-R12.

"Transboundary movement" means any movement of wastes from an area under the national jurisdiction of one OECD Member country to an area under the national jurisdiction of another OECD Member country.

(c) General conditions

- Scope. The level of control for exports and imports of waste is indicated by assignment of
 the waste to either a list of wastes subject to the Green control procedures or a list of
 wastes subject to the Amber control procedures and by the national procedures of the
 United States, as defined in part (a)1 of this paragraph. The OECD Green and Amber
 lists are incorporated by reference in (j)4 of this paragraph.
 - (i) Listed wastes subject to the Green control procedures.
 - (I) Green wastes that are not considered hazardous under U.S. national procedures as defined in part (a)1 of this paragraph are subject to existing controls normally applied to commercial transactions.
 - (II) Green wastes that are considered hazardous under U.S. national procedures as defined in part (a)1 of this paragraph are subject to the Amber control procedures set forth in this paragraph.
 - (ii) Listed wastes subject to the Amber control procedures.
 - (I) Amber wastes that are considered hazardous under U.S. national procedures as defined in part (a)1 of this paragraph are subject to the Amber control procedures set forth in this paragraph.
 - (II) Amber wastes that are considered hazardous under U.S. national procedures as defined in part (a)1 of this paragraph, are subject to the Amber control procedures in the United States, even if they are imported to or exported from a designated OECD Member country listed in subpart (7)(i)1(i) of this rule that does not consider the waste to be hazardous. In such an event, the responsibilities of the Amber control procedures shift as provided:
 - For U.S. exports, the United States shall issue an acknowledgement of receipt and assume other responsibilities of the competent authority of the country of import.
 - II. For U.S. imports, the U.S. recovery facility/importer and the United States shall assume the obligations associated with the Amber control procedures that normally apply to the exporter and country of export, respectively.
 - (III) Amber wastes that are not considered hazardous under U.S. national procedures as defined in part (a)1 of this paragraph, but are considered hazardous by an OECD Member country are subject to the Amber control procedures in the OECD Member country that considers the waste hazardous. All responsibilities of the U.S. importer/exporter shift to the importer/exporter of the OECD Member country that considers the waste hazardous unless the parties make other arrangements through contracts.

(Note: Some wastes subject to the Amber control procedures are not listed or otherwise identified as hazardous under RCRA, and therefore are not subject to the Amber control procedures of this paragraph. Regardless of the status of the waste under RCRA, however, other Federal environmental statutes (e.g., the Toxic Substances Control Act) restrict certain waste imports or exports. Such restrictions continue to apply with regard to this paragraph.)

- (iii) Procedures for mixtures of wastes.
 - (I) A Green waste that is mixed with one or more other Green wastes such that the resulting mixture is not considered hazardous under U.S. national procedures as defined in part (a)1 of this paragraph shall be

subject to the Green control procedures, provided the composition of this mixture does not impair its environmentally sound recovery.

(Note: The regulated community should note that some OECD Member countries may require, by domestic law, that mixtures of different Green wastes be subject to the Amber control procedures.)

(II) A Green waste that is mixed with one or more Amber wastes, in any amount, de minimis or otherwise, or a mixture of two or more Amber wastes, such that the resulting waste mixture is considered hazardous under U.S. national procedures as defined in part (a)1 of this paragraph are subject to the Amber control procedures, provided the composition of this mixture does not impair its environmentally sound recovery.

(Note: The regulated community should note that some OECD Member countries may require, by domestic law, that a mixture of a Green waste and more than a de minimis amount of an Amber waste or a mixture of two or more Amber wastes be subject to the Amber control procedures.)

- (iv) Wastes not yet assigned to an OECD waste list are eligible for transboundary movements, as follows:
 - (I) If such wastes are considered hazardous under U.S. national procedures as defined in part (a)1 of this paragraph, such wastes are subject to the Amber control procedures.
 - (II) If such wastes are not considered hazardous under U.S. national procedures as defined in part (a)1 of this paragraph, such wastes are subject to the Green control procedures.
- General conditions applicable to transboundary movements of hazardous waste:
 - The waste must be destined for recovery operations at a facility that, under applicable domestic law, is operating or is authorized to operate in the importing country;
 - (ii) The transboundary movement must be in compliance with applicable international transport agreements; and

(Note: These international agreements include, but are not limited to, the Chicago Convention (1944), ADR (1957), ADNR (1970), MARPOL Convention (1973/1978), SOLAS Convention (1974), IMDG Code (1985), COTIF (1985), and RID (1985).)

- (iii) Any transit of waste through a non-OECD Member country must be conducted in compliance with all applicable international and national laws and regulations.
- Provisions relating to re-export for recovery to a third country:
 - (i) Re-export of wastes subject to the Amber control procedures from the United States, as the country of import, to a third country listed in subpart (7)(i)1(i) of this rule may occur only after an exporter in the United States provides notification to and obtains consent from the competent authorities in the third country, the original country of export, and any transit countries. The notification must comply with the notice and consent procedures in subparagraph (d) of this paragraph for all countries concerned and the original country of export. The competent authorities of the original country of export, as well as the competent authorities of all other countries concerned have thirty (30) days to object to the proposed movement.

- (I) The thirty (30) day period begins once the competent authorities of both the initial country of export and new country of import issue Acknowledgements of Receipt of the notification.
- (II) The transboundary movement may commence if no objection has been lodged after the thirty (30) day period has passed or immediately after written consent is received from all relevant OECD importing and transit countries.
- (ii) In the case of re-export of Amber wastes to a country other than those listed in subpart (7)(i)1(i) of this rule, notification to and consent of the competent authorities of the original OECD Member country of export and any OECD Member countries of transit is required as specified in subpart (i) of this part, in addition to compliance with all international agreements and arrangements to which the first importing OECD Member country is a party and all applicable regulatory requirements for exports from the first country of import.
- 4. Duty to return or re-export wastes subject to the Amber control procedures. When a transboundary movement of wastes subject to the Amber control procedures cannot be completed in accordance with the terms of the contract or the consent(s) and alternative arrangements cannot be made to recover the waste in an environmentally sound manner in the country of import, the waste must be returned to the country of export or reexported to a third country. The provisions of part 3 of this subparagraph apply to any shipments to be re-exported to a third country. The following provisions apply to shipments to be returned to the country of export as appropriate:
 - (i) Return from the United States to the country of export: The U.S. importer must inform EPA at the specified address in item (d)2(i)(l) of this paragraph of the need to return the shipment. EPA will then inform the competent authorities of the countries of export and transit, citing the reason(s) for returning the waste. The U.S. importer must complete the return within ninety (90) days from the time EPA informs the country of export of the need to return the waste, unless informed in writing by EPA of another timeframe agreed to by the concerned Member countries. If the return shipment will cross any transit country, the return shipment may only occur after EPA provides notification to and obtains consent from the competent authority of the country of transit, and provides a copy of that consent to the U.S. importer.
 - (ii) Return from the country of import to the United States: The U.S. exporter must provide for the return of the hazardous waste shipment within ninety (90) days from the time the country of import informs EPA of the need to return the waste or such other period of time as the concerned Member countries agree. The U.S. exporter must submit an exception report to EPA in accordance with part (h)2 of this paragraph.
- Duty to return wastes subject to the Amber control procedures from a country of transit.
 When a transboundary movement of wastes subject to the Amber control procedures does not comply with the requirements of the notification and movement documents or otherwise constitutes illegal shipment, and if alternative arrangements cannot be made to recover these wastes in an environmentally sound manner, the waste must be returned to the country of export. The following provisions apply as appropriate:
 - (i) Return from the United States (as country of transit) to the country of export: The U.S. transporter must inform EPA at the specified address in item (d)2(i)(l) of this paragraph of the need to return the shipment. EPA will then inform the competent authority of the country of export, citing the reason(s) for returning the waste. The U.S. transporter must complete the return within ninety (90) days from the time EPA informs the country of export of the need to return the waste, unless informed in writing by EPA of another timeframe agreed to by the concerned Member countries.

- (ii) Return from the country of transit to the United States (as country of export): The U.S. exporter must provide for the return of the hazardous waste shipment within ninety (90) days from the time the competent authority of the country of transit informs EPA of the need to return the waste or such other period of time as the concerned Member countries agree. The U.S. exporter must submit an exception report to EPA in accordance with part (h)2 of this paragraph.
- 6. Requirements for wastes destined for and received by R12 and R13 facilities. The transboundary movement of wastes destined for R12 and R13 operations must comply with all Amber control procedures for notification and consent as set forth in subparagraph (d) of this paragraph and for the movement document as set forth in subparagraph (e) of this paragraph. Additional responsibilities of R12/R13 facilities include:
 - (i) Indicating in the notification document the foreseen recovery facility or facilities where the subsequent R1-R11 recovery operation takes place or may take place.
 - (ii) Within three (3) days of the receipt of the wastes by the R12/R13 recovery facility or facilities, the facility(ies) shall return a signed copy of the movement document to the exporter and to the competent authorities of the countries of export and import. The facility(ies) shall retain the original of the movement document for three (3) years.
 - (iii) As soon as possible, but no later than thirty (30) days after the completion of the R12/R13 recovery operation and no later than one (1) calendar year following the receipt of the waste, the R12 or R13 facility(ies) shall send a certificate of recovery to the foreign exporter and to the competent authority of the country of export and to the Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection Agency, 1200 Pennsylvania Avenue, N.W., Washington, D.C. 20460, by mail, e-mail without digital signature followed by mail, or fax followed by mail.
 - (iv) When an R12/R13 recovery facility delivers wastes for recovery to an R1-R11 recovery facility located in the country of import, it shall obtain as soon as possible, but no later than one (1) calendar year following delivery of the waste, a certification from the R1-R11 facility that recovery of the wastes at that facility has been completed. The R12/R13 facility must promptly transmit the applicable certification to the competent authorities of the countries of import and export, identifying the transboundary movements to which the certification pertain.
 - (v) When an R12/R13 recovery facility delivers wastes for recovery to an R1-R11 recovery facility located:
 - In the initial country of export, Amber control procedures apply, including a new notification;
 - (II) In a third country other than the initial country of export, Amber control procedures apply, with the additional provision that the competent authority of the initial country of export shall also be notified of the transboundary movement.
- 7. Laboratory analysis exemption. The transboundary movement of an Amber waste is exempt from the Amber control procedures if it is in certain quantities and destined for laboratory analysis to assess its physical or chemical characteristics, or to determine its suitability for recovery operations. The quantity of such waste shall be determined by the minimum quantity reasonably needed to perform the analysis in each particular case adequately, but in no case exceed twenty-five kilograms (25 kg). Waste destined for laboratory analysis must still be appropriately packaged and labeled.

(d) Notification and consent.

- Applicability. Consent must be obtained from the competent authorities of the relevant OECD countries of import and transit prior to exporting hazardous waste destined for recovery operations subject to this paragraph. Hazardous wastes subject to the Amber control procedures are subject to the requirements of part 2 of this subparagraph; and wastes not identified on any list are subject to the requirements of part 3 of this subparagraph.
- 2. Amber wastes. Exports of hazardous wastes from the United States as described in part (a)1 of this paragraph that are subject to the Amber control procedures are prohibited unless the notification and consent requirements of subpart (i) or (ii) of this part are met.
 - (i) Transactions requiring specific consent:
 - Notification. At least forty-five (45) days prior to commencement of each transboundary movement, the exporter must provide written notification in English of the proposed transboundary movement to the Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection Agency, 1200 Pennsylvania Avenue, N.W., Washington, D.C. 20460, with the words "Attention: OECD Export Notification" prominently displayed on the envelope. This notification must include all of the information identified in part 4 of this subparagraph. In cases where wastes having similar physical and chemical characteristics, the same United Nations classification, the same RCRA waste codes, and are to be sent periodically to the same recovery facility by the same exporter, the exporter may submit one general notification of intent to export these wastes in multiple shipments during a period of up to one (1) year. Even when a general notification is used for multiple shipments, each shipment still must be accompanied by its own movement document pursuant to subparagraph (e) of this paragraph.
 - (II) Tacit consent. If no objection has been lodged by any countries concerned (i.e., exporting, importing, or transit) to a notification provided pursuant to item (I) of this subpart within thirty (30) days after the date of issuance of the Acknowledgement of Receipt of notification by the competent authority of the country of import, the transboundary movement may commence. Tacit consent expires one (1) calendar year after the close of the thirty (30) day period; renotification and renewal of all consents is required for exports after that date.
 - (III) Written consent. If the competent authorities of all the relevant OECD importing and transit countries provide written consent in a period less than thirty (30) days, the transboundary movement may commence immediately after all necessary consents are received. Written consent expires for each relevant OECD importing and transit country one (1) calendar year after the date of that country's consent unless otherwise specified; renotification and renewal of each expired consent is required for exports after that date.
 - (ii) Transboundary movements to facilities pre-approved by the competent authorities of the importing countries to accept specific wastes for recovery:
 - (I) Notification. The exporter must provide EPA a notification that contains all the information identified in part 4 of this subparagraph in English, at least ten (10) days in advance of commencing shipment to a preapproved facility. The notification must indicate that the recovery facility is pre-approved, and may apply to a single specific shipment or to

multiple shipments as described in item (i)(I) of this part. This information must be sent to the Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection Agency, 1200 Pennsylvania Avenue, N.W., Washington, D.C. 20460, with the words "OECD Export Notification—Pre-approved Facility" prominently displayed on the envelope. General notifications that cover multiple shipments as described in item (i)(I) of this part may cover a period of up to three (3) years. Even when a general notification is used for multiple shipments, each shipment still must be accompanied by its own movement document pursuant to subparagraph (e) of this paragraph.

- (ii) Exports to pre-approved facilities may take place after the elapse of seven (7) working days from the issuance of an Acknowledgement of Receipt of the notification by the competent authority of the country of import unless the exporter has received information indicating that the competent authority of any countries concerned objects to the shipment.
- 3. Wastes not covered in the OECD Green and Amber lists. Wastes destined for recovery operations, that have not been assigned to the OECD Green and Amber lists, incorporated by reference in part (j)4 of this paragraph, but which are considered hazardous under U.S. national procedures as defined in part (a)1 of this paragraph, are subject to the notification and consent requirements established for the Amber control procedures in accordance with part 2 of this subparagraph. Wastes destined for recovery operations, that have not been assigned to the OECD Green and Amber lists incorporated by reference in part (j)4 of this paragraph, and are not considered hazardous under U.S. national procedures as defined by part (a)1 of this paragraph are subject to the Green control procedures.
- 4. Notifications submitted under this section must include the information specified in subparts (i) through (xiv) of this part:
 - Serial number or other accepted identifier of the notification document;
 - (ii) Exporter name and EPA identification number (if applicable), address, telephone, fax numbers, and e-mail address;
 - (iii) Importing recovery facility name, address, telephone, fax numbers, e-mail address, and technologies employed;
 - (iv) Importer name (if not the owner or operator of the recovery facility), address, telephone, fax numbers, and e-mail address; whether the importer will engage in waste exchange recovery operation R12 or waste accumulation recovery operation R13 prior to delivering the waste to the final recovery facility and identification of recovery operations to be employed at the final recovery facility;
 - (v) Intended transporter(s) and/or their agent(s); address, telephone, fax, and e-mail address;
 - (vi) Country of export and relevant competent authority, and point of departure;
 - (vii) Countries of transit and relevant competent authorities and points of entry and departure;
 - (viii) Country of import and relevant competent authority, and point of entry;
 - (ix) Statement of whether the notification is a single notification or a general notification. If general, include period of validity requested;
 - (x) Date(s) foreseen for commencement of transboundary movement(s);

- (xi) Means of transport envisaged;
- (xii) Designation of waste type(s) from the appropriate OECD list incorporated by reference in part (j)4 of this paragraph, description(s) of each waste type, estimated total quantity of each, RCRA waste code, and the United Nations number for each waste type;
- (xiii) Specification of the recovery operation(s) as defined in subparagraph (b) of this paragraph.
- (xiv) Certification/Declaration signed by the exporter that states:

"I certify that the above information is complete and correct to the best of my knowledge. I also certify that legally-enforceable written contractual obligations have been entered into, and that any applicable insurance or other financial guarantees are or shall be in force covering the transboundary movement."

Name:		
Signature:	*.	
Date:		

(Note: The United States does not currently require financial assurance for these waste shipments. However, U.S. exporters may be asked by other governments to provide and certify to such assurance as a condition of obtaining consent to a proposed movement.)

5. Certificate of Recovery. As soon as possible, but no later than thirty (30) days after the completion of recovery and no later than one (1) calendar year following receipt of the waste, the U.S. recovery facility shall send a certificate of recovery to the exporter and to the competent authorities of the countries of export and import by mail, e-mail without a digital signature followed by mail, or fax followed by mail. The certificate of recovery shall include a signed, written and dated statement that affirms that the waste materials were recovered in the manner agreed to by the parties to the contract required under subparagraph (f) of this paragraph.

(e) Movement document.

- All U.S. parties subject to the contract provisions of subparagraph (f) of this paragraph must ensure that a movement document meeting the conditions of part 2 of this subparagraph accompanies each transboundary movement of wastes subject to the Amber control procedures from the initiation of the shipment until it reaches the final recovery facility, including cases in which the waste is stored and/or sorted by the importer prior to shipment to the final recovery facility, except as provided in subparts (i) and (ii) of this part.
 - (i) For shipments of hazardous waste within the United States solely by water (bulk shipments only), the generator must forward the movement document with the manifest to the last water (bulk shipment) transporter to handle the waste in the United States if exported by water, (in accordance with the manifest routing procedures at part (3)(d)3 of this rule.
 - (ii) For rail shipments of hazardous waste within the United States which originate at the site of generation, the generator must forward the movement document with the manifest (in accordance with the routing procedures for the manifest in part (3)(d)4 of this rule to the next non-rail transporter, if any, or the last rail transporter to handle the waste in the United States if exported by rail.

- The movement document must include all information required under subparagraph (d) of this paragraph (for notification), as well as the following subparts (i) through (vii) of this part:
 - (i) Date movement commenced;
 - (ii) Name (if not exporter), address, telephone, fax numbers, and e-mail of primary exporter;
 - (iii) Company name and EPA ID number of all transporters;
 - (iv) Identification (license, registered name or registration number) of means of transport, including types of packaging envisaged;
 - (v) Any special precautions to be taken by transporter(s);
 - (vi) Certification/declaration signed by the exporter that no objection to the shipment has been lodged, as follows:

"I certify that the above information is complete and correct to the best of my knowledge. I also certify that legally-enforceable written contractual obligations have been entered into, that any applicable insurance or other financial guarantees are or shall be in force covering the transboundary movement, and that:

- All necessary consents have been received; OR
- (II) The shipment is directed to a recovery facility within the OECD area and no objection has been received from any of the countries concerned within the thirty (30) day tacit consent period; OR
- (III) The shipment is directed to a recovery facility pre-approved for that type of waste within the OECD area; such an authorization has not been revoked, and no objection has been received from any of the countries concerned."

(Delete sentences that are not applicable)

Name:	
Signature:	
Date:	

- (vii) Appropriate signatures for each custody transfer (e.g., transporter, importer, and owner or operator of the recovery facility).
- Exporters also must comply with the special manifest requirements of parts (7)(e)1, 2, 3,
 and 9 of this rule and importers must comply with the import requirements of paragraph (8) of this rule.
- 4. Each U.S. person that has physical custody of the waste from the time the movement commences until it arrives at the recovery facility must sign the movement document (e.g., transporter, importer, and owner or operator of the recovery facility).
- Within three (3) working days of the receipt of imports subject to this paragraph, the owner or operator of the U.S. recovery facility must send signed copies of the movement document to the exporter, to the Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection Agency, 1200 Pennsylvania Avenue, N.W., Washington, D.C.

20460, and to the competent authorities of the countries of export and transit. If the concerned U.S. recovery facility is a R12/R13 recovery facility as defined under subparagraph (b) of this paragraph, the facility shall retain the original of the movement document for three (3) years.

(f) Contracts.

- 1. Transboundary movements of hazardous wastes subject to the Amber control procedures are prohibited unless they occur under the terms of a valid written contract, chain of contracts, or equivalent arrangements (when the movement occurs between parties controlled by the same corporate or legal entity). Such contracts or equivalent arrangements must be executed by the exporter and the owner or operator of the recovery facility, and must specify responsibilities for each. Contracts or equivalent arrangements are valid for the purposes of this subparagraph only if persons assuming obligations under the contracts or equivalent arrangements have appropriate legal status to conduct the operations specified in the contract or equivalent arrangements.
- Contracts or equivalent arrangements must specify the name and EPA ID number, where available, of subparts (i) through (iv) of this part:
 - (i) The generator of each type of waste;
 - (ii) Each person who will have physical custody of the wastes;
 - (iii) Each person who will have legal control of the wastes; and
 - (iv) The recovery facility.
- 3. Contracts or equivalent arrangements must specify which party to the contract will assume responsibility for alternate management of the wastes if their disposition cannot be carried out as described in the notification of intent to export. In such cases, contracts must specify that:
 - (i) The person having actual possession or physical control over the wastes will immediately inform the exporter and the competent authorities of the countries of export and import and, if the wastes are located in a country of transit, the competent authorities of that country; and
 - (ii) The person specified in the contract will assume responsibility for the adequate management of the wastes in compliance with applicable laws and regulations including, if necessary, arranging the return of wastes and, as the case may be, shall provide the notification for re-export.
- Contracts must specify that the importer will provide the notification required in part (c)3
 of this paragraph prior to the re-export of controlled wastes to a third country.
- Contracts or equivalent arrangements must include provisions for financial guarantees, if required by the competent authorities of any countries concerned, in accordance with applicable national or international law requirements.

(Note: Financial guarantees so required are intended to provide for alternate recycling, disposal or other means of sound management of the wastes in cases where arrangements for the shipment and the recovery operations cannot be carried out as foreseen. The United States does not require such financial guarantees at this time; however, some OECD Member countries do. It is the responsibility of the exporter to ascertain and comply with such requirements; in some cases, transporters or importers may refuse to enter into the necessary contracts absent specific references or certifications to financial guarantees.)

- 6. Contracts or equivalent arrangements must contain provisions requiring each contracting party to comply with all applicable requirements of this paragraph.
- 7. Upon request by EPA, U.S. exporters, importers, or recovery facilities must submit to EPA copies of contracts, chain of contracts, or equivalent arrangements (when the movement occurs between parties controlled by the same corporate or legal entity). Information contained in the contracts or equivalent arrangements for which a claim of confidentiality is asserted in accordance with 40 CFR 2.203(b) will be treated as confidential and will be disclosed by EPA only as provided in 40 CFR 260.2.

(Note: Although the United States does not require routine submission of contracts at this time, the OECD Decision allows Member countries to impose such requirements. When other OECD Member countries require submission of partial or complete copies of the contract as a condition to granting consent to proposed movements, EPA will request the required information; absent submission of such information, some OECD Member countries may deny consent for the proposed movement.)

- (g) Provisions relating to recognized traders.
 - A recognized trader who takes physical custody of a waste and conducts recovery
 operations (including storage prior to recovery) is acting as the owner or operator of a
 recovery facility and must be so authorized in accordance with all applicable Federal
 laws.
 - A recognized trader acting as an exporter or importer for transboundary shipments of waste must comply with all the requirements of this paragraph associated with being an exporter or importer.
- (h) Reporting and recordkeeping.
 - 1. Annual reports. For all waste movements subject to this paragraph, persons (e.g., exporters, recognized traders) who meet the definition of primary exporter in subparagraph (7)(b) of this rule or who initiate the movement documentation under subparagraph (e) of this paragraph shall file an annual report with the Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection Agency, 1200 Pennsylvania Avenue, N.W., Washington, D.C. 20460, no later than March 1 of each year summarizing the types, quantities, frequency, and ultimate destination of all such hazardous waste exported during the previous calendar year. (If the primary exporter or the person who initiates the movement document under subparagraph (e) of this paragraph is required to file an annual report for waste exports that are not covered under this paragraph, he may include all export information in one report provided the following information on exports of waste destined for recovery within the designated OECD Member countries is contained in a separate section.) Such reports shall include all of the following subparts (i) through (vi) of this part specified as follows:
 - (i) The EPA identification number, name, and mailing and site address of the exporter filing the report;
 - (ii) The calendar year covered by the report;
 - (iii) The name and site address of each final recovery facility;
 - (iv) By final recovery facility, for each hazardous waste exported, a description of the hazardous waste, the EPA hazardous waste number (from paragraphs (3) or (4) of Rule 0400-12-01-.02), designation of waste type(s) and applicable waste code(s) from the appropriate OECD waste list incorporated by reference in part (j)4 of this paragraph, DOT hazard class, the name and U.S. EPA identification number (where applicable) for each transporter used, the total amount of

- hazardous waste shipped pursuant to this paragraph, and number of shipments pursuant to each notification:
- (v) In even numbered years, for each hazardous waste exported, except for hazardous waste produced by exporters of greater than 100kg but less than 1,000kg in a calendar month, and except for hazardous waste for which information was already provided pursuant to subparagraph (5)(b) of this rule:
 - (I) A description of the efforts undertaken during the year to reduce the volume and toxicity of the waste generated; and
 - (II) A description of the changes in volume and toxicity of the waste actually achieved during the year in comparison to previous years to the extent such information is available for years prior to 1984; and
- (vi) A certification signed by the person acting as primary exporter or initiator of the movement document under subparagraph (e) of this paragraph 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 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. Exception reports. Any person who meets the definition of primary exporter in subparagraph (7)(b) of this rule or who initiates the movement document under subparagraph (e) of this paragraph must file an exception report in lieu of the requirements of subparagraph (5)(c) of this rule (if applicable) with the Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection Agency, 1200 Pennsylvania Avenue, N.W., Washington, D.C. 20460, if any of the following occurs:
 - (i) He has not received a copy of the RCRA hazardous waste manifest (if applicable) signed by the transporter identifying the point of departure of the waste from the United States, within forty-five (45) days from the date it was accepted by the initial transporter;
 - (ii) Within ninety (90) days from the date the waste was accepted by the initial transporter, the exporter has not received written confirmation from the recovery facility that the hazardous waste was received;
 - (iii) The waste is returned to the United States.

Recordkeeping.

- (i) Persons who meet the definition of primary exporter in subparagraph (7)(b) of this rule or who initiate the movement document under subparagraph (e) of this paragraph shall keep the following records in items (I) through (IV) of this subpart:
 - (I) A copy of each notification of intent to export and all written consents obtained from the competent authorities of countries concerned for a period of at least three (3) years from the date the hazardous waste was accepted by the initial transporter;
 - (II) A copy of each annual report for a period of at least three (3) years from the due date of the report;

- (III) A copy of any exception reports and a copy of each confirmation of delivery (i.e., movement document) sent by the recovery facility to the exporter for at least three (3) years from the date the hazardous waste was accepted by the initial transporter or received by the recovery facility, whichever is applicable; and
- (IV) A copy of each certificate of recovery sent by the recovery facility to the exporter for at least three (3) years from the date that the recovery facility completed processing the waste shipment.
- (ii) The periods of retention referred to in this part are extended automatically during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Administrator.
- (i) Pre-approval for U.S. recovery facilities [Reserved]
- (i) OECD waste lists.
 - General. For the purposes of this paragraph, a waste is considered hazardous under U.S. national procedures, and hence subject to this paragraph, if the waste:
 - (i) Meets the definition of hazardous waste in subparagraph (1)(c) of Rule 0400-12-01-.02; and
 - (ii) Is subject to either the manifesting requirements at paragraph (3) of this rule, the universal waste management standards of Rule 0400-12-01-.12, or the export requirements in the spent lead-acid battery management standards of paragraph (7) of Rule 0400-12-.01-.09.
 - If a waste is hazardous under part 1 of this subparagraph, it is subject to the Amber control procedures, regardless of whether it appears in the OECD Amber List, incorporated by reference in part 4 of this subparagraph.
 - 3. The appropriate control procedures for hazardous wastes and hazardous waste mixtures are addressed in subparagraph (c) of this paragraph.
 - The OECD waste lists, as set forth in Annex B ("Green List") and Annex C ("Amber List") (collectively "OECD waste lists") of the 2009 "Guidance Manual for the Implementation of Council Decision C(2001)107/FINAL, as Amended, on the Control of Transboundary Movements of Wastes Destined for Recovery Operations," are incorporated by reference. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. This material is incorporated as it exists on the date of the approval and a notice of any change in these materials will be published in the FEDERAL REGISTER. The materials are available for inspection at: the U.S. Environmental Protection Agency, Docket Center Public Reading Room, EPA West, Room 3334, 1301 Constitution Avenue N.W., Washington, D.C. 20004 (Docket # EPA-HQ-RCRA-2005-0018) or at the National Archives and Records Administration (NARA), and may be obtained from the Organization for Economic Cooperation and Development, Environment Directorate, 2 rue André Pascal, F-75775 Paris Cedex 16, France. For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html. To contact the EPA Docket Center Public Reading Room, call (202) 566-1744. To contact the OECD, call +33 (0) 1 45 24 81 67.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subpart (i) of part 5 of subparagraph (l) of paragraph (12) of Rule 0400-12-01-.03 Notification Requirements and Standards Applicable to Generators of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

- 5. (i) A generator may accumulate as much as 55 gallons of hazardous waste or one quart of acute hazardous waste listed in Rule 0400-12-01-.02(4)(b) or (4)(d)5, in containers at or near any point of generation where wastes initially accumulate, which is under the control of the operator of the process generating the waste, without a permit or interim status and without complying with part 2 or 6 of this subparagraph provided he:
 - (I) Complies with Rule 0400-12-01-.05(9)(b), (c), and (d)1; and
 - (II) Marks his containers either with the words "Hazardous Waste" or with other words that identify the contents of the containers.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subpart (i) of part 5 of subparagraph (I) of paragraph (12) of Rule 0400-12-01-.03 Notification Requirements and Standards Applicable to Generators of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

(i) Write the words "hazardous waste" on the container label that is affixed or attached to the container, within four (4) calendar days of arriving at the on-site interim status or permitted treatment, storage or disposal facility central accumulation area and before the hazardous waste may be removed from the on-site interim status or permitted treatment, storage or disposal facility central accumulation area; and

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Part 5 of subparagraph (a) of paragraph (1) of Rule 0400-12-01-.04 Requirements Applicable to Transfer Facilities and Permit Requirements and Standards Applicable to Transporters of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

5. A transporter of hazardous waste subject to the Federal manifesting requirements of 40 CFR Part 262 Rule 0400-12-01-.03, or subject to the waste management standards of 40 CFR Part 273 or Rule 0400-12-01-.12 that are is being imported from or exported to any of the countries listed in subpart (7)(i)1(i) of Rule 0400-12-01-.03 for the purposes of recovery is subject to this paragraph and to all relevant requirements of 40 CFR Part 262, Subpart H paragraph (9) of Rule 0400-12-01-.03, including, but not limited to, 40 CFR 262.84 for movement documents subparagraph (9)(e) of Rule 0400-12-01-.03.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subparagraph (a) of paragraph (3) of Rule 0400-12-01-.04 Requirements Applicable to Transfer Facilities and Permit Requirements and Standards Applicable to Transporters of Hazardous Waste is amended by deleting it in its entirety and substituting instead the following:

- (a) The Manifest System [40 CFR 263.20]
 - (i) Manifest Requirements requirement.

A transporter may not accept hazardous waste from a generator unless the transporter is also provided with a manifest form (EPA Form 8700-22, and if necessary, EPA Form 8700-22A) signed in accordance with the requirements of subparagraph (3)(d) of Rule 0400-12-01-.03, or is provided with an electronic manifest that is obtained, completed, and transmitted in accordance with subpart (3)(a)1(iii) of Rule 0400-12-01-.03, and signed with a valid and enforceable electronic signature as described in subparagraph (3)(f) of Rule 0400-12-01-.03.

2.(ii) Exports.

In the case of exports other than those subject to Subpart H of 40 CFR 262

paragraph (9) of Rule 0400-12-01-.03, a transporter may not accept such waste from a primary exporter or other person if he knows the shipment does not conform to the EPA Acknowledgement of Consent; and unless, in addition to a manifest signed by the generator as provided in accordance with this paragraph, the transporter shall also be provided with an EPA Acknowledgement of Consent which, except for shipments by rail, is attached to the manifest (or shipping paper for exports by water (bulk shipment)). For exports of hazardous waste subject to the requirements of Subpart H of 40 CFR 262 paragraph (9) of Rule 0400-12-01-.03, a transporter may not accept hazardous waste without a tracking document that includes all information required by 40 CFR 262.84 subparagraph (9)(e) of Rule 0400-12-01-.03.

3.(iii) Compliance Date date for Form Revisions form revisions.

The revised Manifest form and procedures in subparagraph (2)(a) of Rule 0400-12-01-.01, subparagraph (1)(g) of Rule 0400-12-01-.02, and subparagraphs (3)(a) this subparagraph and (3) subparagraph (b) of Rule 0400-12-01-.04 this paragraph shall not apply until had an effective date of September 5, 2006. The Manifest form and procedures in subparagraph (2)(a) of Rule 0400-12-01-.01, subparagraph (1)(g) of Rule 0400-12-01-.02, this subparagraph and subparagraph (b) of this paragraph, contained in the Rules 0400-12-01-.01 through 0400-12-01-.06, in effect as of July 1, 2004, were applicable until September 5, 2006.

(iv) Use of electronic manifest--legal equivalence to paper forms for participating transporters.

Electronic manifests that are obtained, completed, and transmitted in accordance with subpart (3)(a)1(iii) of Rule 0400-12-01-.03, and used in accordance with this subpart in lieu of EPA Forms 8700-22 and 8700-22A, are the legal equivalent of paper manifest forms bearing handwritten signatures, and satisfy for all purposes any requirement in these regulations to obtain, complete, sign, carry, provide, give, use, or retain a manifest.

- (I) Any requirement in these regulations to sign a manifest or manifest certification by hand, or to obtain a handwritten signature, is satisfied by signing with or obtaining a valid and enforceable electronic signature within the meaning of part (3)(f)1 of Rule 0400-12-01-.03.
- (II) Any requirement in these regulations to give, provide, send, forward, or return to another person a copy of the manifest is satisfied when a copy of an electronic manifest is transmitted to the other person by submission to the system.
- (III) Any requirement in these regulations for a manifest to accompany a hazardous waste shipment is satisfied when a copy of an electronic manifest is accessible during transportation and forwarded to the person or persons who are scheduled to receive delivery of the waste shipment, except that to the extent that the Hazardous Materials regulation on shipping papers for carriage by public highway requires transporters of hazardous materials to carry a paper document to comply with 49 CFR 177.817, a hazardous waste transporter must carry one printed copy of the electronic manifest on the transport vehicle.
- (IV) Any requirement in these regulations for a transporter to keep or retain a copy of a manifest is satisfied by the retention of an electronic manifest in the transporter's account on the e-Manifest system, provided that such copies are readily available for viewing and production if requested by any EPA inspector or the Commissioner.

- (V) No transporter may be held liable for the inability to produce an electronic manifest for inspection under this paragraph if that transporter can demonstrate that the inability to produce the electronic manifest is exclusively due to a technical difficulty with the EPA system for which the transporter bears no responsibility.
- (v) A transporter may participate in the electronic manifest system either by accessing the electronic manifest system from the transporter's own electronic equipment, or by accessing the electronic manifest system from the equipment provided by a participating generator, by another transporter, or by a designated facility.
- (vi) Special procedures when electronic manifest is not available.

If after a manifest has been originated electronically and signed electronically by the initial transporter, and the electronic manifest system should become unavailable for any reason, then:

- The transporter in possession of the hazardous waste when the electronic manifest becomes unavailable shall reproduce sufficient copies of the printed manifest that is carried on the transport vehicle pursuant to item (iv)(III) of this part, or obtain and complete another paper manifest for this purpose. The transporter shall reproduce sufficient copies to provide the transporter and all subsequent waste handlers with a copy for their files, plus two additional copies that will be delivered to the designated facility with the hazardous waste.
- (II) On each printed copy, the transporter shall include a notation in the Special Handling and Additional Description space (Item 14) that the paper manifest is a replacement manifest for a manifest originated in the electronic manifest system, shall include (if not pre-printed on the replacement manifest) the manifest tracking number of the electronic manifest that is replaced by the paper manifest, and shall also include a brief explanation why the electronic manifest was not available for completing the tracking of the shipment electronically.
- (III) A transporter signing a replacement manifest to acknowledge receipt of the hazardous waste must ensure that each paper copy is individually signed and that a legible handwritten signature appears on each copy.
- (IV) From the point at which the electronic manifest is no longer available for tracking the waste shipment, the paper replacement manifest copies shall be carried, signed, retained as records, and given to a subsequent transporter or to the designated facility, following the instructions, procedures, and requirements that apply to the use of all other paper manifests.
- (vii) Special procedures for electronic signature methods undergoing tests.

If a transporter using an electronic manifest signs this manifest electronically using an electronic signature method which is undergoing pilot or demonstration tests aimed at demonstrating the practicality or legal dependability of the signature method, then the transporter shall sign the electronic manifest electronically and also sign with an ink signature the transporter acknowledgement of receipt of materials on the printed copy of the manifest that is carried on the vehicle in accordance with item (iv)(III) of this part. This printed copy bearing the generator's and transporter's ink signatures shall also be presented by the transporter to the designated facility to sign in ink to indicate the receipt of the waste materials or to indicate discrepancies. After the owner or operator of the designated facility has signed this printed manifest copy with its

ink signature, the printed manifest copy shall be delivered to the designated facility with the waste materials.

(viii) Imposition of user fee for electronic manifest use.

A transporter who is a user of the electronic manifest may be assessed a user fee by EPA for the origination or processing of each electronic manifest.

(Note: In accordance with 40 CFR 263.20(a)(8), EPA shall maintain and update from time-to-time the current schedule of electronic manifest user fees, which shall be determined based on current and projected system costs and level of use of the electronic manifest system. The current schedule of electronic manifest user fees shall be published as an appendix to 40 CFR Part 262.)

- Before transporting the hazardous waste, the transporter must sign and date the manifest acknowledging acceptance of the hazardous waste from the generator. The transporter must return a signed copy to the generator before leaving the generator's property
- The transporter must ensure that the manifest accompanies the hazardous waste. In the
 case of exports, the transporter must ensure that a copy of the EPA Acknowledgement of
 Consent also accompanies the hazardous waste.
- 4. A transporter who delivers a hazardous waste to another transporter or to the designated facility must:
 - Obtain the date of delivery and the handwritten signature of that transporter or of the owner or operator of the designated facility on the manifest; and
 - (ii) Retain one copy of the manifest in accordance with subparagraph (c) of this paragraph; and
 - (iii) Give the remaining copies of the manifest to the accepting transporter or designated facility.
- 5. The requirements of parts 3, 4, and 6 of this subparagraph do not apply to water (bulk shipment) transporters if:
 - (i) The hazardous waste is delivered by water (bulk shipment) to the designated facility; and
 - (ii) A shipping paper containing all the information required on the manifest (excluding the Installation Identification Numbers, generator certification, and signatures) and, for exports, an EPA Acknowledgment of Consent accompanies the hazardous waste; and
 - (iii) The delivering transporter obtains the date of delivery and handwritten signature of the owner or operator of the designated facility on either the manifest or the shipping paper; and
 - (iv) The person delivering the hazardous waste to the initial water (bulk shipment) transporter obtains the date of delivery and signature of the water (bulk shipment) transporter on the manifest and forwards it to the designated facility; and
 - (v) A copy of the shipping paper or manifest is retained by each water (bulk shipment) transporter in accordance with subparagraph (c) of this paragraph.
- 6. For shipments involving rail transportation, the requirements of parts 3, 4, and 5 do not apply and the following requirements do apply:

- (i) When accepting hazardous waste from a non-rail transporter, the initial rail transporter must:
 - Sign and date the manifest acknowledging acceptance of the hazardous waste;
 - (II) Return a signed copy of the manifest to the non-rail transporter;
 - (III) Forward at least three copies of the manifest to:
 - The next non-rail transporter, if any; or
 - II. The designated facility, if the shipment is delivered to that facility by rail; or
 - III. The last rail transporter designated to handle the waste in the United States;
 - (IV) Retain one copy of the manifest and rail shipping paper in accordance with subparagraph (c) of this paragraph.
- (ii) Rail transporters must ensure that a shipping paper containing all the information required on the manifest (excluding the Installation Identification Numbers, generator certification, and signatures) and, for exports an EPA Acknowledgment of Consent accompanies the hazardous waste at all times.

(Note: Intermediate rail transporters are not required to sign either the manifest or shipping paper.)

- (iii) When delivering hazardous waste to the designated facility, a rail transporter must:
 - (I) Obtain the date of delivery and handwritten signature of the owner or operator of the designated facility on the manifest or the shipping paper (if the manifest has not been received by the facility); and
 - (II) Retain a copy of the manifest or signed shipping paper in accordance with subparagraph (c) of this paragraph.
- (iv) When delivering hazardous waste to a non-rail transporter a rail transporter must:
 - (I) Obtain the date of delivery and the handwritten signature of the next nonrail transporter on the manifest; and
 - (II) Retain a copy of the manifest in accordance with subparagraph (c) of this paragraph.
- (v) Before accepting hazardous waste from a rail transporter, a non-rail transporter must sign and date the manifest and provide a copy to the rail transporter.
- 7. Transporters who transport hazardous waste out of the United States must:
 - (i) Sign and date the manifest in the International Shipments block to indicate the date that the shipment left the United States; and
 - (ii) Retain one copy in accordance with part (c)4 of this subparagraph; and
 - (iii) Return a signed copy of the manifest to the generator; and
 - (iv) Give a copy of the manifest to a U.S. Customs official at the point of departure

from the United States.

- 8. A transporter transporting hazardous waste from a generator who generates greater than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month need not comply with the requirements of this subparagraph or those of subparagraph (c) of this paragraph provided that:
 - (i) The waste is being transported pursuant to a reclamation agreement as provided for in Rule 0400-12-01-.03(3)(a)5;
 - (ii) The transporter records, on a log or shipping paper, the following information for each shipment:
 - (I) The name, address, and U.S. Installation Identification Number of the generator of the waste;
 - (II) The quantity of waste accepted;
 - (III) All DOT-required shipping information;
 - (IV) The date the waste is accepted; and
 - (iii) The transporter carries this record when transporting waste to the reclamation facility; and
 - (iv) The transporter retains these records for a period of at least three years after termination or expiration of the agreement.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Paragraph (3) of Rule 0400-12-01-.04 Requirements Applicable to Transfer Facilities and Permit Requirements and Standards Applicable to Transporters of Hazardous Waste is amended by adding subparagraphs (d), (e) and (f) to read as follows:

- (d) Reserved
- (e) Reserved
- (f) Electronic manifest signatures [40 CFR 263.25]
 - Electronic manifest signatures shall meet the criteria described in 40 CFR 262.25(a).
 - Reserved

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subpart (ii) of part 1 of subparagraph (c) of paragraph (2) of Rule 0400-12-01-.05 Interim Status Standards for Owners and Operators of Existing Hazardous Waste Treatment, Storage, and Disposal Facilities is amended by deleting it in its entirety and substituting instead the following:

(ii) The owner or operator of a recovery facility that has arranged to receive hazardous waste subject to 40 CFR Part 262, Subpart H paragraph (9) of Rule 0400-12-01-.03 must provide a copy of the movement document bearing all required signatures to the foreign exporter, to the Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection Agency, 1200 Pennsylvania Avenue, NW., N.W., Washington, DC D.C. 20460; and to the competent authorities of all other countries concerned within three (3) working days of receipt of the shipment. The original of the signed movement document must be maintained at the facility for at least three (3) years. In addition, such

owner or operator shall, as soon as possible, but no later than thirty (30) days after the completion of recovery and no later than one (1) calendar year following the receipt of the hazardous waste, send a certificate of recovery to the foreign exporter and to the competent authority of the country of export and to EPA's Office of Enforcement and Compliance Assurance at the above address by mail, e-mail without a digital signature followed by mail, or fax followed by mail.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subpart (ii) of part 1 of subparagraph (b) of paragraph (5) of Rule 0400-12-01-.05 Interim Status Standards for Owners and Operators of Existing Hazardous Waste Treatment, Storage, and Disposal Facilities is amended by deleting it in its entirety and substituting instead the following:

- (ii) If a facility receives a hazardous waste shipment accompanied by a manifest, the owner, operator or his/her agent must:
 - (I) Sign and date, by hand, each copy of the manifest;
 - (II) Note any discrepancies (as defined in part (c)1 of this paragraph) on each copy of the manifest;

(Comment: The Department does not intend that the owner or operator of a facility whose procedures under part (2)(d)3 of this rule include waste analysis must perform that analysis before signing the manifest and giving it to the transporter. Part (e)2 (c)3 of this paragraph, however, requires reporting an unreconciled discrepancy discovered during later analysis.)

- (III) Immediately give the transporter at least one copy of the manifest;
- (IV) Within 30 days of delivery, send a copy (Page 3) of the manifest to the generator; and;
- (V) Within 30 days of delivery, send the top copy (Page 1) of the Manifest to the e-Manifest system for purposes of data entry and processing. In lieu of mailing this paper copy to EPA, the owner or operator may transmit to EPA an image file of Page 1 of the manifest, or both a data string file and the image file corresponding to Page 1 of the manifest. Any data or image files transmitted to EPA under this item must be submitted in data file and image file formats that are acceptable to EPA and that are supported by EPA's electronic reporting requirements and by the electronic manifest system; and
- (VI) Retain at the facility a copy of each manifest for at least three years from the date of delivery.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Part 4 of subparagraph (b) of paragraph (5) of Rule 0400-12-01-.05 Interim Status Standards for Owners and Operators of Existing Hazardous Waste Treatment, Storage, and Disposal Facilities is amended by deleting it in its entirety and substituting instead the following:

4. Within three (3) working days of the receipt of a shipment subject to 40 CFR Part 262, Subpart H paragraph (9) of Rule 0400-12-01-.03, the owner or operator of a facility must provide a copy of the movement document bearing all required signatures to the exporter, to the Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection Agency, 1200 Pennsylvania Avenue, NW., N.W., Washington, DC D.C. 20460, and to competent authorities of all other countries concerned. The original copy of the movement document must be maintained at the facility for at least three (3) years from the date of signature.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subparagraph (b) of paragraph (5) of Rule 0400-12-01-.05 Interim Status Standards for Owners and Operators of Existing Hazardous Waste Treatment, Storage, and Disposal Facilities is amended by adding new parts 6 through 11 to read as follows:

Legal equivalence to paper manifests.

Electronic manifests that are obtained, completed, and transmitted in accordance with subpart (3)(a)1(iii) of Rule 0400-12-01-.03, and used in accordance with this part in lieu of the paper manifest form are the legal equivalent of paper manifest forms bearing handwritten signatures, and satisfy for all purposes any requirement in these regulations to obtain, complete, sign, provide, use, or retain a manifest.

- (i) Any requirement in these regulations for the owner or operator of a facility to sign a manifest or manifest certification by hand, or to obtain a handwritten signature, is satisfied by signing with or obtaining a valid and enforceable electronic signature within the meaning of part (3)(f)1 of Rule 0400-12-01-.03.
- (ii) Any requirement in these regulations to give, provide, send, forward, or to return to another person a copy of the manifest is satisfied when a copy of an electronic manifest is transmitted to the other person.
- (iii) Any requirement in these regulations for a manifest to accompany a hazardous waste shipment is satisfied when a copy of an electronic manifest is accessible during transportation and forwarded to the person or persons who are scheduled to receive delivery of the hazardous waste shipment.
- (iv) Any requirement in these regulations for an owner or operator to keep or retain a copy of each manifest is satisfied by the retention of the facility's electronic manifest copies in its account on the e-Manifest system, provided that such copies are readily available for viewing and production if requested by any EPA inspector or the Commissioner.
- (v) No owner or operator may be held liable for the inability to produce an electronic manifest for inspection under this paragraph if the owner or operator can demonstrate that the inability to produce the electronic manifest is due exclusively to a technical difficulty with the electronic manifest system for which the owner or operator bears no responsibility.
- 7. An owner or operator may participate in the electronic manifest system either by accessing the electronic manifest system from the owner's or operator's electronic equipment, or by accessing the electronic manifest system from portable equipment brought to the owner's or operator's site by the transporter who delivers the waste shipment to the facility.
- Special procedures applicable to replacement manifests.

If a facility receives hazardous waste that is accompanied by a paper replacement manifest for a manifest that was originated electronically, the following procedures apply to the delivery of the hazardous waste by the final transporter:

(i) Upon delivery of the hazardous waste to the designated facility, the owner or operator must sign and date each copy of the paper replacement manifest by hand in Item 20 (Designated Facility Certification of Receipt) and note any discrepancies in Item 18 (Discrepancy Indication Space) of the replacement manifest.

- (ii) The owner or operator of the facility must give back to the final transporter one copy of the paper replacement manifest,
- (iii) Within 30 days of delivery of the hazardous waste to the designated facility, the owner or operator of the facility must send one signed and dated copy of the paper replacement manifest to the generator, and send an additional signed and dated copy of the paper replacement manifest to the EPA e-Manifest system, and
- (iv) The owner or operator of the facility must retain at the facility one copy of the paper replacement manifest for at least three years from the date of delivery.
- Special procedures applicable to electronic signature methods undergoing tests.

If an owner or operator using an electronic manifest signs this manifest electronically using an electronic signature method which is undergoing pilot or demonstration tests aimed at demonstrating the practicality or legal dependability of the signature method, then the owner or operator shall also sign with an ink signature the facility's certification of receipt or discrepancies on the printed copy of the manifest provided by the transporter. Upon executing its ink signature on this printed copy, the owner or operator shall retain this original copy among its records for at least 3 years from the date of delivery of the waste.

10. Imposition of user fee for electronic manifest use.

An owner or operator who is a user of the electronic manifest format may be assessed a user fee by EPA for the origination or processing of each electronic manifest.

(Note: In accordance with 40 CFR 265.71(j), an owner or operator may also be assessed a user fee by EPA for the collection and processing of paper manifest copies that owners or operators must submit to the electronic manifest system operator under item I(ii)(V) of this subparagraph. EPA shall maintain and update from time-to-time the current schedule of electronic manifest system user fees, which shall be determined based on current and projected system costs and level of use of the electronic manifest system. The current schedule of electronic manifest user fees shall be published as an appendix to 40 CFR Part 262.)

- 11. Electronic manifest signatures.
 - (i) Electronic manifest signatures shall meet the criteria described in 40 CFR 262.25(a).
 - (ii) Reserved

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subpart (ii) of part 1 of subparagraph (c) of paragraph (2) of Rule 0400-12-01-.06 Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities is amended by deleting it in its entirety and substituting instead the following:

(ii) The owner or operator of a recovery facility that has arranged to receive hazardous waste subject to 40 CFR Part 262, Subpart H paragraph (9) of Rule 0400-12-01-.03 must provide a copy of the movement document bearing all required signatures to the foreign exporter, to the Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection Agency, 1200 Pennsylvania Avenue, N.W., N.W., Washington, DC D.C. 20460; and to the competent authorities of all other countries concerned within three (3) working days of receipt of the shipment. The original of the signed movement document must be maintained at the facility for at least three (3) years. In addition, such

owner or operator shall, as soon as possible, but no later than thirty (30) days after the completion of recovery and no later than one (1) calendar year following the receipt of the hazardous waste, send a certificate of recovery to the foreign exporter and to the competent authority of the country of export and to EPA's Office of Enforcement and Compliance Assurance at the above address by mail, e-mail without a digital signature followed by mail, or fax followed by mail.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subpart (ii) of part 1 of subparagraph (b) of paragraph (5) of Rule 0400-12-01-.06 Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities is amended by deleting it in its entirety and substituting instead the following:

- (ii) If a facility receives a hazardous waste shipment accompanied by a manifest, the owner, operator or his/her agent must:
 - (I) Sign and date, by hand, each copy of the manifest;
 - (II) Note any discrepancies (as defined in part (c)1 of this paragraph) on each copy of the manifest;

(Comment: The Department does not intend that the owner or operator of a facility whose procedures under part (2)(d)3 of this rule include waste analysis must perform that analysis before signing the manifest and giving it to the transporter. Part (c)2 of this paragraph, however, requires reporting an unreconciled discrepancy discovered during later analysis.)

- (III) Immediately give the transporter at least one copy of the manifest;
- (IV) Within 30 days of delivery, send a copy (Page 3) of the manifest to the generator; and;
- (V) Within 30 days of delivery, send the top copy (Page 1) of the Manifest to the e-Manifest system for purposes of data entry and processing. In lieu of mailing this paper copy to EPA, the owner or operator may transmit to the EPA system an image file of Page 1 of the manifest, or both a data string file and the image file corresponding to Page 1 of the manifest. Any data or image files transmitted to EPA under this item must be submitted in data file and image file formats that are acceptable to EPA and that are supported by EPA's electronic reporting requirements and by the electronic manifest system; and
- (VI) Retain at the facility a copy of each manifest for at least three years from the date of delivery.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Part 4 of subparagraph (b) of paragraph (5) of Rule 0400-12-01-.06 Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities is amended by deleting it in its entirety and substituting instead the following:

4. Within three (3) working days of the receipt of a shipment subject to 40 CFR Part 262, Subpart H paragraph (9) of Rule 0400-12-01-.03, the owner or operator of a facility must provide a copy of the movement document bearing all required signatures to the exporter, to the Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection Agency, 1200 Pennsylvania Avenue, NW., N.W., Washington, DC D.C. 20460, and to competent authorities of all other countries concerned. The original copy of the movement document must be maintained at the facility for at least three (3) years from

the date of signature.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Subparagraph (b) of paragraph (5) of Rule 0400-12-01-.06 Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities is amended by adding new parts 6 through 11 to read as follows:

Legal equivalence to paper manifests.

Electronic manifests that are obtained, completed, and transmitted in accordance with subpart (3)(a)1(iii) of Rule 0400-12-01-.03, and used in accordance with this part in lieu of the paper manifest form are the legal equivalent of paper manifest forms bearing handwritten signatures, and satisfy for all purposes any requirement in these regulations to obtain, complete, sign, provide, use, or retain a manifest.

- (i) Any requirement in these regulations for the owner or operator of a facility to sign a manifest or manifest certification by hand, or to obtain a handwritten signature, is satisfied by signing with or obtaining a valid and enforceable electronic signature within the meaning of part (3)(f)1 of Rule 0400-12-01-.03.
- (ii) Any requirement in these regulations to give, provide, send, forward, or to return to another person a copy of the manifest is satisfied when a copy of an electronic manifest is transmitted to the other person.
- (iii) Any requirement in these regulations for a manifest to accompany a hazardous waste shipment is satisfied when a copy of an electronic manifest is accessible during transportation and forwarded to the person or persons who are scheduled to receive delivery of the hazardous waste shipment.
- (iv) Any requirement in these regulations for an owner or operator to keep or retain a copy of each manifest is satisfied by the retention of the facility's electronic manifest copies in its account on the e-Manifest system, provided that such copies are readily available for viewing and production if requested by any EPA or authorized state inspector.
- (v) No owner or operator may be held liable for the inability to produce an electronic manifest for inspection under this paragraph if the owner or operator can demonstrate that the inability to produce the electronic manifest is due exclusively to a technical difficulty with the electronic manifest system for which the owner or operator bears no responsibility.
- 7. An owner or operator may participate in the electronic manifest system either by accessing the electronic manifest system from the owner's or operator's electronic equipment, or by accessing the electronic manifest system from portable equipment brought to the owner's or operator's site by the transporter who delivers the waste shipment to the facility.
- 8. Special procedures applicable to replacement manifests.

If a facility receives hazardous waste that is accompanied by a paper replacement manifest for a manifest that was originated electronically, the following procedures apply to the delivery of the hazardous waste by the final transporter:

(i) Upon delivery of the hazardous waste to the designated facility, the owner or operator must sign and date each copy of the paper replacement manifest by hand in Item 20 (Designated Facility Certification of Receipt) and note any discrepancies in Item 18 (Discrepancy Indication Space) of the replacement manifest,

- (ii) The owner or operator of the facility must give back to the final transporter one copy of the paper replacement manifest,
- (iii) Within 30 days of delivery of the hazardous waste to the designated facility, the owner or operator of the facility must send one signed and dated copy of the paper replacement manifest to the generator, and send an additional signed and dated copy of the paper replacement manifest to the EPA e-Manifest system, and
- (iv) The owner or operator of the facility must retain at the facility one copy of the paper replacement manifest for at least three years from the date of delivery.
- Special procedures applicable to electronic signature methods undergoing tests.

If an owner or operator using an electronic manifest signs this manifest electronically using an electronic signature method which is undergoing pilot or demonstration tests aimed at demonstrating the practicality or legal dependability of the signature method, then the owner or operator shall also sign with an ink signature the facility's certification of receipt or discrepancies on the printed copy of the manifest provided by the transporter. Upon executing its ink signature on this printed copy, the owner or operator shall retain this original copy among its records for at least 3 years from the date of delivery of the waste.

Imposition of user fee for electronic manifest use.

An owner or operator who is a user of the electronic manifest format may be assessed a user fee by EPA for the origination or processing of each electronic manifest.

(Note: In accordance with 40 CFR 264.71(j), an owner or operator may also be assessed a user fee by EPA for the collection and processing of paper manifest copies that owners or operators must submit to the electronic manifest system operator under item 1(ii)(V) of this subparagraph. EPA shall maintain and update from time-to-time the current schedule of electronic manifest system user fees, which shall be determined based on current and projected system costs and level of use of the electronic manifest system. The current schedule of electronic manifest user fees shall be published as an appendix to 40 CFR Part 262.)

- 11. Electronic manifest signatures.
 - (i) Electronic manifest signatures shall meet the criteria described in part (3)(f)1 of Rule 0400-12-01-.03.
 - (ii) Reserved

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Part 10 of subparagraph (I) of paragraph (10) of Rule 0400-12-01-.07 Permitting of Hazardous Waste Treatment, Storage, and Disposal Facilities is amended by deleting it in its entirety and substituting instead the following:

10. Changes to RCRA permit provisions needed to support transition to 40 CFR 63 (Subpart EEE—National Emission Standards for Hazardous Air Pollutants From Hazardous Waste Combustors), provided the procedures of Rule 0400-12-01-.07(9)(c)5(xi) are followed.

11

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Part 1 of subparagraph (a) of paragraph (7) of Rule 0400-12-01-.09 Standards for the Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Facilities is amended by deleting it in its entirety and substituting instead the following:

1. Are spent lead-acid batteries exempt from hazardous waste management requirements? If you generate, collect, transport, store, or regenerate lead-acid batteries for reclamation purposes, you may be exempt from certain hazardous waste management requirements. Use the following table to determine which requirements apply to you. Alternatively, you may choose to manage your spent lead-acid batteries under the "Universal Waste" rule in Rule 0400-12-01-.12.

If your batteries * * *	And if you * * *	Then you * * *	And you * * *
If your batteries	And if you	Then you	And you
(i) Will be reclaimed through regeneration (such as by electrolyte replacement).	7 HIGH YOU	are exempt from Rules 0400-12-0103 (except for .03(1)(b)) through .07, .09, and .10 including the notification requirement of Rule 0400-12-0103(2).	are subject to Rules 0400-12-0102 and .03(1)(b).
(ii) Will be reclaimed other than through regeneration.	generate, collect, and/or transport these batteries.	are exempt from Rules 0400-12-0103 (except for .03(1)(b)) through .07 and .09, including the notification requirement of Rule 0400-12-0103(2).	are subject to Rules 0400-12-0102 and .03(1)(b),and applicable provisions under Rule 0400-12- 0110.
(iii) Will be reclaimed other than through regeneration.	store these batteries but you aren't the reclaimer.	are exempt from Rules 0400-12-0103 (except for .03(1)(b)) through .07 and .09, including the notification requirement of Rule 0400-12-0103(2).	are subject to Rules 0400-12-0102, .03(1)(b),and applicable provisions under Rule 0400-12- 0110.
(iv) Will be reclaimed other than through regeneration.	store these batteries before you reclaim them.	must comply with part 2 of this subparagraph and as appropriate other regulator provisions described in part 2 of this subparagraph.	are subject to Rules 0400-12-0102, .03(1)(b),and applicable provisions under Rule 0400-12- 0110.
(v) Will be reclaimed other than through regeneration.	don't store these batteries before you reclaim them.	are exempt from Rules 0400-12-0103 (except for .03(1)(b)) through .07 and .09, including the notification requirement of Rule 0400-12-0103(2).	are subject to Rules 0400-12-0102, .03(1)(b),and applicable provisions under Rule 0400-12- 0110.
(vi) Will be reclaimed through regeneration or any other means.	Export these batteries for reclamation in a foreign country.	are exempt from Rules 0400-12-0104 through .07, .09 and .10, including the notification requirement of Rule 0400-12-0103(2). You are also exempt from 0400-12-0103 (except for .03(1)(b)), and except for the	are subject to Rules 0400-12-0102 and .03(1)(b), and either must comply with 40 CFR Part 262, Subpart H paragraph (9) of Rule 0400-12-0103 (if shipping to one of the OECD countries specified in subpart (7)(i)1(i) of

		requirements in either (I) 40 CFR Part 262, Subpart H paragraph (9) of Rule 0400-12-0103; or (II) subparagraph (7)(d) of Rule 0400-12-0103 "Notification of Intent to Export", subparts (7)(g)1(i) through (iv) and (vi) and part (7)(g)2 of Rule 0400-12-0103 "Annual Reports", and subparagraph (7)(h) of Rule 0400-12-0103 "Recordkeeping".	or must: (I) Comply with the requirements applicable to a primary exporter in subparagraph (7)(d), subparts (7)(g)1(i) through (iv) and (vi), part (7)(g)2, and subparagraph (7)(h) of Rule 0400-12-0103; and (II) Export these batteries only upon consent of the receiving country and in conformance with the EPA Acknowledgement of Consent as defined in paragraph (7) of Rule 0400-12-0103; and (III) Provide a copy of the EPA Acknowledgement of Consent for the shipment to the transporter transporting the shipment for export.
(vii) Will be reclaimed through regeneration or any other means.	Transport these batteries in the U.S. to export them for reclamation in a foreign country.	are exempt from Rules 0400-12-0103 through .07 and .09, 0400-12-0104 through .07, .09 and .10 including the notification requirements of Rule 0400-12-0103(2).	must comply with applicable requirements in 40 CFR Part 262, Subpart H paragraph (9) of Rule 0400-12-0103 (if shipping to one of the OECD countries specified in subpart (7)(i)1(i) of Rule 0400-12-0103, or must comply with the following: (I) you may not accept a shipment if you know the shipment does not conform to the EPA Acknowledgement of Consent; (II) you must ensure that a copy of the EPA acknowledgement of Consent accompanies the shipment; and (III) you must ensure that the shipment is delivered to the facility designated by the

	person initiating the
	 shipment.

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Appendix IX of paragraph (30) of Rule 0400-12-01-.09 Standards for the Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Facilities is amended by deleting it in its entirety and substituting instead the following:

Appendix IX - Methods Manual for Compliance With the BIF Regulations

The Methods Manual for Compliance with the BIF Regulations presents required methods for demonstrating compliance with Tennessee's Hazardous Waste Regulations for boilers and industrial furnaces (BIFs) burning hazardous waste.

(Note: A copy of this Methods Manual may be obtained by contacting the Division Director at the following address:

Division Director
Division of Solid Waste Management
Tennessee Department of Environment and Conservation
L & C Tower, 5th Floor William R. Snodgrass TN Tower
401 Church Street 312 Rosa L. Parks Avenue, 14th Floor
Nashville, Tennessee 37243-1535

or calling 615-532-0780. The "Methods Manual for Compliance With the BIF Regulations" may also be found at 40 CFR 266 Appendix IX or by searching the U.S. Government Printing Office's website http://www.gpo.gov/fdsys/.)

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Waste code K157 of the Table "Treatment Standards for Hazardous Wastes" following part 10 of subparagraph (a) of paragraph (3) of Rule 0400-12-01-.10 Land Disposal Restrictions is amended by deleting the last sentence in the second column so that, as amended, it reads as follows:

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-propynly n-butylcarbamate.)	Carbon tetrachloride	56-23-5	0.057	6.0
		Chloroform	67-66-3	0.046	6.0
		Chloromethane	74-87-3	0.19	30
		Methomyl ¹⁰	16752-77-5	0.028; or CMBST, CHOXD, BIODG or CARBN	0.14; or CMBST

Methylene chloride	75-09-2	0.089	30
Methyl ethyl ketone	78-93-3	0.28	36
Pyridine	110-86-1	0.014	16
Triethylamine	121-44-8	0.081; or CMBST, CHOXD, BIODG or CARBN	1.5; or CMBST

Authority: T.C.A. §§ 68-212-101 et seq. and 4-5-201 et seq.

Board Member	Aye	No	Abstain	Absent	Signature (if required)
Marty Calloway	X		·		
(Petroleum Business with at least 15 Underground		1			
Storage Tanks)					
Stacey Cothran	X				
(Solid/Hazardous Waste Management Industry) Kenneth L. Donaldson	X	-			
(Municipal Government)	^				
Dr. George Hyfantis, Jr.	X				
(Institution of Higher Learning)					
Bhag Kanwar				X	
(Single Facility with less than 5 Underground Storage					
Tanks)					
Alan Leiserson	X				
Environmental Interests					
Jared L. Lynn	, X				
(Manufacturing experienced with Solid/Hazardous Waste David Martin	(x)	-			
(Working in a field related to Agriculture)	^				
Beverly Philpot	X	-	 		
(Manufacturing experienced with Underground Storage	^				
Tanks/Hazardous Materials)					
DeAnne Redman	X				
(Petroleum Management Business)					
Mayor A. Franklin Smith, III				X	
(County Government)					
Mark Williams	X	İ			
(Small Generator of Solid/Hazardous Materials					
representing Automotive Interests)					
I certify that this is an accurate and complete copy of rul- by the Underground Storage Tanks and Solid Waste Dis					
with the provisions of T.C.A. § 4-5-222.	P • • • • • • • • • • • • • • • • • • •				,
I further certify the following:					
Nation of Dulamakian Handan flad with the Danatanant	-f Ct-t		40/44/44		
Notice of Rulemaking Hearing filed with the Department	or State or	1;	12/11/14	·	
Rulemaking Hearing(s) Conducted on: (add more dates). 02/02/15					
3(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
Date: Fe	ebruary 4	2015			
Signature:					
Name of Officer: Stacey Cothran					
Title of Officer: Board Chair					
Subscribed and sworn to before me on:					
Notary Public Signature:					
My commission expires on:					

* If a roll-call vote was necessary, the vote by the Agency on these rulemaking hearing rules was as follows:

Rules of the Underground Storage Tanks and Solid Waste Disposal Control Rule 0400-12-0101 Hazardous Waste Management System: General Rule 0400-12-0102 Identification and Listing of Hazardous Waste Rule 0400-12-0103 Notification Requirements and Standards Applicable Rule 0400-12-0104 Requirements Applicable to Transfer Facilities and Popplicable to Transporters of Hazardous Waste Rule 0400-12-0105 Interim Status Standards for Owners and Operators of	to Generators of Hazardous Waste ermit Requirements and Standards
Treatment, Storage, and Disposal Facilities Rule 0400-12-0106 Standards for Owners and Operators of Hazardous V	Vaste Treatment, Storage, and
Disposal Facilities Rule 0400-12-0107 Permitting of Hazardous Waste Treatment, Storage, a Rule 0400-12-0109 Standards for the Management of Specific Hazardous Hazardous Waste Management Facilities Rule 0400-12-0110 Land Disposal Restrictions	
All rulemaking hearing rules provided for herein have been examined by the State of Tennessee and are approved as to legality pursuant to the provision Act, Tennessee Code Annotated, Title 4, Chapter 5.	
	Herbert H. Slatery III Attorney General and Reporter
	Date
Department of State Use Only	
Filed with the Department of State on:	
Effective on:	
	Tre Hargett Secretary of State SECRETARY OF STATE PUBLICATIONS

Public Hearing Comments

One copy of a document containing responses to comments made at the public hearing must accompany the filing pursuant to T.C.A. § 4-5-222. Agencies shall include only their responses to public hearing comments, which can be summarized. No letters of inquiry from parties questioning the rule will be accepted. When no comments are received at the public hearing, the agency need only draft a memorandum stating such and include it with the Rulemaking Hearing Rule filing. Minutes of the meeting will not be accepted. Transcripts are not acceptable.

Comment:

A commenter suggested that proposed new subparts (1)(d)1(xxv) and (1)(d)2(xvii) of Rule 0400-12-01-.02 be amended to make it clear that to maintain the exclusion regarding solvent-contaminated wipes on-site accumulation be limited to 180 days. The suggested language is consistent with the intent of EPA's rule and avoids the ambiguity created by the "may" in the proposed language.

Response:

The Department agrees and has changed the proposed rule as suggested by the commenter.

Comment:

The commenter pointed out that in 2012 the Office of General Counsel and the Attorney General agreed that the following sentence be added to certification statements: "As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury." They suggested that the sentence be added to the certification statements in three places: Rule 0400-12-01-.02(1)(d)8(iv)(I) and (II), and 0400-12-01-.02(1)(c)3(ii)(II)III.

Response:

The Department agrees and has added the sentence in the three places suggested by the commenter.

Comment:

The commenter pointed out a typographical error in proposed amendment to subpart (3)(a)1(iii) of Rule 0400-12-01-.04.

Response:

The typographical error has been corrected as suggested.

Comment:

A commenter pointed out that EPA nomenclature was not converted to the state required numbering at Item (6)(b)1(v)(X) of Rule 0400-12-01-.02.

Response:

The item was changed to state numbering.

Comment:

A commenter pointed out that proposed regulations incorporating EPA's language regarding electronic manifests that in seven places in the proposed rules the Department converted an EPA rule citation to conform to the comparable state citation. However, to obtain authorization from EPA, the state is required to use the EPA citation. The commenter identified the following proposed rules that need changing: subpart (3)(e)1(i) in Rule 0400-12-01-.03; Item (3)(a)1(iv)(l) and part (3)(f)1 in Rule 0400-12-01-.04; subpart (5)(b)6(i) and subpart (5)(b)11(i) in Rule 0400-12-01-.06.

Response:

The Department agrees with the commenter and the identified rules were changed to include the required EPA citation.

Comment:

A commenter questioned changing the federal references from the Clean Air Act and Clean Water Act to the analogous state statutes in the amendments to Item (1)(c)1(ii)(IV), subpart (1)(d)1(ii) and item (1)(d)2(xii)(IV) of Rule 0400-12-01-.02. The commenter was concerned about whether the change in reference would change the scope of the exemption in the regulation.

Response:

The proposed change was made in response to EPA's comments regarding program authorization reviews of past rulemakings. Many of the changes proposed in this rulemaking, in addition to the amendments that concern the commenter, are being made to address EPA's concerns regarding the suitability of regulations to support additional authorization. There is no intention to either expand or narrow the scope of the exemptions cited by the commenter. To ensure that the exemption does not change its scope the proposed rules are being changed in response to this comment to include references to both the applicable federal and state laws.

Comment:

A commenter wanted to know why the proposed rules include the regulatory language regarding Transboundary Movements of Hazardous Waste for Recovery with the OECD if EPA was going to the agency implementing them.

Response:

The department acknowledges that EPA is the agency to implement the transboundary movements of hazardous waste for recovery with the "Organization of Economic Cooperation and Development". A previous version of the regulations simply referenced the EPA as the implementing agency and during an authorization review of those regulations EPA informed the department that Tennessee was required to adopt and spell out the federal regulations, including any internal federal statutory or regulatory references. To support additional authorization we are adding the regulatory language as EPA requires.

Comment:

A commenter noticed that the hazardous waste listing for Commercial Chemical Products at part (4)(d)6 of Rule 0400-12-01-.02 did not also include the chemical name 1,1,1-Trichloroethane for U226 and suggested it be added and asked for additional changes to make the listing easier to use.

Response:

This rulemaking did not propose to amend the listings found at part (4)(d)6 of Rule 0400-12-01-.02 and will be considered in a future rulemaking. The U226 listing already includes the chemical in question by two of its names: Ethane, 1,1,1-trichloro- and Methyl chloroform.

Regulatory Flexibility Addendum

Pursuant to T.C.A. §§ 4-5-401 through 4-5-404, prior to initiating the rule making process as described in T.C.A. § 4-5-202(a)(3) and T.C.A. § 4-5-202(a), all agencies shall conduct a review of whether a proposed rule or rule affects small businesses.

The primary intent of this rulemaking is to update the hazardous waste regulations by incorporating the following federal changes that EPA published as final rules in the Federal Register from July 1, 2013 to June 30, 2014: (1) the definition of solid waste was amended to conditionally exempt solvent-contaminated wipes that are cleaned and reused and revised the definition of hazardous waste to conditionally exempt solvent-contaminated wipes that are disposed; (2) to conditionally exclude carbon dioxide (CO₂) streams that are hazardous from the definition of hazardous waste provided these CO₂ streams are captured from emission sources and injected into Class VI injection wells for the purpose of geologic sequestration; (3) to allow the use an electronic hazardous waste manifesting system; and (4) to amend the export provisions of Cathode Ray Tube recycling.

This rulemaking is also intended to correct language EPA identified while reviewing our requests for additional program authorization. These corrections are necessary to obtain additional program authorization and include amending the rules to include state citations where several federal citations are used, if appropriate and to add language regarding transboundary movement of hazardous waste for recovery with the Organization for Economic Cooperation and Development although EPA is responsible to its implementation.

The amendments identified above substantially codify existing federal law and are exempt from the requirements of the Regulatory Flexibility Act of 2007, T.C.A. §§ 4-5-401 et seq. The following amendments are not exempt: (1) The restoration of language regarding mixtures of used oil and hazardous waste from conditionally exempt small quantity generators that was inadvertently deleted from the regulations during renumbering; (2) the addition of a perjury statement to three certification statements; and (3) the correction of typographical errors.

- (1) The type or types of small business and an identification and estimate of the number of small businesses subject to the proposed rule that would bear the cost of, or directly benefit from the proposed rule.
 - There are many small businesses that generate used oil and that also generate hazardous waste in quantities of less than 220 pounds per calendar month. These types of used oil and hazardous waste generators are not required by existing regulations to notify the Department of their generating activities. Therefore, we have no reliable estimate of the number of affected small businesses. Nevertheless, this regulatory amendment is necessary in order to protect public health, welfare and the environment. It is doubtful that any small business will be impacted by the amended certification statements added to the carbon dioxide stream injected for geologic sequestration requirement or to the high temperature metals recovery (HTMR) processing regulations.
- (2) The projected reporting, recordkeeping, and other administrative costs required for compliance with the proposed rule, including the type of professional skills necessary for preparation of the report or record.
 - If the conditionally exempt small quantity generator avoids adding any hazardous waste to his used oil that could result in a mixture that exhibits the characteristic ignitability, corrosivity or reactivity, which is the intent of the amendment, then there are no additional reporting, recordkeeping or other administrative costs.
- (3) A statement of the probable effect on impacted small businesses and consumers.
 - The probable effect is the desired effect, that conditionally exempt small quantity generator will be careful to not mix their hazardous waste with their used oil, if the resultant mixture continues to be ignitable, corrosive or reactive. Mixtures of used oil and hazardous waste that are ignitable, corrosive or reactive, without this amendment, would not be effectively managed in a manner that is protective of public health, welfare or the environment.
- (4) A description of any less burdensome, less intrusive or less costly alternative methods of achieving the purpose and objectives of the proposed rule that may exist, and to what extent the alternative means might be less burdensome to small business.

The Department is not aware of any alternative that will achieve the protection being sought with the used oil hazardous waste mixture amendment.

(5) A comparison of the proposed rule with any federal or state counterparts.

The current regulations are identical to the federal regulations. The amendment will bring the regulations in line with other states' interpretation of how these used oil hazardous waste mixture must be managed.

(6) Analysis of the effect of the possible exemption of small businesses from all or any part of the requirements contained in the proposed rule.

Exempting small businesses from this proposed rule is equivalent to keeping the existing rules unchanged. The amendment is necessary to enhance protection of public health, welfare and the environment and is designed to ensure that hazardous waste and used oil mixtures are appropriately managed.

Impact on Local Governments

Pursuant to T.C.A. §§ 4-5-220 and 4-5-228 "any rule proposed to be promulgated shall state in a simple declarative sentence, without additional comments on the merits of the policy of the rules or regulation, whether the rule or regulation may have a projected impact on local governments." (See Public Chapter Number 1070 (http://state.tn.us/sos/acts/106/pub/pc1070.pdf) of the 2010 Session of the General Assembly)

The Department does not anticipate an impact on local governments.

Additional Information Required by Joint Government Operations Committee

All agencies, upon filing a rule, must also submit the following pursuant to T.C.A. § 4-5-226(i)(1).

(A) A brief summary of the rule and a description of all relevant changes in previous regulations effectuated by such rule;

The primary intent of this rulemaking is to update the hazardous waste regulations by incorporating the following federal changes that EPA published as final rules in the Federal Register from July 1, 2013 to June 30, 2014:

- The definition of solid waste was amended to conditionally exempt solvent-contaminated wipes that are cleaned and reused and revise the definition of hazardous waste to conditionally exempt solvent-contaminated wipes that are disposed. This proposed rulemaking provides a consistent regulatory framework that is appropriate to the level of risk posed by solvent-contaminated wipes in a way that is protective of human health and the environment and reduces cost.
- To conditionally exclude carbon dioxide (CO₂) streams that are hazardous from the definition of hazardous waste provided these CO₂ streams are captured from emission sources and injected into Class VI injection wells for the purpose of geologic sequestration.
- To allow the use an electronic hazardous waste manifesting system.
- To update the export provisions of Cathode Ray Tube recycling to reflect applicable federal rules.

This rulemaking also updates the rules in order to maintain continued program authorization and includes recently adopted federal exemptions, and exclusions. The rules are also amended to include state citations in addition to existing federal citations regarding transboundary movement of hazardous waste for recovery in cooperation with the Organization for Economic Cooperation and Development.

This rulemaking also restores language regarding mixtures of used oil and hazardous waste from conditionally exempt small quantity generators that was inadvertently deleted from the regulations; adds a perjury statement to three certification statements following the advice of the attorney general; and corrects typographical errors.

(B) A citation to and brief description of any federal law or regulation or any state law or regulation mandating promulgation of such rule or establishing guidelines relevant thereto;

These rules are being promulgated under the authority of T.C.A. §§ 68-212-101 et seq. These amendments will bring the state hazardous waste regulations more in line with the federal regulations and surrounding states.

(C) Identification of persons, organizations, corporations or governmental entities most directly affected by this rule, and whether those persons, organizations, corporations or governmental entities urge adoption or rejection of this rule;

Generators, Transporters, Treatment, Storage and Disposal Facilities of Hazardous Waste or directly affected by this rulemaking.

(D) Identification of any opinions of the attorney general and reporter or any judicial ruling that directly relates to the rule;

The Department is not aware of any opinions or judicial rulings that directly relate to this rule.

(E) An estimate of the probable increase or decrease in state and local government revenues and expenditures, if any, resulting from the promulgation of this rule, and assumptions and reasoning upon which the estimate is based. An agency shall not state that the fiscal impact is minimal if the fiscal impact is more than two percent (2%) of the agency's annual budget or five hundred thousand dollars (\$500,000), whichever is less;

This rulemaking will not impact state or local government revenues or expenditures.

(F) Identification of the appropriate agency representative or representatives, possessing substantial knowledge and understanding of the rule;

Jackie Okoreeh-Baah Division of Solid Waste Management William R. Snodgrass Tennessee Tower 312 Rosa L. Parks Avenue, 14th Floor Nashville, Tennessee 37243 (615) 532-0825 Jackie.Okoreeh-Baah@tn.gov

(G) Identification of the appropriate agency representative or representatives who will explain the rule at a scheduled meeting of the committees;

Jenny Howard Deputy General Counsel Office of General Counsel

(H) Office address, telephone number, and email address of the agency representative or representatives who will explain the rule at a scheduled meeting of the committees; and

Office of General Counsel
Tennessee Department of Environment and Conservation
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 2nd Floor
Nashville, Tennessee 37243
(615) 532-8685
Jenny.Howard@tn.gov

(I) Any additional information relevant to the rule proposed for continuation that the committee requests.

The Department is not aware of any additional relevant information.