



State of Utah

GARY R. HERBERT  
Governor

SPENCER J. COX  
Lieutenant Governor

Department of  
Environmental Quality

L. Scott Baird  
Executive Director

DIVISION OF WASTE MANAGEMENT  
AND RADIATION CONTROL  
Ty L. Howard  
Director

A meeting of the Waste Management and Radiation Control Board has been scheduled for February 13, 2020 at 1:30 p.m. at the Utah Department of Environmental Quality, (Multi-Agency State Office Building), Conference Room #1015, 195 North 1950 West, SLC.

(One or more Board members may participate telephonically.)  
General Public Audio Conferencing Access Number: 1-877-820-7831  
Passcode Number: 853610#

AGENDA

- I. Call to Order.
- II. Public Comments on Agenda Items.
- III. Declarations of Conflict of Interest.
- IV. Approval of Meeting Minutes for the November 14, 2019 Board Meeting  
(Board Action Item)..... Tab 1
- V. Underground Storage Tanks Update ..... Tab 2
- VI. Administrative Rules ..... Tab 3
  - A. Approval to proceed with formal rulemaking and a 30-day public comment period on proposed rule changes to R315-260, R315-262, R315-263, R315-264, and R315-265 of the **hazardous waste rules** to incorporate federal regulatory changes promulgated by the Environmental Protection Agency (EPA) and published in the Federal Register on January 3, 2018 (83 FR 420) (Board Action Item).
  - B. Approval to proceed with formal rulemaking and a 30-day public comment period on a proposed rule change to R315-15-14 of the **rules for management of used oil** clarifying the type of documents that DIYer collection centers must submit in order to qualify for the reimbursement (Board Action Item).
  - C. Approval to proceed with formal rulemaking and a 30-day public comment period on a proposed rule change to R313-16-293 of the **radiation control rules** to clarify the rule regarding who must submit x-ray equipment inspection reports to the Director (Board Action Item).

(Over)

- D. Request for approval for final adoption of the rule changes to R313-15-1006, R313-19-100, and R313-36-3 of the **radiation control rules**, as published in the December 1, 2019 issue of the *Utah State Bulletin*. The rule changes incorporate regulatory corrections promulgated by the Nuclear Regulatory Commission and published in the December 1, 2015 (80 FR 74974), November 15, 2017 (82 FR 52823), June 28, 2018 (83 FR 30285), and November 21, 2018 (83 FR 58721) issues of the *Federal Register*. **(Board Action Item)**

VII. Low-Level Radioactive Waste ..... Tab 4

- A. EnergySolutions request for a site-specific treatment variance from the Hazardous Waste Management Rules. EnergySolutions seeks authorization to receive high concentration arsenic waste for disposal **(Information Item Only)**.
- B. EnergySolutions request for a site-specific treatment variance from the Hazardous Waste Management Rules. EnergySolutions seeks authorization to receive Cemented Uranium Extraction Process Residues for disposal **(Information Item Only)**.
- C. EnergySolutions request for a site-specific treatment variance from the Hazardous Waste Management Rules. EnergySolutions seeks authorization to receive magnesium/thorium dross for disposal **(Information Item Only)**.

VIII. Other Business.

- A. Director’s Report.
- B. Misc. Information Items.
- C. Scheduling of next Board meeting (March 12, 2020).

IX. Adjourn.

In compliance with the Americans with Disabilities Act, individuals with special needs (including auxiliary communicative aids and services) should contact Larene Wyss, Office of Human Resources at (801) 536-4284, Telecommunications Relay Service 711, or by email at “lwys@utah.gov”.

Waste Management and Radiation Control Board Meeting  
 Utah Department of Environmental Quality  
 195 North 1950 West (Conference Room #1015) SLC, Utah  
 November 14, 2019  
 1:30 p.m.

Board Members Present: Dennis Riding (Vice-Chair), Scott Baird, Danielle Endres, Marc Franc, Jeremy Hawk, Steve McIff, Vern Rogers and Shane Whitney

Board Members Participating Telephonically: Richard Codell and Nathan Rich

Board Members Absent/Excused: Brett Mickelson (Chair), Shawn Milne

Staff Members Present: Ty Howard, Brent Everett, Thomas Ball, Ed Costomiris, Kimberlee McEwan, Deborah Ng, Arlene Lovato, Rusty Lundberg, Bret Randall, Bill Rees, Alma Rosas, Elisa Smith, Don Verbica, Raymond Wixom and Otis Willoughby

Others Present: Tim Orton and Jason McHann

I. Call to Order.

Dennis Riding (Vice-Chair) welcomed all in attendance and called the meeting to order at 1:30 pm. Brett Mickelson (Chair) and Shawn Milne were excused from the meeting. Richard Codell and Nathan Rich participated telephonically.

II. Public Comments on Agenda Items. — None.

III. Declarations of Conflict of Interest.

Vern Rogers declared a conflict of interest and stated he will not participate in any discussions or vote on Agenda Item IX. A. (EnergySolutions' request for a site-specific treatment variance).

IV. Approval of the Meeting Minutes for the October 10, 2019 Board Meeting (Board Action Item).

**It was moved by Shane Whitney and seconded by Jeremy Hawk and UNANIMOUSLY CARRIED to approve the October 10, 2019 Board Meeting minutes.**

V. Underground Storage Tanks Update.

Brent Everett, Director of the Division of Environmental Response and Remediation (DERR), informed the Board that the cash balance of the Petroleum Storage Tank (PST) Trust Fund at the end of September 2019 was \$15,457,149.00. The preliminary estimate for the cash balance of the PST Trust Fund for the end of October 2019 is \$15,794,912.00. The PST Trust Fund is managed on a cash balance basis to ensure sufficient coverage for known claims that have been reported. The balance of the PST Trust Fund is watched closely to ensure sufficient coverage for covered releases. The PST Trust Fund Actuarial Report has been provided to the Board. There were no comments or questions.

VI. Administrative Rules.

A. Five-Year Review of R311-500 Illegal Drug Operations Site Reporting and Decontamination Act, Decontamination Specialist Certification Program (**Board Action Item**)

Bill Rees, VCP/Brownfields Section Manager, informed the Board that the R311-500 Illegal Drug Operations Site Reporting and Decontamination Specialist Certification Program five-year review has been completed. There was one public comment received. The comment does not impact the five-year review of

the rule. The DEQ will continue to work closely with the Department of Health and local health departments regarding any issues with the decontamination specialist program. Mr. Rees requested authorization to file a Statement of Continuation with the Division of Administrative Rules.

Mr. Riding asked for clarification on the comment received. Mr. Rees stated that the comment had to do with licensure and the type of sites that are able to be worked on. Mr. Rees has discussed these issues with relevant parties and will continue to work within the rules of the program. Mr. Rees indicated that any recommended changes to the program as a result of these discussions, would be brought back to the board for discussion.

**It was moved by Mark Franc and seconded by Steve McIff and UNANIMOUSLY CARRIED to approve filing of the Five-Year Review of R311-500 Illegal Drug Operations Site Reporting and Decontamination Specialist Certification Program.**

VII. X-Ray Program.

- A. Approval of Mammography Imaging Medical Physicists (MIMPs) in accordance with UCA 19-6-104(2)(b) (**Board Action Item**).

Tom Ball, Planning and Technical Support Section Manager, reviewed the request for the Board's approval of two qualified Mammography Imaging Medical Physicists (MIMPs). Mr. Ball stated that individuals referred to as MIMPs must submit an application for review of qualifications to be certified by the Board. These physicists perform radiation surveys and evaluate the quality control programs of the facilities in Utah providing mammography examinations. Typically this is done annually in May because the certification year runs from June 1 to May 31st. Occasionally, the Division receives new applications during the year that need to be approved before the May Board meeting. Recently two individuals filed applications to be certified as MIMPs. The applicants are: Charles W. Spencer, Jr., MS, DABMP and Robert M. Allman, MS, DABSNM.

Division staff has reviewed the applicants' qualifications and both applicants meet the requirements detailed in Utah Administrative Code R313-28-140. In accordance with Subsection 19-6-104(2)(b) of the Utah Code Annotated, the Board shall review the qualifications of, and issue certificates of approval to, individuals who: (i) survey mammography equipment; or (ii) oversee quality assurance practices at mammography facilities. For the Waste Management and Radiation Control Board, this statutory requirement was effective July 1, 2015.

The Director of the Division of Waste Management and Radiation Control recommended the Board issue a certificate of approval for the applicants reviewed and presented to the Board.

**It was motioned by Jeremy Hawk and seconded by Shane Whitney and UNANIMOUSLY CARRIED to approve Charles W. Spencer, Jr., MS, DABMP and Robert M. Allman, MS, DABSNM as Mammography Imaging Medical Physicists (MIMPs) in accordance with UCA 19-6-104-(2)(b).**

VIII. Radioactive Materials.

- A. Approval to proceed with formal rulemaking and a 30-day public comment period for proposed rule changes to Utah Administrative Code (UAC) R313-15-1006, R313-19-100, and R313-36-3 to incorporate regulatory corrections promulgated by the Nuclear Regulatory Commission and published in the December 1, 2015 (80 FR 74974), November 15, 2017 (82 FR 52823),

June 28, 2018 (83 FR 30285), and November 21, 2018 (83 FR 58721) issues of the Federal Register (**Board Action Item**).

Rusty Lundberg, Deputy Director, reviewed the request for the Boards approval to initiate formal rulemaking and receive public comment on proposed changes to UAC R313-15-1006, Transfer for Disposal and Manifests; UAC R313-19-100, Transportation; and UAC R313-36-3, Clarifications or Exceptions of the radiation control rules to incorporate federal regulatory changes promulgated by the Nuclear Regulatory Commission (NRC) and published in the Federal Register on December 1, 2015 (80 FR 74974), November 15, 2017 (82 FR 52823), June 28, 2018 (83 FR 30285), and November 21, 2018 (83 FR 58721).

The proposed changes affect the following sections of the radiation control rules that incorporate by reference the selected sections of the noted parts of the federal radiation control regulations of 10 CFR: UAC R313-15-1006 incorporates Appendix G of 10 CFR Part 20; UAC R313-19-100 incorporates selected sections of 10 CFR Part 71; and UAC R313-36-3 incorporates selected sections of 10 CFR Part 34. The proposed changes update the incorporation-by-reference dates in each of the noted rules. By updating these dates, the minor corrections made by the NRC in the above referenced Federal Registers are incorporated into the state radiation control rules. As an Agreement State with the NRC for the radioactive materials program, Utah is required to maintain regulatory compatibility with the corresponding NRC radioactive materials regulations. While the proposed changes are minor in nature, the NRC designated the changes as necessary for an Agreement State to adopt in order to maintain regulatory compatibility with the NRC.

Mr. Lundberg stated that a more detailed summary of the proposed changes was provided in the rulemaking crosswalk and in each of the rule analysis forms that followed the Executive Summary to the Board in their November 14, 2019 Board packet.

The Board is authorized under Subsection 19-3-104(4)(b) to make rules to meet the requirements of federal law and maintain primacy of the radioactive materials program from the federal government and under Subsection 19-6-104(1) to make rules necessary to implement the Radiation Control Act. The proposed rule changes also meet existing DEQ and state rulemaking procedures.

The Director recommended that the Board authorize the publication of the proposed rule changes in the Utah State Bulletin and commence a 30-day public comment period. With the Board's approval, it is anticipated that the proposed rule changes will be published in the December 1, 2019 issue of the *Utah State Bulletin* with the public comment period beginning on December 1 and ending on December 31, 2019. The proposed rule changes will come back to the Board for final adoption of the rules at a subsequent meeting.

Danielle Endres requested clarification on the rulemaking date/timeframe. As the first rule making proposal was submitted in 2015. Mr. Lundberg stated the more recent rulemakings actions were combined with the older ones to be completed at one time, as all these rule changes are not major or substantial. Typically the Division has a three-year timeframe to adopt rules and if they are substantial changes they are done in a faster timeframe.

**It was motioned by Vern Rogers and seconded by Danielle Endres and UNANIMOUSLY CARRIED to approval to proceed with formal rulemaking and a 30-day public comment period for proposed rule changes to UAC R313-15-1006, UAC R313-19-100, and UAC R313-36-3 of the Radiation Control Rules to incorporate regulatory corrections promulgated by the Nuclear Regulatory Commission, to be published in the December 1, 2019 issue of the *Utah State Bulletin*.**

## IX. Low-Level Radioactive Waste

- A. EnergySolutions' request for a site-specific treatment variance from the Hazardous Waste Management Rules. EnergySolutions seeks authorization to treat waste containing Dioxins and Furans (**Board Action Item**).

Otis Willoughby, Environmental Scientist, Low Level Radioactive Waste Section, reviewed EnergySolutions' request submitted on August 23, 2019, for a one-time site-specific treatment variance from the Utah Administrative Code to receive an ash with Dioxin/Furan contamination. This agenda item was presented to the Board as an information item in the October 10, 2019 Board meeting.

The Mixed Waste Facility proposes to receive up to 100 tons of ash contaminated with metals at varying levels with dioxins and furans as Underlying Hazardous Constituents. If, upon receipt, this waste meets Land Disposal Restrictions for characteristic metals the waste may be directly disposed in the Low-Level Radioactive Waste embankment regardless of dioxin and furan concentrations. However, if the Facility is required to treat the waste for metals to meet the Land Disposal Restrictions for characteristic metals then they are also required to treat the dioxins and furans as Underlying Hazardous Constituents.

EnergySolutions proposes to receive this waste and treat it to meet Land Disposal Restriction standards for the hazardous metals if necessary. EnergySolutions is asking to be relieved of the requirement for treating the dioxins and furans. In order to ensure that this treatment is protective to the environment, EnergySolutions proposed to macroencapsulate the waste for disposal in the Mixed Waste Landfill Cell.

This request is based on the fact that treatment of the dioxin and furan contaminants is contingent only upon the hazardous metal levels. The proposed treatment method will include further encapsulating the waste and protect it from contact with precipitation, thereby decreasing the potential of leaching.

A notice for public comment was published in the *Salt Lake Tribune*, the *Deseret News* and the *Tooele Transcript Bulletin* on September 10, 2019. The comment period began September 10, 2019 and ended October 9, 2019. No comments were received.

The Director recommended approval of this variance request. The Director's recommendation is based on the following findings: the proposed alternative treatment method meets the regulatory basis for a variance and will be as safe to human health and the environment as the required method.

**It was moved by Shane Whitney and seconded by Steve McIff and UNANIMOUSLY CARRIED to approve EnergySolutions' request for a one-time site specific treatment variance from the Utah Administrative Code to receive an ash with Dioxin/Furan contamination. Vern Rogers abstained from voting.**

X. Other Business.

A. Misc. Information Items. – None.

Ty Howard, Director of the Division, informed the Board that Scott Baird, Interim Executive Director of the UDEQ appointment was unanimously approved by the Senate Natural Resources, Agriculture, and Environment Confirmation Committee and is anticipated in the next few weeks to be brought before the Utah Senate for confirmation.

B. Scheduling of next Board meeting.

The next Board meeting is tentatively scheduled for January 9, 2020 at 1:30 p.m. at the Utah Department of Environmental Quality, located at 195 North 1950 West, SLC.

XI. Adjourn.

The meeting adjourned at 1:55 p.m.

**UST STATISTICAL SUMMARY**

**January 1, 2019 -- December 31, 2019**

**PROGRAM**

	January	February	March	April	May	June	July	August	September	October	November	December	(+/-) OR Total
<b>Regulated Tanks</b>	4,062	4,067	4,071	4,071	4,075	4,084	4,083	4,098	4,093	4,092	4,089	4,081	<b>19</b>
<b>Tanks with Certificate of Compliance</b>	4,002	3,998	4,000	4,004	4,005	4,009	4,006	4,022	3,994	3,996	3,997	3,986	<b>(16)</b>
<b>Tanks without COC</b>	60	69	71	67	70	75	77	76	99	96	92	95	<b>35</b>
<b>Cumulative Facilities with Registered A Operators</b>	1,302	1,300	1,298	1,297	1,297	1,298	1,297	1,296	1,293	1,291	1,292	1,292	<b>97.58%</b>
<b>Cumulative Facilities with Registered B Operators</b>	1,304	1,302	1,300	1,298	1,297	1,298	1,297	1,296	1,293	1,291	1,292	1,292	<b>97.58%</b>
<b>New LUST Sites</b>	2	4	3	4	5	4	1	5	6	14	9	6	<b>63</b>
<b>Closed LUST Sites</b>	9	4	2	3	11	2	10	3	2	5	5	3	<b>59</b>
<b>Cumulative Closed LUST Sites</b>	5204	5209	5212	5215	5226	5228	5240	5243	5245	5255	5261	5264	<b>60</b>
<b>FINANCIAL</b>													
	January	February	March	April	May	June	July	August	September	October	November	December	(+/-)
<b>Tanks on PST Fund</b>	2,693	2,689	2,687	2,694	2,692	2,692	2,689	2,696	2,675	2,663	2,661	2,647	<b>(46)</b>
<b>PST Claims (Cumulative)</b>	689	690	690	692	692	692	672	673	673	672	672	673	<b>(16)</b>
<b>Equity Balance</b>	-\$12,233,897	-\$11,795,381	-\$12,311,881	-\$12,373,863	-\$11,754,675	-\$11,876,207	-\$11,102,850	-\$10,785,760	-\$10,680,862	-\$10,323,368	-\$10,502,116	-\$10,575,676	<b>\$1,658,221</b>
<b>Cash Balance</b>	\$13,904,114	\$14,342,630	\$13,826,130	\$13,764,148	\$14,383,336	\$14,261,804	\$15,035,161	\$15,352,251	\$15,457,149	\$15,794,912	\$15,616,114	\$15,542,604	<b>\$1,638,490</b>
<b>Loans</b>	2	2	0	0	1	2	0	1	0	0	0	0	<b>-2</b>
<b>Cumulative Loans</b>	115	117	117	117	118	120	120	121	121	121	121	121	<b>6</b>
<b>Cumulative Amount</b>	\$4,253,415	\$4,317,727	\$4,317,727	\$4,317,727	\$4,617,727	\$4,732,507	\$4,732,507	\$4,738,367	\$4,738,367	\$4,738,367	\$4,738,367	\$4,738,367	<b>\$484,952</b>
<b>Defaults/Amount</b>	1	1	1	1	2	1	1	1	1	1	1	1	<b>0</b>
<b>OPERATIONS</b>													
	January	February	March	April	May	June	July	August	September	October	November	December	TOTAL
<b>Speed Memos</b>	25	16	28	63	49	21	22	18	28	40	40	25	<b>375</b>
<b>Compliance Letters</b>	4	4	10	2	3	2	12	3	0	17	19	2	<b>78</b>
<b>Notice of Intent to Revoke</b>	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
<b>Orders</b>	0	1	0	2	0	2	1	0	0	0	4	3	<b>13</b>

WASTE MANAGEMENT AND RADIATION CONTROL BOARD  
 Executive Summary  
 Public Comment -- Proposed Rule Changes  
 UAC R315-260, R315-262, R315-263, R315-264, and R315-265  
 February 13, 2020

<p><b>What is the issue before the Board?</b></p>	<p>Approval from the Board to proceed with formal rulemaking and public comment on proposed changes to R315-260, R315-262, R315-263, R315-264, and R315-265 of the hazardous waste rules to incorporate federal regulatory changes promulgated by the Environmental Protection Agency (EPA) and published in the Federal Register on January 3, 2018 (83 FR 420).        A copy of the Federal Register can be obtained at the <a href="#">Federal Register website</a>.</p>
<p><b>What is the historical background or context for this issue?</b></p>	<p>In September of 2012, the US Congress passed legislation directing EPA to establish an e-Manifest system. The bill was signed into law in October of 2013. EPA has implemented this law in two rulemakings.</p> <p>The first rulemaking was published in the Federal Register on February 7, 2014 (79 FR 7518) and has already been adopted into R315 of the Utah Administrative Code. The issue before the Board is the second rulemaking as discussed above. This rule contains a schedule of user fees to cover EPA's cost of building and running the e-Manifest system and e-Manifest program. The rule announced the date when the system became active, June 30, 2018, and EPA began to accept electronic manifests. The rule addresses which users of manifests will be charged fees and when those fees will be charged. The rule also contains the fee formula.</p> <p>Many of the requirements in this rule can only be administered and enforced by EPA. Those that are not solely administered and enforced by EPA were promulgated under the authority of Section 2(g)(3) of the e-Manifest Act. This authority is similar to Section 3006(g) of RCRA which provides that EPA shall carry out regulations promulgated under the Act in each state unless the state program is fully authorized to carry out such regulations in lieu of EPA. The State of Utah is a fully authorized state. However; because the hazardous waste manifest is an area subject to special program consistency considerations and section 2(g)(3) of the e-Manifest Act requires that all federal requirements promulgated under e-Manifest Act authority be given consistent effect in all states, authorized State programs are still required to adopt the e-Manifest provisions into their rules in order to maintain equivalency with the Federal program. The purpose of this change is to adopt the appropriate revisions into R315 of the Utah Administrative Code.</p>

	<p>As part of the Divisions on-going efforts to adopt the necessary sections of 40 CFR 265 into R315-265 instead of incorporating them all by reference, R315-265-1030 through 1035 and R315-265-1080 through 1090 are being adopted into R315-265 with this rulemaking because they were referenced by rules being revised or were being revised themselves by this rulemaking.</p> <p>The proposed changes to R315-260, 262, 263, 264, and 265 follow this Executive Summary.</p>
<b>What is the governing statutory or regulatory citation?</b>	<p>The Board is authorized under Subsection 19-6-105(1)(c) to make rules governing generators and transporters of hazardous waste and owners and operators of hazardous waste treatment, storage and disposal facilities.</p> <p>The rule changes also meet existing DEQ and state rulemaking procedures.</p>
<b>Is Board action required?</b>	<p>Yes. Board approval is necessary to begin the formal rulemaking process by filing the appropriate documents with the Office of Administrative Rules for publishing the proposed rule changes in the <i>Utah State Bulletin</i> and conducting a public comment period.</p>
<b>What is the Division Director's recommendation?</b>	<p>The Director recommends the Board approve proceeding with formal rulemaking and public comment by publishing in the March 1, 2020, <i>Utah State Bulletin</i> the proposed changes to UAC R315-260, 262, 263, 264, and 265 and conducting a public comment period from March 1 to March 31, 2020.</p>
<b>Where can more information be obtained?</b>	<p>Please contact Tom Ball (801-536-0251, <a href="mailto:tball@utah.gov">tball@utah.gov</a>) or Rusty Lundberg (801-536-4257, <a href="mailto:rlundberg@utah.gov">rlundberg@utah.gov</a>).</p>

**R315. Environmental Quality, Waste Management and Radiation Control, Waste Management.**

**R315-260. Hazardous Waste Management System.**

**R315-260-[4]3. References to Other Statutes and Regulations.**

(a) Federal statutes and regulations that are cited in Rules R315-260 through 266, 268, 270, 273 and 124 that are not specifically adopted by reference shall be used as guidance in interpreting the Rules R315-260 through 266, 268, 270, 273 and 124.

(b) Any reference to the "Department of Transportation" or "DOT" in Rules R315-260 through 266, 268, 270, 273 and 124 shall mean the "U.S. Department of Transportation".

**R315-260-4. Manifest Copy Submission Requirements for Certain Interstate Waste Shipments.**

(a) In any case in which the state in which waste is generated, or the state in which waste will be transported to a designated facility, requires that the waste be regulated as a hazardous waste or otherwise be tracked through a hazardous waste manifest, the designated facility that receives the waste shall, regardless of the state in which the facility is located:

- (1) Complete the facility portion of the applicable manifest;
- (2) Sign and date the facility certification;
- (3) Submit to the e-Manifest system a final copy of the manifest for data processing purposes; and
- (4) Pay the appropriate per manifest fee to EPA for each manifest submitted to the e-Manifest system, subject to the fee determination methodology, payment methods, dispute procedures, sanctions, and other fee requirements specified in 40 CFR 264.1300 through 264.1316, which are adopted and incorporated by reference.

**R315-260-5. Applicability of Electronic Manifest System and User Fee Requirements to Facilities Receiving State-Only Regulated Waste Shipments.**

(a) For purposes of Section R315-260-5, "state-only regulated waste" means:

- (1) A non-RCRA waste that a state regulates more broadly under its state regulatory program, or
- (2) A RCRA hazardous waste that is federally exempt from manifest requirements, but not exempt from manifest requirements under state law.

(b) In any case in which a state requires a RCRA manifest to be used under state law to track the shipment and transportation of a state-only regulated waste to a receiving facility, the facility receiving such a waste shipment for management shall:

- (1) Comply with the provisions of Section R315-264-71, use of the manifest, and Section R315-264-72, manifest discrepancies; and

(2) Pay the appropriate per manifest fee to EPA for each manifest submitted to the e-Manifest system, subject to the fee determination methodology, payment methods, dispute procedures, sanctions, and other fee requirements specified in 40 CFR 264.1300 through 264.1316, which are adopted and incorporated by reference.

**R315-260-[5]6. Inspections.**

Any duly authorized officer, employee or representative of the Department or the Director may, in accordance with Section 19-6-109, enter upon and inspect any property, premise, or place on or at which solid or hazardous wastes are generated, transported, stored, treated or disposed of for the purpose of ascertaining the compliance with Rules R315-15, R315-101, R315-124, R315-260 through 266, R315-268, R315-270, and R315-273. Inspectors may also inspect any waste and obtain samples thereof, including samples from any vehicle in which wastes are being transported or samples of any containers or labels. Inspectors may also have access to and the right to make copies of any records, either in hard copy or electronic format, relating to compliance with Rules R315-15, R315-101, R315-124, R315-260 through 266, R315-268, R315-270, and R315-273. Inspectors may also take photographs and make video and audio recordings while conducting authorized activities.

**KEY: hazardous waste**

**Date of Enactment or Last Substantive Amendment: October 15, 2019**  
**Authorizing, and Implemented or Interpreted Law: 19-1-301; 19-6-105; 19-6-106**

**R315. Environmental Quality, Waste Management and Radiation Control, Waste Management.**

**R315-262. Hazardous Waste Generator Requirements.**

**R315-262-20. Manifest Requirements Applicable to Small and Large Quantity Generators -- General Requirements.**

(a) (1) A generator who transports, or offers for transport a hazardous waste for offsite treatment, storage, or disposal, or a treatment, storage, and disposal facility who offers for transport a rejected hazardous waste load, shall prepare a Manifest (OMB Control number 2050-0039) on EPA Form 8700-22, and, if necessary, EPA Form 8700-22A [~~, according to the instructions included in the appendix to Rule R315-262~~].

(2) Reserved.

(3) Electronic manifest. In lieu of using the manifest form specified in Subsection R315-262-20(a) (1), a person required to prepare a manifest under Subsection R315-262-20(a) (1) may prepare and use an electronic manifest, provided that the person:

(i) Complies with the requirements in Section R315-262-24 for use of electronic manifests, and

(ii) Complies with the requirements of 40 CFR 3.10 for the reporting of electronic documents to EPA.

(b) A generator shall designate on the manifest one facility which is permitted to handle the waste described on the manifest.

(c) A generator may also designate on the manifest one alternate facility which is permitted to handle his waste in the event an emergency prevents delivery of the waste to the primary designated facility.

(d) If the transporter is unable to deliver the hazardous waste to the designated facility or the alternate facility, the generator shall either designate another facility or instruct the transporter to return the waste.

(e) The requirements of Section R315-262-20 through 27 do not apply to hazardous waste produced by generators of greater than 100 kg but less than 1000 kg in a calendar month where:

(1) The waste is reclaimed under a contractual agreement pursuant to which:

(i) The type of waste and frequency of shipments are specified in the agreement;

(ii) The vehicle used to transport the waste to the recycling facility and to deliver regenerated material back to the generator is owned and operated by the reclaimer of the waste; and

(2) The generator maintains a copy of the reclamation agreement in his files for a period of at least three years after termination or expiration of the agreement.

(f) The requirements of Sections R315-262-20 through 27 and Subsection R315-262-32(b) do not apply to the transport of hazardous

wastes on a public or private right-of-way within or along the border of contiguous property under the control of the same person, even if such contiguous property is divided by a public or private right-of-way. Notwithstanding Subsection R315-263-10(a), the generator or transporter shall comply with the requirements for transporters set forth in Sections R315-263-30 and 31 in the event of a discharge of hazardous waste on a public or private right-of-way.

**R315-262-21. Manifest Requirements Applicable to Small and Large Quantity Generators -- Manifest Tracking Numbers, Manifest Printing, and Obtaining Manifests.**

(a) (1) A registrant may not print, or have printed, the manifest for use of distribution unless it has received approval from the EPA Director of the Office of Resource Conservation and Recovery to do so under Subsection R315-262-21(c) and (e).

(2) The approved registrant is responsible for ensuring that the organizations identified in its application are in compliance with the procedures of its approved application and the requirements of Section R315-262-21. The registrant is responsible for assigning manifest tracking numbers to its manifests.

(b) A registrant shall submit an initial application to the EPA Director of the Office of Resource Conservation and Recovery that contains the following information:

- (1) Name and mailing address of registrant;
- (2) Name, telephone number and email address of contact person;
- (3) Brief description of registrant's government or business activity;
- (4) EPA identification number of the registrant, if applicable;
- (5) Description of the scope of the operations that the registrant plans to undertake in printing, distributing, and using its manifests, including:

(i) A description of the printing operation. The description should include an explanation of whether the registrant intends to print its manifests in-house, i.e., using its own printing establishments, or through a separate, i.e., unaffiliated, printing company. If the registrant intends to use a separate printing company to print the manifest on its behalf, the application shall identify this printing company and discuss how the registrant will oversee the company. If this includes the use of intermediaries, e.g., prime and subcontractor relationships, the role of each shall be discussed. The application shall provide the name and mailing address of each company. It also shall provide the name and telephone number of the contact person at each company.

(ii) A description of how the registrant will ensure that its organization and unaffiliated companies, if any, comply with the requirements of Section R315-262-21. The application shall discuss how the registrant will ensure that a unique manifest tracking number

will be pre-printed on each manifest. The application shall describe the internal control procedures to be followed by the registrant and unaffiliated companies to ensure that numbers are tightly controlled and remain unique. In particular, the application shall describe how the registrant will assign manifest tracking numbers to its manifests. If computer systems or other infrastructure will be used to maintain, track, or assign numbers, these should be indicated. The application shall also indicate how the printer will pre-print a unique number on each form, e.g., crash or press numbering. The application also shall explain the other quality procedures to be followed by each establishment and printing company to ensure that all required print specifications are consistently achieved and that printing violations are identified and corrected at the earliest practicable time.

(iii) An indication of whether the registrant intends to use the manifests for its own business operations or to distribute the manifests to a separate company or to the general public, e.g., for purchase.

(6) A brief description of the qualifications of the company that will print the manifest. The registrant may use readily available information to do so, e.g., corporate brochures, product samples, customer references, documentation of ISO certification, so long as such information pertains to the establishments or company being proposed to print the manifest.

(7) Proposed unique three-letter manifest tracking number suffix. If the registrant is approved to print the manifest, the registrant shall use this suffix to pre-print a unique manifest tracking number on each manifest.

(8) A signed certification by a duly authorized employee of the registrant that the organizations and companies in its application will comply with the procedures of its approved application and the requirements of Section R315-262-21 and that it will notify the EPA Director of the Office of Resource Conservation and Recovery of any duplicated manifest tracking numbers on manifests that have been used or distributed to other parties as soon as this becomes known.

(c) EPA shall review the application submitted under Subsection R315-262-21(b) and either approve it or request additional information or modification before approving it.

(d)(1) Upon EPA approval of the application under Subsection R315-262-21(c), EPA shall provide the registrant an electronic file of the manifest, continuation sheet, and manifest instructions and ask the registrant to submit three fully assembled manifests and continuation sheet samples, except as noted in Subsection R315-262-21(d)(3). The registrant's samples shall meet all of the specifications in Subsection R315-262-21(f) and be printed by the company that will print the manifest as identified in the application approved under Subsection R315-262-21(c).

(2) The registrant shall submit a description of the manifest

samples as follows:

(i) Paper type, i.e., manufacturer and grade of the manifest paper;

(ii) Paper weight of each copy;

(iii) Ink color of the manifest's instructions. If screening of the ink was used, the registrant shall indicate the extent of the screening; and

(iv) Method of binding the copies.

(3) The registrant need not submit samples of the continuation sheet if it will print its continuation sheet using the same paper type, paper weight of each copy, ink color of the instructions, and binding method as its manifest form samples.

(e) EPA shall evaluate the forms and either approve the registrant to print them as proposed or request additional information or modification to them before approval. EPA shall notify the registrant of its decision by mail. The registrant cannot use or distribute its forms until EPA approves them. An approved registrant shall print the manifest and continuation sheet according to its application approved under Subsection R315-262-21(c) and the manifest specifications in Subsection R315-262-21(f). It also shall print the forms according to the paper type, paper weight, ink color of the manifest instructions and binding method of its approved forms.

(f) Paper manifests and continuation sheets shall be printed according to the following specifications:

(1) The manifest and continuation sheet shall be printed with the exact format and appearance as EPA Forms 8700-22 and 8700-22A, respectively. However, information required to complete the manifest may be pre-printed on the manifest form.

(2) A unique manifest tracking number assigned in accordance with a numbering system approved by EPA shall be pre-printed in Item 4 of the manifest. The tracking number shall consist of a unique three-letter suffix following nine digits.

(3) The manifest and continuation sheet shall be printed on 8 1/2 x 11-inch white paper, excluding common stubs, e.g., top- or side-bound stubs. The paper shall be durable enough to withstand normal use.

(4) The manifest and continuation sheet shall be printed in black ink that can be legibly photocopied, scanned, or faxed, except that the marginal words indicating copy distribution shall be printed with a distinct ink color or with another method; e.g., white text against black background in text box, or, black text against grey background in text box; that clearly distinguishes the copy distribution notations from the other text and data entries on the form.

(5) The manifest and continuation sheet shall be printed as ~~six~~ five-copy forms. Copy-to-copy registration shall be exact within 1/32 ~~[-]~~nd of an inch. Handwritten and typed impressions on the form shall be legible on all ~~six~~ five copies. Copies shall be bound

together by one or more common stubs that reasonably ensure that they will not become detached inadvertently during normal use.

(6) Each copy of the manifest and continuation sheet shall indicate how the copy shall be distributed, as follows:

(i) Page 1, top copy: "Designated facility to ~~[destination State, if required]~~ EPA's e-Manifest system" ~~[-];~~;

(ii) Page 2: "Designated facility to generator ~~[-State, if required]~~" ~~[-];~~;

(iii) Page 3: "Designated facility copy ~~[to generator]~~" ~~[-];~~;

(iv) Page 4: "~~Designated facility's~~ Transporter copy" ~~[-];~~; and

(v) Page 5, bottom copy: "~~Transporter's~~ Generator's initial copy".

~~[-(vi) Page 6 (bottom copy): "Generator's initial copy".]~~

(7) The instructions for the manifest form, EPA Form 8700-22, and the manifest continuation sheet, EPA Form 8700-22A, shall be printed in accordance with the content that is currently approved under OMB Control Number 2050-0039 and published to the e-Manifest program's web site. The instructions ~~[in the appendix to Rule R315-262-]~~ shall appear legibly on the back of the copies of the manifest and continuation sheet as provided in Subsection R315-262-21(f). The instructions shall not be visible through the front of the copies when photocopied or faxed.

(i) Manifest ~~[EPA-]~~ Form 8700-22.

(A) The "Instructions for Generators" on Copy ~~[6]5;~~

(B) The "Instructions for International Shipment Block" and "Instructions for Transporters" on Copy ~~[5]4;~~ and

(C) The "Instructions for Treatment, Storage, and Disposal Facilities" on Copy ~~[4]3.~~

(ii) Manifest ~~[EPA-]~~ Form 8700-22A.

(A) The "Instructions for Generators" on Copy ~~[6]5;~~

(B) The "Instructions for Transporters" on Copy ~~[5]4;~~ and

(C) The "Instructions for Treatment, Storage, and Disposal Facilities" on Copy ~~[4]3.~~

(8) The designated facility copy of each manifest and continuation sheet shall include in the bottom margin the following warning in prominent font: "If you received this manifest, you have responsibilities under the e-Manifest Act. See instructions on reverse side."

(g) (1) A generator may use manifests printed by any source so long as the source of the printed form has received approval from EPA to print the manifest under Subsections R315-262-21(c) and (e). A registered source may be a:

(i) State agency;

(ii) Commercial printer;

(iii) Hazardous waste generator, transporter or TSDf; or

(iv) Hazardous waste broker or other preparer who prepares or arranges shipments of hazardous waste for transportation.

(2) A generator shall determine whether the generator state or the consignment state for a shipment regulates any additional wastes, beyond those regulated Federally, as hazardous wastes under these states' authorized programs. Generators also shall determine whether the consignment state or generator state requires the generator to submit any copies of the manifest to these states. In cases where the generator shall supply copies to either the generator's state or the consignment state, the generator is responsible for supplying legible photocopies of the manifest to these states.

(h) (1) If an approved registrant would like to update any of the information provided in its application approved under Subsection R315-262-21(c), e.g., to update a company phone number or name of contact person, the registrant shall revise the application and submit it to the EPA Director of the Office of Resource Conservation and Recovery, along with an indication or explanation of the update, as soon as practicable after the change occurs. The Agency either shall approve or deny the revision. If the Agency denies the revision, it shall explain the reasons for the denial, and it shall contact the registrant and request further modification before approval.

(2) If the registrant would like a new tracking number suffix, the registrant shall submit a proposed suffix to the EPA Director of the Office of Resource Conservation and Recovery, along with the reason for requesting it. The Agency shall either approve the suffix or deny the suffix and provide an explanation why it is not acceptable.

(3) If a registrant would like to change the paper type, paper weight, ink color of the manifest instructions, or binding method of its manifest or continuation sheet subsequent to approval under Subsection R315-262-21(e), then the registrant shall submit three samples of the revised form for EPA review and approval. If the approved registrant would like to use a new printer, the registrant shall submit three manifest samples printed by the new printer, along with a brief description of the printer's qualifications to print the manifest. EPA shall evaluate the manifests and either approve the registrant to print the forms as proposed or request additional information or modification to them before approval. EPA shall notify the registrant of its decision by mail. The registrant cannot use or distribute its revised forms until EPA approves them.

(i) If, subsequent to its approval under Subsection R315-262-21(e), a registrant typesets its manifest or continuation sheet instead of using the electronic file of the forms provided by EPA, it shall submit three samples of the manifest or continuation sheet to the registry for approval. EPA shall evaluate the manifests or continuation sheets and either approve the registrant to print them as proposed or request additional information or modification to them before approval. EPA shall notify the registrant of its decision by mail. The registrant cannot use or distribute its typeset forms until EPA approves them.

(j) EPA may exempt a registrant from the requirement to submit form samples under Subsection R315-262-21(d) or (h)(3) if the Agency is persuaded that a separate review of the registrant's forms would serve little purpose in informing an approval decision; e.g., a registrant certifies that it will print the manifest using the same paper type, paper weight, ink color of the instructions and binding method of the form samples approved for some other registrant. A registrant may request an exemption from EPA by indicating why an exemption is warranted.

(k) An approved registrant shall notify EPA by phone or email as soon as it becomes aware that it has duplicated tracking numbers on any manifests that have been used or distributed to other parties.

(l) If, subsequent to approval of a registrant under Subsection R315-262-21(e), EPA becomes aware that the approved paper type, paper weight, ink color of the instructions, or binding method of the registrant's form is unsatisfactory, EPA shall contact the registrant and require modifications to the form.

(m)(1) EPA may suspend and, if necessary, revoke printing privileges if we find that the registrant:

(i) Has used or distributed forms that deviate from its approved form samples in regard to paper weight, paper type, ink color of the instructions, or binding method; or

(ii) Exhibits a continuing pattern of behavior in using or distributing manifests that contain duplicate manifest tracking numbers.

(2) EPA shall send a warning letter to the registrant that specifies the date by which it shall come into compliance with the requirements. If the registrant does not come in compliance by the specified date, EPA shall send a second letter notifying the registrant that EPA has suspended or revoked its printing privileges. An approved registrant shall provide information on its printing activities to EPA if requested.

**R315-262-24. Manifest Requirements Applicable to Small and Large Quantity Generators -- Use of the Electronic Manifest.**

(a) Legal equivalence to paper manifests. Electronic manifests that are obtained, completed, and transmitted in accordance with Subsection R315-262-20(a)(3), and used in accordance with Section R315-262-24 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.

(1) 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 Section R315-262-25.

(2) 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.

(3) 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 or Utah inspector.

(4) No generator may be held liable for the inability to produce an electronic manifest for inspection under Section R315-262-24 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.

(b) 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.

(c) Restriction on use of electronic manifests. A generator may [prepare]use 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 use of the electronic manifest, except that: [-system.]

(1) A generator may sign by hand and retain a paper copy of the electronic manifest signed by hand by the initial transporter, in lieu of executing the generator copy electronically, thereby enabling the transporter and subsequent waste handlers to execute the remainder of the manifest copies electronically.

(d) 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 shall also provide the initial transporter with one printed copy of the electronic manifest.

(e) 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 shall 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 the appendix to Rule R315-262], and use these paper forms from this point forward in accordance with the requirements of Section R315-262-23.

(f) 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 Subsection R315-262-24(d).

~~(g) Reserved[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. 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 Rule R315-262].~~

(h) Post-receipt manifest data corrections. After facilities have certified to the receipt of hazardous wastes by signing Item 20 of the manifest, any post-receipt data corrections may be submitted at any time by any interested person, such as the waste handler, named on the manifest. Generators may participate electronically in the post-receipt data corrections process by following the process described in Subsection R315-264-71(l), which applies to corrections made to either paper or electronic manifest records.

**R315-262-40. Recordkeeping and Reporting Applicable to Small and Large Quantity Generators -- Recordkeeping.**

(a) A generator shall keep a copy of each manifest signed in accordance with Subsection R315-262-23(a) for three years or until he receives a signed copy from the designated facility which received the waste. This signed copy shall be retained as a record for at least three years from the date the waste was accepted by the initial transporter.

(b) A generator shall keep a copy of each Biennial Report and Exception Report for a period of at least three years from the due date of the report.

(c) A generator shall follow Subsection R315-262-11(f) for recordkeeping requirements for documenting hazardous waste determinations.

(d) The periods or retention referred to in Section R315-262-40 are extended automatically during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Director.

(e) Records maintained in accordance with Section R315-262-40 and any other records which the Director deems necessary to determine quantities and disposition of hazardous waste or other determinations,

test results, or waste analyses made in accordance with R315-262-11 shall be available for inspection by any duly authorized officer, employee or representative of the Department or the Director as provided in R315-260-[5]6 for a period of at least three years from the date the waste was last sent to on-site or off-site treatment, storage, or disposal facilities.

**~~[R315-262-217. Appendix to Rule R315-262 -- Uniform Hazardous Waste Manifest and Instructions (EPA Forms 8700-22 and 8700-22A and Their Instructions).~~**

~~U.S. EPA Forms 8700-22 and Manifest Continuation Sheet (EPA Form 8700-22A) found in appendix to 40 CFR 262, 2015 edition, are incorporated and incorporated by reference.~~

~~Read all instructions before completing this form.~~

~~1. This form has been designed for use on a 12-pitch (elite) typewriter which is also compatible with standard computer printers; a firm point pen may also be used — press down hard.~~

~~2. Federal regulations require generators and transporters of hazardous waste and owners or operators of hazardous waste treatment, storage, and disposal facilities to complete this form (FORM 8700-22) and, if necessary, the continuation sheet (FORM 8700-22A) for both inter- and intrastate transportation of hazardous waste.~~

~~Manifest 8700-22~~

~~The following statement shall be included with each Uniform Hazardous Waste Manifest, either on the form, in the instructions to the form, or accompanying the form:~~

~~Public reporting burden for this collection of information is estimated to average: 30 minutes for generators, 10 minutes for transporters, and 25 minutes for owners or operators of treatment, storage, and disposal facilities. This includes time for reviewing instructions, gathering data, completing, reviewing and transmitting the form. Any correspondence regarding the PRA burden statement for the manifest shall be sent to the Director of the Collection Strategies Division in EPA's Office of Information Collection at the following address: U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW., Washington, DC 20460. Do not send the completed form to this address.~~

~~I. Instructions for Generators~~

~~Manifest 8700-22~~

~~The following statement shall be included with each Uniform Hazardous Waste Manifest, either on the form, in the instructions to the form, or accompanying the form:~~

~~Public reporting burden for this collection of information is estimated to average: 30 minutes for generators, 10 minutes for transporters, and 25 minutes for owners or operators of treatment, storage, and disposal facilities. This includes time for reviewing instructions, gathering data, completing, reviewing and transmitting~~

the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch (2136), U.S. Environmental Protection Agency, Ariel Rios Building, 1200 Pennsylvania Ave., NW., Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

Item 1. Generator's U.S. EPA Identification Number

Enter the generator's U.S. EPA twelve digit identification number, or the State generator identification number if the generator site does not have an EPA identification number.

Item 2. Page 1 of

Enter the total number of pages used to complete this Manifest (i.e., the first page (EPA Form 8700-22) plus the number of Continuation Sheets (EPA Form 8700-22A), if any).

Item 3. Emergency Response Phone Number

Enter a phone number for which emergency response information can be obtained in the event of an incident during transportation. The emergency response phone number shall:

1. Be the number of the generator or the number of an agency or organization who is capable of and accepts responsibility for providing detailed information about the shipment;

2. Reach a phone that is monitored 24 hours a day at all times the waste is in transportation (including transportation related storage); and

3. Reach someone who is either knowledgeable of the hazardous waste being shipped and has comprehensive emergency response and spill cleanup/incident mitigation information for the material being shipped or has immediate access to a person who has that knowledge and information about the shipment.

Note: Emergency Response phone number information should only be entered in Item 3 when there is one phone number that applies to all the waste materials described in Item 9b. If a situation (e.g., consolidated shipments) arises where more than one Emergency Response phone number applies to the various wastes listed on the manifest, the phone numbers associated with each specific material should be entered after its description in Item 9b.

Item 4. Manifest Tracking Number

This unique tracking number shall be pre-printed on the manifest by the forms printer.

Item 5. Generator's Mailing Address, Phone Number and Site Address

Enter the name of the generator, the mailing address to which the completed manifest signed by the designated facility should be mailed, and the generator's telephone number. Note, the telephone number (including area code) should be the normal business number for the generator, or the number where the generator or his authorized agent may be reached to provide instructions in the event the designated

and/or alternate (if any) facility rejects some or all of the shipment. Also enter the physical site address from which the shipment originates only if this address is different than the mailing address.

Item 6. Transporter 1 Company Name, and U.S. EPA ID Number

Enter the company name and U.S. EPA ID number of the first transporter who will transport the waste. Vehicle or driver information may not be entered here.

Item 7. Transporter 2 Company Name and U.S. EPA ID Number

If applicable, enter the company name and U.S. EPA ID number of the second transporter who will transport the waste. Vehicle or driver information may not be entered here.

If more than two transporters are needed, use a Continuation Sheet(s) (EPA Form 8700-22A).

Item 8. Designated Facility Name, Site Address, and U.S. EPA ID Number

Enter the company name and site address of the facility designated to receive the waste listed on this manifest. Also enter the facility's phone number and the U.S. EPA twelve digit identification number of the facility.

Item 9. U.S. DOT Description (Including Proper Shipping Name, Hazard Class or Division, Identification Number, and Packing Group)

Item 9a. If the wastes identified in Item 9b consist of both hazardous and nonhazardous materials, then identify the hazardous materials by entering an "X" in this Item next to the corresponding hazardous material identified in Item 9b.

If applicable, enter the name of the person accepting the waste on behalf of the second transporter. That person shall acknowledge acceptance of the waste described on the manifest by signing and entering the date of receipt.

Item 9b. Enter the U.S. DOT Proper Shipping Name, Hazard Class or Division, Identification Number (UN/NA) and Packing Group for each waste as identified in 49 CFR 172. Include technical name(s) and reportable quantity references, if applicable.

Note: If additional space is needed for waste descriptions, enter these additional descriptions in Item 27 on the Continuation Sheet (EPA Form 8700-22A). Also, if more than one Emergency Response phone number applies to the various wastes described in either Item 9b or Item 27, enter applicable Emergency Response phone numbers immediately following the shipping descriptions for those Items.

Item 10. Containers (Number and Type)

Enter the number of containers for each waste and the appropriate abbreviation from Table I (below) for the type of container.

#### TABLE I

#### Types of Containers

BA = Burlap, cloth, paper, or plastic bags.  
 CF = Fiber or plastic boxes, cartons, cases.  
 CM = Metal boxes, cartons, cases (including roll-offs).  
 CW = Wooden boxes, cartons, cases.  
 CY = Cylinders.  
 DF = Fiberboard or plastic drums, barrels, kegs.  
 DM = Metal drums, barrels, kegs.  
 DT = Dump truck.  
 DW = Wooden drums, barrels, kegs.  
 HG = Hopper or gondola cars.  
 TC = Tank cars.  
 TP = Portable tanks.  
 TT = Cargo tanks (tank trucks).

Item 11. Total Quantity

Enter, in designated boxes, the total quantity of waste. Round partial units to the nearest whole unit, and do not enter decimals or fractions. To the extent practical, report quantities using appropriate units of measure that will allow you to report quantities with precision. Waste quantities entered should be based on actual measurements or reasonably accurate estimates of actual quantities shipped. Container capacities are not acceptable as estimates.

Item 12. Units of Measure (Weight/Volume)

Enter, in designated boxes, the appropriate abbreviation from Table II (below) for the unit of measure.

TABLE II

Units of Measure

G = Gallons (liquids only).  
 K = Kilograms.  
 L = Liters (liquids only).  
 M = Metric Tons (1000 kilograms).  
 N = Cubic Meters.  
 P = Pounds.  
 T = Tons (2000 pounds).  
 Y = Cubic Yards.

Note: Tons, Metric Tons, Cubic Meters, and Cubic Yards should only be reported in connection with very large bulk shipments, such as rail cars, tank trucks, or barges.

Item 13. Waste Codes

Enter up to six federal and state waste codes to describe each waste stream identified in Item 9b. State waste codes that are not redundant with federal codes shall be entered here, in addition to the

federal waste codes which are most representative of the properties of the waste.

Item 14. Special Handling Instructions and Additional Information.

1. Generators may enter any special handling or shipment-specific information necessary for the proper management or tracking of the materials under the generator's or other handler's business processes, such as waste profile numbers, container codes, bar codes, or response guide numbers. Generators also may use this space to enter additional descriptive information about their shipped materials, such as chemical names, constituent percentages, physical state, or specific gravity of wastes identified with volume units in Item 12.

2. This space may be used to record limited types of federally required information for which there is no specific space provided on the manifest, including any alternate facility designations; the manifest tracking number of the original manifest for rejected wastes and residues that are re-shipped under a second manifest; and the specification of PCB waste descriptions and PCB out-of-service dates required under 40 CFR 761.207. Generators, however, cannot be required to enter information in this space to meet state regulatory requirements.

Item 15. Generator's/Officer's Certifications

1. The generator shall read, sign, and date the waste minimization certification statement. In signing the waste minimization certification statement, those generators who have not been exempted by statute or regulation from the duty to make a waste minimization certification under section 3002(b) of RCRA are also certifying that they have complied with the waste minimization requirements. The Generator's Certification also contains the required attestation that the shipment has been properly prepared and is in proper condition for transportation (the shipper's certification). The content of the shipper's certification statement is as follows: "I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked, and labeled/placarded, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent." When a party other than the generator prepares the shipment for transportation, this party may also sign the shipper's certification statement as the offeror of the shipment.

2. Generator or Offeror personnel may preprint the words, "On behalf of" in the signature block or may hand write this statement in the signature block prior to signing the generator/offeror certification, to indicate that the individual signs as the employee

or agent of the named principal.

Note: All of the above information except the handwritten signature required in Item 15 may be pre-printed.

## II. Instructions for International Shipment Block

### Item 16. International Shipments

For export shipments, the primary exporter shall check the export box, and enter the point of exit (city and state) from the United States. For import shipments, the importer shall check the import box and enter the point of entry (city and state) into the United States.

## III. Instructions for Transporters

### Item 17. Transporters' Acknowledgments of Receipt

Enter the name of the person accepting the waste on behalf of the first transporter. That person shall acknowledge acceptance of the waste described on the manifest by signing and entering the date of receipt. Only one signature per transportation company is required. Signatures are not required to track the movement of wastes in and out of transfer facilities, unless there is a change of custody between transporters.

If applicable, enter the name of the person accepting the waste on behalf of the second transporter. That person shall acknowledge acceptance of the waste described on the manifest by signing and entering the date of receipt.

Note: Transporters carrying imports, who are acting as importers, may have responsibilities to enter information in the International Shipments Block. Transporters carrying exports may also have responsibilities to enter information in the International Shipments Block. See above instructions for Item 16.

## IV. Instructions for Owners and Operators of Treatment, Storage, and Disposal Facilities

### Item 18. Discrepancy

#### Item 18a. Discrepancy Indication Space

1. The authorized representative of the designated (or alternate) facility's owner or operator shall note in this space any discrepancies between the waste described on the Manifest and the waste actually received at the facility. Manifest discrepancies are: significant differences (as defined by Subsections R315-264-72(b) and R315-265-72(b)), between the quantity or type of hazardous waste designated on the manifest or shipping paper, and the quantity and type of hazardous waste a facility actually receives, rejected wastes, which may be a full or partial shipment of hazardous waste that the TSDF cannot accept, or container residues, which are residues that exceed the quantity limits for "empty" containers set forth in Subsection R315-261-7(b).

2. For rejected loads and residues (Subsections R315-264-72(d), (e), and (f), or R315-265-72(d), (e), or (f)), check the appropriate box if the shipment is a rejected load (i.e., rejected by the designated and/or alternate facility and is sent to an alternate facility or

returned to the generator) or a regulated residue that cannot be removed from a container. Enter the reason for the rejection or the inability to remove the residue and a description of the waste. Also, reference the manifest tracking number for any additional manifests being used to track the rejected waste or residue shipment on the original manifest. Indicate the original manifest tracking number in Item 14, the Special Handling Block and Additional Information Block of the additional manifests.

3. Owners or operators of facilities located in unauthorized States (i.e., states in which the U.S. EPA administers the hazardous waste management program) who cannot resolve significant differences in quantity or type within 15 days of receiving the waste shall submit to their Regional Administrator a letter with a copy of the Manifest at issue describing the discrepancy and attempts to reconcile it (Subsections R315-264-72(c) and R315-265-72(c)).

4. Owners or operators of facilities located in authorized States (i.e., those States that have received authorization from the U.S. EPA to administer the hazardous waste management program) should contact their State agency for information on where to report discrepancies involving "significant differences" to state officials.

Item 18b. Alternate Facility (or Generator) for Receipt of Full Load Rejections

Enter the name, address, phone number, and EPA Identification Number of the Alternate Facility which the rejecting TSDF has designated, after consulting with the generator, to receive a fully rejected waste shipment. In the event that a fully rejected shipment is being returned to the generator, the rejecting TSDF may enter the generator's site information in this space. This field is not to be used to forward partially rejected loads or residue waste shipments.

Item 18c. Alternate Facility (or Generator) Signature

The authorized representative of the alternate facility (or the generator in the event of a returned shipment) shall sign and date this field of the form to acknowledge receipt of the fully rejected wastes or residues identified by the initial TSDF.

Item 19. Hazardous Waste Report Management Method Codes

Enter the most appropriate Hazardous Waste Report Management Method code for each waste listed in Item 9. The Hazardous Waste Report Management Method code is to be entered by the first treatment, storage, or disposal facility (TSDF) that receives the waste and is the code that best describes the way in which the waste is to be managed when received by the TSDF.

Item 20. Designated Facility Owner or Operator Certification of Receipt (Except As Noted in Item 18a)

Enter the name of the person receiving the waste on behalf of the owner or operator of the facility. That person shall acknowledge receipt or rejection of the waste described on the Manifest by signing and entering the date of receipt or rejection where indicated. Since

the Facility Certification acknowledges receipt of the waste except as noted in the Discrepancy Space in Item 18a, the certification should be signed for both waste receipt and waste rejection, with the rejection being noted and described in the space provided in Item 18a. Fully rejected wastes may be forwarded or returned using Item 18b after consultation with the generator. Enter the name of the person accepting the waste on behalf of the owner or operator of the alternate facility or the original generator. That person shall acknowledge receipt or rejection of the waste described on the Manifest by signing and entering the date they received or rejected the waste in Item 18c. Partially rejected wastes and residues shall be re-shipped under a new manifest, to be initiated and signed by the rejecting TSDf as offeror of the shipment.

Instructions --- Continuation Sheet, U.S. EPA Form 8700-22A  
 --- Read all instructions before completing this form. This form has been designed for use on a 12-pitch (elite) typewriter; a firm point pen may also be used --- press down hard.

--- This form shall be used as a continuation sheet to U.S. EPA Form 8700-22 if:

--- More than two transporters are to be used to transport the waste; or

--- More space is required for the U.S. DOT descriptions and related information in Item 9 of U.S. EPA Form 8700-22.

--- Federal regulations require generators and transporters of hazardous waste and owners or operators of hazardous waste treatment, storage, or disposal facilities to use the uniform hazardous waste manifest (EPA Form 8700-22) and, if necessary, this continuation sheet (EPA Form 8700-22A) for both interstate and intrastate transportation.

--- Item 21. Generator's ID Number

--- Enter the generator's U.S. EPA twelve digit identification number or, the State generator identification number if the generator site does not have an EPA identification number.

--- Item 22. Page

--- Enter the page number of this Continuation Sheet.

--- Item 23. Manifest Tracking Number

--- Enter the Manifest Tracking number from Item 4 of the Manifest form to which this continuation sheet is attached.

--- Item 24. Generator's Name

--- Enter the generator's name as it appears in Item 5 on the first page of the Manifest.

--- Item 25. Transporter --- Company Name

--- If additional transporters are used to transport the waste described on this Manifest, enter the company name of each additional transporter in the order in which they will transport the waste. Enter after the word "Transporter" the order of the transporter. For example, Transporter 3 Company Name. Also enter the U.S. EPA twelve digit identification number of the transporter described in Item 25.

~~Item 26. Transporter - Company Name~~

~~If additional transporters are used to transport the waste described on this Manifest, enter the company name of each additional transporter in the order in which they will transport the waste. Enter after the word "Transporter" the order of the transporter. For example, Transporter 4 Company Name. Each Continuation Sheet can record the names of two additional transporters. Also enter the U.S. EPA twelve digit identification number of the transporter named in Item 26.~~

~~Item 27. U.S. D.O.T. Description Including Proper Shipping Name, Hazardous Class, and ID Number (UN/NA)~~

~~For each row enter a sequential number under Item 27b that corresponds to the order of waste codes from one continuation sheet to the next, to reflect the total number of wastes being shipped. Refer to instructions for Item 9 of the manifest for the information to be entered.~~

~~Item 28. Containers (No. And Type)~~

~~Refer to the instructions for Item 10 of the manifest for information to be entered.~~

~~Item 29. Total Quantity~~

~~Refer to the instructions for Item 11 of the manifest form.~~

~~Item 30. Units of Measure (Weight/Volume)~~

~~Refer to the instructions for Item 12 of the manifest form.~~

~~Item 31. Waste Codes~~

~~Refer to the instructions for Item 13 of the manifest form.~~

~~Item 32. Special Handling Instructions and Additional Information~~

~~Refer to the instructions for Item 14 of the manifest form.~~

~~Transporters~~~~Item 33. Transporter - Acknowledgment of Receipt of Materials~~

~~Enter the same number of the Transporter as identified in Item 25. Enter also the name of the person accepting the waste on behalf of the Transporter (Company Name) identified in Item 25. That person shall acknowledge acceptance of the waste described on the Manifest by signing and entering the date of receipt.~~

~~Item 34. Transporter - Acknowledgment of Receipt of Materials~~

~~Enter the same number of the Transporter as identified in Item 26. Enter also the name of the person accepting the waste on behalf of the Transporter (Company Name) identified in Item 26. That person shall acknowledge acceptance of the waste described on the Manifest by signing and entering the date of receipt.~~

~~Owner and Operators of Treatment, Storage, or Disposal Facilities~~~~Item 35. Discrepancy Indication Space~~

~~Refer to Item 18. This space may be used to more fully describe information on discrepancies identified in Item 18a of the manifest form.~~

~~Item 36. Hazardous Waste Report Management Method Codes~~

~~For each field here, enter the sequential number that corresponds to the waste materials described under Item 27, and enter the appropriate process code that describes how the materials will be processed when received. If additional continuation sheets are attached, continue numbering the waste materials and process code fields sequentially, and enter on each sheet the process codes corresponding to the waste materials identified on that sheet.]~~

**KEY: hazardous waste, generators**

**Date of Enactment or Last Substantive Amendment: October 15, 2019**

**Authorizing, and Implemented or Interpreted Law: 19-6-105; 19-6-106**

**R315. Environmental Quality, Waste Management and Radiation Control, Waste Management.**

**R315-263. Standards Applicable to Transporters of Hazardous Waste and Standards Applicable to Emergency Control of Spills for All Hazardous Waste Handlers.**

**R315-263-20. The Manifest System.**

(a)(1) 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 requirement of Section R315-262-23, or is provided with an electronic manifest that is obtained, completed, and transmitted in accordance with Subsection R315-262-20(a)(3), and signed with a valid and enforceable electronic signature as described in Section R315-262-25.

(2) Exports. For exports of hazardous waste subject to the requirements of Sections R315-262-80 through 262-84, a transporter may not accept hazardous waste without a manifest signed by the generator in accordance with Section R315-263-20, as appropriate, and for exports occurring under the terms of consent issued by EPA on or after December 31, 2016, a movement document that includes all information require by Subsection R315-262-83(d).

(3) Compliance date for form revisions. The revised Manifest form and procedures in Sections R315-260-10, 261-7, 263-20, and 263-21, had an effective date of September 5, 2006.

(4) Use of electronic manifest-legal equivalence to paper forms for participating transporters. Electronic manifests that are obtained, completed, and transmitted in accordance with Subsection R315-262-20(a)(3), and used in accordance with Section R315-263-20 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 Section R315-262-25.

(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 shall 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 or Utah inspector.

(v) No transporter may be held liable for the inability to produce an electronic manifest for inspection under Section R315-263-20 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.

(5) 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.

(6) 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 Subsection R315-263-20(a)(4)(iii)(A), 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 shall 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.

(7) 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 Subsection R315-263-20(a)(4)(iii)(A). 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/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.

(8) ~~[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. 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]Reserved.~~

(9) ~~Post-receipt manifest data corrections. After facilities have certified to the receipt of hazardous wastes by signing Item 20 of the manifest, any post-receipt data corrections may be submitted at any time by any interested person, such as the waste handler, named on the manifest. Transporters may participate electronically in the post-receipt data corrections process by following the process described in Subsection R315-264-71(1), which applies to corrections made to either paper or electronic manifest records.~~

(b) Before transporting the hazardous waste, the transporter shall sign and date the manifest acknowledging acceptance of the hazardous waste from the generator. The transporter shall return a signed copy to the generator before leaving the generator's property.

(c) The transporter shall ensure that the manifest accompanies the hazardous waste. In the case of exports occurring under the terms of a consent issued by EPA to the exporter on or after December 31, 2016, the transporter shall ensure that a movement document that includes all information required by Subsection R315-262-83(d) also accompanies the hazardous waste. In the case of imports occurring under

the terms of a consent issued by EPA to the country of export or the importer on or after December 31, 2016, the transporter shall ensure that a movement document that includes all information required by Subsection R315-262-84(d) also accompanies the hazardous waste.

(d) A transporter who delivers a hazardous waste to another transporter or to the designated facility shall:

(1) 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

(2) Retain one copy of the manifest in accordance with Section R315-263-22; and

(3) Give the remaining copies of the manifest to the accepting transporter or designated facility.

(e) The requirements of Subsections R315-263-20(c), (d) and (f) do not apply to water, bulk shipment, transporters if:

(1) The hazardous waste is delivered by water, bulk shipment, to the designated facility; and

(2) A shipping paper containing all the information required on the manifest; excluding the EPA identification numbers, generator certification, and signatures; and, for exports or imports occurring under the terms of a consent issued by EPA on or after December 31, 2016, a movement document that includes all information required by Subsections R315-262-83(d) or 262-84(d) accompanies the hazardous waste; and

(3) 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

(4) 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

(5) A copy of the shipping paper or manifest is retained by each water, bulk shipment, transporter in accordance with Section R315-263-22.

(f) For shipments involving rail transportation, the requirements of Subsections R315-263-20(c), (d) and (e) do not apply and the following requirements do apply:

(1) When accepting hazardous waste from a non-rail transporter, the initial rail transporter shall:

(i) 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:

(A) The next non-rail transporter, if any; or

(B) The designated facility, if the shipment is delivered to that facility by rail; or

(C) 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 Section R315-263-22.

(2) Rail transporters shall ensure that a shipping paper containing all the information required on the manifest; excluding the EPA identification numbers, generator certification, and signatures; and, for exports or imports occurring under the terms of a consent issued by EPA on or after December 31, 2016, a movement document that includes all information required by Subsections R315-262-83(d) or 262-84(d) accompanies the hazardous waste at all times.

Note to Subsection R315-263-20(f)(2): Intermediate rail transporters are not required to sign the manifest, movement document, or shipping paper.

(3) When delivering hazardous waste to the designated facility, a rail transporter shall:

(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 Section R315-263-22.

(4) When delivering hazardous waste to a non-rail transporter a rail transporter shall:

(i) Obtain the date of delivery and the handwritten signature of the next non-rail transporter on the manifest; and

(ii) Retain a copy of the manifest in accordance with Section R315-263-22.

(5) Before accepting hazardous waste from a rail transporter, a non-rail transporter shall sign and date the manifest and provide a copy to the rail transporter.

(g) Transporters who transport hazardous waste out of the United States shall:

(1) Sign and date the manifest in the International Shipments block to indicate the date that the shipment left the United States;

(2) Retain one copy in accordance with Subsection R315-263-22(d);

(3) Return a signed copy of the manifest to the generator; and

(4) For paper manifest only,

(i) Send a copy of the manifest to the e-Manifest system in accordance with the allowable methods specified in Subsection R315-264-71(a)(2)(v); and

(ii) For shipments initiated prior to the AES filing compliance date, when instructed by the exporter to do so, give a copy of the manifest to a U.S. Customs official at the point of departure from the United States.

(h) 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 Section 315-263-20 or those of Section R315-263-22 provided that:

- (1) The waste is being transported pursuant to a reclamation agreement as provided for in Subsection R315-262-20(e);
- (2) The transporter records, on a log or shipping paper, the following information for each shipment:
  - (i) The name, address, and U.S. EPA 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
- (3) The transporter carries this record when transporting waste to the reclamation facility; and
- (4) The transporter retains these records for a period of at least three years after termination or expiration of the agreement.

**R315-263-21. Compliance with the Manifest.**

(a) Except as provided in Subsection R315-263-21(b), [The]the transporter shall deliver the entire quantity of hazardous waste which [he]the transporter has accepted from a generator or a transporter to:

- (1) The designated facility listed on the manifest; or
- (2) The alternate designated facility, if the hazardous waste cannot be delivered to the designated facility because an emergency prevents delivery; or
- (3) The next designated transporter; or
- (4) The place outside the United States designated by the generator.

(b) (1) Emergency Condition. If the hazardous waste cannot be delivered in accordance with Subsection R315-263-21(a) (1), (2) or (4) because of an emergency condition other than rejection of the waste by the designated facility or alternate designated facility, then the transporter shall contact the generator for further [directions]instructions and shall revise the manifest according to the generator's instructions.

(2) Transporters without agency authority. If the hazardous waste is not delivered to the next designated transporter in accordance with Subsection R315-263-21(a) (3), and the current transporter is without contractual authorization from the generator to act as the generator's agent with respect to transporter additions or substitutions, then the current transporter must contact the generator for further instructions prior to making any revisions to the transporter designations on the manifest. The current transporter may thereafter make such revisions if:

- (i) The hazardous waste is not delivered in accordance with Subsection R315-263-21(a) (3) because of an emergency condition; or

(ii) The current transporter proposes to change the transporter(s) designated on the manifest by the generator, or to add a new transporter during transportation, to respond to an emergency, or for purposes of transportation efficiency, convenience, or safety; and

(iii) The generator authorizes the revision.

(3) Transporters with agency authority. If the hazardous waste is not delivered to the next designated transporter in accordance with Subsection R315-263-21(a)(3), and the current transporter has authorization from the generator to act as the generator's agent, then the current transporter may change the transporter(s) designated on the manifest, or add a new transporter, during transportation without the generator's prior, explicit approval, provided that:

(i) The current transporter is authorized by a contractual provision that provides explicit agency authority for the transporter to make such transporter changes on behalf of the generator;

(ii) The transporter enters in Item 14 of each manifest for which such a change is made, the following statement of its agency authority: "Contract retained by generator confers agency authority on initial transporter to add or substitute additional transporters on generator's behalf;" and

(iii) The change in designated transporters is necessary to respond to an emergency, or for purposes of transportation efficiency, convenience, or safety.

(4) Generator liability. The grant by a generator of authority to a transporter to act as the agent of the generator with respect to changes to transporter designations under Subsection R315-263-21(b)(3) does not affect the generator's liability or responsibility for complying with any applicable requirement under Rules R315-260 through R315-266, R315-268, R315-270 and R315-273, or grant any additional authority to the transporter to act on behalf of the generator.

~~[(2)]~~ (c) If hazardous waste is rejected by the designated facility while the transporter is on the facility's premises, then the transporter shall obtain the following:

~~[(i)]~~ (1) For a partial load rejection or for regulated quantities of container residues, a copy of the original manifest that includes the facility's date and signature, and the Manifest Tracking Number of the new manifest that shall accompany the shipment, and a description of the partial rejection or container residue in the discrepancy block of the original manifest. The transporter shall retain a copy of this manifest in accordance with Section R315-263-22, and give the remaining copies of the original manifest to the rejecting designated facility. If the transporter is forwarding the rejected part of the shipment or a regulated container residue to an alternate facility or returning it to the generator, the transporter shall obtain a new manifest to accompany the shipment, and the new manifest shall

include all of the information required in Subsections R315-264-72(e)(1) through (6) or (f)(1) through (6) or [40-CFR] Subsections R315-265[-]-72(e)(1) through (6) or (f)(1) through (6) [7 which are adopted by reference].

(ii) For a full load rejection that will be taken back by the transporter, a copy of the original manifest that includes the rejecting facility's signature and date attesting to the rejection, the description of the rejection in the discrepancy block of the manifest, and the name, address, phone number, and Identification Number for the alternate facility or generator to whom the shipment shall be delivered. The transporter shall retain a copy of the manifest in accordance with Section R315-263-22, and give a copy of the manifest containing this information to the rejecting designated facility. If the original manifest is not used, then the transporter shall obtain a new manifest for the shipment and comply with Subsection R315-264-72(e)(1) through (6) or [40-CFR] R315-265[-]-72(e)(1) through (6) [7 which are adopted by reference].

**KEY: hazardous waste**

**Date of Enactment or Last Substantive Amendment: October 15, 2019**

**Authorizing, and Implemented or Interpreted Law: 19-6-105; 19-6-106**

**R315. Environmental Quality, Waste Management and Radiation Control, Waste Management.**

**R315-264. Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities.**

**R315-264-71. Manifest System, Recordkeeping, and Reporting -- Use of Manifest System.**

(a) (1) If a facility receives hazardous waste accompanied by a manifest, the owner, operator or his/her agent shall sign and date the manifest as indicated in Subsection R315-264-71(a) (2) to certify that the hazardous waste covered by the manifest was received, that the hazardous waste was received except as noted in the discrepancy space of the manifest, or that the hazardous waste was rejected as noted in the manifest discrepancy space.

(2) If the facility receives a hazardous waste shipment accompanied by a manifest, the owner, operator, or his agent shall:

- (i) Sign and date ~~[, by hand,]~~ each copy of the manifest;
- (ii) Note any discrepancies, as defined in Subsection R315-264-72(a), on each copy of the manifest;
- (iii) Immediately give the transporter at least one copy of the manifest;
- (iv) Within 30 days of delivery, send a copy, Page ~~[3]2~~, of the manifest to the generator,

(v) Paper manifest submission requirements are:

~~[-v]~~ (A) Options for compliance on June 30, 2018. [Within 30 days of delivery,] Beginning on June 30, 2018, send the top copy, Page 1, of [the Manifest] any paper manifest and any paper continuation sheet to the e-Manifest system for purposes of data entry and processing [-], or [-In] in lieu of [mailing this] submitting the paper copy to EPA, the owner or operator may transmit to the EPA system an image file of Page 1 of the manifest and any continuation sheet, or both a data [-string] file and the image file corresponding to Page 1 of the manifest and any continuation sheet, within 30 days of the date of delivery. Submissions of copies to the e-Manifest system shall be made at the mailing address or electronic mail/submission address specified at the e-Manifest program website's directory of services. Beginning on June 30, 2021, EPA will not accept mailed paper manifests from facilities for processing in e-Manifest. [Any data or image files transmitted to EPA under Subsection R315-264-71(a) shall 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.]

(B) Options for compliance on June 30, 2021. Beginning on June 30, 2021, the requirement to submit the top copy, Page 1, of the paper manifest and any paper continuation sheet to the e-Manifest system for purposes of data entry and processing may be met by the owner or operator only by transmitting to the EPA system an image file of Page

1 of the manifest and any continuation sheet, or by transmitting to the EPA system both a data file and the image file corresponding to Page 1 of the manifest and any continuation sheet, within 30 days of the date of delivery. Submissions of copies to the e-Manifest system shall be made to the electronic mail/submission address specified at the e-Manifest program website's directory of services; and

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

(3) The owner or operator of a facility receiving hazardous waste subject to Sections R315-262-80 through 262-84 from a foreign source shall:

(i) Additionally list the relevant consent number from consent documentation supplied by EPA to the facility for each waste listed on the manifest, matched to the relevant list number for the waste from block 9b. If additional space is needed, the owner or operator should use a Continuation Sheet(s), EPA Form 8700-22A; and

(ii) Send a copy of the manifest within 30 days of delivery to EPA using the addresses listed in Subsection R315-262-82(e) until the facility can submit such a copy to the e-Manifest system per Subsection R315-264-71(a)(2)(v).

(b) If a facility receives, from a rail or water (bulk shipment) transporter, hazardous waste which is accompanied by a shipping paper containing all the information required on the manifest; excluding the EPA identification numbers, generator's certification, and signatures; the owner or operator, or his agent, shall:

(1) Sign and date each copy of the manifest or shipping paper, if the manifest has not been received, to certify that the hazardous waste covered by the manifest or shipping paper was received;

(2) Note any significant discrepancies, as defined in Subsection R315-264-72(a), in the manifest or shipping paper, if the manifest has not been received, on each copy of the manifest or shipping paper. The Director does not intend that the owner or operator of a facility whose procedures under R315-264-13(c) include waste analysis shall perform that analysis before signing the shipping paper and giving it to the transporter. Subsection R315-264-72(b), however, requires reporting an unreconciled discrepancy discovered during later analysis.

(3) Immediately give the rail or water (bulk shipment) transporter at least one copy of the manifest or shipping paper, if the manifest has not been received;

(4) Within 30 days after the delivery, send a copy of the signed and dated manifest or a signed and dated copy of the shipping paper, if the manifest has not been received within 30 days after delivery, to the generator; and

Comment: Subsection R315-262-23(c) requires the generator to send three copies of the manifest to the facility when hazardous waste is sent by rail or water (bulk shipment).

(5) Retain at the facility a copy of the manifest and shipping paper, if signed in lieu of the manifest at the time of delivery, for at least three years from the date of delivery.

(c) Whenever a shipment of hazardous waste is initiated from a facility, the owner or operator of that facility shall comply with the requirements of Rule R315-262. The provisions of Sections R315-262-15, R315-262-16, and R315-262-17 are applicable to the on-site accumulation of hazardous wastes by generators. Therefore, the provisions of Sections R315-262-15, R315-262-16, and R315-262-17 only apply to owners or operators who are shipping hazardous waste which they generated at that facility or operating as a large quantity generator consolidating hazardous waste from very small quantity generators under Subsection R315-262-17(f).

(d) As per Subsection R315-262-84(d)(2)(xv), within three working days of the receipt of a shipment subject to Sections R315-262-80 through 262-84 the owner or operator of a facility shall provide a copy of the movement document bearing all required signatures to the foreign exporter; to the competent authorities of the countries of export and transit that control the shipment as an export and transit of hazardous waste respectively; and on or after the electronic import-export reporting compliance date, to EPA electronically using EPA's Waste Import Export Tracking System (WIETS), or its successor system. The original copy of the movement document shall be maintained at the facility for at least three years from the date of signature. The owner or operator of a facility may satisfy this recordkeeping requirement by retaining electronically submitted documents in the facility's account on EPA's Waste Import Export Tracking System (WIETS), or its successor system, provided that copies are readily available for viewing and production if requested by any EPA or Utah inspector. No owner or operator of a facility may be held liable for the inability to produce the documents for inspection under Section R315-264-71 if the owner or operator of a facility can demonstrate that the inability to produce the document is due exclusively to technical difficulty with EPA's Waste Import Export Tracking System (WIETS), or its successor system, for which the owner or operator of a facility bears no responsibility.

(e) A facility shall determine whether the consignment state for a shipment regulates any additional wastes, beyond those regulated Federally, as hazardous wastes under its state hazardous waste program. Facilities shall also determine whether the consignment state or generator state requires the facility to submit any copies of the manifest to these states.

(f) Legal equivalence to paper manifests. Electronic manifests that are obtained, completed, and transmitted in accordance with Subsection R315-262-20(a)(3), and used in accordance with Section R315-264-71 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.

(1) 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 Section R315-262-25.

(2) 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.

(3) 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.

(4) 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 Division of Waste Management and Radiation Control inspector.

(5) No owner or operator may be held liable for the inability to produce an electronic manifest for inspection under Section R315-264-71 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.

(g) 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.

(h) 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:

(1) Upon delivery of the hazardous waste to the designated facility, the owner or operator shall 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 paper replacement manifest,

(2) The owner or operator of the facility shall give back to the final transporter one copy of the paper replacement manifest,

(3) Within 30 days of delivery of the waste to the designated

facility, the owner or operator of the facility shall 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 electronic manifest system, and

(4) The owner or operator of the facility shall retain at the facility one copy of the paper replacement manifest for at least three years from the date of delivery.

(i) 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.

(j) Imposition of user fee for ~~electronic manifest use~~ manifest submissions.

(1) As prescribed in 40 CFR 264.1311, and determined in 40 CFR 264.1312, which are adopted and incorporated by reference, ~~An~~an owner or operator who is a user of the electronic manifest ~~format may~~system shall be assessed a user fee by EPA for the ~~origination or~~submission and processing of each electronic and paper manifest. ~~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 shall submit to the electronic manifest system operator under Subsection R315-264-71(a)(2)(v).—~~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 262]~~ and publish them to the user community, as provided in 40 CFR 264.1313, which is adopted and incorporated by reference.

(2) An owner or operator subject to user fees under Section R315-264-71 shall make user fee payments in accordance with the requirements of 40 CFR 264.1314, which is adopted and incorporated by reference, subject to the informal fee dispute resolution process of 40 CFR 264.1316, which is adopted and incorporated by reference, and subject to the sanctions for delinquent payments under 40 CFR 264.1315, which is adopted and incorporated by reference.

(k) Electronic manifest signatures. Electronic manifest signatures shall meet the criteria described in Section R315-262-25.

(1) Post-receipt manifest data corrections. After facilities have certified to the receipt of hazardous wastes by signing Item 20

of the manifest, any post-receipt data corrections may be submitted at any time by any interested person, such as the waste handler, shown on the manifest.

(1) Interested persons shall make all corrections to manifest data by electronic submission, either by directly entering corrected data to the web based service provided in e-Manifest for such corrections, or by an upload of a data file containing data corrections relating to one or more previously submitted manifests.

(2) Each correction submission shall include the following information:

(i) The Manifest Tracking Number and date of receipt by the facility of the original manifest(s) for which data are being corrected;

(ii) The item number(s) of the original manifest that is the subject of the submitted correction(s); and

(iii) For each item number with corrected data, the data previously entered and the corresponding data as corrected by the correction submission.

(3) Each correction submission shall include a statement that the person submitting the corrections certifies that to the best of their knowledge or belief, the corrections that are included in the submission will cause the information reported about the previously received hazardous wastes to be true, accurate, and complete:

(i) The certification statement shall be executed with a valid electronic signature; and

(ii) A batch upload of data corrections may be submitted under one certification statement.

(4) Upon receipt by the system of any correction submission, other interested persons shown on the manifest will be provided electronic notice of the submitter's corrections.

(5) Other interested persons shown on the manifest may respond to the submitter's corrections with comments to the submitter, or by submitting another correction to the system, certified by the respondent as specified in Subsection R315-264-71(1)(3), and with notice of the corrections to other interested persons shown on the manifest.

#### **R315-264-1086. Standards: Containers.**

(a) The provisions of Section R315-264-1086 apply to the control of air pollutant emissions from containers for which Subsection R315-264-1082(b) references the use of Section R315-264-1086 for such air emission control.

(b) General requirements.

(1) The owner or operator shall control air pollutant emissions from each container subject to Section R315-264-1086 in accordance with the following requirements, as applicable to the container, except when the special provisions for waste stabilization processes

specified in Subsection R315-264-1086(b) (2) apply to the container.

(i) For a container having a design capacity greater than 0.1 cubic meters and less than or equal to 0.46 cubic meters, the owner or operator shall control air pollutant emissions from the container in accordance with the Container Level 1 standards specified in Subsection R315-264-1086(c).

(ii) For a container having a design capacity greater than 0.46 cubic meters that is not in light material service, the owner or operator shall control air pollutant emissions from the container in accordance with the Container Level 1 standards specified in Subsection R315-264-1086(c).

(iii) For a container having a design capacity greater than 0.46 cubic meters that is in light material service, the owner or operator shall control air pollutant emissions from the container in accordance with the Container Level 2 standards specified in Subsection R315-264-1086(d).

(2) When a container having a design capacity greater than 0.1 cubic meters is used for treatment of a hazardous waste by a waste stabilization process, the owner or operator shall control air pollutant emissions from the container in accordance with the Container Level 3 standards specified in Subsection R315-264-1086(e) at those times during the waste stabilization process when the hazardous waste in the container is exposed to the atmosphere.

(c) Container Level 1 standards.

(1) A container using Container Level 1 controls is one of the following:

(i) A container that meets the applicable U.S. Department of Transportation (DOT) regulations on packaging hazardous materials for transportation as specified in Subsection R315-264-1086(f).

(ii) A container equipped with a cover and closure devices that form a continuous barrier over the container openings such that when the cover and closure devices are secured in the closed position there are no visible holes, gaps, or other open spaces into the interior of the container. The cover may be a separate cover installed on the container, e.g., a lid on a drum or a suitably secured tarp on a roll-off box, or may be an integral part of the container structural design, e.g., a "portable tank" or bulk cargo container equipped with a screw-type cap.

(iii) An open-top container in which an organic-vapor suppressing barrier is placed on or over the hazardous waste in the container such that no hazardous waste is exposed to the atmosphere. One example of such a barrier is application of a suitable organic-vapor suppressing foam.

(2) A container used to meet the requirements of Subsections R315-264-1086(c) (1) (ii) or (c) (1) (iii) shall be equipped with covers and closure devices, as applicable to the container, that are composed of suitable materials to minimize exposure of the hazardous waste to

the atmosphere and to maintain the equipment integrity, for as long as the container is in service. Factors to be considered in selecting the materials of construction and designing the cover and closure devices shall include: Organic vapor permeability; the effects of contact with the hazardous waste or its vapor managed in the container; the effects of outdoor exposure of the closure device or cover material to wind, moisture, and sunlight; and the operating practices for which the container is intended to be used.

(3) Whenever a hazardous waste is in a container using Container Level 1 controls, the owner or operator shall install all covers and closure devices for the container, as applicable to the container, and secure and maintain each closure device in the closed position except as follows:

(i) Opening of a closure device or cover is allowed for the purpose of adding hazardous waste or other material to the container as follows:

(A) In the case when the container is filled to the intended final level in one continuous operation, the owner or operator shall promptly secure the closure devices in the closed position and install the covers, as applicable to the container, upon conclusion of the filling operation.

(B) In the case when discrete quantities or batches of material intermittently are added to the container over a period of time, the owner or operator shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon either the container being filled to the intended final level; the completion of a batch loading after which no additional material will be added to the container within 15 minutes; the person performing the loading operation leaving the immediate vicinity of the container; or the shutdown of the process generating the material being added to the container, whichever condition occurs first.

(ii) Opening of a closure device or cover is allowed for the purpose of removing hazardous waste from the container as follows:

(A) For the purpose of meeting the requirements of Section R315-264-1086, an empty container as defined in Subsection R315-261-7(b) may be open to the atmosphere at any time, i.e., covers and closure devices are not required to be secured in the closed position on an empty container.

(B) In the case when discrete quantities or batches of material are removed from the container but the container does not meet the conditions to be an empty container as defined in Subsection R315-261-7(b), the owner or operator shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon the completion of a batch removal after which no additional material will be removed from the container within 15 minutes or the person performing the unloading operation leaves the immediate vicinity of the container, whichever condition occurs first.

(iii) Opening of a closure device or cover is allowed when access inside the container is needed to perform routine activities other than transfer of hazardous waste. Examples of such activities include those times when a worker needs to open a port to measure the depth of or sample the material in the container, or when a worker needs to open a manhole hatch to access equipment inside the container. Following completion of the activity, the owner or operator shall promptly secure the closure device in the closed position or reinstall the cover, as applicable to the container.

(iv) Opening of a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the internal pressure of the container in accordance with the container design specifications. The device shall be designed to operate with no detectable organic emissions when the device is secured in the closed position. The settings at which the device opens shall be established such that the device remains in the closed position whenever the internal pressure of the container is within the internal pressure operating range determined by the owner or operator based on container manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the internal pressure of the container exceeds the internal pressure operating range for the container as a result of loading operations or diurnal ambient temperature fluctuations.

(v) Opening of a safety device, as defined in ~~[40-CFR-]Section R315-265[-]-1081[, which is adopted by reference,]~~ is allowed at any time conditions require doing so to avoid an unsafe condition.

(4) The owner or operator of containers using Container Level 1 controls shall inspect the containers and their covers and closure devices as follows:

(i) In the case when a hazardous waste already is in the container at the time the owner or operator first accepts possession of the container at the facility and the container is not emptied within 24 hours after the container is accepted at the facility, i.e., does not meet the conditions for an empty container as specified in Subsection R315-261-7(b), the owner or operator shall visually inspect the container and its cover and closure devices to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. The container visual inspection shall be conducted on or before the date that the container is accepted at the facility, i.e., the date the container becomes subject to container standards of Sections R315-264-1080 through 1090. For purposes of this

requirement, the date of acceptance is the date of signature that the facility owner or operator enters on Item 20 of the Uniform Hazardous Waste Manifest, ~~[in the appendix to Rule R315-262]~~ ~~[+]~~ EPA Forms 8700-22 and 8700-22A ~~[+]~~, as required under Section R315-264-71. If a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of Subsection R315-264-1086(c) (4) (iii).

(ii) In the case when a container used for managing hazardous waste remains at the facility for a period of 1 year or more, the owner or operator shall visually inspect the container and its cover and closure devices initially and thereafter, at least once every 12 months, to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. If a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of Subsection R315-264-1086(c) (4) (iii).

(iii) When a defect is detected for the container, cover, or closure devices, the owner or operator shall make first efforts at repair of the defect no later than 24 hours after detection and repair shall be completed as soon as possible but no later than 5 calendar days after detection. If repair of a defect cannot be completed within 5 calendar days, then the hazardous waste shall be removed from the container and the container shall not be used to manage hazardous waste until the defect is repaired.

(5) The owner or operator shall maintain at the facility a copy of the procedure used to determine that containers with capacity of 0.46 cubic meters or greater, which do not meet applicable DOT regulations as specified in Subsection R315-264-1086(f), are not managing hazardous waste in light material service.

(d) Container Level 2 standards.

(1) A container using Container Level 2 controls is one of the following:

(i) A container that meets the applicable U.S. Department of Transportation (DOT) regulations on packaging hazardous materials for transportation as specified in Subsection R315-264-1086(f).

(ii) A container that operates with no detectable organic emissions as defined in ~~[40 CFR]~~ Section R315-265 ~~[+]~~-1081 ~~[, which is adopted by reference,]~~ and determined in accordance with the procedure specified in Subsection R315-264-1086(g).

(iii) A container that has been demonstrated within the preceding 12 months to be vapor-tight by using 40 CFR part 60, appendix A, Method 27 in accordance with the procedure specified in Subsection R315-264-1086(h).

(2) Transfer of hazardous waste in or out of a container using Container Level 2 controls shall be conducted in such a manner as to minimize exposure of the hazardous waste to the atmosphere, to the extent practical, considering the physical properties of the hazardous

waste and good engineering and safety practices for handling flammable, ignitable, explosive, reactive, or other hazardous materials. Examples of container loading procedures that the Director considers to meet the requirements of Subsection R315-264-1086(d) include using any one of the following: A submerged-fill pipe or other submerged-fill method to load liquids into the container; a vapor-balancing system or a vapor-recovery system to collect and control the vapors displaced from the container during filling operations; or a fitted opening in the top of a container through which the hazardous waste is filled and subsequently purging the transfer line before removing it from the container opening.

(3) Whenever a hazardous waste is in a container using Container Level 2 controls, the owner or operator shall install all covers and closure devices for the container, and secure and maintain each closure device in the closed position except as follows:

(i) Opening of a closure device or cover is allowed for the purpose of adding hazardous waste or other material to the container as follows:

(A) In the case when the container is filled to the intended final level in one continuous operation, the owner or operator shall promptly secure the closure devices in the closed position and install the covers, as applicable to the container, upon conclusion of the filling operation.

(B) In the case when discrete quantities or batches of material intermittently are added to the container over a period of time, the owner or operator shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon either the container being filled to the intended final level; the completion of a batch loading after which no additional material will be added to the container within 15 minutes; the person performing the loading operation leaving the immediate vicinity of the container; or the shutdown of the process generating the material being added to the container, whichever condition occurs first.

(ii) Opening of a closure device or cover is allowed for the purpose of removing hazardous waste from the container as follows:

(A) For the purpose of meeting the requirements of Section R315-264-1086, an empty container as defined in Subsection R315-261-7(b) may be open to the atmosphere at any time, i.e., covers and closure devices are not required to be secured in the closed position on an empty container.

(B) In the case when discrete quantities or batches of material are removed from the container but the container does not meet the conditions to be an empty container as defined in Subsection R315-261-7(b), the owner or operator shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon the completion of a batch removal after which no additional material will be removed from the container within 15

minutes or the person performing the unloading operation leaves the immediate vicinity of the container, whichever condition occurs first.

(iii) Opening of a closure device or cover is allowed when access inside the container is needed to perform routine activities other than transfer of hazardous waste. Examples of such activities include those times when a worker needs to open a port to measure the depth of or sample the material in the container, or when a worker needs to open a manhole hatch to access equipment inside the container. Following completion of the activity, the owner or operator shall promptly secure the closure device in the closed position or reinstall the cover, as applicable to the container.

(iv) Opening of a spring-loaded, pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the internal pressure of the container in accordance with the container design specifications. The device shall be designed to operate with no detectable organic emission when the device is secured in the closed position. The settings at which the device opens shall be established such that the device remains in the closed position whenever the internal pressure of the container is within the internal pressure operating range determined by the owner or operator based on container manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the internal pressure of the container exceeds the internal pressure operating range for the container as a result of loading operations or diurnal ambient temperature fluctuations.

(v) Opening of a safety device, as defined in ~~[40 CFR] Section R315-265 [-]-1081 [7, which is adopted by reference,]~~ is allowed at any time conditions require doing so to avoid an unsafe condition.

(4) The owner or operator of containers using Container Level 2 controls shall inspect the containers and their covers and closure devices as follows:

(i) In the case when a hazardous waste already is in the container at the time the owner or operator first accepts possession of the container at the facility and the container is not emptied within 24 hours after the container is accepted at the facility, i.e., does not meet the conditions for an empty container as specified in Subsection R35- 261-7 (b), the owner or operator shall visually inspect the container and its cover and closure devices to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. The container visual inspection shall be conducted on or before the date that the container is accepted at the facility, i.e.,

the date the container becomes subject to the container standards of Sections R315-264-1080 through. For purposes of this requirement, the date of acceptance is the date of signature that the facility owner or operator enters on Item 20 of the Uniform Hazardous Waste Manifest, [in the appendix to Rule R315-262] [-] EPA Forms 8700-22 and 8700-22A [+], as required under Section R315-264-71. If a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of Subsection R315-264-1086(d) (4) (iii).

(ii) In the case when a container used for managing hazardous waste remains at the facility for a period of 1 year or more, the owner or operator shall visually inspect the container and its cover and closure devices initially and thereafter, at least once every 12 months, to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. If a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of Subsection R315-264-1086(d) (4) (iii).

(iii) When a defect is detected for the container, cover, or closure devices, the owner or operator shall make first efforts at repair of the defect no later than 24 hours after detection, and repair shall be completed as soon as possible but no later than 5 calendar days after detection. If repair of a defect cannot be completed within 5 calendar days, then the hazardous waste shall be removed from the container and the container shall not be used to manage hazardous waste until the defect is repaired.

(e) Container Level 3 standards.

(1) A container using Container Level 3 controls is one of the following:

(i) A container that is vented directly through a closed-vent system to a control device in accordance with the requirements of Subsection R315-264-1086(e) (2) (ii).

(ii) A container that is vented inside an enclosure which is exhausted through a closed-vent system to a control device in accordance with the requirements of Subsections R315-264-1086(e) (2) (i) and (e) (2) (ii).

(2) The owner or operator shall meet the following requirements, as applicable to the type of air emission control equipment selected by the owner or operator:

(i) The container enclosure shall be designed and operated in accordance with the criteria for a permanent total enclosure as specified in "Procedure T-Criteria for and Verification of a Permanent or Temporary Total Enclosure" under 40 CFR 52.741, appendix B. The enclosure may have permanent or temporary openings to allow worker access; passage of containers through the enclosure by conveyor or other mechanical means; entry of permanent mechanical or electrical equipment; or direct airflow into the enclosure. The owner or operator shall perform the verification procedure for the enclosure

as specified in Section 5.0 to "Procedure T-Criteria for and Verification of a Permanent or Temporary Total Enclosure" initially when the enclosure is first installed and, thereafter, annually.

(ii) The closed-vent system and control device shall be designed and operated in accordance with the requirements of Section R315-264-1087.

(3) Safety devices, as defined in ~~[40 CFR]~~ Section R315-265 ~~[.]~~-1081 ~~[, which is adopted by reference,]~~ may be installed and operated as necessary on any container, enclosure, closed-vent system, or control device used to comply with the requirements of Subsection R315-264-1086(e) (1).

(4) Owners and operators using Container Level 3 controls in accordance with the provisions of Sections R315-264-1086 through 1090 shall inspect and monitor the closed-vent systems and control devices as specified in Subsection R315-264-1087.

(5) Owners and operators that use Container Level 3 controls in accordance with the provisions of Sections R315-264-1086 through 1090 shall prepare and maintain the records specified in Subsection R315-264-1089(d).

(6) Transfer of hazardous waste in or out of a container using Container Level 3 controls shall be conducted in such a manner as to minimize exposure of the hazardous waste to the atmosphere, to the extent practical, considering the physical properties of the hazardous waste and good engineering and safety practices for handling flammable, ignitable, explosive, reactive, or other hazardous materials. Examples of container loading procedures that the Director considers to meet the requirements of Subsection R315-264-1086(e) include using any one of the following: A submerged-fill pipe or other submerged-fill method to load liquids into the container; a vapor-balancing system or a vapor-recovery system to collect and control the vapors displaced from the container during filling operations; or a fitted opening in the top of a container through which the hazardous waste is filled and subsequently purging the transfer line before removing it from the container opening.

(f) For the purpose of compliance with Subsection R315-264-1086(c) (1) (i) or (d) (1) (i), containers shall be used that meet the applicable U.S. Department of Transportation (DOT) regulations on packaging hazardous materials for transportation as follows:

(1) The container meets the applicable requirements specified in 49 CFR part 178-Specifications for Packaging or 49 CFR part 179-Specifications for Tank Cars.

(2) Hazardous waste is managed in the container in accordance with the applicable requirements specified in 49 CFR part 107, subpart B-Exemptions; 49 CFR part 172-Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements; 49 CFR part

173-Shippers-General Requirements for Shipments and Packages; and 49 CFR part 180-Continuing Qualification and Maintenance of Packagings.

(3) For the purpose of complying with Sections R315-264-1086 through 1090, no exceptions to the 49 CFR part 178 or part 179 regulations are allowed except as provided for in Subsection R315-264-1086(f)(4).

(4) For a lab pack that is managed in accordance with the requirements of 49 CFR part 178 for the purpose of complying with Sections R315-264-1086 through 1090, an owner or operator may comply with the exceptions for combination packagings specified in 49 CFR 173.12(b).

(g) To determine compliance with the no detectable organic emissions requirement of Subsection R315-264-1086(d)(1)(ii), the procedure specified in Subsection R315-264-1083(d) shall be used.

(1) Each potential leak interface, i.e., a location where organic vapor leakage could occur, on the container, its cover, and associated closure devices, as applicable to the container, shall be checked. Potential leak interfaces that are associated with containers include, but are not limited to: The interface of the cover rim and the container wall; the periphery of any opening on the container or container cover and its associated closure device; and the sealing seat interface on a spring-loaded pressure-relief valve.

(2) The test shall be performed when the container is filled with a material having a volatile organic concentration representative of the range of volatile organic concentrations for the hazardous wastes expected to be managed in this type of container. During the test, the container cover and closure devices shall be secured in the closed position.

(h) Procedure for determining a container to be vapor-tight using Method 27 of 40 CFR part 60, appendix A for the purpose of complying with Subsection R315-264-1086(d)(1)(iii).

(1) The test shall be performed in accordance with Method 27 of 40 CFR part 60, appendix A of this chapter.

(2) A pressure measurement device shall be used that has a precision of +/- 2.5 mm water and that is capable of measuring above the pressure at which the container is to be tested for vapor tightness.

(3) If the test results determined by Method 27 indicate that the container sustains a pressure change less than or equal to 750 Pascals within 5 minutes after it is pressurized to a minimum of 4,500 Pascals, then the container is determined to be vapor-tight.

**KEY: hazardous waste, TSD facilities**

**Date of Enactment or Last Substantive Amendment: October 15, 2019**  
**Authorizing, and Implemented or Interpreted Law: 19-6-105; 19-6-106**

**R315. Environmental Quality, Waste Management and Radiation Control, Waste Management.**

**R315-265. Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities.**

**R315-265-1. Incorporation, General -- Purpose, Scope, and Applicability.**

40 CFR 265.270 through 265.282, 265.300 through 265.316, 265.340 through 265.352, 265.370 through 265.383, 265.400 through 265.406, 265.430, 265.440 through 265.445, ~~[265.1030 through 265.1035,~~ ]265.1050 through 265.1064, ~~[265.1080 through 265.1091,~~ ]265.1100 through 265.1102, 265.1200 through 265.1202, 265.1300 through 265.1316 and Appendices I and III through VI of 40 CFR 265, 2015 edition, as amended by 81 FR 85827, are adopted and incorporated by reference except that "Director" is substituted for all references to "Regional Administrator", and for all references to "EPA" or "Environmental Protection Agency" except for references to "EPA identification number" and where EPA is used in reference to actions under Subsection R315-268-42(b) and in Subsection R315-265-71(a)(3).

(a) The purpose of Rule R315-265 is to establish minimum standards that define the acceptable management of hazardous waste during the period of interim status and until certification of final closure or, if the facility is subject to post-closure requirements, until post-closure responsibilities are fulfilled.

(b) Except as provided in ~~[40 CFR]~~ Subsection R315-265 ~~[.]~~-1080(b), ~~[which is adopted and incorporated by reference,~~ ]the standards of Rule R315-265, and of Sections R315-264-552, R315-264-553, and R315-264-554, apply to owners and operators of facilities that treat, store or dispose of hazardous waste who have fully complied with the requirements for interim status under section 3005(e) of RCRA and Section R315-270-10 until either a permit is issued under Rule R315-270 or until applicable Rule R315-265 closure and post-closure responsibilities are fulfilled, and to those owners and operators of facilities in existence on November 19, 1980 who have failed to provide timely notification as required by section 3010(a) of RCRA, failed to file Part A of the permit application as required by Subsections R315-270-10 (e) and (g), or both. These standards apply to all treatment, storage and disposal of hazardous waste at these facilities after the effective date of these regulations, except as specifically provided otherwise in Rule R315-265 or Rule R315-261.

Comment: As stated in section 3005(a) of RCRA, after the effective date of regulations under that section, i.e., Rules R315-270 and R315-124, the treatment, storage and disposal of hazardous waste is prohibited except in accordance with a permit. Section 3005(e) of RCRA provides for the continued operation of an existing facility that meets certain conditions, until final administrative disposition of the owner's and operator's permit application is made.

(c) The requirements of Rule R315-265 do not apply to:

(1) A person disposing of hazardous waste by means of ocean disposal subject to a permit issued under the Marine Protection, Research, and Sanctuaries Act;

Comment: These Rule R315-265 regulations do apply to the treatment or storage of hazardous waste before it is loaded onto an ocean vessel for incineration or disposal at sea, as provided in Subsection R315-265-1(b).

(2) Reserved

(3) The owner or operator of a POTW which treats, stores, or disposes of hazardous waste;

Comment: The owner or operator of a facility under Subsections R315-265-1(c) (1) through (3) is subject to the requirements of Rule R315-264 to the extent they are included in a permit by rule granted to such a person under 40 CFR 122, or are required by 40 CFR 144.14.

(4) Reserved

(5) The owner or operator of a facility permitted under Rules R315-301 through R315-320 to manage municipal or industrial solid waste, if the only hazardous waste the facility treats, stores, or disposes of is excluded from regulation under Rule R315-265 by Section R315-262-14;

(6) The owner or operator of a facility managing recyclable materials described in Subsections R315-261-6(a) (2), (3), and (4), except to the extent they are referred to in Rule R315-279 or Sections R315-266-20 through 266-23, R315-266-70, R315-266-80, or R315-266-100 through 266-112.

(7) A generator accumulating waste on site in compliance with applicable conditions for exemption in Sections R315-262-14 through 262-17 and Sections R315-262-200 through 262-216 and R315-262-230 through 262-233, except to the extent the requirements of Rule R315-265 are included in those sections;

(8) A farmer disposing of waste pesticides from his own use in compliance with Section R315-262-70; or

(9) The owner or operator of a totally enclosed treatment facility, as defined in Section R315-260-10.

(10) The owner or operator of an elementary neutralization unit or a wastewater treatment unit as defined in Section R315-260-10, provided that if the owner or operator is diluting hazardous ignitable (D001) wastes (other than the D001 High TOC Subcategory defined in Section R315-268-40, Table Treatment Standards for Hazardous Wastes), or reactive (D003) waste, to remove the characteristic before land disposal, the owner/operator shall comply with the requirements set out in Subsection R315-265-17(b).

(11) (i) Except as provided in Subsection R315-265-1(c) (11) (ii), a person engaged in treatment or containment activities during immediate response to any of the following situations:

(A) A discharge of a hazardous waste;

(B) An imminent and substantial threat of a discharge of a hazardous waste;

(C) A discharge of a material which, when discharged, becomes a hazardous waste.

(ii) An owner or operator of a facility otherwise regulated by this Rule R315-265 shall comply with all applicable requirements of Sections R315-265-30 through 265-37 and Sections R315-265-50 through 265-56.

(iii) Any person who is covered by Subsection R315-265-1(c) (11) (i) and who continues or initiates hazardous waste treatment or containment activities after the immediate response is over is subject to all applicable requirements of this Rule R315-265 and Rule R315-124 for those activities.

(12) A transporter storing manifested shipments of hazardous waste in containers meeting the requirements of Section R315-262-30 at a transfer facility for a period of ten days or less.

(13) The addition of absorbent material to waste in a container, as defined in Section R315-260-10, or the addition of waste to the absorbent material in a container provided that these actions occur at the time waste is first placed in the containers; and Subsection R315-265-17(b), Sections R315-265-171, and 265-172 are complied with.

(14) Universal waste handlers and universal waste transporters, as defined in Section R315-260-10, handling the wastes listed below. These handlers are subject to regulation under Rule R315-273, when handling the below listed universal wastes.

(i) Batteries as described in Section R315-273-2;

(ii) Pesticides as described in Section R315-273-3;

(iii) Mercury-containing equipment as described in Section R315-273-4; and

(iv) Lamps as described in Section R315-273-5;

(v) Antifreeze as described in Subsection R315-273-6(a); and

(vi) Aerosol cans as described in Subsection R315-273-6(b).

(d) The following hazardous wastes shall not be managed at facilities subject to regulation under Rule R315-265.

(1) EPA Hazardous Waste Nos. FO20, FO21, FO22, FO23, FO26, or FO27 unless:

(i) The wastewater treatment sludge is generated in a surface impoundment as part of the plant's wastewater treatment system;

(ii) The waste is stored in tanks or containers;

(iii) The waste is stored or treated in waste piles that meet the requirements of Subsection R315-264-250(c) as well as all other applicable requirements of Sections R315-265-250 through 265-260;

(iv) The waste is burned in incinerators that are certified pursuant to the standards and procedures in 40 CFR 265.352, which is adopted by reference; or

(v) The waste is burned in facilities that thermally treat the waste in a device other than an incinerator and that are certified

pursuant to the standards and procedures in 40 CFR 265.383, which is adopted by reference.

(e) The requirements of Rule R315-265 apply to owners or operators of all facilities which treat, store or dispose of hazardous waste referred to in Rule R315-268, and the Rule R315-268 standards are considered material conditions or requirements of the Rule R315-265 interim status standards.

**R315-265-71. Manifest System, Recordkeeping, and Reporting --Use of Manifest System.**

(a) (1) If a facility receives hazardous waste accompanied by a manifest, the owner, operator or his/her agent shall sign and date the manifest as indicated in Subsection R315-265-71(a) (2) to certify that the hazardous waste covered by the manifest was received, that the hazardous waste was received except as noted in the discrepancy space of the manifest, or that the hazardous waste was rejected as noted in the manifest discrepancy space.

(2) If the facility receives a hazardous waste shipment accompanied by a manifest, the owner, operator, or his agent shall:

- (i) Sign and date ~~[, by hand,]~~ each copy of the manifest;
- (ii) Note any discrepancies, as defined in Subsection R315-265-72(a), on each copy of the manifest;
- (iii) Immediately give the transporter at least one copy of the manifest;
- (iv) Within 30 days of delivery, send a copy, Page 2, of the manifest to the generator;

(v) Paper manifest submission requirements are:

(A) Options for compliance on June 30, 2018. Beginning on June 30, 2018, send the top copy, Page 1, of any paper manifest and any paper continuation sheet to the e-Manifest system for purposes of data entry and processing, or in lieu of submitting the paper copy to EPA, the owner or operator may transmit to the EPA system an image file of Page 1 of the manifest and any continuation sheet, or both a data file and image file corresponding to Page 1 of the manifest and any continuation sheet, within 30 days of the date of delivery. Submissions of copies to the e-Manifest system shall be made at the mailing address or electronic mail/submission address specified at the e-Manifest program website's directory of services. Beginning on June 30, 2021, EPA will not accept mailed paper manifests from facilities for processing in e-Manifest.

(B) Options for compliance on June 30, 2021. Beginning on June 30, 2021, the requirement to submit the top copy, Page 1, of the paper manifest and any paper continuation sheet to the e-Manifest system for purposes of data entry and processing may be met by the owner or operator only by transmitting to the EPA system an image file of Page 1 of the manifest and any continuation sheet, or by transmitting to the EPA system both a data file and the image file corresponding to

Page 1 of the manifest and any continuation sheet, within 30 days of the date of delivery. Submissions of copies to the e-Manifest system shall be made to the electronic mail/submission address specified at the e-Manifest program website's directory of services; and

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

(3) The owner or operator of a facility that receives hazardous waste subject to Sections R315-262-80 through 265-84 from a foreign source shall:

(i) Additionally list the relevant consent number from consent documentation supplied by EPA to the facility for each waste listed on the manifest, matched to the relevant list number for the waste from block 9b. If additional space is needed, the owner or operator should use a Continuation Sheet(s), EPA Form 8700-22A; and

(ii) Send a copy of the manifest to EPA using the addresses listed in Subsection R315-262-82(e) within 30 days of delivery until the facility can submit such a copy to the e-Manifest system per Subsection R315-265-71(a)(2)(v).

(b) If a facility receives, from a rail or water (bulk shipment) transporter, hazardous waste which is accompanied by a shipping paper containing all the information required on the manifest, excluding the EPA identification numbers, generator's certification, and signatures, the owner or operator, or his agent, shall:

(1) Sign and date each copy of the manifest or shipping paper, if the manifest has not been received, to certify that the hazardous waste covered by the manifest or shipping paper was received;

(2) Note any significant discrepancies, as defined in Subsection R315-265-72(a), in the manifest or shipping paper, if the manifest has not been received, on each copy of the manifest or shipping paper;

Comment: The Director does not intend that the owner or operator of a facility whose procedures under Subsection R315-265-13(c) include waste analysis shall perform that analysis before signing the shipping paper and giving it to the transporter. Subsection R315-265-72(b), however, requires reporting an unreconciled discrepancy discovered during later analysis.

(3) Immediately give the rail or water (bulk shipment) transporter at least one copy of the manifest or shipping paper, if the manifest has not been received;

(4) Within 30 days after the delivery, send a copy of the signed and dated manifest or a signed and dated copy of the shipping paper, if the manifest has not been received within 30 days after delivery, to the generator; and

Comment: Subsection R315-262-23(c) requires the generator to send three copies of the manifest to the facility when hazardous waste is sent by rail or water (bulk shipment).

(5) Retain at the facility a copy of the manifest and shipping

paper, if signed in lieu of the manifest at the time of delivery, for at least three years from the date of delivery.

(c) Whenever a shipment of hazardous waste is initiated from a facility, the owner or operator of that facility shall comply with the requirements of Rule R315-262. The provisions of Sections R315-262-15, R315-262-16, and R315-262-17 are applicable to the on-site accumulation of hazardous wastes by generators. Therefore, the provisions of Sections R315-262-15, R315-262-16, and R315-262-17 only apply to owners or operators who are shipping hazardous waste which they generated at that facility or operating as a large quantity generator consolidating hazardous waste from very small quantity generators under Subsection R315-262-17(f).

Comment: The provisions of Section R315-262-34 are applicable to the on-site accumulation of hazardous wastes by generators. Therefore, the provisions of Section R315-262-34 only apply to owners or operators who are shipping hazardous waste which they generated at that facility.

(d) As per Subsection R315-262-84(d)(2)(xv), within three working days of the receipt of a shipment subject to Sections R315-262-80 through 262-84, the owner or operator of a facility shall provide a copy of the movement document bearing all required signatures to the foreign exporter; to the competent authorities of the countries of export and transit that control the shipment as an export and transit shipment of hazardous waste respectively; and on or after the electronic import-export reporting compliance date, to EPA electronically using EPA's Waste Import Export Tracking System (WIETS), or its successor system. The original copy of the movement document shall be maintained at the facility for at least three years from the date of signature. The owner or operator of a facility may satisfy this recordkeeping requirement by retaining electronically submitted documents in the facility's account on EPA's Waste Import Export Tracking System (WIETS), or its successor system, provided that copies are readily available for viewing and production if requested by any EPA or Utah inspector. No owner or operator of a facility may be held liable for the inability to produce the documents for inspection under this section if the owner or operator of a facility can demonstrate that the inability to produce the document is due exclusively to technical difficulty with EPA's Waste Import Export Tracking System (WIETS), or its successor system, for which the owner or operator of a facility bears no responsibility.

(e) A facility shall determine whether the consignment state for a shipment regulates any additional wastes, beyond those regulated Federally, as hazardous wastes under its state hazardous waste program. Facilities shall also determine whether the consignment state or generator state requires the facility to submit any copies of the manifest to these states.

(f) Legal equivalence to paper manifests. Electronic

manifests that are obtained, completed, and transmitted in accordance with Subsection R315-262-20(a)(3), and used in accordance with this Section R315-265-71 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.

(1) 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 Section R315-262-25.

(2) 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.

(3) 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.

(4) 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 Utah inspector.

(5) No owner or operator may be held liable for the inability to produce an electronic manifest for inspection under this Section R315-265-71 if the owner or operator can demonstrate that the inability to produce the electronic manifest is due exclusively to a technical difficulty with the EPA system for which the owner or operator bears no responsibility.

(g) 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

(h) 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:

(1) Upon delivery of the hazardous waste to the designated facility, the owner or operator shall 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,

(2) The owner or operator of the facility shall give back to the final transporter one copy of the paper replacement manifest,

(3) Within 30 days of delivery of the hazardous waste to the designated facility, the owner or operator of the facility shall 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

(4) The owner or operator of the facility shall retain at the facility one copy of the paper replacement manifest for at least three years from the date of delivery.

(i) 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 three years from the date of delivery of the waste.

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

(1) As prescribed in 40 CFR 265.1311, and determined in 40 CFR 265.1312, which are adopted and incorporated by reference, an owner or operator who is a user of the electronic manifest system shall be assessed a user fee by EPA for the submission and processing of each electronic and paper manifest. EPA shall update the schedule of user fees and publish them to the user community, as provided in 40 CFR 265.1313, which is adopted and incorporated by reference.

(2) An owner or operator subject to user fees under Section R315-265-71 shall make user fee payments in accordance with the requirements of 40 CFR 265.1314, subject to the informal fee dispute resolution process of 40 CFR 265.1316, and subject to the sanctions for delinquent payments under 40 CFR 265.1315, which are adopted and incorporated by reference.

(k) Electronic manifest signatures.

(1) Electronic manifest signatures shall meet the criteria described in Section R315-262-25.

(1) Post-receipt manifest data corrections. After facilities have certified to the receipt of hazardous wastes by signing Item 20 of the manifest, any post-receipt data corrections may be submitted at any time by any interested person, for example, waste handler, shown on the manifest.

(1) Interested persons shall make all corrections to manifest data by electronic submission, either by directly entering corrected data to the web based service provided in e-Manifest for such

corrections, or by an upload of a data file containing data corrections relating to one or more previously submitted manifests.

(2) Each correction submission shall include the following information:

(i) The Manifest Tracking Number and date of receipt by the facility of the original manifest(s) for which data are being corrected;

(ii) The Item Number(s) of the original manifest that is the subject of the submitted correction(s); and

(iii) For each Item Number with corrected data, the data previously entered and the corresponding data as corrected by the correction submission.

(3) Each correction submission shall include a statement that the person submitting the corrections certifies that to the best of his or her knowledge or belief, the corrections that are included in the submission will cause the information reported about the previously received hazardous wastes to be true, accurate, and complete.

(i) The certification statement shall be executed with a valid electronic signature; and

(ii) A batch upload of data corrections may be submitted under one certification statement.

(4) Upon receipt by the system of any correction submission, other interested persons shown on the manifest will be provided electronic notice of the submitter's corrections.

(5) Other interested persons shown on the manifest may respond to the submitter's corrections with comments to the submitter, or by submitting another correction to the system, certified by the respondent as specified in Subsection R315-265-71(1)(3), and with notice of the corrections to other interested persons shown on the manifest.

R315-265-72. Manifest System, Recordkeeping, and Reporting -- Manifest Discrepancies.

(a) Manifest discrepancies are:

(1) Significant differences, as defined by Subsection R315-265-72(b), between the quantity or type of hazardous waste designated on the manifest or shipping paper, and the quantity and type of hazardous waste a facility actually receives;

(2) Rejected wastes, which may be a full or partial shipment of hazardous waste that the TSDF cannot accept; or

(3) Container residues, which are residues that exceed the quantity limits for "empty" containers set forth in Subsection R315-261-7(b).

(b) Significant differences in quantity are: For bulk waste, variations greater than 10 percent in weight; for batch waste, any variation in piece count, such as a discrepancy of one drum in a

truckload. Significant differences in type are obvious differences which can be discovered by inspection or waste analysis, such as waste solvent substituted for waste acid, or toxic constituents not reported on the manifest or shipping paper.

(c) Upon discovering a significant difference in quantity or type, the owner or operator shall attempt to reconcile the discrepancy with the waste generator or transporter, for example, with telephone conversations. If the discrepancy is not resolved within 15 days after receiving the waste, the owner or operator shall immediately submit to the Director a letter describing the discrepancy and attempts to reconcile it, and a copy of the manifest or shipping paper at issue.

(d) (1) Upon rejecting waste or identifying a container residue that exceeds the quantity limits for "empty" containers set forth in Subsection R315-261-7(b), the facility shall consult with the generator prior to forwarding the waste to another facility that can manage the waste. If it is impossible to locate an alternative facility that can receive the waste, the facility may return the rejected waste or residue to the generator. The facility shall send the waste to the alternative facility or to the generator within 60 days of the rejection or the container residue identification.

(2) While the facility is making arrangements for forwarding rejected wastes or residues to another facility under this Section R315-265-72, it shall ensure that either the delivering transporter retains custody of the waste, or the facility shall provide for secure, temporary custody of the waste, pending delivery of the waste to the first transporter designated on the manifest prepared under Subsections R315-265-72(e) or (f).

(e) Except as provided in Subsection R315-265-72(e)(7), for full or partial load rejections and residues that are to be sent off-site to an alternate facility, the facility is required to prepare a new manifest in accordance with Subsection R315-262-20(a) and the following instructions:

(1) Write the generator's U.S. EPA ID number in Item 1 of the new manifest. Write the generator's name and mailing address in Item 5 of the new manifest. If the mailing address is different from the generator's site address, then write the generator's site address in the designated space in Item 5.

(2) Write the name of the alternate designated facility and the facility's U.S. EPA ID number in the designated facility block, Item 8, of the new manifest.

(3) Copy the manifest tracking number found in Item 4 of the old manifest to the Special Handling and Additional Information Block of the new manifest, and indicate that the shipment is a residue or rejected waste from the previous shipment.

(4) Copy the manifest tracking number found in Item 4 of the new manifest to the manifest reference number line in the Discrepancy Block of the old manifest, Item 18a.

(5) Write the DOT description for the rejected load or the residue in Item 9, U.S. DOT Description, of the new manifest and write the container types, quantity, and volume(s) of waste.

(6) Sign the Generator's/Offerrer's Certification to certify, as the offeror of the shipment, that the waste has been properly packaged, marked and labeled and is in proper condition for transportation, and mail a signed copy of the manifest to the generator identified in Item 5 of the new manifest.

(7) For full load rejections that are made while the transporter remains present at the facility, the facility may forward the rejected shipment to the alternate facility by completing Item 18b of the original manifest and supplying the information on the next destination facility in the Alternate Facility space. The facility shall retain a copy of this manifest for its records, and then give the remaining copies of the manifest to the transporter to accompany the shipment. If the original manifest is not used, then the facility shall use a new manifest and comply with Subsections R315-265-72 (e) (1), (2), (3), (4), (5), and (6).

(f) Except as provided in Subsection R315-265-72 (f) (7), for rejected wastes and residues that must be sent back to the generator, the facility is required to prepare a new manifest in accordance with Subsection R315-262-20(a) and the following instructions:

(1) Write the facility's U.S. EPA ID number in Item 1 of the new manifest. Write the facility's name and mailing address in Item 5 of the new manifest. If the mailing address is different from the facility's site address, then write the facility's site address in the designated space for Item 5 of the new manifest.

(2) Write the name of the initial generator and the generator's U.S. EPA ID number in the designated facility block, Item 8, of the new manifest.

(3) Copy the manifest tracking number found in Item 4 of the old manifest to the Special Handling and Additional Information Block of the new manifest, and indicate that the shipment is a residue or rejected waste from the previous shipment,

(4) Copy the manifest tracking number found in Item 4 of the new manifest to the manifest reference number line in the Discrepancy Block of the old manifest, Item 18a,

(5) Write the DOT description for the rejected load or the residue in Item 9, U.S. DOT Description, of the new manifest and write the container types, quantity, and volume(s) of waste.

(6) Sign the Generator's/Offerrer's Certification to certify, as offeror of the shipment, that the waste has been properly packaged, marked and labeled and is in proper condition for transportation,

(7) For full load rejections that are made while the transporter remains at the facility, the facility may return the shipment to the generator with the original manifest by completing Item 18a and 18b of the manifest and supplying the generator's information in the

Alternate Facility space. The facility shall retain a copy for its records and then give the remaining copies of the manifest to the transporter to accompany the shipment. If the original manifest is not used, then the facility shall use a new manifest and comply with Subsections R315-265-72(f)(1), (2), (3), (4), (5), (6), and (8).

(8) For full or partial load rejections and container residues contained in non-empty containers that are returned to the generator, the facility shall also comply with the exception reporting requirements in Subsection R315-262-42(a).

(g) If a facility rejects a waste or identifies a container residue that exceeds the quantity limits for "empty" containers set forth in Subsection R315-261-7(b) after it has signed, dated, and returned a copy of the manifest to the delivering transporter or to the generator, the facility shall amend its copy of the manifest to indicate the rejected wastes or residues in the discrepancy space of the amended manifest. The facility shall also copy the manifest tracking number from Item 4 of the new manifest to the discrepancy space of the amended manifest, and shall re-sign and date the manifest to certify to the information as amended. The facility shall retain the amended manifest for at least three years from the date of amendment, and shall within 30 days, send a copy of the amended manifest to the transporter and generator that received copies prior to their being amended.

**R315-265-1030. Air Emission Standards for Process Vents--Applicability**

(a) The regulations in Sections R315-265-1030 through R315-265-1035 apply to owners and operators of facilities that treat, store, or dispose of hazardous wastes, except as provided in Section R315-265-1.

(b) Except for Subsections R315-265-1034(d) and R315-265-1034(e), Sections R315-265-1030 through R315-265-1035 apply to process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations that manage hazardous wastes with organic concentrations of at least 10 ppmw, if these operations are conducted in one of the following:

(1) A unit that is subject to the permitting requirements of Rule R315-270, or

(2) A unit, including a hazardous waste recycling unit, that is not exempt from permitting under the provisions of Section R315-262-17, for example, a hazardous waste recycling unit that is not a 90-day tank or container, and that is located at a hazardous waste management facility otherwise subject to the permitting requirements of Rule R315-270, or

(3) A unit that is exempt from permitting under the provisions of Section R315-262-17, for example, a "90-day" tank or container, and

is not a recycling unit under the requirements of Section R315-261-6.

Note: The requirements of Sections R315-265-1032 through R315-265-1035 apply to process vents on hazardous waste recycling units previously exempt under Subsection R315-261-6(c)(1). Other exemptions under Section R315-261-4, and Subsection R315-265-1(c) are not affected by these requirements.

(c) Reserved.

(d) The requirements of Sections R315-265-1030 through R315-265-1035 do not apply to the process vents at a facility where the facility owner or operator certifies that all of the process vents that would otherwise be subject to Sections R315-265-1030 through R315-265-1035 are equipped with and operating air emission controls in accordance with the process vent requirements of an applicable Clean Air Act regulation codified under 40 CFR part 60, part 61, or part 63. The documentation of compliance under regulations at 40 CFR part 60, part 61, or part 63 shall be kept with, or made readily available with, the facility operating record.

#### **R315-265-1031. Air Emission Standards for Process Vents--Definitions.**

As used in Sections R315-265-1030 through R315-265-1035, all terms shall have the meaning given them in Section R315-264-1031, RCRA, and Rules R315-260 through R315-266.

#### **R315-265-1032. Air Emission Standards for Process Vents--Standards: Process Vents.**

(a) The owner or operator of a facility with process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction or air or steam stripping operations managing hazardous wastes with organic concentrations at least 10 ppmw shall either:

(1) Reduce total organic emissions from all affected process vents at the facility below 1.4 kg/h (3 lb/h) and 2.8 Mg/yr (3.1 tons/yr), or

(2) Reduce, by use of a control device, total organic emissions from all affected process vents at the facility by 95 weight percent.

(b) If the owner or operator installs a closed-vent system and control device to comply with the provisions of Subsection R315-265-1032(a), the closed-vent system and control device shall meet the requirements of Section R315-265-1033.

(c) Determinations of vent emissions and emission reductions or total organic compound concentrations achieved by add-on control devices may be based on engineering calculations or performance tests. If performance tests are used to determine vent emissions, emission reductions, or total organic compound concentrations achieved by add-on control devices, the performance tests shall conform with the requirements of Subsection R315-265-1034(c).

(d) When an owner or operator and the Director do not agree on determinations of vent emissions and emission reductions or both or total organic compound concentrations achieved by add-on control devices based on engineering calculations, the test methods in Subsection R315-265-1034(c) shall be used to resolve the disagreement.

**R315-265-1033. Air Emission Standards for Process Vents--Standards: Closed-Vent Systems and Control Devices.**

(a) (1) Owners or operators of closed-vent systems and control devices used to comply with provisions of Sections R315-265-1030 through R315-265-1035 shall comply with the provisions of Section R315-265-1033.

(2) (i) The owner or operator of an existing facility who cannot install a closed-vent system and control device to comply with the provisions of Sections R315-265-1030 through R315-265-1035 on the effective date that the facility becomes subject to the requirements of Sections R315-265-1030 through R315-265-1035 shall prepare an implementation schedule that includes dates by which the closed-vent system and control device will be installed and in operation. The controls shall be installed as soon as possible, but the implementation schedule may allow up to 30 months after the effective date that the facility becomes subject to Sections R315-265-1030 through R315-265-1035 for installation and startup.

(ii) Any unit that begins operation after December 21, 1990, and is subject to the requirements of Sections R315-265-1030 through R315-265-1035 when operation begins, shall comply with the rules immediately, for example, shall have control devices installed and operating on startup of the affected unit; the 30-month implementation schedule does not apply.

(iii) The owner or operator of any facility in existence on the effective date of a statutory or regulatory amendment that renders the facility subject to Sections R315-265-1030 through R315-265-1035 shall comply with all requirements of Sections R315-265-1030 through R315-265-1035 as soon as practicable but no later than 30 months after the amendment's effective date. When control equipment required by Sections R315-265-1030 through R315-265-1035 cannot be installed and begin operation by the effective date of the amendment, the facility owner or operator shall prepare an implementation schedule that includes the following information: Specific calendar dates for award of contracts or issuance of purchase orders for the control equipment, initiation of on-site installation of the control equipment, completion of the control equipment installation, and performance of any testing to demonstrate that the installed equipment meets the applicable standards of Sections R315-265-1030 through R315-265-1035. The owner or operator shall enter the implementation schedule in the operating record or in a permanent, readily available file located at the facility.

(iv) Owners and operators of facilities and units that become newly subject to the requirements of Sections R315-265-1030 through R315-265-1035 after December 8, 1997, due to an action other than those described in Subsection R315-265-1033(a)(2)(iii) shall comply with all applicable requirements immediately, for example, shall have control devices installed and operating on the date the facility or unit becomes subject to Sections R315-265-1030 through R315-265-1035; the 30-month implementation schedule does not apply.

(b) A control device involving vapor recovery, for example, a condenser or adsorber, shall be designed and operated to recover the organic vapors vented to it with an efficiency of 95 weight percent or greater unless the total organic emission limits of Subsection R315-265-1032(a)(1) for all affected process vents can be attained at an efficiency less than 95 weight percent.

(c) An enclosed combustion device, for example, a vapor incinerator, boiler, or process heater, shall be designed and operated to reduce the organic emissions vented to it by 95 weight percent or greater; to achieve a total organic compound concentration of 20 ppmv, expressed as the sum of the actual compounds, not carbon equivalents, on a dry basis corrected to 3 percent oxygen; or to provide a minimum residence time of 0.50 seconds at a minimum temperature of 760 °C. If a boiler or process heater is used as the control device, then the vent stream shall be introduced into the flame combustion zone of the boiler or process heater.

(d) (1) A flare shall be designed for and operated with no visible emissions as determined by the methods specified in Subsection R315-265-1033(e)(1), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

(2) A flare shall be operated with a flame present at all times, as determined by the methods specified in Subsection R315-265-1033(f)(2)(iii).

(3) A flare shall be used only if the net heating value of the gas being combusted is 11.2 MJ/scm (300 Btu/scf) or greater, if the flare is steam-assisted or air-assisted; or if the net heating value of the gas being combusted is 7.45 MJ/scm (200 Btu/scf) or greater if the flare is nonassisted. The net heating value of the gas being combusted shall be determined by the methods specified in Subsection R315-265-1033(e)(2).

(4) (i) A steam-assisted or nonassisted flare shall be designed for and operated with an exit velocity, as determined by the methods specified in Subsection R315-265-1033(e)(3), of less than 18.3 m/s (60 ft/s), except as provided in Subsections R315-265-1033(d)(4)(ii) and R315-265-1033(d)(4)(iii).

(ii) A steam-assisted or nonassisted flare designed for and operated with an exit velocity, as determined by the methods specified in Subsection R315-265-1033(e)(3), equal to or greater than 18.3 m/s (60 ft/s) but less than 122 m/s (400 ft/s) is allowed if the net heating

value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).

(iii) A steam-assisted or nonassisted flare designed for and operated with an exit velocity, as determined by the methods specified in Subsection R315-265-1033 (e) (3), less than the velocity,  $V_{max}$ , as determined by the method specified in Subsection R315-265-1033(e) (4), and less than 122 m/s (400 ft/s) is allowed.

(5) An air-assisted flare shall be designed and operated with an exit velocity less than the velocity,  $V_{max}$ , as determined by the method specified in Subsection R315-265-1033(e) (5).

(6) A flare used to comply with Section R315-265-1033 shall be steam-assisted, air-assisted, or nonassisted.

(e) (1) Reference Method 22 in 40 CFR part 60 shall be used to determine the compliance of a flare with the visible emission provisions of this subpart. The observation period is 2 hours and shall be used according to Method 22.

(2) The net heating value of the gas being combusted in a flare shall be calculated using the equation found in 40 CFR 265.1033(e) (2), which is adopted and incorporated by reference.

(3) The actual exit velocity of a flare shall be determined by dividing the volumetric flow rate, in units of standard temperature and pressure, as determined by Reference Methods 2, 2A, 2C, or 2D in 40 CFR part 60 as appropriate, by the unobstructed, free, cross-sectional area of the flare tip.

(4) The maximum allowed velocity in m/s,  $V_{max}$ , for a flare complying with Subsection R315-265-1033(d) (4) (iii) shall be determined by the following equation:

$$\text{Log}_{10}(V_{max}) = (HT + 28.8)/31.7$$

where:

HT = The net heating value as determined in Subsection R315-265-1033(e) (2).

28.8 = Constant.

31.7 = Constant.

(5) The maximum allowed velocity in m/s,  $V_{max}$ , for an air-assisted flare shall be determined by the following equation:

$$V_{max} = 8.706 + 0.7084 (HT)$$

where:

8.706 = Constant.

0.7084 = Constant.

HT = The net heating value as determined in Subsection R315-265-1033(e) (2).

(f) The owner or operator shall monitor and inspect each control device required to comply with Section R315-265-1033 to ensure proper operation and maintenance of the control device by implementing the following requirements:

(1) Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow indicator that provides a record

of vent stream flow from each affected process vent to the control device at least once every hour. The flow indicator sensor shall be installed in the vent stream at the nearest feasible point to the control device inlet, but before being combined with other vent streams.

(2) Install, calibrate, maintain, and operate according to the manufacturer's specifications a device to continuously monitor control device operation as specified below:

(i) For a thermal vapor incinerator, a temperature monitoring device equipped with a continuous recorder. The device shall have an accuracy of plus or minus 1 percent of the temperature being monitored in degrees Celsius or plus or minus 0.5 degrees Celsius, whichever is greater. The temperature sensor shall be installed at a location in the combustion chamber downstream of the combustion zone.

(ii) For a catalytic vapor incinerator, a temperature monitoring device equipped with a continuous recorder. The device shall be capable of monitoring temperature at two locations and have an accuracy of plus or minus 1 percent of the temperature being monitored in degrees Celsius or plus or minus 0.5 degrees Celsius, whichever is greater. One temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed inlet and a second temperature sensor shall be installed in the vent stream at the nearest feasible point to the catalyst bed outlet.

(iii) For a flare, a heat sensing monitoring device equipped with a continuous recorder that indicates the continuous ignition of the pilot flame.

(iv) For a boiler or process heater having a design heat input capacity less than 44 MW, a temperature monitoring device equipped with a continuous recorder. The device shall have an accuracy of plus or minus 1 percent of the temperature being monitored in degrees Celsius or plus or minus 0.5 degrees Celsius, whichever is greater. The temperature sensor shall be installed at a location in the furnace downstream of the combustion zone.

(v) For a boiler or process heater having a design heat input capacity greater than or equal to 44 MW, a monitoring device equipped with a continuous recorder to measure a parameter or parameters that indicate good combustion operating practices are being used.

(vi) For a condenser, either:

(A) A monitoring device equipped with a continuous recorder to measure the concentration level of the organic compounds in the exhaust vent stream from the condenser; or

(B) A temperature monitoring device equipped with a continuous recorder. The device shall be capable of monitoring temperature with an accuracy of plus or minus 1 percent of the temperature being monitored in degrees Celsius or plus or minus 0.5 degrees Celsius, whichever is greater. The temperature sensor shall be installed at a location in the exhaust vent stream from the condenser exit, for

example, product side.

(vii) For a carbon adsorption system such as a fixed-bed carbon adsorber that regenerates the carbon bed directly in the control device, either:

(A) A monitoring device equipped with a continuous recorder to measure the concentration level of the organic compounds in the exhaust vent stream from the carbon bed, or

(B) A monitoring device equipped with a continuous recorder to measure a parameter that indicates the carbon bed is regenerated on a regular, predetermined time cycle.

(3) Inspect the readings from each monitoring device required by Subsections R315-265-1033(f) (1) and R315-265-1033(f) (2) at least once each operating day to check control device operation and, if necessary, immediately implement the corrective measures necessary to ensure the control device operates in compliance with the requirements of Section R315-265-1033.

(g) An owner or operator using a carbon adsorption system such as a fixed-bed carbon adsorber that regenerates the carbon bed directly onsite in the control device, shall replace the existing carbon in the control device with fresh carbon at a regular, predetermined time interval that is no longer than the carbon service life established as a requirement of Subsection R315-265-1035(b) (4) (iii) (F).

(h) An owner or operator using a carbon adsorption system such as a carbon canister that does not regenerate the carbon bed directly onsite in the control device shall replace the existing carbon in the control device with fresh carbon on a regular basis by using one of the following procedures:

(1) Monitor the concentration level of the organic compounds in the exhaust vent stream from the carbon adsorption system on a regular schedule and replace the existing carbon with fresh carbon immediately when carbon breakthrough is indicated. The monitoring frequency shall be daily or at an interval no greater than 20 percent of the time required to consume the total carbon working capacity established as a requirement of Subsection R315-265-1035(b) (4) (iii) (G), whichever is longer.

(2) Replace the existing carbon with fresh carbon at a regular, predetermined time interval that is less than the design carbon replacement interval established as a requirement of Subsection R315-265-1035(b) (4) (iii) (G).

(i) An owner or operator of an affected facility seeking to comply with the provisions of Sections R315-265-1030 through R315-265-1035 by using a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system is required to develop documentation including sufficient information to describe the control device operation and identify the process parameter or parameters that indicate proper operation and maintenance of the

control device.

(j) A closed-vent system shall meet either of the following design requirements:

(1) A closed-vent system shall be designed to operate with no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background as determined by the procedure in Subsection R315-265-1034(b), and by visual inspections; or

(2) A closed-vent system shall be designed to operate at a pressure below atmospheric pressure. The system shall be equipped with at least one pressure gauge or other pressure measurement device that can be read from a readily accessible location to verify that negative pressure is being maintained in the closed-vent system when the control device is operating.

(k) The owner or operator shall monitor and inspect each closed-vent system required to comply with Section R315-265-1033 to ensure proper operation and maintenance of the closed-vent system by implementing the following requirements:

(1) Each closed-vent system that is used to comply with Subsection R315-265-1033(j) (1) shall be inspected and monitored in accordance with the following requirements:

(i) An initial leak detection monitoring of the closed-vent system shall be conducted by the owner or operator on or before the date that the system becomes subject to Section R315-265-1033. The owner or operator shall monitor the closed-vent system components and connections using the procedures specified in Subsection R315-265-1034(b) to demonstrate that the closed-vent system operates with no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background.

(ii) After initial leak detection monitoring required in Subsection R315-265-1033(k) (1) (i), the owner or operator shall inspect and monitor the closed-vent system as follows:

(A) Closed-vent system joints, seams, or other connections that are permanently or semi-permanently sealed, for example, a welded joint between two sections of hard piping or a bolted and gasketed ducting flange, shall be visually inspected at least once per year to check for defects that could result in air pollutant emissions. The owner or operator shall monitor a component or connection using the procedures specified in Subsection R315-265-1034(b) to demonstrate that it operates with no detectable emissions following any time the component is repaired or replaced, for example, a section of damaged hard piping is replaced with new hard piping, or the connection is unsealed, for example, a flange is unbolted.

(B) Closed-vent system components or connections other than those specified in Subsection R315-265-1033(k) (1) (ii) (A) shall be monitored annually and at other times as requested by the Director, except as provided for in Subsection R315-265-1033(n), using the procedures specified in Subsection R315-265-1034(b) to demonstrate that the

components or connections operate with no detectable emissions.

(iii) In the event that a defect or leak is detected, the owner or operator shall repair the defect or leak in accordance with the requirements of Subsection R315-265-1033(k) (3).

(iv) The owner or operator shall maintain a record of the inspection and monitoring in accordance with the requirements specified in Section R315-265-1035.

(2) Each closed-vent system that is used to comply with Subsection R315-265-1033(j) (2) shall be inspected and monitored in accordance with the following requirements:

(i) The closed-vent system shall be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in ductwork or piping or loose connections.

(ii) The owner or operator shall perform an initial inspection of the closed-vent system on or before the date that the system becomes subject to Section R315-265-1033. Thereafter, the owner or operator shall perform the inspections at least once every year.

(iii) In the event that a defect or leak is detected, the owner or operator shall repair the defect in accordance with the requirements of Subsection R315-265-1033(k) (3).

(iv) The owner or operator shall maintain a record of the inspection and monitoring in accordance with the requirements specified in Section R315-265-1035.

(3) The owner or operator shall repair all detected defects as follows:

(i) Detectable emissions, as indicated by visual inspection, or by an instrument reading greater than 500 ppmv above background, shall be controlled as soon as practicable, but not later than 15 calendar days after the emission is detected, except as provided for in Subsection R315-265-1033(k) (3) (iii).

(ii) A first attempt at repair shall be made no later than 5 calendar days after the emission is detected.

(iii) Delay of repair of a closed-vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown, or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be completed by the end of the next process unit shutdown.

(iv) The owner or operator shall maintain a record of the defect repair in accordance with the requirements specified in Section R315-265-1035.

(1) Closed-vent systems and control devices used to comply with provisions of Sections R315-265-1030 through R315-265-1035 shall be operated at all times when emissions may be vented to them.

(m) The owner or operator using a carbon adsorption system to

control air pollutant emissions shall document that all carbon that is a hazardous waste and that is removed from the control device is managed in one of the following manners, regardless of the average volatile organic concentration of the carbon:

(1) Regenerated or reactivated in a thermal treatment unit that meets one of the following:

(i) The owner or operator of the unit has been issued a final permit under Rule R315-270 which implements the requirements of Sections R315-264-600 through R315-264-603; or

(ii) The unit is equipped with and operating air emission controls in accordance with the applicable requirements of Sections R315-265-1030 through R315-265-1035 and Sections R315-265-1080 through R315-265-1090 or of Sections R315-264-1030 through R315-264-1036 and Sections R315-264-1080 through R315-264-1090; or

(iii) The unit is equipped with and operating air emission controls in accordance with a national emission standard for hazardous air pollutants under 40 CFR part 61 or 40 CFR part 63.

(2) Incinerated in a hazardous waste incinerator for which the owner or operator either:

(i) Has been issued a final permit under Rule R315-270 which implements the requirements of Sections R315-264-340 through R315-264-351; or

(ii) Has designed and operates the incinerator in accordance with the interim status requirements of 40 CFR 265.340 through 352, which are adopted and incorporated by reference.

(3) Burned in a boiler or industrial furnace for which the owner or operator either:

(i) Has been issued a final permit under Rule R315-270 which implements the requirements of Sections R315-266-100 through R315-266-112; or

(ii) Has designed and operates the boiler or industrial furnace in accordance with the interim status requirements of Sections R315-266-100 through R315-266-112.

(n) Any components of a closed-vent system that are designated, as described in Subsection R315-265-1035(c) (9), as unsafe to monitor are exempt from the requirements of Subsection R315-265-1033(k) (1) (ii) (B) if:

(1) The owner or operator of the closed-vent system determines that the components of the closed-vent system are unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with Subsection R315-265-1033(k) (1) (ii) (B); and

(2) The owner or operator of the closed-vent system adheres to a written plan that requires monitoring the closed-vent system components using the procedure specified in Subsection R315-265-1033(k) (1) (ii) (B) as frequently as practicable during safe-to-monitor times.

**R315-265-1034. Air Emission Standards for Process Vents--Test Methods and Procedures.**

(a) Each owner or operator subject to the provisions of Sections R315-265-1030 through R315-265-1035 shall comply with the test methods and procedures requirements provided in Section R315-265-1034.

(b) When a closed-vent system is tested for compliance with no detectable emissions, as required in Subsection R315-265-1033(k), the test shall comply with the following requirements:

(1) Monitoring shall comply with Reference Method 21 in 40 CFR part 60.

(2) The detection instrument shall meet the performance criteria of Reference Method 21.

(3) The instrument shall be calibrated before use on each day of its use by the procedures specified in Reference Method 21.

(4) Calibration gases shall be:

(i) Zero air, less than 10 ppm of hydrocarbon in air.

(ii) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.

(5) The background level shall be determined as set forth in Reference Method 21.

(6) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

(7) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

(c) Performance tests to determine compliance with Subsection R315-265-1032(a) and with the total organic compound concentration limit of Subsection R315-265.1033(c) shall comply with the following:

(1) Performance tests to determine total organic compound concentrations and mass flow rates entering and exiting control devices shall be conducted and data reduced in accordance with the following reference methods and calculation procedures:

(i) Method 2 in 40 CFR part 60 for velocity and volumetric flow rate.

(ii) Method 18 or Method 25A in 40 CFR part 60, appendix A, for organic content. If Method 25A is used, the organic HAP used as the calibration gas shall be the single organic HAP representing the largest percent by volume of the emissions. The use of Method 25A is acceptable if the response from the high-level calibration gas is at least 20 times the standard deviation of the response from the zero calibration gas when the instrument is zeroed on the most sensitive scale.

(iii) Each performance test shall consist of three separate runs; each run conducted for at least 1 hour under the conditions that exist when the hazardous waste management unit is operating at the highest

load or capacity level reasonably expected to occur. For the purpose of determining total organic compound concentrations and mass flow rates, the average of results of all runs shall apply. The average shall be computed on a time-weighted basis.

(iv) Total organic mass flow rates shall be determined by the following equation:

(A) For sources utilizing Method 18 the equation found in 40 CFR 264.1034(c)(1)(iv)(A), is adopted and incorporated by reference.

Where:

$E_h$  = Total organic mass flow rate, kg/h;

$Q_{2sd}$  = Volumetric flow rate of gases entering or exiting control device, as determined by Method 2, dscm/h;

$n$  = Number of organic compounds in the vent gas;

$C_i$  = Organic concentration in ppm, dry basis, of compound  $i$  in the vent gas, as determined by Method 18;

$MW_i$  = Molecular weight of organic compound  $i$  in the vent gas, kg/kg-mol;

0.0416 = Conversion factor for molar volume, kg-mol/m<sup>3</sup> (@ 293 K and 760 mm Hg);

10<sup>-6</sup> = Conversion from ppm

(B) For sources utilizing Method 25A.

$E_h = (Q)(C)(MW)(0.0416)(10^{-6})$

Where:

$E_h$  = Total organic mass flow rate, kg/h;

$Q$  = Volumetric flow rate of gases entering or exiting control device, as determined by Method 2, dscm/h;

$C$  = Organic concentration in ppm, dry basis, as determined by Method 25A;

$MW$  = Molecular weight of propane, 44;

0.0416 = Conversion factor for molar volume, kg-mol/m<sup>3</sup> (@ 293 K and 760 mm Hg);

10<sup>-6</sup> = Conversion from ppm.

(v) The annual total organic emission rate shall be determined by the following equation:

$EA = (E_h)(H)$

where:

$EA$  = Total organic mass emission rate, kg/y;

$E_h$  = Total organic mass flow rate for the process vent, kg/h;

$H$  = Total annual hours of operations for the affected unit, h.

(vi) Total organic emissions from all affected process vents at the facility shall be determined by summing the hourly total organic mass emission rates,  $E_h$ , as determined in Subsection R315-265-1034(c)(1)(iv), and by summing the annual total organic mass emission rates,  $EA$ , as determined in Subsection R315-265-1034(c)(1)(v), for all affected process vents at the facility.

(2) The owner or operator shall record such process information

as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test.

(3) The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

(i) Sampling ports adequate for the test methods specified in Subsection R315-265-1034(c) (1).

(ii) Safe sampling platforms.

(iii) Safe access to sampling platforms.

(iv) Utilities for sampling and testing equipment.

(4) For the purpose of making compliance determinations, the time-weighted average of the results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the owner or operator's control, compliance may, upon the Director's approval, be determined using the average of the results of the two other runs.

(d) To show that a process vent associated with a hazardous waste distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation is not subject to the requirements of Sections R315-265-1030 through R315-265-1035, the owner or operator shall make an initial determination that the time-weighted, annual average total organic concentration of the waste managed by the waste management unit is less than 10 ppmw using one of the following two methods:

(1) Direct measurement of the organic concentration of the waste using the following procedures:

(i) The owner or operator shall take a minimum of four grab samples of waste for each waste stream managed in the affected unit under process conditions expected to cause the maximum waste organic concentration.

(ii) For waste generated onsite, the grab samples shall be collected at a point before the waste is exposed to the atmosphere such as in an enclosed pipe or other closed system that is used to transfer the waste after generation to the first affected distillation fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation. For waste generated offsite, the grab samples shall be collected at the inlet to the first waste management unit that receives the waste provided the waste has been transferred to the facility in a closed system such as a tank truck and the waste is not diluted or mixed with other waste.

(iii) Each sample shall be analyzed and the total organic concentration of the sample shall be computed using Method 9060A, incorporated by reference under Section R315-260-11, of "Test Methods

for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846; or analyzed for its individual organic constituents.

(iv) The arithmetic mean of the results of the analyses of the four samples shall apply for each waste stream managed in the unit in determining the time-weighted, annual average total organic concentration of the waste. The time-weighted average is to be calculated using the annual quantity of each waste stream processed and the mean organic concentration of each waste stream managed in the unit.

(2) Using knowledge of the waste to determine that its total organic concentration is less than 10 ppmw. Documentation of the waste determination is required. Examples of documentation that shall be used to support a determination under this provision include production process information documenting that no organic compounds are used, information that the waste is generated by a process that is identical to a process at the same or another facility that has previously been demonstrated by direct measurement to generate a waste stream having a total organic content less than 10 ppmw, or prior speciation analysis results on the same waste stream where it can also be documented that no process changes have occurred since that analysis that could affect the waste total organic concentration.

(e) The determination that distillation fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations manage hazardous wastes with time-weighted annual average total organic concentrations less than 10 ppmw shall be made as follows:

(1) By the effective date that the facility becomes subject to the provisions of Sections R315-265-1030 through R315-265-1035 or by the date when the waste is first managed in a waste management unit, whichever is later; and

(2) For continuously generated waste, annually; or

(3) Whenever there is a change in the waste being managed or a change in the process that generates or treats the waste.

(f) When an owner or operator and the Director do not agree on whether a distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation manages a hazardous waste with organic concentrations of at least 10 ppmw based on knowledge of the waste, the dispute may be resolved using direct measurement as specified at Subsection R315-265-1034(d)(1).

#### **R315-265-1035. Air Emission Standards for Process Vents--Recordkeeping Requirements.**

(a)(1) Each owner or operator subject to the provisions of Sections R315-265-1030 through R315-265-1035 shall comply with the recordkeeping requirements of Section R315-265-1035.

(2) An owner or operator of more than one hazardous waste management unit subject to the provisions of Sections R315-265-1030

through R315-265-1035 may comply with the recordkeeping requirements for these hazardous waste management units in one recordkeeping system if the system identifies each record by each hazardous waste management unit.

(b) Owners and operators shall record the following information in the facility operating record:

(1) For facilities that comply with the provisions of Subsection R315-265-1033(a) (2), an implementation schedule that includes dates by which the closed-vent system and control device will be installed and in operation. The schedule shall also include a rationale of why the installation cannot be completed at an earlier date. The implementation schedule shall be in the facility operating record by the effective date that the facility becomes subject to the provisions of Sections R315-265-1030 through R315-265-1035.

(2) Up-to-date documentation of compliance with the process vent standards in Section R315-265-1032, including:

(i) Information and data identifying all affected process vents, annual throughput and operating hours of each affected unit, estimated emission rates for each affected vent and for the overall facility, for example, the total emissions for all affected vents at the facility, and the approximate location within the facility of each affected unit, for example, identify the hazardous waste management units on a facility plot plan; and

(ii) Information and data supporting determinations of vent emissions and emission reductions achieved by add-on control devices based on engineering calculations or source tests. For the purpose of determining compliance, determinations of vent emissions and emission reductions shall be made using operating parameter values, for example, temperatures, flow rates or vent stream organic compounds and concentrations, that represent the conditions that result in maximum organic emissions, such as when the waste management unit is operating at the highest load or capacity level reasonably expected to occur. If the owner or operator takes any action, for example, managing a waste of different composition or increasing operating hours of affected waste management units, that would result in an increase in total organic emissions from affected process vents at the facility, then a new determination is required.

(3) Where an owner or operator chooses to use test data to determine the organic removal efficiency or total organic compound concentration achieved by the control device, a performance test plan. The test plan shall include:

(i) A description of how it is determined that the planned test is going to be conducted when the hazardous waste management unit is operating at the highest load or capacity level reasonably expected to occur. This shall include the estimated or design flow rate and organic content of each vent stream and define the acceptable operating ranges of key process and control device parameters during the test

program.

(ii) A detailed engineering description of the closed-vent system and control device including:

(A) Manufacturer's name and model number of control device.

(B) Type of control device.

(C) Dimensions of the control device.

(D) Capacity.

(E) Construction materials.

(iii) A detailed description of sampling and monitoring procedures, including sampling and monitoring locations in the system, the equipment to be used, sampling and monitoring frequency, and planned analytical procedures for sample analysis.

(4) Documentation of compliance with Section R315-265-1033 shall include the following information:

(i) A list of all information references and sources used in preparing the documentation.

(ii) Records, including the dates, of each compliance test required by Subsection R315-265-1033(j).

(iii) If engineering calculations are used, a design analysis, specifications, drawings, schematics, and piping and instrumentation diagrams based on the appropriate sections of "APTI Course 415: Control of Gaseous Emissions", incorporated by reference as specified in Section R315-260-11, or other engineering texts acceptable to the Director that present basic control device design information. Documentation provided by the control device manufacturer or vendor that describes the control device design in accordance with Subsections R315-265-1035(b)(4)(iii)(A) through R315-265-1035(b)(4)(iii)(G) may be used to comply with this requirement. The design analysis shall address the vent stream characteristics and control device operation parameters as specified below.

(A) For a thermal vapor incinerator, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average temperature in the combustion zone and the combustion zone residence time.

(B) For a catalytic vapor incinerator, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average temperatures across the catalyst bed inlet and outlet.

(C) For a boiler or process heater, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average flame zone temperatures, combustion zone residence time, and description of method and location where the vent stream is introduced into the combustion zone.

(D) For a flare, the design analysis shall consider the vent

stream composition, constituent concentrations, and flow rate. The design analysis shall also consider the requirements specified in Subsection R315-265-1033(d).

(E) For a condenser, the design analysis shall consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature. The design analysis shall also establish the design outlet organic compound concentration level, design average temperature of the condenser exhaust vent stream, and design average temperatures of the coolant fluid at the condenser inlet and outlet.

(F) For a carbon adsorption system such as a fixed-bed adsorber that regenerates the carbon bed directly onsite in the control device, the design analysis shall consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature. The design analysis shall also establish the design exhaust vent stream organic compound concentration level, number and capacity of carbon beds, type and working capacity of activated carbon used for carbon beds, design total steam flow over the period of each complete carbon bed regeneration cycle, duration of the carbon bed steaming and cooling and drying cycles, design carbon bed temperature after regeneration, design carbon bed regeneration time, and design service life of carbon.

(G) For a carbon adsorption system such as a carbon canister that does not regenerate the carbon bed directly onsite in the control device, the design analysis shall consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature. The design analysis shall also establish the design outlet organic concentration level, capacity of carbon bed, type and working capacity of activated carbon used for carbon bed, and design carbon replacement interval based on the total carbon working capacity of the control device and source operating schedule.

(iv) A statement signed and dated by the owner or operator certifying that the operating parameters used in the design analysis reasonably represent the conditions that exist when the hazardous waste management unit is or would be operating at the highest load or capacity level reasonably expected to occur.

(v) A statement signed and dated by the owner or operator certifying that the control device is designed to operate at an efficiency of 95 percent or greater unless the total organic concentration limit of Subsection R315-265-1032(a) is achieved at an efficiency less than 95 weight percent or the total organic emission limits of Subsection R315-265-1032(a) for affected process vents at the facility can be attained by a control device involving vapor recovery at an efficiency less than 95 weight percent. A statement provided by the control device manufacturer or vendor certifying that the control equipment meets the design specifications may be used to comply with this requirement.

(vi) If performance tests are used to demonstrate compliance, all

test results.

(c) Design documentation and monitoring, operating, and inspection information for each closed-vent system and control device required to comply with the provisions of Sections R315-265-1030 through R315-265-1035 shall be recorded and kept up-to-date in the facility operating record. The information shall include:

(1) Description and date of each modification that is made to the closed-vent system or control device design.

(2) Identification of operating parameter, description of monitoring device, and diagram of monitoring sensor location or locations used to comply with Subsections R315-265-1033(f) (1) and R315-265-1035(f) (2).

(3) Monitoring, operating and inspection information required by Subsections R315-265-1033(f) through R315-265-1033(k).

(4) Date, time, and duration of each period that occurs while the control device is operating when any monitored parameter exceeds the value established in the control device design analysis as specified below:

(i) For a thermal vapor incinerator designed to operate with a minimum residence time of 0.50 seconds at a minimum temperature of 760 degrees Celsius, period when the combustion temperature is below 760 degrees Celsius.

(ii) For a thermal vapor incinerator designed to operate with an organic emission reduction efficiency of 95 percent or greater, period when the combustion zone temperature is more than 28 degrees Celsius below the design average combustion zone temperature established as a requirement of Subsection R315-265-1035(b) (4) (iii) (A).

(iii) For a catalytic vapor incinerator, period when:

(A) Temperature of the vent stream at the catalyst bed inlet is more than 28 degrees Celsius below the average temperature of the inlet vent stream established as a requirement of Subsection R315-265-1035(b) (4) (iii) (B); or

(B) Temperature difference across the catalyst bed is less than 80 percent of the design average temperature difference established as a requirement of Subsection R315-265-1035(b) (4) (iii) (B).

(iv) For a boiler or process heater, period when:

(A) Flame zone temperature is more than 28 degrees Celsius below the design average flame zone temperature established as a requirement of Subsection R315-265-1035(b) (4) (iii) (C); or

(B) Position changes where the vent stream is introduced to the combustion zone from the location established as a requirement of Subsection R315-265-1035(b) (4) (iii) (C).

(v) For a flare, period when the pilot flame is not ignited.

(vi) For a condenser that complies with Subsection R315-265-1033(f) (2) (vi) (A), period when the organic compound concentration level or readings of organic compounds in the exhaust vent stream from the condenser are more than 20 percent greater than

the design outlet organic compound concentration level established as a requirement of Subsection R315-265-1035(b) (4) (iii) (E).

(vii) For a condenser that complies with Subsection R315-265-1033(f) (2) (vi) (B), period when:

(A) Temperature of the exhaust vent stream from the condenser is more than 6 degrees Celsius above the design average exhaust vent stream temperature established as a requirement of Subsection R315-265-1035 (b) (4) (iii) (E); or

(B) Temperature of the coolant fluid exiting the condenser is more than 6 degrees Celsius above the design average coolant fluid temperature at the condenser outlet established as a requirement of Subsection R315-265-1035 (b) (4) (iii) (E).

(viii) For a carbon adsorption system such as a fixed-bed carbon adsorber that regenerates the carbon bed directly onsite in the control device and complies with Subsection R315-265-1033(f) (2) (vii) (A), period when the organic compound concentration level or readings of organic compounds in the exhaust vent stream from the carbon bed are more than 20 percent greater than the design exhaust vent stream organic compound concentration level established as a requirement of Subsection R315-265-1035 (b) (4) (iii) (F).

(ix) For a carbon adsorption system such as a fixed-bed carbon adsorber that regenerates the carbon bed directly onsite in the control device and complies with Subsection R315-265-1033(f) (2) (vii) (B), period when the vent stream continues to flow through the control device beyond the predetermined carbon bed regeneration time established as a requirement of Subsection R315-265-1035 (b) (4) (iii) (F).

(5) Explanation for each period recorded under Subsection R315-265-1035 (c) (4) of the cause for control device operating parameter exceeding the design value and the measures implemented to correct the control device operation.

(6) For carbon adsorption systems operated subject to requirements specified in Subsections R315-265-1033(g) or R315-265-1033(h) (2), date when existing carbon in the control device is replaced with fresh carbon.

(7) For carbon adsorption systems operated subject to requirements specified in Subsection R315-265-1033(h) (1), a log that records:

(i) Date and time when control device is monitored for carbon breakthrough and the monitoring device reading.

(ii) Date when existing carbon in the control device is replaced with fresh carbon.

(8) Date of each control device startup and shutdown.

(9) An owner or operator designating any components of a closed-vent system as unsafe to monitor pursuant to Subsection R315-265-1033(n) shall record in a log that is kept in the facility operating record the identification of closed-vent system components

that are designated as unsafe to monitor in accordance with the requirements of Subsection R315-265-1033(n), an explanation for each closed-vent system component stating why the closed-vent system component is unsafe to monitor, and the plan for monitoring each closed-vent system component.

(10) When each leak is detected as specified in Subsection R315-265-1033(k), the following information shall be recorded:

(i) The instrument identification number, the closed-vent system component identification number, and the operator name, initials, or identification number.

(ii) The date the leak was detected and the date of first attempt to repair the leak.

(iii) The date of successful repair of the leak.

(iv) Maximum instrument reading measured by Method 21 of 40 CFR part 60, appendix A after it is successfully repaired or determined to be nonrepairable.

(v) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

(A) The owner or operator may develop a written procedure that identifies the conditions that justify a delay of repair. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure.

(B) If delay of repair was caused by depletion of stocked parts, there shall be documentation that the spare parts were sufficiently stocked on-site before depletion and the reason for depletion.

(d) Records of the monitoring, operating, and inspection information required by Subsections R315-265-1035(c) (3) through R315-265-1035(c) (10) shall be maintained by the owner or operator for at least 3 years following the date of each occurrence, measurement, maintenance, corrective action, or record.

(e) For a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system, monitoring and inspection information indicating proper operation and maintenance of the control device shall be recorded in the facility operating record.

(f) Up-to-date information and data used to determine whether or not a process vent is subject to the requirements in Section R315-265-1032 including supporting documentation as required by Subsection R315-265-1034(d) (2) when application of the knowledge of the nature of the hazardous waste stream or the process by which it was produced is used, shall be recorded in a log that is kept in the facility operating record.

#### **R315-265-1080. Air Emission Standards for Tanks, Surface Impoundments, and Containers--Applicability.**

(a) The requirements of Sections R315-265-1080 through R315-265-1090 apply to owners and operators of all facilities that

treat, store, or dispose of hazardous waste in tanks, surface impoundments, or containers subject to either Sections R315-265-170 through R315-265-178, Sections R315-265-190 through R315-265-202, or Sections R315-265-220 through R315-265-231 except as Section R315-265-1 and Subsection R315-265-1080(b) provide otherwise.

(b) The requirements of Sections R315-265-1080 through R315-265-1090 do not apply to the following waste management units at the facility:

(1) A waste management unit that holds hazardous waste placed in the unit before December 6, 1996, and in which no hazardous waste is added to the unit on or after December 6, 1996.

(2) A container that has a design capacity less than or equal to 0.1 m<sup>3</sup>.

(3) A tank in which an owner or operator has stopped adding hazardous waste and the owner or operator has begun implementing or completed closure pursuant to an approved closure plan.

(4) A surface impoundment in which an owner or operator has stopped adding hazardous waste, except to implement an approved closure plan, and the owner or operator has begun implementing or completed closure pursuant to an approved closure plan.

(5) A waste management unit that is used solely for on-site treatment or storage of hazardous waste that is placed in the unit as a result of implementing remedial activities required under the corrective action authorities of RCRA sections 3004(u), 3004(v), or 3008(h); CERCLA authorities; or similar Federal or Utah authorities.

(6) A waste management unit that is used solely for the management of radioactive mixed waste in accordance with all applicable regulations under the authority of the Atomic Energy Act and the Nuclear Waste Policy Act.

(7) A hazardous waste management unit that the owner or operator certifies is equipped with and operating air emission controls in accordance with the requirements of an applicable regulation codified under the Utah Air Conservation Act. For the purpose of complying with Subsection R315-265-1080(b), a tank for which the air emission control includes an enclosure, as opposed to a cover, shall be in compliance with the enclosure and control device requirements of Subsection R315-265-1085(i), except as provided in Subsection R315-265-1083(c) (5).

(8) A tank that has a process vent as defined in Section R315-264-1031.

(c) For the owner and operator of a facility subject to Sections R315-265-1080 through R315-265-1090 who has received a final permit under RCRA section 3005 prior to December 6, 1996, the following requirements apply:

(1) The requirements of Sections R315-264-1080 through R315-264-1090 shall be incorporated into the permit when the permit is reissued in accordance with the requirements of Section R315-124-15

or reviewed in accordance with the requirements of Subsection R315-270-50(d).

(2) Until the date when the permit is reissued in accordance with the requirements of Section R315-124-15 or reviewed in accordance with the requirements of Subsection R315-270-50(d), the owner and operator is subject to the requirements of Sections R315-265-1080 through R315-265-1090.

(d) The requirements of Sections R315-265-1080 through R315-265-1090, except for the recordkeeping requirements specified in Subsection R315-265-1090(i), are administratively stayed for a tank or a container used for the management of hazardous waste generated by organic peroxide manufacturing and its associated laboratory operations when the owner or operator of the unit meets all of the following conditions:

(1) The owner or operator identifies that the tank or container receives hazardous waste generated by an organic peroxide manufacturing process producing more than one functional family of organic peroxides or multiple organic peroxides within one functional family, that one or more of these organic peroxides could potentially undergo self-accelerating thermal decomposition at or below ambient temperatures, and that organic peroxides are the predominant products manufactured by the process. For the purpose of meeting the conditions of Subsection R315-265-1080(d), "organic peroxide" means an organic compound that contains the bivalent -O-O- structure and which may be considered to be a structural derivative of hydrogen peroxide where one or both of the hydrogen atoms has been replaced by an organic radical.

(2) The owner or operator prepares documentation, in accordance with the requirements of Subsection R315-265-1090(i), explaining why an undue safety hazard would be created if air emission controls specified in Sections R315-265-1085 through R315-265-1088 are installed and operated on the tanks and containers used at the facility to manage the hazardous waste generated by the organic peroxide manufacturing process or processes meeting the conditions of Subsection R315-265-1080(d)(1).

(3) The owner or operator notifies the Director in writing that hazardous waste generated by an organic peroxide manufacturing process or processes meeting the conditions of Subsection R315-265-1080(d)(1) are managed at the facility in tanks or containers meeting the conditions of Subsection R315-265-1080(d)(2). The notification shall state the name and address of the facility, and be signed and dated by an authorized representative of the facility owner or operator.

#### **R315-265-1081. Air Emission Standards for Tanks, Surface Impoundments, and Containers --Definitions.**

As used in Sections R315-265-1080 through R315-265-1090, all terms not defined herein shall have the meaning given to them in RCRA and Rules

R315-260 through R315-266.

"Average volatile organic concentration" or "average VO concentration" means the mass-weighted average volatile organic concentration of a hazardous waste as determined in accordance with the requirements of Section R315-265-1084.

"Closure device" means a cap, hatch, lid, plug, seal, valve, or other type of fitting that blocks an opening in a cover such that when the device is secured in the closed position it prevents or reduces air pollutant emissions to the atmosphere. Closure devices include devices that are detachable from the cover, for example, a sampling port cap, manually operated, for example a hinged access lid or hatch, or automatically operated, for example, a spring-loaded pressure relief valve.

"Continuous seal" means a seal that forms a continuous closure that completely covers the space between the edge of the floating roof and the wall of a tank. A continuous seal may be a vapor-mounted seal, liquid-mounted seal, or metallic shoe seal. A continuous seal may be constructed of fastened segments so as to form a continuous seal.

"Cover" means a device that provides a continuous barrier over the hazardous waste managed in a unit to prevent or reduce air pollutant emissions to the atmosphere. A cover may have openings, such as access hatches, sampling ports, gauge wells, that are necessary for operation, inspection, maintenance, and repair of the unit on which the cover is used. A cover may be a separate piece of equipment which can be detached and removed from the unit or a cover may be formed by structural features permanently integrated into the design of the unit.

"Enclosure" means a structure that surrounds a tank or container, captures organic vapors emitted from the tank or container, and vents the captured vapors through a closed-vent system to a control device.

"External floating roof" means a pontoon-type or double-deck type cover that rests on the surface of the material managed in a tank with no fixed roof.

"Fixed roof" means a cover that is mounted on a unit in a stationary position and does not move with fluctuations in the level of the material managed in the unit.

"Floating membrane cover" means a cover consisting of a synthetic flexible membrane material that rests upon and is supported by the hazardous waste being managed in a surface impoundment.

"Floating roof" means a cover consisting of a double deck, pontoon single deck, or internal floating cover which rests upon and is supported by the material being contained, and is equipped with a continuous seal.

"Hard-piping" means pipe or tubing that is manufactured and properly installed in accordance with relevant standards and good engineering practices.

"In light material service" means the container is used to manage

a material for which both of the following conditions apply: The vapor pressure of one or more of the organic constituents in the material is greater than 0.3 kilopascals (kPa) at 20 °C; and the total concentration of the pure organic constituents having a vapor pressure greater than 0.3 kPa at 20 °C is equal to or greater than 20 percent by weight.

“Internal floating roof” means a cover that rests or floats on the material surface, but not necessarily in complete contact with it, inside a tank that has a fixed roof.

“Liquid-mounted seal” means a foam or liquid-filled primary seal mounted in contact with the hazardous waste between the tank wall and the floating roof continuously around the circumference of the tank.

“Malfunction” means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

“Maximum organic vapor pressure” means the sum of the individual organic constituent partial pressures exerted by the material contained in a tank, at the maximum vapor pressure-causing conditions, such as, temperature, agitation, pH effects of combining wastes, etc., reasonably expected to occur in the tank. For the purpose of Sections R315-265-1080 through R315-265-1090, maximum organic vapor pressure is determined using the procedures specified in Subsection R315-265-1084(c).

“Metallic shoe seal” means a continuous seal that is constructed of metal sheets which are held vertically against the wall of the tank by springs, weighted levers, or other mechanisms and is connected to the floating roof by braces or other means. A flexible coated fabric, envelope, spans the annular space between the metal sheet and the floating roof.

“No detectable organic emissions” means no escape of organics to the atmosphere as determined using the procedure specified in Subsection R315-265-1084(d).

“Point of waste origination” means as follows:

(1) When the facility owner or operator is the generator of the hazardous waste, the point of waste origination means the point where a solid waste produced by a system, process, or waste management unit is determined to be a hazardous waste as defined in Rule R315-261.

Note: In this case, this term is being used in a manner similar to the use of the term “point of generation” in air standards established for waste management operations under authority of the Utah Air Conservation Act.

(2) When the facility owner and operator are not the generator of the hazardous waste, point of waste origination means the point where the owner or operator accepts delivery or takes possession of the hazardous waste.

"Point of waste treatment" means the point where a hazardous waste to be treated in accordance with Subsection R315-265-1083(c) (2) exits the treatment process. Any waste determination shall be made before the waste is conveyed, handled, or otherwise managed in a manner that allows the waste to volatilize to the atmosphere.

"Safety device" means a closure device such as a pressure relief valve, frangible disc, fusible plug, or any other type of device which functions exclusively to prevent physical damage or permanent deformation to a unit or its air emission control equipment by venting gases or vapors directly to the atmosphere during unsafe conditions resulting from an unplanned, accidental, or emergency event. For the purpose of Sections R315-265-1080 through R315-265-1090, a safety device is not used for routine venting of gases or vapors from the vapor headspace underneath a cover such as during filling of the unit or to adjust the pressure in this vapor headspace in response to normal daily diurnal ambient temperature fluctuations. A safety device is designed to remain in a closed position during normal operations and open only when the internal pressure, or another relevant parameter, exceeds the device threshold setting applicable to the air emission control equipment as determined by the owner or operator based on manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials.

"Single-seal system" means a floating roof having one continuous seal. This seal may be vapor-mounted, liquid-mounted, or a metallic shoe seal.

"Vapor-mounted seal" means a continuous seal that is mounted such that there is a vapor space between the hazardous waste in the unit and the bottom of the seal.

"Volatile organic concentration" or "VO concentration" means the fraction by weight of the volatile organic compounds contained in a hazardous waste expressed in terms of parts per million (ppmw) as determined by direct measurement or by knowledge of the waste in accordance with the requirements of Section R315-265-1084. For the purpose of determining the VO concentration of a hazardous waste, organic compounds with a Henry's law constant value of at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in the liquid-phase, ( $0.1 Y/X$ ), which can also be expressed as  $1.8 \times 10^{-6}$  atmospheres/gram-mole/m<sup>3</sup>, at 25 degrees Celsius shall be included. Appendix VI of 40 CFR 265, which is adopted and incorporated by reference, presents a list of compounds known to have a Henry's law constant value less than the cutoff level.

"Waste determination" means performing all applicable procedures in accordance with the requirements of Section R315-265-1084 to determine whether a hazardous waste meets standards specified in Sections R315-265-1080 through R315-265-1090. Examples of a waste

determination include performing the procedures in accordance with the requirements of Section R315-265-1084 to determine the average VO concentration of a hazardous waste at the point of waste origination; the average VO concentration of a hazardous waste at the point of waste treatment and comparing the results to the exit concentration limit specified for the process used to treat the hazardous waste; the organic reduction efficiency and the organic biodegradation efficiency for a biological process used to treat a hazardous waste and comparing the results to the applicable standards; or the maximum volatile organic vapor pressure for a hazardous waste in a tank and comparing the results to the applicable standards.

"Waste stabilization" process means any physical or chemical process used to either reduce the mobility of hazardous constituents in a hazardous waste or eliminate free liquids as determined by Test Method 9095B, Paint Filter Liquids Test, in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, as incorporated by reference in Section R315-260-11. A waste stabilization process includes mixing the hazardous waste with binders or other materials, and curing the resulting hazardous waste and binder mixture. Other synonymous terms used to refer to this process are "waste fixation" or "waste solidification." This does not include the adding of absorbent materials to the surface of a waste, without mixing, agitation, or subsequent curing, to absorb free liquid.

**R315-265-1082. Air Emission Standards for Tanks, Surface Impoundments, and Containers --Schedule for Implementation of Air Emission Standards.**

(a) Owners or operators of facilities existing on December 6, 1996 and subject to Sections R315-265-170 through R315-265-178, Sections R315-265-190 through R315-265-202, and Sections R315-265-220 through R315-265-231 shall meet the following requirements:

(1) Install and begin operation of all control equipment or waste management units required to comply with Sections R315-265-1080 through R315-265-1090 and complete modifications of production or treatment processes to satisfy exemption criteria in accordance with Subsection R315-265-1083(c) by December 6, 1996, except as provided for in Subsection R315-265-1082(a)(2).

(2) When control equipment or waste management units required to comply with Sections R315-265-1080 through R315-265-1090 cannot be installed and in operation or modifications of production or treatment processes to satisfy exemption criteria in accordance with Subsection R315-265-1083(c) cannot be completed by December 6, 1996, the owner or operator shall:

(i) Install and begin operation of the control equipment and waste management units, and complete modifications of production or treatment processes as soon as possible but no later than December 8, 1997.

(ii) Prepare an implementation schedule that includes the following information: specific calendar dates for award of contracts or issuance of purchase orders for control equipment, waste management units, and production or treatment process modifications; initiation of on-site installation of control equipment or waste management units, and modifications of production or treatment processes; completion of control equipment or waste management unit installation, and production or treatment process modifications; and performance of testing to demonstrate that the installed equipment or waste management units, and modified production or treatment processes meet the applicable standards of Sections R315-265-1080 through R315-265-1090.

(iii) For facilities subject to the recordkeeping requirements of Section R315-265-73, the owner or operator shall enter the implementation schedule specified in Subsection R315-265-1082(a)(2)(ii) in the operating record no later than December 6, 1996.

(iv) For facilities not subject to Section R315-265-73, the owner or operator shall enter the implementation schedule specified in Subsection R315-265-1082(a)(2)(ii) in a permanent, readily available file located at the facility no later than December 6, 1996.

(b) Owners or operators of facilities and units in existence on the effective date of a statutory, EPA, or Utah regulatory amendment that renders the facility subject to Sections R315-265-170 through R315-265-178, Sections R315-265-190 through R315-265-202, or Sections R315-265-220 through R315-265-231 shall meet the following requirements:

(1) Install and begin operation of control equipment or waste management units required to comply with Sections R315-265-1080 through R315-265-1090, and complete modifications of production or treatment processes to satisfy exemption criteria of Subsection R315-265-1083(c) by the effective date of the amendment, except as provided for in Subsection R315-265-1082(b)(2).

(2) When control equipment or waste management units required to comply with Sections R315-265-1080 through R315-265-1090 cannot be installed and begin operation, or when modifications of production or treatment processes to satisfy exemption criteria of Subsection R315-265-1083(c) cannot be completed by the effective date of the amendment, the owner or operator shall:

(i) Install and begin operation of the control equipment or waste management unit, and complete modification of production or treatment processes as soon as possible but no later than 30 months after the effective date of the amendment.

(ii) For facilities subject to the recordkeeping requirements of Section R315-265-73, enter and maintain the implementation schedule specified in Subsection R315-265-1082(a)(2)(ii) in the operating record no later than the effective date of the amendment, or

(iii) For facilities not subject to Section R315-265-73, the owner or operator shall enter and maintain the implementation schedule specified in Subsection R315-265-1082(a)(2)(ii) in a permanent, readily available file located at the facility site no later than the effective date of the amendment.

(c) Owners and operators of facilities and units that become newly subject to the requirements of Sections R315-265-1080 through R315-265-1090 after December 8, 1997 due to an action other than those described in Subsection R315-265-1082(b) shall comply with all applicable requirements immediately, for example, shall have control devices installed and operating on the date the facility or unit becomes subject to Sections R315-265-1080 through R315-265-1090; the 30-month implementation schedule does not apply.

(d) The Director may elect to extend the implementation date for control equipment at a facility, on a case by case basis, to a date later than December 8, 1997, when special circumstances that are beyond the facility owner's or operator's control delay installation or operation of control equipment, and the owner or operator has made all reasonable and prudent attempts to comply with the requirements of Sections R315-265-1080 through R315-265-1090.

**R315-265-1083. Air Emission Standards for Tanks, Surface Impoundments, and Containers -- Standards: General.**

(a) Section R315-265-1083 applies to the management of hazardous waste in tanks, surface impoundments, and containers subject to Sections R315-265-1080 through R315-265-1090.

(b) The owner or operator shall control air pollutant emissions from each hazardous waste management unit in accordance with standards specified in Sections R315-265-1085 through R315-265-1088, as applicable to the hazardous waste management unit, except as provided for in R315-265-1083(c).

(c) A tank, surface impoundment, or container is exempt from standards specified in Sections R315-265-1085 through R315-265-1088, as applicable, provided that the waste management unit is one of the following:

(1) A tank, surface impoundment, or container for which all hazardous waste entering the unit has an average VO concentration at the point of waste origination of less than 500 parts per million by weight (ppmw). The average VO concentration shall be determined using the procedures specified in Subsection R315-265-1084(a). The owner or operator shall review and update, as necessary, this determination at least once every 12 months following the date of the initial determination for the hazardous waste streams entering the unit.

(2) A tank, surface impoundment, or container for which the organic content of all the hazardous waste entering the waste management unit has been reduced by an organic destruction or removal process that achieves any one of the following conditions:

(i) A process that removes or destroys the organics contained in the hazardous waste to a level such that the average VO concentration of the hazardous waste at the point of waste treatment is less than the exit concentration limit (Ct) established for the process. The average VO concentration of the hazardous waste at the point of waste treatment and the exit concentration limit for the process shall be determined using the procedures specified in Subsection R315-265-1084 (b) .

(ii) A process that removes or destroys the organics contained in the hazardous waste to a level such that the organic reduction efficiency (R) for the process is equal to or greater than 95 percent, and the average VO concentration of the hazardous waste at the point of waste treatment is less than 100 ppmw. The organic reduction efficiency for the process and the average VO concentration of the hazardous waste at the point of waste treatment shall be determined using the procedures specified in Subsection R315-265-1084 (b) .

(iii) A process that removes or destroys the organics contained in the hazardous waste to a level such that the actual organic mass removal rate (MR) for the process is equal to or greater than the required organic mass removal rate (RMR) established for the process. The required organic mass removal rate and the actual organic mass removal rate for the process shall be determined using the procedures specified in Subsection R315-265-1084 (b) .

(iv) A biological process that destroys or degrades the organics contained in the hazardous waste, such that either of the following conditions is met:

(A) The organic reduction efficiency (R) for the process is equal to or greater than 95 percent, and the organic biodegradation efficiency (R<sub>bio</sub>) for the process is equal to or greater than 95 percent. The organic reduction efficiency and the organic biodegradation efficiency for the process shall be determined using the procedures specified in Subsection R315-265-1084 (b) .

(B) The total actual organic mass biodegradation rate (MR<sub>bio</sub>) for all hazardous waste treated by the process is equal to or greater than the required organic mass removal rate (RMR) . The required organic mass removal rate and the actual organic mass biodegradation rate for the process shall be determined using the procedures specified in Subsection R315-265-1084 (b) .

(v) A process that removes or destroys the organics contained in the hazardous waste and meets all of the following conditions:

(A) From the point of waste origination through the point where the hazardous waste enters the treatment process, the hazardous waste is managed continuously in waste management units which use air emission controls in accordance with the standards specified in Sections R315-265-1085 through R315-265.1088, as applicable to the waste management unit.

(B) From the point of waste origination through the point where

the hazardous waste enters the treatment process, any transfer of the hazardous waste is accomplished through continuous hard-piping or other closed system transfer that does not allow exposure of the waste to the atmosphere. The Director considers a drain system that meets the requirements of Subsection R307-214-2(29), which incorporates 40 CFR part 63, subpart RR-National Emission Standards for Individual Drain Systems to be a closed system.

(C) The average VO concentration of the hazardous waste at the point of waste treatment is less than the lowest average VO concentration at the point of waste origination determined for each of the individual waste streams entering the process or 500 ppmw, whichever value is lower. The average VO concentration of each individual waste stream at the point of waste origination shall be determined using the procedures specified in Subsection R315-265-1084(a). The average VO concentration of the hazardous waste at the point of waste treatment shall be determined using the procedures specified in Subsection R315-265-1084(b).

(vi) A process that removes or destroys the organics contained in the hazardous waste to a level such that the organic reduction efficiency (R) for the process is equal to or greater than 95 percent and the owner or operator certifies that the average VO concentration at the point of waste origination for each of the individual waste streams entering the process is less than 10,000 ppmw. The organic reduction efficiency for the process and the average VO concentration of the hazardous waste at the point of waste origination shall be determined using the procedures specified in Subsections R315-265-1084(b) and R315-265-1084(a), respectively.

(vii) A hazardous waste incinerator for which the owner or operator has either:

(A) Been issued a final permit under Rule R315-270 which implements the requirements of Sections R315-264-340 through R315-264-351; or

(B) Has designed and operates the incinerator in accordance with the interim status requirements of 40 CFR 265.340 through 265.352, which is adopted and incorporated by reference.

(viii) A boiler or industrial furnace for which the owner or operator has either:

(A) Been issued a final permit under Rule R315-270 which implements the requirements of Sections R315-266-100 through R315-266-112, or

(B) Has designed and operates the boiler or industrial furnace in accordance with the interim status requirements of Sections R315-266-100 through R315-266-112.

(ix) For the purpose of determining the performance of an organic destruction or removal process in accordance with the conditions in each of Subsections R315-265-1083(c)(2)(i) through R315-265-1083(c)(2)(vi), the owner or operator shall account for VO

concentrations determined to be below the limit of detection of the analytical method by using the following VO concentration:

(A) If Method 25D in 40 CFR part 60, appendix A is used for the analysis, one-half the blank value determined in the method at section 4.4 of Method 25D in 40 CFR part 60, appendix A, or a value of 25 ppmw, whichever is less.

(B) If any other analytical method is used, one-half the sum of the limits of detection established for each organic constituent in the waste that has a Henry's law constant value at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase ( $0.1 Y/X$ ), which can also be expressed as  $1.8 \times 10^{-6}$  atmospheres/gram-mole/m<sup>3</sup>, at 25 degrees Celsius.

(3) A tank or surface impoundment used for biological treatment of hazardous waste in accordance with the requirements of Subsection R315-265-1083(c) (2) (iv).

(4) A tank, surface impoundment, or container for which all hazardous waste placed in the unit either:

(i) Meets the numerical concentration limits for organic hazardous constituents, applicable to the hazardous waste, as specified in Rule R315-268-Land Disposal Restrictions under Table "Treatment Standards for Hazardous Waste"; or

(ii) The organic hazardous constituents in the waste have been treated by the treatment technology established by the Board for the waste in Subsection R315-268-42 (a), or have been removed or destroyed by an equivalent method of treatment approved by EPA pursuant to 40 CFR 268.42 (b).

(5) A tank used for bulk feed of hazardous waste to a waste incinerator and all of the following conditions are met:

(i) The tank is located inside an enclosure vented to a control device that is designed and operated in accordance with all applicable requirements specified under Section R315-214-1, which incorporates 40 CFR part 61, subpart FF-National Emission Standards for Benzene Waste Operations for a facility at which the total annual benzene quantity from the facility waste is equal to or greater than 10 megagrams per year;

(ii) The enclosure and control device serving the tank were installed and began operation prior to November 25, 1996; and

(iii) The enclosure is designed and operated in accordance with the criteria for a permanent total enclosure as specified in "Procedure T-Criteria for and Verification of a Permanent or Temporary Total Enclosure" under 40 CFR 52.741, Appendix B. The enclosure may have permanent or temporary openings to allow worker access; passage of material into or out of the enclosure by conveyor, vehicles, or other mechanical or electrical equipment; or to direct air flow into the enclosure. The owner or operator shall perform the verification procedure for the enclosure as specified in Section 5.0 to "Procedure T-Criteria for and Verification of a Permanent or Temporary Total

Enclosure" annually.

(d) The Director may at any time perform or request that the owner or operator perform a waste determination for a hazardous waste managed in a tank, surface impoundment, or container exempted from using air emission controls under the provisions of Section R315-265-1083 as follows:

(1) The waste determination for average VO concentration of a hazardous waste at the point of waste origination shall be performed using direct measurement in accordance with the applicable requirements of Subsection R315-265-1084(a). The waste determination for a hazardous waste at the point of waste treatment shall be performed in accordance with the applicable requirements of Subsection R315-265-1084(b).

(2) In performing a waste determination pursuant to Subsection R315-265-1083(d)(1), the sample preparation and analysis shall be conducted as follows:

(i) In accordance with the method used by the owner or operator to perform the waste analysis, except in the case specified in Subsection R315-265-1083(d)(2)(ii).

(ii) If the Director determines that the method used by the owner or operator was not appropriate for the hazardous waste managed in the tank, surface impoundment, or container, then the Director may choose an appropriate method.

(3) In a case when the owner or operator is requested to perform the waste determination, the Director may elect to have an authorized representative observe the collection of the hazardous waste samples used for the analysis.

(4) In a case when the results of the waste determination performed or requested by the Director do not agree with the results of a waste determination performed by the owner or operator using knowledge of the waste, then the results of the waste determination performed in accordance with the requirements of Subsection R315-265-1083(d)(1) shall be used to establish compliance with the requirements of Sections R315-265-1080 through R315-265-1090.

(5) In a case when the owner or operator has used an averaging period greater than 1 hour for determining the average VO concentration of a hazardous waste at the point of waste origination, the Director may elect to establish compliance with Sections R315-265-1080 through R315-265-1090 by performing or requesting that the owner or operator perform a waste determination using direct measurement based on waste samples collected within a 1-hour period as follows:

(i) The average VO concentration of the hazardous waste at the point of waste origination shall be determined by direct measurement in accordance with the requirements of Subsection R315-265-1084(a).

(ii) Results of the waste determination performed or requested by the Director showing that the average VO concentration of the hazardous waste at the point of waste origination is equal to or greater

than 500 ppmw shall constitute noncompliance with Sections R315-265-1080 through R315-265-1090 except in a case as provided for in Subsection R315-265-1083(d) (5) (iii).

(iii) For the case when the average VO concentration of the hazardous waste at the point of waste origination previously has been determined by the owner or operator using an averaging period greater than 1 hour to be less than 500 ppmw but because of normal operating process variations the VO concentration of the hazardous waste determined by direct measurement for any given 1-hour period may be equal to or greater than 500 ppmw, information that was used by the owner or operator to determine the average VO concentration of the hazardous waste, for example, test results, measurements, calculations, and other documentation, and recorded in the facility records in accordance with the requirements of Subsection R315-265-1084 (a) and Section R315-265-1090 shall be considered by the Director together with the results of the waste determination performed or requested by the Director in establishing compliance with Sections R315-265-1080 through R315-265-1090.

**R315-265-1084. Air Emission Standards for Tanks, Surface Impoundments, and Containers -- Waste Determination Procedures.**

(a) Waste determination procedure to determine average volatile organic (VO) concentration of a hazardous waste at the point of waste origination.

(1) An owner or operator shall determine the average VO concentration at the point of waste origination for each hazardous waste placed in a waste management unit exempted under the provisions of Subsection R315-265-1083(c) (1) from using air emission controls in accordance with standards specified in Sections R315-265-1085 through R315-265-1088, as applicable to the waste management unit.

(i) An initial determination of the average VO concentration of the waste stream shall be made before the first time any portion of the material in the hazardous waste stream is placed in a waste management unit exempted under the provisions of Subsection R315-265-1083(c) (1) from using air emission controls, and thereafter an initial determination of the average VO concentration of the waste stream shall be made for each averaging period that a hazardous waste is managed in the unit; and

(ii) Perform a new waste determination whenever changes to the source generating the waste stream are reasonably likely to cause the average VO concentration of the hazardous waste to increase to a level that is equal to or greater than the VO concentration limit specified in Subsection R315-265-1083(c) (1).

(2) For a waste determination that is required by Subsection R315-265-1084 (a) (1), the average VO concentration of a hazardous waste at the point of waste origination shall be determined using either direct measurement as specified in Subsection R315-265-1084 (a) (3) or

by knowledge as specified in Subsection R315-265-1084(a)(4).

(3) Direct measurement to determine average VO concentration of a hazardous waste at the point of waste origination.

(i) Identification. The owner or operator shall identify and record the point of waste origination for the hazardous waste.

(ii) Sampling. Samples of the hazardous waste stream shall be collected at the point of waste origination in a manner such that volatilization of organics contained in the waste and in the subsequent sample is minimized and an adequately representative sample is collected and maintained for analysis by the selected method.

(A) The averaging period to be used for determining the average VO concentration for the hazardous waste stream on a mass-weighted average basis shall be designated and recorded. The averaging period can represent any time interval that the owner or operator determines is appropriate for the hazardous waste stream but shall not exceed 1 year.

(B) A sufficient number of samples, but no less than four samples, shall be collected and analyzed for a hazardous waste determination. All of the samples for a given waste determination shall be collected within a one-hour period. The average of the four or more sample results constitutes a waste determination for the waste stream. One or more waste determinations may be required to represent the complete range of waste compositions and quantities that occur during the entire averaging period due to normal variations in the operating conditions for the source or process generating the hazardous waste stream. Examples of such normal variations are seasonal variations in waste quantity or fluctuations in ambient temperature.

(C) All samples shall be collected and handled in accordance with written procedures prepared by the owner or operator and documented in a site sampling plan. This plan shall describe the procedure by which representative samples of the hazardous waste stream are collected such that a minimum loss of organics occurs throughout the sample collection and handling process, and by which sample integrity is maintained. A copy of the written sampling plan shall be maintained on-site in the facility operating records. An example of acceptable sample collection and handling procedures for a total volatile organic constituent concentration may be found in Method 25D in 40 CFR part 60, appendix A.

(D) Sufficient information, as specified in the "site sampling plan" required under Subsection R315-265-1084(a)(3)(ii)(C), shall be prepared and recorded to document the waste quantity represented by the samples and, as applicable, the operating conditions for the source or process generating the hazardous waste represented by the samples.

(iii) Analysis. Each collected sample shall be prepared and analyzed in accordance with Method 25D in 40 CFR part 60, appendix A for the total concentration of volatile organic constituents, or using one or more methods when the individual organic compound

concentrations are identified and summed and the summed waste concentration accounts for and reflects all organic compounds in the waste with Henry's law constant values at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X), which can also be expressed as  $1.8 \times 10^{-6}$  atmospheres/gram-mole/m<sup>3</sup>, at 25 degrees Celsius. At the owner or operator's discretion, the owner or operator may adjust test data obtained by any appropriate method to discount any contribution to the total volatile organic concentration that is a result of including a compound with a Henry's law constant value of less than 0.1 Y/X at 25 degrees Celsius. To adjust these data, the measured concentration of each individual chemical constituent contained in the waste is multiplied by the appropriate constituent-specific adjustment factor (fm25D). If the owner or operator elects to adjust test data, the adjustment shall be made to all individual chemical constituents with a Henry's law constant value greater than or equal to 0.1 Y/X at 25 degrees Celsius contained in the waste. Constituent-specific adjustment factors (fm25D) can be obtained by contacting the Waste and Chemical Processes Group, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711. Other test methods may be used if they meet the requirements in Subsections R315-265-1084(a) (3) (iii) (A) or (B) and provided the requirement to reflect all organic compounds in the waste with Henry's law constant values greater than or equal to 0.1 Y/X, which can also be expressed as  $1.8 \times 10^{-6}$  atmospheres/gram-mole/m<sup>3</sup>, at 25 degrees Celsius, is met.

(A) Any EPA standard method that has been validated in accordance with "Alternative Validation Procedure for EPA Waste and Wastewater Methods," 40 CFR part 63, appendix D.

(B) Any other analysis method that has been validated in accordance with the procedures specified in Section 5.1 or Section 5.3, and the corresponding calculations in Section 6.1 or Section 6.3, of Method 301 in 40 CFR part 63, appendix A. The data are acceptable if they meet the criteria specified in Section 6.1.5 or Section 6.3.3 of Method 301. If correction is required under section 6.3.3 of Method 301, the data are acceptable if the correction factor is within the range 0.7 to 1.30. Other sections of Method 301 are not required.

(iv) Calculations.

(A) The average VO concentration on a mass-weighted basis shall be calculated by using the results for all waste determinations conducted in accordance with Subsections R315-265-1084(a) (3) (ii) and (iii) and the equation found in 40 CFR 265.1084(a) (3) (iv) (A), which is adopted and incorporated by reference.

(B) For the purpose of determining  $C_i$ , for individual waste samples analyzed in accordance with Subsection R315-265-1084(a) (3) (iii), the owner or operator shall account for VO concentrations determined to be below the limit of detection of the analytical method by using the following VO concentration:

(1) If Method 25D in 40 CFR part 60, appendix A is used for the analysis, one-half the blank value determined in the method at section 4.4 of Method 25D in 40 CFR part 60, appendix A.

(2) If any other analytical method is used, one-half the sum of the limits of detection established for each organic constituent in the waste that has a Henry's law constant values at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase ( $0.1 Y/X$ ), which can also be expressed as  $1.8 \times 10^{-6}$  atmospheres/gram-mole/m<sup>3</sup>, at 25 degrees Celsius.

(v) Provided that the test method is appropriate for the waste as required under Subsection R315-265-1084(a) (3) (iii), the Director will determine compliance based on the test method used by the owner or operator as recorded pursuant to Subsection R315-265-1090(f) (1).

(4) Use of owner or operator knowledge to determine average VO concentration of a hazardous waste at the point of waste origination.

(i) Documentation shall be prepared that presents the information used as the basis for the owner's or operator's knowledge of the hazardous waste stream's average VO concentration. Examples of information that may be used as the basis for knowledge include: Material balances for the source or process generating the hazardous waste stream; constituent-specific chemical test data for the hazardous waste stream from previous testing that are still applicable to the current waste stream; previous test data for other locations managing the same type of waste stream; or other knowledge based on information included in manifests, shipping papers, or waste certification notices.

(ii) If test data are used as the basis for knowledge, then the owner or operator shall document the test method, sampling protocol, and the means by which sampling variability and analytical variability are accounted for in the determination of the average VO concentration. For example, an owner or operator may use organic concentration test data for the hazardous waste stream that are validated in accordance with Method 301 in 40 CFR part 63, appendix A as the basis for knowledge of the waste.

(iii) An owner or operator using chemical constituent-specific concentration test data as the basis for knowledge of the hazardous waste may adjust the test data to the corresponding average VO concentration value which would have been obtained had the waste samples been analyzed using Method 25D in 40 CFR part 60, appendix A. To adjust these data, the measured concentration for each individual chemical constituent contained in the waste is multiplied by the appropriate constituent-specific adjustment factor (fm25D).

(iv) In the event that the Director and the owner or operator disagree on a determination of the average VO concentration for a hazardous waste stream using knowledge, then the results from a determination of average VO concentration using direct measurement as specified in Subsection R316-265-1084(a) (3) shall be used to establish

compliance with the applicable requirements of Sections R315-265-1080 through R315-265-1090. The Director may perform or request that the owner or operator perform this determination using direct measurement. The owner or operator may choose one or more appropriate methods to analyze each collected sample in accordance with the requirements of Subsection R315-265-1084(a)(3)(iii).

(b) Waste determination procedures for treated hazardous waste.

(1) An owner or operator shall perform the applicable waste determination for each treated hazardous waste placed in a waste management unit exempted under the provisions of Subsections R315-265-1083(c)(2)(i) through (c)(2)(vi) from using air emission controls in accordance with standards specified in Sections R315-265-1085 through R315-265-1088, as applicable to the waste management unit.

(i) An initial determination of the average VO concentration of the waste stream shall be made before the first time any portion of the material in the treated waste stream is placed in a waste management unit exempted under the provisions of Subsections R315-265-1083(c)(2), R315-265-1083(c)(3), or R315-265-1083(c)(4) from using air emission controls, and thereafter update the information used for the waste determination at least once every 12 months following the date of the initial waste determination; and

(ii) Perform a new waste determination whenever changes to the process generating or treating the waste stream are reasonably likely to cause the average VO concentration of the hazardous waste to increase to a level such that the applicable treatment conditions specified in Subsections R315-265-1083(c)(2), R315-265-1083(c)(3), or R315-265-1083(c)(4) are not achieved.

(2) The owner or operator shall designate and record the specific provision in Subsection R315-265-1083(c)(2) under which the waste determination is being performed. The waste determination for the treated hazardous waste shall be performed using the applicable procedures specified in Subsections R315-265-1084(b)(3) through (b)(9).

(3) Procedure to determine the average VO concentration of a hazardous waste at the point of waste treatment.

(i) Identification. The owner or operator shall identify and record the point of waste treatment for the hazardous waste.

(ii) Sampling. Samples of the hazardous waste stream shall be collected at the point of waste treatment in a manner such that volatilization of organics contained in the waste and in the subsequent sample is minimized and an adequately representative sample is collected and maintained for analysis by the selected method.

(A) The averaging period to be used for determining the average VO concentration for the hazardous waste stream on a mass-weighted average basis shall be designated and recorded. The averaging period can represent any time interval that the owner or operator determines

is appropriate for the hazardous waste stream but shall not exceed 1 year.

(B) A sufficient number of samples, but no less than four samples, shall be collected and analyzed for a hazardous waste determination. All of the samples for a given waste determination shall be collected within a one-hour period. The average of the four or more sample results constitutes a waste determination for the waste stream. One or more waste determinations may be required to represent the complete range of waste compositions and quantities that occur during the entire averaging period due to normal variations in the operating conditions for the process generating or treating the hazardous waste stream. Examples of such normal variations are seasonal variations in waste quantity or fluctuations in ambient temperature.

(C) All samples shall be collected and handled in accordance with written procedures prepared by the owner or operator and documented in a site sampling plan. This plan shall describe the procedure by which representative samples of the hazardous waste stream are collected such that a minimum loss of organics occurs throughout the sample collection and handling process, and by which sample integrity is maintained. A copy of the written sampling plan shall be maintained on-site in the facility operating records. An example of acceptable sample collection and handling procedures for a total volatile organic constituent concentration may be found in Method 25D in 40 CFR part 60, appendix A.

(D) Sufficient information, as specified in the "site sampling plan" required under Subsection R316-265-1084(b) (3) (ii) (C), shall be prepared and recorded to document the waste quantity represented by the samples and, as applicable, the operating conditions for the process treating the hazardous waste represented by the samples.

(iii) Analysis. Each collected sample shall be prepared and analyzed in accordance with Method 25D in 40 CFR part 60, appendix A for the total concentration of volatile organic constituents, or using one or more methods when the individual organic compound concentrations are identified and summed and the summed waste concentration accounts for and reflects all organic compounds in the waste with Henry's law constant values at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase ( $0.1 Y/X$ ), which can also be expressed as  $1.8 \times 10^{-6}$  atmospheres/gram-mole/m<sup>3</sup>, at 25 degrees Celsius. When the owner or operator is making a waste determination for a treated hazardous waste that is to be compared to an average VO concentration at the point of waste origination or the point of waste entry to the treatment system to determine if the conditions of Subsections R315-264-1082(c) (2) (i) through (c) (2) (vi), or Subsections R315-265-1083(c) (2) (i) through (c) (2) (vi) are met, then the waste samples shall be prepared and analyzed using the same method or methods as were used in making the initial waste determinations at the point of waste origination or at

the point of entry to the treatment system. At the owner or operator's discretion, the owner or operator may adjust test data obtained by any appropriate method to discount any contribution to the total volatile organic concentration that is a result of including a compound with a Henry's law constant value less than 0.1 Y/X at 25 degrees Celsius. To adjust these data, the measured concentration of each individual chemical constituent in the waste is multiplied by the appropriate constituent-specific adjustment factor (fm25D). If the owner or operator elects to adjust test data, the adjustment shall be made to all individual chemical constituents with a Henry's law constant value greater than or equal to 0.1 Y/X at 25 degrees Celsius contained in the waste. Constituent-specific adjustment factors (fm25D) can be obtained by contacting the Waste and Chemical Processes Group, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711. Other test methods may be used if they meet the requirements in Subsections R315-265-1084(a) (3) (iii) (A) or (B) and provided the requirement to reflect all organic compounds in the waste with Henry's law constant values greater than or equal to 0.1 Y/X, which can also be expressed as  $1.8 \times 10^{-6}$  atmospheres/gram-mole/m<sup>3</sup>, at 25 degrees Celsius, is met.

(A) Any EPA standard method that has been validated in accordance with "Alternative Validation Procedure for EPA Waste and Wastewater Methods," 40 CFR part 63, appendix D.

(B) Any other analysis method that has been validated in accordance with the procedures specified in Section 5.1 or Section 5.3, and the corresponding calculations in Section 6.1 or Section 6.3, of Method 301 in 40 CFR part 63, appendix A. The data are acceptable if they meet the criteria specified in Section 6.1.5 or Section 6.3.3 of Method 301. If correction is required under section 6.3.3 of Method 301, the data are acceptable if the correction factor is within the range 0.7 to 1.30. Other sections of Method 301 are not required.

(iv) Calculations. The average VO concentration on a mass-weighted basis shall be calculated by using the results for all waste determinations conducted in accordance with Subsections R315-265-1084(b) (3) (ii) and (iii) and the equation found in 40 CFR 265.1084(b) (3) (iv), which is adopted and incorporated by reference.

(v) Provided that the test method is appropriate for the waste as required under Subsection R315-265-1084(b) (3) (iii), compliance shall be determined based on the test method used by the owner or operator as recorded pursuant to Subsection R315-265-1090(f) (1).

(4) Procedure to determine the exit concentration limit for a treated hazardous waste.

(i) The point of waste origination for each hazardous waste treated by the process at the same time shall be identified.

(ii) If a single hazardous waste stream is identified in Subsection R315-265-1084(b) (4) (i), then the exit concentration limit shall be 500 ppmw.

(iii) If more than one hazardous waste stream is identified in Subsection R315-265-1084(b) (4) (i), then the average VO concentration of each hazardous waste stream at the point of waste origination shall be determined in accordance with the requirements of Subsection R315-265-1084(a). The exit concentration limit shall be calculated by using the results determined for each individual hazardous waste stream and the equation found in 40 CFR 265.1084(b) (4) (iii), which is adopted and incorporated by reference.

(5) Procedure to determine the organic reduction efficiency for a treated hazardous waste.

(i) The organic reduction efficiency for a treatment process shall be determined based on results for a minimum of three consecutive runs.

(ii) All hazardous waste streams entering the treatment process and all hazardous waste streams exiting the treatment process shall be identified. The owner or operator shall prepare a sampling plan for measuring these streams that accurately reflects the retention time of the hazardous waste in the process.

(iii) For each run, information shall be determined for each hazardous waste stream identified in Subsection R315-265-1084(b) (5) (ii) using the following procedures:

(A) The mass quantity of each hazardous waste stream entering the process and the mass quantity of each hazardous waste stream exiting the process shall be determined.

(B) The average VO concentration at the point of waste origination of each hazardous waste stream entering the process during the run shall be determined in accordance with the requirements of Subsection R315-265-1084(a) (3). The average VO concentration at the point of waste treatment of each waste stream exiting the process during the run shall be determined in accordance with the requirements of Subsection R315-265-1084(b) (3).

(iv) The waste volatile organic mass flow entering the process and the waste volatile organic mass flow exiting the process shall be calculated by using the results determined in accordance with Subsection R315-265-1084(b) (5) (iii) and the equations found in 40 CFR 265.1084(b) (5) (iv), which is adopted and incorporated by reference.

(v) The organic reduction efficiency of the process shall be calculated by using the results determined in accordance with Subsection R315-265-1084(b) (5) (iv) and the equation found in 40 CFR 265.1084(b) (5) (v), which is adopted and incorporated by reference.

(6) Procedure to determine the organic biodegradation efficiency for a treated hazardous waste.

(i) The fraction of organics biodegraded shall be determined using the procedure specified in 40 CFR part 63, appendix C.

(ii) The organic biodegradation efficiency shall be calculated by using the equation found in 40 CFR 265.1084(b) (6) (ii), which is adopted and incorporated by reference.

(7) Procedure to determine the required organic mass removal rate for a treated hazardous waste.

(i) All of the hazardous waste streams entering the treatment process shall be identified.

(ii) The average VO concentration of each hazardous waste stream at the point of waste origination shall be determined in accordance with the requirements of Subsection R315-265-1084(a).

(iii) For each individual hazardous waste stream that has an average VO concentration equal to or greater than 500 ppmw at the point of waste origination, the average volumetric flow rate and the density of the hazardous waste stream at the point of waste origination shall be determined.

(iv) The required organic mass removal rate shall be calculated by using the average VO concentration, average volumetric flow rate, and density determined for each individual hazardous waste stream, and the equation found in 40 CFR 265.1084(b) (7) (iv), which is adopted and incorporated by reference.

(8) Procedure to determine the actual organic mass removal rate (MR) for a treated hazardous waste.

(i) The MR shall be determined based on results for a minimum of three consecutive runs. The sampling time for each run shall be 1 hour.

(ii) The waste volatile organic mass flow entering the process (Eb) and the waste volatile organic mass flow exiting the process (Ea) shall be determined in accordance with the requirements of Subsection R315-265-1084(b) (5) (iv).

(iii) The MR shall be calculated by using the mass flow rate determined in accordance with the requirements of Subsection R315-265-1084(b) (8) (ii) and the following equation:

$$MR = E_b - E_a$$

Where:

MR = Actual organic mass removal rate, kg/hr.

E<sub>b</sub> = Waste volatile organic mass flow entering process as determined in accordance with the requirements of Subsection R315-265-1084(b) (5) (iv), kg/hr.

E<sub>a</sub> = Waste volatile organic mass flow exiting process as determined in accordance with the requirements of Subsection R315-265-1084(b) (5) (iv), kg/hr.

(9) Procedure to determine the actual organic mass biodegradation rate (MR<sub>bio</sub>) for a treated hazardous waste.

(i) The MR<sub>bio</sub> shall be determined based on results for a minimum of three consecutive runs. The sampling time for each run shall be 1 hour.

(ii) The waste organic mass flow entering the process (Eb) shall be determined in accordance with the requirements of Subsection R315-265-1084(b) (5) (iv).

(iii) The fraction of organic biodegraded (F<sub>bio</sub>) shall be determined using the procedure specified in 40 CFR part 63, appendix

## C.

(iv) The MR<sub>bio</sub> shall be calculated by using the mass flow rates and fraction of organic biodegraded determined in accordance with the requirements of Subsections R315-265-1084(b) (9) (ii) and (b) (9) (iii), respectively, and the following equation:

$$MR_{bio} = E_b \times F_{bio}$$

Where:

MR<sub>bio</sub> = Actual organic mass biodegradation rate, kg/hr.

E<sub>b</sub> = Waste organic mass flow entering process as determined in accordance with the requirements of Subsection R315-265-1084(b) (5) (iv), kg/hr.

F<sub>bio</sub> = Fraction of organic biodegraded as determined in accordance with the requirements of Subsection R315-265-1084(b) (9) (iii).

(c) Procedure to determine the maximum organic vapor pressure of a hazardous waste in a tank.

(1) An owner or operator shall determine the maximum organic vapor pressure for each hazardous waste placed in a tank using Tank Level 1 controls in accordance with the standards specified in Subsection R315-265-1085(c).

(2) An owner or operator shall use either direct measurement as specified in Subsection R315-265-1084(c) (3) or knowledge of the waste as specified by Subsection R315-265-1084(c) (4) to determine the maximum organic vapor pressure which is representative of the hazardous waste composition stored or treated in the tank.

(3) Direct measurement to determine the maximum organic vapor pressure of a hazardous waste.

(i) Sampling. A sufficient number of samples shall be collected to be representative of the waste contained in the tank. All samples shall be collected and handled in accordance with written procedures prepared by the owner or operator and documented in a site sampling plan. This plan shall describe the procedure by which representative samples of the hazardous waste are collected such that a minimum loss of organics occurs throughout the sample collection and handling process and by which sample integrity is maintained. A copy of the written sampling plan shall be maintained on-site in the facility operating records. An example of acceptable sample collection and handling procedures may be found in Method 25D in 40 CFR part 60, appendix A.

(ii) Analysis. Any appropriate one of the following methods may be used to analyze the samples and compute the maximum organic vapor pressure of the hazardous waste:

(A) Method 25E in 40 CFR part 60 appendix A;

(B) Methods described in American Petroleum Institute Publication 2517, Third Edition, February 1989, "Evaporative Loss from External Floating-Roof Tanks," incorporated by reference—refer to Section R315-260-11;

(C) Methods obtained from standard reference texts;

(D) ASTM Method 2879-92, incorporated by reference—refer to Section R315-260-11; and

(E) Any other method approved by the Director.

(4) Use of knowledge to determine the maximum organic vapor pressure of the hazardous waste. Documentation shall be prepared and recorded that presents the information used as the basis for the owner's or operator's knowledge that the maximum organic vapor pressure of the hazardous waste is less than the maximum vapor pressure limit listed in Subsection R315-265-1085(b) (1) (i) for the applicable tank design capacity category. An example of information that may be used is documentation that the hazardous waste is generated by a process for which at other locations it previously has been determined by direct measurement that the waste maximum organic vapor pressure is less than the maximum vapor pressure limit for the appropriate tank design capacity category.

(d) Procedure for determining no detectable organic emissions for the purpose of complying with Sections R315-265-1080 through R315-265-1090:

(1) The test shall be conducted in accordance with the procedures specified in Method 21 of 40 CFR part 60, appendix A. Each potential leak interface, for example, a location where organic vapor leakage could occur, on the cover and associated closure devices shall be checked. Potential leak interfaces that are associated with covers and closure devices include, but are not limited to: The interface of the cover and its foundation mounting; the periphery of any opening on the cover and its associated closure device; and the sealing seat interface on a spring-loaded pressure relief valve.

(2) The test shall be performed when the unit contains a hazardous waste having an organic concentration representative of the range of concentrations for the hazardous waste expected to be managed in the unit. During the test, the cover and closure devices shall be secured in the closed position.

(3) The detection instrument shall meet the performance criteria of Method 21 of 40 CFR part 60, appendix A, except the instrument response factor criteria in section 3.1.2(a) of Method 21 shall be for the average composition of the organic constituents in the hazardous waste placed in the waste management unit, not for each individual organic constituent.

(4) The detection instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR part 60, appendix A.

(5) Calibration gases shall be as follows:

(i) Zero air, less than 10 ppmv hydrocarbon in air, and

(ii) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppmv methane or n-hexane.

(6) The background level shall be determined according to the

procedures in Method 21 of 40 CFR part 60, appendix A.

(7) Each potential leak interface shall be checked by traversing the instrument probe around the potential leak interface as close to the interface as possible, as described in Method 21 of 40 CFR part 60, appendix A. In the case when the configuration of the cover or closure device prevents a complete traverse of the interface, all accessible portions of the interface shall be sampled. In the case when the configuration of the closure device prevents any sampling at the interface and the device is equipped with an enclosed extension or horn, for example, some pressure relief devices, the instrument probe inlet shall be placed at approximately the center of the exhaust area to the atmosphere.

(8) The arithmetic difference between the maximum organic concentration indicated by the instrument and the background level shall be compared with the value of 500 ppmv except when monitoring a seal around a rotating shaft that passes through a cover opening, in which case the comparison shall be as specified in Subsection R315-265-1084(d) (9). If the difference is less than 500 ppmv, then the potential leak interface is determined to operate with no detectable organic emissions.

(9) For the seals around a rotating shaft that passes through a cover opening, the arithmetic difference between the maximum organic concentration indicated by the instrument and the background level shall be compared with the value of 10,000 ppmw. If the difference is less than 10,000 ppmw, then the potential leak interface is determined to operate with no detectable organic emissions.

#### **R315-265-1085. Air Emission Standards for Tanks, Surface Impoundments, and Containers -- Standards: Tanks.**

(a) The provisions of Section R315-265-1085 apply to the control of air pollutant emissions from tanks for which Subsection R315-265-1083(b) references the use of Section R315-265-1085 for such air emission control.

(b) The owner or operator shall control air pollutant emissions from each tank subject to Section R315-265-1085 in accordance with the following requirements, as applicable:

(1) For a tank that manages hazardous waste that meets all of the conditions specified in Subsections R315-265-1085(b) (1) (i) through R315-265-1085(b) (1) (iii), the owner or operator shall control air pollutant emissions from the tank in accordance with the Tank Level 1 controls specified in Subsection R315-265-1085(c) or the Tank Level 2 controls specified in Subsection R315-265-1085(d).

(i) The hazardous waste in the tank has a maximum organic vapor pressure which is less than the maximum organic vapor pressure limit for the tank's design capacity category as follows:

(A) For a tank design capacity equal to or greater than 151 m<sup>3</sup>, the maximum organic vapor pressure limit for the tank is 5.2 kPa.

(B) For a tank design capacity equal to or greater than 75 m<sup>3</sup> but less than 151 m<sup>3</sup>, the maximum organic vapor pressure limit for the tank is 27.6 kPa.

(C) For a tank design capacity less than 75 m<sup>3</sup>, the maximum organic vapor pressure limit for the tank is 76.6 kPa.

(ii) The hazardous waste in the tank is not heated by the owner or operator to a temperature that is greater than the temperature at which the maximum organic vapor pressure of the hazardous waste is determined for the purpose of complying with Subsection R315-265-1085(b) (1) (i).

(iii) The hazardous waste in the tank is not treated by the owner or operator using a waste stabilization process, as defined in Section R315-265-1081.

(2) For a tank that manages hazardous waste that does not meet all of the conditions specified in Subsections R315-265-1085(b) (1) (i) through R315-265-1085(b) (1) (iii), the owner or operator shall control air pollutant emissions from the tank by using Tank Level 2 controls in accordance with the requirements of Subsection R315-265-1085(d). Examples of tanks required to use Tank Level 2 controls include: A tank used for a waste stabilization process; and a tank for which the hazardous waste in the tank has a maximum organic vapor pressure that is equal to or greater than the maximum organic vapor pressure limit for the tank's design capacity category as specified in Subsection R315-265-1085(b) (1) (i).

(c) Owners and operators controlling air pollutant emissions from a tank using Tank Level 1 controls shall meet the requirements specified in Subsections R315-265-1085(c) (1) through R315-265-1085(c) (4):

(1) The owner or operator shall determine the maximum organic vapor pressure for a hazardous waste to be managed in the tank using Tank Level 1 controls before the first time the hazardous waste is placed in the tank. The maximum organic vapor pressure shall be determined using the procedures specified in Subsection R315-265-1084(c). Thereafter, the owner or operator shall perform a new determination whenever changes to the hazardous waste managed in the tank could potentially cause the maximum organic vapor pressure to increase to a level that is equal to or greater than the maximum organic vapor pressure limit for the tank design capacity category specified in Subsection R315-265-1085(b) (1) (i), as applicable to the tank.

(2) The tank shall be equipped with a fixed roof designed to meet the following specifications:

(i) The fixed roof and its closure devices shall be designed to form a continuous barrier over the entire surface area of the hazardous waste in the tank. The fixed roof may be a separate cover installed on the tank, for example, a removable cover mounted on an open-top tank, or may be an integral part of the tank structural design, for example,

a horizontal cylindrical tank equipped with a hatch.

(ii) The fixed roof shall be installed in a manner such that there are no visible cracks, holes, gaps, or other open spaces between roof section joints or between the interface of the roof edge and the tank wall.

(iii) Each opening in the fixed roof, and any manifold system associated with the fixed roof, shall be either:

(A) Equipped with a closure device designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the opening and the closure device; or

(B) Connected by a closed-vent system that is vented to a control device. The control device shall remove or destroy organics in the vent stream, and shall be operating whenever hazardous waste is managed in the tank, except as provided for in Subsections R315-265-1085(c) (2) (iii) (B) (1) and (2).

(1) During periods it is necessary to provide access to the tank for performing the activities of Subsection R315-265-1085(c) (2) (iii) (B) (2), venting of the vapor headspace underneath the fixed roof to the control device is not required, opening of closure devices is allowed, and removal of the fixed roof is allowed. Following completion of the activity, the owner or operator shall promptly secure the closure device in the closed position or reinstall the cover, as applicable, and resume operation of the control device.

(2) During periods of routine inspection, maintenance, or other activities needed for normal operations, and for the removal of accumulated sludge or other residues from the bottom of the tank.

(iv) The fixed roof and its closure devices shall be made of suitable materials that will minimize exposure of the hazardous waste to the atmosphere, to the extent practical, and will maintain the integrity of the fixed roof and closure devices throughout their intended service life. Factors to be considered when selecting the materials for and designing the fixed roof and closure devices shall include: Organic vapor permeability, the effects of any contact with the hazardous waste or its vapors managed in the tank; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the tank on which the fixed roof is installed.

(3) Whenever a hazardous waste is in the tank, the fixed roof shall be installed with each closure device secured in the closed position except as follows:

(i) Opening of closure devices or removal of the fixed roof is allowed at the following times:

(A) To provide access to the tank for performing routine inspection, maintenance, or other activities needed for normal operations. Examples of such activities include those times when a

worker needs to open a port to sample the liquid in the tank, or when a worker needs to open a hatch to maintain or repair equipment. Following completion of the activity, the owner or operator shall promptly secure the closure device in the closed position or reinstall the cover, as applicable, to the tank.

(B) To remove accumulated sludge or other residues from the bottom of tank.

(ii) Opening of a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the tank internal pressure in accordance with the tank design specifications. The device shall be designed to operate with no detectable organic emissions when the device is secured in the closed position. The settings at which the device opens shall be established such that the device remains in the closed position whenever the tank internal pressure is within the internal pressure operating range determined by the owner or operator based on the tank manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the tank internal pressure exceeds the internal pressure operating range for the tank as a result of loading operations or diurnal ambient temperature fluctuations.

(iii) Opening of a safety device, as defined in Section R315-265-1081, is allowed at any time conditions require doing so to avoid an unsafe condition.

(4) The owner or operator shall inspect the air emission control equipment in accordance with the following requirements.

(i) The fixed roof and its closure devices shall be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the roof sections or between the roof and the tank wall; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

(ii) The owner or operator shall perform an initial inspection of the fixed roof and its closure devices on or before the date that the tank becomes subject to this section. Thereafter, the owner or operator shall perform the inspections at least once every year except under the special conditions provided for in Subsection R315-265-1085(l).

(iii) In the event that a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of Subsection R315-265-1085(k).

(iv) The owner or operator shall maintain a record of the

inspection in accordance with the requirements specified in Subsection R315-265-1090 (b) .

(d) Owners and operators controlling air pollutant emissions from a tank using Tank Level 2 controls shall use one of the following tanks:

(1) A fixed-roof tank equipped with an internal floating roof in accordance with the requirements specified in Subsection R315-265-1085 (e) ;

(2) A tank equipped with an external floating roof in accordance with the requirements specified in Subsection R315-265-1085 (f) ;

(3) A tank vented through a closed-vent system to a control device in accordance with the requirements specified in Subsection R315-265-1085 (g) ;

(4) A pressure tank designed and operated in accordance with the requirements specified in Subsection R315-265-1085 (h) ; or

(5) A tank located inside an enclosure that is vented through a closed-vent system to an enclosed combustion control device in accordance with the requirements specified in Subsection R315-265-1085 (i) .

(e) The owner or operator who controls air pollutant emissions from a tank using a fixed-roof with an internal floating roof shall meet the requirements specified in Subsections R315-265-1085 (e) (1) through R315-265-1085 (e) (3) .

(1) The tank shall be equipped with a fixed roof and an internal floating roof in accordance with the following requirements:

(i) The internal floating roof shall be designed to float on the liquid surface except when the floating roof must be supported by the leg supports.

(ii) The internal floating roof shall be equipped with a continuous seal between the wall of the tank and the floating roof edge that meets either of the following requirements:

(A) A single continuous seal that is either a liquid-mounted seal or a metallic shoe seal, as defined in Section R315-265-1081; or

(B) Two continuous seals mounted one above the other. The lower seal may be a vapor-mounted seal.

(iii) The internal floating roof shall meet the following specifications:

(A) Each opening in a noncontact internal floating roof except for automatic bleeder vents, vacuum breaker vents, and the rim space vents is to provide a projection below the liquid surface.

(B) Each opening in the internal floating roof shall be equipped with a gasketed cover or a gasketed lid except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains.

(C) Each penetration of the internal floating roof for the purpose of sampling shall have a slit fabric cover that covers at least 90 percent of the opening.

(D) Each automatic bleeder vent and rim space vent shall be

gasketed.

(E) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

(F) Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

(2) The owner or operator shall operate the tank in accordance with the following requirements:

(i) When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be completed as soon as practical.

(ii) Automatic bleeder vents are to be set closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the leg supports.

(iii) Prior to filling the tank, each cover, access hatch, gauge float well or lid on any opening in the internal floating roof shall be bolted or fastened closed, for example, no visible gaps. Rim space vents are to be set to open only when the internal floating roof is not floating or when the pressure beneath the rim exceeds the manufacturer's recommended setting.

(3) The owner or operator shall inspect the internal floating roof in accordance with the procedures specified as follows:

(i) The floating roof and its closure devices shall be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to: The internal floating roof is not floating on the surface of the liquid inside the tank; liquid has accumulated on top of the internal floating roof; any portion of the roof seals have detached from the roof rim; holes, tears, or other openings are visible in the seal fabric; the gaskets no longer close off the hazardous waste surface from the atmosphere; or the slotted membrane has more than 10 percent open area.

(ii) The owner or operator shall inspect the internal floating roof components as follows except as provided in Subsection R315-265-1085(e) (3) (iii):

(A) Visually inspect the internal floating roof components through openings on the fixed-roof, for example, manholes and roof hatches, at least once every 12 months after initial fill, and

(B) Visually inspect the internal floating roof, primary seal, secondary seal, if one is in service, gaskets, slotted membranes, and sleeve seals, if any, each time the tank is emptied and degassed and at least every 10 years.

(iii) As an alternative to performing the inspections specified in Subsection R315-265-1085(e) (3) (ii) for an internal floating roof equipped with two continuous seals mounted one above the other, the owner or operator may visually inspect the internal floating roof, primary and secondary seals, gaskets, slotted membranes, and sleeve

seals, if any, each time the tank is emptied and degassed and at least every 5 years.

(iv) Prior to each inspection required by Subsections R315-265-1085(e) (3) (ii) or R315-265-1085(e) (3) (iii), the owner or operator shall notify the Director in advance of each inspection to provide the Director with the opportunity to have an observer present during the inspection. The owner or operator shall notify the Director of the date and location of the inspection as follows:

(A) Prior to each visual inspection of an internal floating roof in a tank that has been emptied and degassed, written notification shall be prepared and sent by the owner or operator so that it is received by the Director at least 30 calendar days before refilling the tank except when an inspection is not planned as provided for in Subsection R315-265-1085(e) (3) (iv) (B).

(B) When a visual inspection is not planned and the owner or operator could not have known about the inspection 30 calendar days before refilling the tank, the owner or operator shall notify the Director as soon as possible, but no later than 7 calendar days before refilling of the tank. This notification may be made by telephone and immediately followed by a written explanation for why the inspection is unplanned. Alternatively, written notification, including the explanation for the unplanned inspection, may be sent so that it is received by the Director at least 7 calendar days before refilling the tank.

(v) In the event that a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of Subsection R315-265-1085(k).

(vi) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in Subsection R315-265-1090(b).

(4) Safety devices, as defined in Section R315-265-1081, may be installed and operated as necessary on any tank complying with the requirements of Subsection R315-265-1085(e).

(f) The owner or operator who controls air pollutant emissions from a tank using an external floating roof shall meet the requirements specified in Subsections R315-265-1085(f) (1) through R315-265-1085(f) (3).

(1) The owner or operator shall design the external floating roof in accordance with the following requirements:

(i) The external floating roof shall be designed to float on the liquid surface except when the floating roof must be supported by the leg supports.

(ii) The floating roof shall be equipped with two continuous seals, one above the other, between the wall of the tank and the roof edge. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal.

(A) The primary seal shall be a liquid-mounted seal or a metallic

shoe seal, as defined in Section R315-265-1081. The total area of the gaps between the tank wall and the primary seal shall not exceed 212 square centimeters (cm<sup>2</sup>) per meter of tank diameter, and the width of any portion of these gaps shall not exceed 3.8 centimeters (cm). If a metallic shoe seal is used for the primary seal, the metallic shoe seal shall be designed so that one end extends into the liquid in the tank and the other end extends a vertical distance of at least 61 centimeters above the liquid surface.

(B) The secondary seal shall be mounted above the primary seal and cover the annular space between the floating roof and the wall of the tank. The total area of the gaps between the tank wall and the secondary seal shall not exceed 21.2 square centimeters (cm<sup>2</sup>) per meter of tank diameter, and the width of any portion of these gaps shall not exceed 1.3 centimeters (cm).

(iii) The external floating roof shall meet the following specifications:

(A) Except for automatic bleeder vents, vacuum breaker vents, and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface.

(B) Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof shall be equipped with a gasketed cover, seal, or lid.

(C) Each access hatch and each gauge float well shall be equipped with a cover designed to be bolted or fastened when the cover is secured in the closed position.

(D) Each automatic bleeder vent and each rim space vent shall be equipped with a gasket.

(E) Each roof drain that empties into the liquid managed in the tank shall be equipped with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.

(F) Each unslotted and slotted guide pole well shall be equipped with a gasketed sliding cover or a flexible fabric sleeve seal.

(G) Each unslotted guide pole shall be equipped with a gasketed cap on the end of the pole.

(H) Each slotted guide pole shall be equipped with a gasketed float or other device which closes off the liquid surface from the atmosphere.

(I) Each gauge hatch and each sample well shall be equipped with a gasketed cover.

(2) The owner or operator shall operate the tank in accordance with the following requirements:

(i) When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be completed as soon as practical.

(ii) Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof shall be secured and maintained in a closed position at all times except when the closure

device must be open for access.

(iii) Covers on each access hatch and each gauge float well shall be bolted or fastened when secured in the closed position.

(iv) Automatic bleeder vents shall be set closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the leg supports.

(v) Rim space vents shall be set to open only at those times that the roof is being floated off the roof leg supports or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

(vi) The cap on the end of each unslotted guide pole shall be secured in the closed position at all times except when measuring the level or collecting samples of the liquid in the tank.

(vii) The cover on each gauge hatch or sample well shall be secured in the closed position at all times except when the hatch or well must be opened for access.

(viii) Both the primary seal and the secondary seal shall completely cover the annular space between the external floating roof and the wall of the tank in a continuous fashion except during inspections.

(3) The owner or operator shall inspect the external floating roof in accordance with the procedures specified as follows:

(i) The owner or operator shall measure the external floating roof seal gaps in accordance with the following requirements:

(A) The owner or operator shall perform measurements of gaps between the tank wall and the primary seal within 60 calendar days after initial operation of the tank following installation of the floating roof and, thereafter, at least once every 5 years.

(B) The owner or operator shall perform measurements of gaps between the tank wall and the secondary seal within 60 calendar days after initial operation of the tank following installation of the floating roof and, thereafter, at least once every year.

(C) If a tank ceases to hold hazardous waste for a period of 1 year or more, subsequent introduction of hazardous waste into the tank shall be considered an initial operation for the purposes of Subsections R315-265-1085(f)(3)(i)(A) and R315-265-1085(f)(3)(i)(B).

(D) The owner or operator shall determine the total surface area of gaps in the primary seal and in the secondary seal individually using the following procedure:

(1) The seal gap measurements shall be performed at one or more floating roof levels when the roof is floating off the roof supports.

(2) Seal gaps, if any, shall be measured around the entire perimeter of the floating roof in each place where a 0.32-centimeter (cm) diameter uniform probe passes freely, without forcing or binding against the seal, between the seal and the wall of the tank and measure the circumferential distance of each such location.

(3) For a seal gap measured under Subsection R315-265-1085(f)(3),

the gap surface area shall be determined by using probes of various widths to measure accurately the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance.

(4) The total gap area shall be calculated by adding the gap surface areas determined for each identified gap location for the primary seal and the secondary seal individually, and then dividing the sum for each seal type by the nominal diameter of the tank. These total gap areas for the primary seal and secondary seal are then compared to the respective standards for the seal type as specified in Subsection R315-265-1085(f) (1) (ii).

(E) In the event that the seal gap measurements do not conform to the specifications in Subsection R315-265-1085(f) (1) (ii), the owner or operator shall repair the defect in accordance with the requirements of Subsection R315-265-1085(k).

(F) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in Subsection R315-265-1090 (b).

(ii) The owner or operator shall visually inspect the external floating roof in accordance with the following requirements:

(A) The floating roof and its closure devices shall be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to: Holes, tears, or other openings in the rim seal or seal fabric of the floating roof; a rim seal detached from the floating roof; all or a portion of the floating roof deck being submerged below the surface of the liquid in the tank; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

(B) The owner or operator shall perform an initial inspection of the external floating roof and its closure devices on or before the date that the tank becomes subject to Section R315-265-1085. Thereafter, the owner or operator shall perform the inspections at least once every year except for the special conditions provided for in Subsection R315-265-1085(l).

(C) In the event that a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of Subsection R315-265-1085 (k).

(D) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in Subsection R315-265-1090 (b).

(iii) Prior to each inspection required by Subsections R315-265-1085(f) (3) (i) or R315-265-1085(f) (3) (ii), the owner or operator shall notify the Director in advance of each inspection to provide the Director with the opportunity to have an observer present during the inspection. The owner or operator shall notify the Director of the date and location of the inspection as follows:

(A) Prior to each inspection to measure external floating roof seal gaps as required under Subsection R315-265-1085(f) (3) (i), written notification shall be prepared and sent by the owner or operator so that it is received by the Director at least 30 calendar days before the date the measurements are scheduled to be performed.

(B) Prior to each visual inspection of an external floating roof in a tank that has been emptied and degassed, written notification shall be prepared and sent by the owner or operator so that it is received by the Director at least 30 calendar days before refilling the tank except when an inspection is not planned as provided for in Subsection R315-265-1085(f) (3) (iii) (C).

(C) When a visual inspection is not planned and the owner or operator could not have known about the inspection 30 calendar days before refilling the tank, the owner or operator shall notify the Director as soon as possible, but no later than 7 calendar days before refilling of the tank. This notification may be made by telephone and immediately followed by a written explanation for why the inspection is unplanned. Alternatively, written notification, including the explanation for the unplanned inspection, may be sent so that it is received by the Director at least 7 calendar days before refilling the tank.

(4) Safety devices, as defined in Section R315-265-1081, may be installed and operated as necessary on any tank complying with the requirements of Subsection R315-265-1085(f).

(g) The owner or operator who controls air pollutant emissions from a tank by venting the tank to a control device shall meet the requirements specified in Subsections R315-265-1085(g) (1) through R315-265-1085(g) (3).

(1) The tank shall be covered by a fixed roof and vented directly through a closed-vent system to a control device in accordance with the following requirements:

(i) The fixed roof and its closure devices shall be designed to form a continuous barrier over the entire surface area of the liquid in the tank.

(ii) Each opening in the fixed roof not vented to the control device shall be equipped with a closure device. If the pressure in the vapor headspace underneath the fixed roof is less than atmospheric pressure when the control device is operating, the closure devices shall be designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the cover opening and the closure device. If the pressure in the vapor headspace underneath the fixed roof is equal to or greater than atmospheric pressure when the control device is operating, the closure device shall be designed to operate with no detectable organic emissions.

(iii) The fixed roof and its closure devices shall be made of

suitable materials that will minimize exposure of the hazardous waste to the atmosphere, to the extent practical, and will maintain the integrity of the fixed roof and closure devices throughout their intended service life. Factors to be considered when selecting the materials for and designing the fixed roof and closure devices shall include: Organic vapor permeability, the effects of any contact with the liquid and its vapor managed in the tank; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the tank on which the fixed roof is installed.

(iv) The closed-vent system and control device shall be designed and operated in accordance with the requirements of Section R315-265-1088.

(2) Whenever a hazardous waste is in the tank, the fixed roof shall be installed with each closure device secured in the closed position and the vapor headspace underneath the fixed roof vented to the control device except as follows:

(i) Venting to the control device is not required, and opening of closure devices or removal of the fixed roof is allowed at the following times:

(A) To provide access to the tank for performing routine inspection, maintenance, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a port to sample liquid in the tank, or when a worker needs to open a hatch to maintain or repair equipment. Following completion of the activity, the owner or operator shall promptly secure the closure device in the closed position or reinstall the cover, as applicable, to the tank.

(B) To remove accumulated sludge or other residues from the bottom of a tank.

(ii) Opening of a safety device, as defined in Section R315-265-1081, is allowed at any time conditions require doing so to avoid an unsafe condition.

(3) The owner or operator shall inspect and monitor the air emission control equipment in accordance with the following procedures:

(i) The fixed roof and its closure devices shall be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the roof sections or between the roof and the tank wall; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

(ii) The closed-vent system and control device shall be inspected and monitored by the owner or operator in accordance with the procedures specified in Section R315-265-1088.

(iii) The owner or operator shall perform an initial inspection of the air emission control equipment on or before the date that the

tank becomes subject to Section R315-265-1085. Thereafter, the owner or operator shall perform the inspections at least once every year except for the special conditions provided for in Subsection R315-265-1085(l).

(iv) In the event that a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of Subsection R315-265-1085(k).

(v) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in Subsection R315-265-1090(b).

(h) The owner or operator who controls air pollutant emissions by using a pressure tank shall meet the following requirements.

(1) The tank shall be designed not to vent to the atmosphere as a result of compression of the vapor headspace in the tank during filling of the tank to its design capacity.

(2) All tank openings shall be equipped with closure devices designed to operate with no detectable organic emissions as determined using the procedure specified in Subsection R315-265-1084(d).

(3) Whenever a hazardous waste is in the tank, the tank shall be operated as a closed system that does not vent to the atmosphere except under either of the following conditions as specified in Subsections R315-265-1085(h)(3)(i) or R315-265-1085(h)(3)(ii).

(i) At those times when opening of a safety device, as defined in Section R315-265-1081, is required to avoid an unsafe condition.

(ii) At those times when purging of inerts from the tank is required and the purge stream is routed to a closed-vent system and control device designed and operated in accordance with the requirements of Section R315-265-1088.

(i) The owner or operator who controls air pollutant emissions by using an enclosure vented through a closed-vent system to an enclosed combustion control device shall meet the requirements specified in Subsections R315-265-1085(i)(1) through R315-265-1085(i)(4).

(1) The tank shall be located inside an enclosure. The enclosure shall be designed and operated in accordance with the criteria for a permanent total enclosure as specified in "Procedure T-Criteria for and Verification of a Permanent or Temporary Total Enclosure" under 40 CFR 52.741, appendix B. The enclosure may have permanent or temporary openings to allow worker access; passage of material into or out of the enclosure by conveyor, vehicles, or other mechanical means; entry of permanent mechanical or electrical equipment; or direct airflow into the enclosure. The owner or operator shall perform the verification procedure for the enclosure as specified in Section 5.0 to "Procedure T-Criteria for and Verification of a Permanent or Temporary Total Enclosure" initially when the enclosure is first installed and, thereafter, annually.

(2) The enclosure shall be vented through a closed-vent system

to an enclosed combustion control device that is designed and operated in accordance with the standards for either a vapor incinerator, boiler, or process heater specified in Section R315-265-1088.

(3) Safety devices, as defined in Section R315-265-1081, may be installed and operated as necessary on any enclosure, closed-vent system, or control device used to comply with the requirements of Subsections R315-265-1085(i)(1) and R315-265-1085(i)(2).

(4) The owner or operator shall inspect and monitor the closed-vent system and control device as specified in Section R315-265-1088.

(j) The owner or operator shall transfer hazardous waste to a tank subject to Section R315-265-1085 in accordance with the following requirements:

(1) Transfer of hazardous waste, except as provided in Subsection R315-265-1085(j)(2), to the tank from another tank subject to Section R315-265-1085 or from a surface impoundment subject to Section R315-265-1086 shall be conducted using continuous hard-piping or another closed system that does not allow exposure of the hazardous waste to the atmosphere. For the purpose of complying with this provision, an individual drain system is considered to be a closed system when it meets the requirements of 40 CFR part 63, subpart RR—National Emission Standards for Individual Drain Systems.

(2) The requirements of Subsection R315-265-1085(j)(1) do not apply when transferring a hazardous waste to the tank under any of the following conditions:

(i) The hazardous waste meets the average VO concentration conditions specified in Subsection R315-265-1083(c)(1) at the point of waste origination.

(ii) The hazardous waste has been treated by an organic destruction or removal process to meet the requirements in Subsection R315-265-1083(c)(2).

(iii) The hazardous waste meets the requirements of Subsection R315-265-1083(c)(4).

(k) The owner or operator shall repair each defect detected during an inspection performed in accordance with the requirements of Subsections R315-265-1085(c)(4), R315-265-1085(e)(3), R315-265-1085(f)(3), or R315-265-1085(g)(3) as follows:

(1) The owner or operator shall make first efforts at repair of the defect no later than 5 calendar days after detection, and repair shall be completed as soon as possible but no later than 45 calendar days after detection except as provided in Subsection R315-265-1085(k)(2).

(2) Repair of a defect may be delayed beyond 45 calendar days if the owner or operator determines that repair of the defect requires emptying or temporary removal from service of the tank and no alternative tank capacity is available at the site to accept the hazardous waste normally managed in the tank. In this case, the owner

or operator shall repair the defect the next time the process or unit that is generating the hazardous waste managed in the tank stops operation. Repair of the defect shall be completed before the process or unit resumes operation.

(1) Following the initial inspection and monitoring of the cover as required by the applicable provisions of Sections R315-265-1080 through R315-265-1090, subsequent inspection and monitoring may be performed at intervals longer than 1 year under the following special conditions:

(1) In the case when inspecting or monitoring the cover would expose a worker to dangerous, hazardous, or other unsafe conditions, then the owner or operator may designate a cover as an "unsafe to inspect and monitor cover" and comply with all of the following requirements:

(i) Prepare a written explanation for the cover stating the reasons why the cover is unsafe to visually inspect or to monitor, if required.

(ii) Develop and implement a written plan and schedule to inspect and monitor the cover, using the procedures specified in the applicable section of Sections R315-265-1080 through R315-265-1090, as frequently as practicable during those times when a worker can safely access the cover.

(2) In the case when a tank is buried partially or entirely underground, an owner or operator is required to inspect and monitor, as required by the applicable provisions of Section R315-265-1085, only those portions of the tank cover and those connections to the tank, for example, fill ports, access hatches, gauge wells, etc., that are located on or above the ground surface.

#### **R315-265-1086. Air Emission Standards for Tanks, Surface Impoundments, and Containers -- Standards: Surface Impoundments.**

(a) The provisions of Section R315-265-1086 apply to the control of air pollutant emissions from surface impoundments for which Subsection R315-265-1083(b) references the use of Section R315-265-1086 for such air emission control.

(b) The owner or operator shall control air pollutant emissions from the surface impoundment by installing and operating either of the following:

(1) A floating membrane cover in accordance with the provisions specified in Subsection R315-265-1086(c); or

(2) A cover that is vented through a closed-vent system to a control device in accordance with the requirements specified in Subsection R315-265-1086(d).

(c) The owner or operator who controls air pollutant emissions from a surface impoundment using a floating membrane cover shall meet the requirements specified in Subsections R315-265-1086(c) (1) through R315-265-1086(c) (3).

(1) The surface impoundment shall be equipped with a floating membrane cover designed to meet the following specifications:

(i) The floating membrane cover shall be designed to float on the liquid surface during normal operations and form a continuous barrier over the entire surface area of the liquid.

(ii) The cover shall be fabricated from a synthetic membrane material that is either:

(A) High density polyethylene (HDPE) with a thickness no less than 2.5 millimeters (mm); or

(B) A material or a composite of different materials determined to have both organic permeability properties that are equivalent to those of the material listed in Subsection R315-265-1086(c) (1) (ii) (A) and chemical and physical properties that maintain the material integrity for the intended service life of the material.

(iii) The cover shall be installed in a manner such that there are no visible cracks, holes, gaps, or other open spaces between cover section seams or between the interface of the cover edge and its foundation mountings.

(iv) Except as provided for in Subsection R315-265-1086(c) (1) (v), each opening in the floating membrane cover shall be equipped with a closure device designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the cover opening and the closure device.

(v) The floating membrane cover may be equipped with one or more emergency cover drains for removal of stormwater. Each emergency cover drain shall be equipped with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening or a flexible fabric sleeve seal.

(vi) The closure devices shall be made of suitable materials that will minimize exposure of the hazardous waste to the atmosphere, to the extent practical, and will maintain the integrity of the closure devices throughout their intended service life. Factors to be considered when selecting the materials of construction and designing the cover and closure devices shall include: Organic vapor permeability; the effects of any contact with the liquid and its vapor managed in the surface impoundment; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the surface impoundment on which the floating membrane cover is installed.

(2) Whenever a hazardous waste is in the surface impoundment, the floating membrane cover shall float on the liquid and each closure device shall be secured in the closed position except as follows:

(i) Opening of closure devices or removal of the cover is allowed at the following times:

(A) To provide access to the surface impoundment for performing

routine inspection, maintenance, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a port to sample the liquid in the surface impoundment, or when a worker needs to open a hatch to maintain or repair equipment. Following completion of the activity, the owner or operator shall promptly replace the cover and secure the closure device in the closed position, as applicable.

(B) To remove accumulated sludge or other residues from the bottom of surface impoundment.

(ii) Opening of a safety device, as defined in Section R315-265-1081, is allowed at any time conditions require doing so to avoid an unsafe condition.

(3) The owner or operator shall inspect the floating membrane cover in accordance with the following procedures:

(i) The floating membrane cover and its closure devices shall be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the cover section seams or between the interface of the cover edge and its foundation mountings; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

(ii) The owner or operator shall perform an initial inspection of the floating membrane cover and its closure devices on or before the date that the surface impoundment becomes subject to Section R315-265-1086. Thereafter, the owner or operator shall perform the inspections at least once every year except for the special conditions provided for in Subsection R315-265-1086(g).

(iii) In the event that a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of Subsection R315-265-1086(f).

(iv) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in Subsection R315-265-1090(c).

(d) The owner or operator who controls air pollutant emissions from a surface impoundment using a cover vented to a control device shall meet the requirements specified in Subsections R315-265-1086(d) (1) through R315-265-1086(d) (3).

(1) The surface impoundment shall be covered by a cover and vented directly through a closed-vent system to a control device in accordance with the following requirements:

(i) The cover and its closure devices shall be designed to form a continuous barrier over the entire surface area of the liquid in the surface impoundment.

(ii) Each opening in the cover not vented to the control device shall be equipped with a closure device. If the pressure in the vapor headspace underneath the cover is less than atmospheric pressure when

the control device is operating, the closure devices shall be designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the cover opening and the closure device. If the pressure in the vapor headspace underneath the cover is equal to or greater than atmospheric pressure when the control device is operating, the closure device shall be designed to operate with no detectable organic emissions using the procedure specified in Subsection R315-265-1084(d).

(iii) The cover and its closure devices shall be made of suitable materials that will minimize exposure of the hazardous waste to the atmosphere, to the extent practical, and will maintain the integrity of the cover and closure devices throughout their intended service life. Factors to be considered when selecting the materials of construction and designing the cover and closure devices shall include: Organic vapor permeability; the effects of any contact with the liquid or its vapors managed in the surface impoundment; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the surface impoundment on which the cover is installed.

(iv) The closed-vent system and control device shall be designed and operated in accordance with the requirements of Section R315-265-1088.

(2) Whenever a hazardous waste is in the surface impoundment, the cover shall be installed with each closure device secured in the closed position and the vapor headspace underneath the cover vented to the control device except as follows:

(i) Venting to the control device is not required, and opening of closure devices or removal of the cover is allowed at the following times:

(A) To provide access to the surface impoundment for performing routine inspection, maintenance, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a port to sample liquid in the surface impoundment, or when a worker needs to open a hatch to maintain or repair equipment. Following completion of the activity, the owner or operator shall promptly secure the closure device in the closed position or reinstall the cover, as applicable, to the surface impoundment.

(B) To remove accumulated sludge or other residues from the bottom of the surface impoundment.

(ii) Opening of a safety device, as defined in Section R315-265-1081, is allowed at any time conditions require doing so to avoid an unsafe condition.

(3) The owner or operator shall inspect and monitor the air emission control equipment in accordance with the following procedures:

(i) The surface impoundment cover and its closure devices shall

be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the cover section seams or between the interface of the cover edge and its foundation mountings; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

(ii) The closed-vent system and control device shall be inspected and monitored by the owner or operator in accordance with the procedures specified in Section R315-265-1088.

(iii) The owner or operator shall perform an initial inspection of the air emission control equipment on or before the date that the surface impoundment becomes subject to Section R315-265-1086. Thereafter, the owner or operator shall perform the inspections at least once every year except for the special conditions provided for in Subsection R315-265-1086(g).

(iv) In the event that a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of Subsection R315-265-1086(f).

(v) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in Subsection R315-265-1090(c).

(e) The owner or operator shall transfer hazardous waste to a surface impoundment subject to Section R315-265-1086 in accordance with the following requirements:

(1) Transfer of hazardous waste, except as provided in Subsection R315-265-1086(e)(2), to the surface impoundment from another surface impoundment subject to Section R315-265-1086 or from a tank subject to Section R315-265-1085 shall be conducted using continuous hard-piping or another closed system that does not allow exposure of the waste to the atmosphere. For the purpose of complying with this provision, an individual drain system is considered to be a closed system when it meets the requirements of 40 CFR part 63, subpart RR-National Emission Standards for Individual Drain Systems.

(2) The requirements of Subsection R315-265-1086(e)(1) do not apply when transferring a hazardous waste to the surface impoundment under either of the following conditions:

(i) The hazardous waste meets the average VO concentration conditions specified in Subsection R315-265-1083(c)(1) at the point of waste origination.

(ii) The hazardous waste has been treated by an organic destruction or removal process to meet the requirements in Subsection R315-265-1083(c)(2).

(iii) The hazardous waste meets the requirements of Subsection R315-265-1083(c)(4).

(f) The owner or operator shall repair each defect detected during an inspection performed in accordance with the requirements of

Subsections R315-265-1086(c) (3) or R315-265-1086(d) (3) as follows:

(1) The owner or operator shall make first efforts at repair of the defect no later than 5 calendar days after detection, and repair shall be completed as soon as possible but no later than 45 calendar days after detection except as provided in Subsection R315-265-1086(f) (2).

(2) Repair of a defect may be delayed beyond 45 calendar days if the owner or operator determines that repair of the defect requires emptying or temporary removal from service of the surface impoundment and no alternative capacity is available at the site to accept the hazardous waste normally managed in the surface impoundment. In this case, the owner or operator shall repair the defect the next time the process or unit that is generating the hazardous waste managed in the tank stops operation. Repair of the defect shall be completed before the process or unit resumes operation.

(g) Following the initial inspection and monitoring of the cover as required by the applicable provisions of Sections R315-265-1080 through R315-265-1090, subsequent inspection and monitoring may be performed at intervals longer than 1 year in the case when inspecting or monitoring the cover would expose a worker to dangerous, hazardous, or other unsafe conditions. In this case, the owner or operator may designate the cover as an "unsafe to inspect and monitor cover" and comply with all of the following requirements:

(1) Prepare a written explanation for the cover stating the reasons why the cover is unsafe to visually inspect or to monitor, if required.

(2) Develop and implement a written plan and schedule to inspect and monitor the cover using the procedures specified in the applicable section of Sections R315-265-1080 through R315-265-1090 as frequently as practicable during those times when a worker can safely access the cover.

**R315-265-1087. Air Emission Standards for Tanks, Surface Impoundments, and Containers -- Standards: Containers.**

(a) The provisions of Section R315-265-1087 apply to the control of air pollutant emissions from containers for which Subsection R315-265-1083(b) references the use of Section R315-265-1087 for such air emission control.

(b) General requirements.

(1) The owner or operator shall control air pollutant emissions from each container subject to Section R315-265-1087 in accordance with the following requirements, as applicable to the container, except when the special provisions for waste stabilization processes specified in Subsection R315-265-1087(b) (2) apply to the container.

(i) For a container having a design capacity greater than 0.1 m<sup>3</sup> and less than or equal to 0.46 m<sup>3</sup>, the owner or operator shall control air pollutant emissions from the container in accordance with the

Container Level 1 standards specified in Subsection R315-265-1087(c).

(ii) For a container having a design capacity greater than 0.46 m<sup>3</sup> that is not in light material service, the owner or operator shall control air pollutant emissions from the container in accordance with the Container Level 1 standards specified in Subsection R315-265-1087(c).

(iii) For a container having a design capacity greater than 0.46 m<sup>3</sup> that is in light material service, the owner or operator shall control air pollutant emissions from the container in accordance with the Container Level 2 standards specified in Subsection R315-265-1087(d).

(2) When a container having a design capacity greater than 0.1 m<sup>3</sup> is used for treatment of a hazardous waste by a waste stabilization process, the owner or operator shall control air pollutant emissions from the container in accordance with the Container Level 3 standards specified in Subsection R315-265-1087(e) at those times during the waste stabilization process when the hazardous waste in the container is exposed to the atmosphere.

(c) Container Level 1 standards.

(1) A container using Container Level 1 controls is one of the following:

(i) A container that meets the applicable U.S. Department of Transportation (DOT) regulations on packaging hazardous materials for transportation as specified in Subsection R315-265-1087(f).

(ii) A container equipped with a cover and closure devices that form a continuous barrier over the container openings such that when the cover and closure devices are secured in the closed position there are no visible holes, gaps, or other open spaces into the interior of the container. The cover may be a separate cover installed on the container, for example, a lid on a drum or a suitably secured tarp on a roll-off box, or may be an integral part of the container structural design, for example, a "portable tank" or bulk cargo container equipped with a screw-type cap.

(iii) An open-top container in which an organic-vapor suppressing barrier is placed on or over the hazardous waste in the container such that no hazardous waste is exposed to the atmosphere. One example of such a barrier is application of a suitable organic-vapor suppressing foam.

(2) A container used to meet the requirements of Subsections R315-265-1087(c)(1)(ii) or R315-265-1087(c)(1)(iii) shall be equipped with covers and closure devices, as applicable to the container, that are composed of suitable materials to minimize exposure of the hazardous waste to the atmosphere and to maintain the equipment integrity for as long as it is in service. Factors to be considered in selecting the materials of construction and designing the cover and closure devices shall include: Organic vapor permeability, the effects of contact with the hazardous waste or its

vapor managed in the container; the effects of outdoor exposure of the closure device or cover material to wind, moisture, and sunlight; and the operating practices for which the container is intended to be used.

(3) Whenever a hazardous waste is in a container using Container Level 1 controls, the owner or operator shall install all covers and closure devices for the container, as applicable to the container, and secure and maintain each closure device in the closed position except as follows:

(i) Opening of a closure device or cover is allowed for the purpose of adding hazardous waste or other material to the container as follows:

(A) In the case when the container is filled to the intended final level in one continuous operation, the owner or operator shall promptly secure the closure devices in the closed position and install the covers, as applicable to the container, upon conclusion of the filling operation.

(B) In the case when discrete quantities or batches of material intermittently are added to the container over a period of time, the owner or operator shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon either the container being filled to the intended final level; the completion of a batch loading after which no additional material will be added to the container within 15 minutes; the person performing the loading operation leaving the immediate vicinity of the container; or the shutdown of the process generating the material being added to the container, whichever condition occurs first.

(ii) Opening of a closure device or cover is allowed for the purpose of removing hazardous waste from the container as follows:

(A) For the purpose of meeting the requirements of Section R315-265-1087, an empty container as defined in Subsection R315-261-7(b) may be open to the atmosphere at any time, for example, covers and closure devices are not required to be secured in the closed position on an empty container.

(B) In the case when discrete quantities or batches of material are removed from the container but the container does not meet the conditions to be an empty container as defined in Subsection R315-261-7(b), the owner or operator shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon the completion of a batch removal after which no additional material will be removed from the container within 15 minutes or the person performing the unloading operation leaves the immediate vicinity of the container, whichever condition occurs first.

(iii) Opening of a closure device or cover is allowed when access inside the container is needed to perform routine activities other than transfer of hazardous waste. Examples of such activities include those times when a worker needs to open a port to measure the depth of or sample the material in the container, or when a worker needs to open

a manhole hatch to access equipment inside the container. Following completion of the activity, the owner or operator shall promptly secure the closure device in the closed position or reinstall the cover, as applicable to the container.

(iv) Opening of a spring-loaded, pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the container internal pressure in accordance with the design specifications of the container. The device shall be designed to operate with no detectable organic emissions when the device is secured in the closed position. The settings at which the device opens shall be established such that the device remains in the closed position whenever the internal pressure of the container is within the internal pressure operating range determined by the owner or operator based on container manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the internal pressure of the container exceeds the internal pressure operating range for the container as a result of loading operations or diurnal ambient temperature fluctuations.

(v) Opening of a safety device, as defined in Section R315-265-1081, is allowed at any time conditions require doing so to avoid an unsafe condition.

(4) The owner or operator of containers using Container Level 1 controls shall inspect the containers and their covers and closure devices as follows:

(i) In the case when a hazardous waste already is in the container at the time the owner or operator first accepts possession of the container at the facility and the container is not emptied within 24 hours after the container is accepted at the facility, for example, does not meet the conditions for an empty container as specified in Subsection R315-261-7(b), the owner or operator shall visually inspect the container and its cover and closure devices to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. The container visual inspection shall be conducted on or before the date that the container is accepted at the facility, for example, the date the container becomes subject to the container standards of Sections R315-265-1080 through R315-265-1090. For purposes of this requirement, the date of acceptance is the date of signature that the facility owner or operator enters on Item 20 of the Uniform Hazardous Waste Manifest, EPA Forms 8700-22 and 8700-22A, as required under Section R315-265-71. If a defect is detected, the owner or operator shall repair the defect in accordance with the requirements

of Subsection R315-265-1087(c) (4) (iii).

(ii) In the case when a container used for managing hazardous waste remains at the facility for a period of 1 year or more, the owner or operator shall visually inspect the container and its cover and closure devices initially and thereafter, at least once every 12 months, to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. If a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of Subsection R315-265-1087(c) (4) (iii).

(iii) When a defect is detected for the container, cover, or closure devices, the owner or operator shall make first efforts at repair of the defect no later than 24 hours after detection, and repair shall be completed as soon as possible but no later than 5 calendar days after detection. If repair of a defect cannot be completed within 5 calendar days, then the hazardous waste shall be removed from the container and the container shall not be used to manage hazardous waste until the defect is repaired.

(5) The owner or operator shall maintain at the facility a copy of the procedure used to determine that containers with capacity of 0.46 m<sup>3</sup> or greater, which do not meet applicable DOT regulations as specified in Subsection R315-265-1087(f), are not managing hazardous waste in light material service.

(d) Container Level 2 standards.

(1) A container using Container Level 2 controls is one of the following:

(i) A container that meets the applicable U.S. Department of Transportation (DOT) regulations on packaging hazardous materials for transportation as specified in Subsection R315-265-1087(f).

(ii) A container that operates with no detectable organic emissions as defined in Section R315-265-1081 and determined in accordance with the procedure specified in Subsection R315-265-1087(g).

(iii) A container that has been demonstrated within the preceding 12 months to be vapor-tight by using 40 CFR part 60, appendix A, Method 27 in accordance with the procedure specified in Subsection R315-265-1087(h).

(2) Transfer of hazardous waste in or out of a container using Container Level 2 controls shall be conducted in such a manner as to minimize exposure of the hazardous waste to the atmosphere, to the extent practical, considering the physical properties of the hazardous waste and good engineering and safety practices for handling flammable, ignitable, explosive, reactive or other hazardous materials. Examples of container loading procedures that the Director considers to meet the requirements of Subsection R315-265-1087(d) include using any one of the following: A submerged-fill pipe or other submerged-fill method to load liquids into the container; a

vapor-balancing system or a vapor-recovery system to collect and control the vapors displaced from the container during filling operations; or a fitted opening in the top of a container through which the hazardous waste is filled and subsequently purging the transfer line before removing it from the container opening.

(3) Whenever a hazardous waste is in a container using Container Level 2 controls, the owner or operator shall install all covers and closure devices for the container, and secure and maintain each closure device in the closed position except as follows:

(i) Opening of a closure device or cover is allowed for the purpose of adding hazardous waste or other material to the container as follows:

(A) In the case when the container is filled to the intended final level in one continuous operation, the owner or operator shall promptly secure the closure devices in the closed position and install the covers, as applicable to the container, upon conclusion of the filling operation.

(B) In the case when discrete quantities or batches of material intermittently are added to the container over a period of time, the owner or operator shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon either the container being filled to the intended final level; the completion of a batch loading after which no additional material will be added to the container within 15 minutes; the person performing the loading operation leaving the immediate vicinity of the container; or the shutdown of the process generating the material being added to the container, whichever condition occurs first.

(ii) Opening of a closure device or cover is allowed for the purpose of removing hazardous waste from the container as follows:

(A) For the purpose of meeting the requirements of Section R315-265-1087, an empty container as defined in Subsection R315-261-7(b) may be open to the atmosphere at any time, for example, covers and closure devices are not required to be secured in the closed position on an empty container.

(B) In the case when discrete quantities or batches of material are removed from the container but the container does not meet the conditions to be an empty container as defined in Subsection R315-261-7(b), the owner or operator shall promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon the completion of a batch removal after which no additional material will be removed from the container within 15 minutes or the person performing the unloading operation leaves the immediate vicinity of the container, whichever condition occurs first.

(iii) Opening of a closure device or cover is allowed when access inside the container is needed to perform routine activities other than transfer of hazardous waste. Examples of such activities include those times when a worker needs to open a port to measure the depth of or

sample the material in the container, or when a worker needs to open a manhole hatch to access equipment inside the container. Following completion of the activity, the owner or operator shall promptly secure the closure device in the closed position or reinstall the cover, as applicable to the container.

(iv) Opening of a spring-loaded, pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the internal pressure of the container in accordance with the container design specifications. The device shall be designed to operate with no detectable organic emission when the device is secured in the closed position. The settings at which the device opens shall be established such that the device remains in the closed position whenever the internal pressure of the container is within the internal pressure operating range determined by the owner or operator based on container manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the internal pressure of the container exceeds the internal pressure operating range for the container as a result of loading operations or diurnal ambient temperature fluctuations.

(v) Opening of a safety device, as defined in Section R315-265-1081, is allowed at any time conditions require doing so to avoid an unsafe condition.

(4) The owner or operator of containers using Container Level 2 controls shall inspect the containers and their covers and closure devices as follows:

(i) In the case when a hazardous waste already is in the container at the time the owner or operator first accepts possession of the container at the facility and the container is not emptied within 24 hours after the container is accepted at the facility, for example, does not meet the conditions for an empty container as specified in Subsection R315-261-7(b), the owner or operator shall visually inspect the container and its cover and closure devices to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. The container visual inspection shall be conducted on or before the date that the container is accepted at the facility, for example, the date the container becomes subject to the container standards of Sections R315-265-1080 through R315-265-1090. For purposes of this requirement, the date of acceptance is the date of signature that the facility owner or operator enters on Item 20 of the Uniform Hazardous Waste Manifest, EPA Forms 8700-22 and 8700-22A, as required under Section R315-265-71. If a defect is detected, the owner

or operator shall repair the defect in accordance with the requirements of Subsection R315-265-1087(d) (4) (iii).

(ii) In the case when a container used for managing hazardous waste remains at the facility for a period of 1 year or more, the owner or operator shall visually inspect the container and its cover and closure devices initially and thereafter, at least once every 12 months, to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. If a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of Subsection R315-265-1087(d) (4) (iii).

(iii) When a defect is detected for the container, cover, or closure devices, the owner or operator shall make first efforts at repair of the defect no later than 24 hours after detection, and repair shall be completed as soon as possible but no later than 5 calendar days after detection. If repair of a defect cannot be completed within 5 calendar days, then the hazardous waste shall be removed from the container and the container shall not be used to manage hazardous waste until the defect is repaired.

(e) Container Level 3 standards.

(1) A container using Container Level 3 controls is one of the following:

(i) A container that is vented directly through a closed-vent system to a control device in accordance with the requirements of Subsection R315-265-1087(e) (2) (ii).

(ii) A container that is vented inside an enclosure which is exhausted through a closed-vent system to a control device in accordance with the requirements of Subsections R315-265-1087(e) (2) (i) and R315-265-1087(e) (2) (ii).

(2) The owner or operator shall meet the following requirements, as applicable to the type of air emission control equipment selected by the owner or operator:

(i) The container enclosure shall be designed and operated in accordance with the criteria for a permanent total enclosure as specified in "Procedure T-Criteria for and Verification of a Permanent or Temporary Total Enclosure" under 40 CFR 52.741, appendix B. The enclosure may have permanent or temporary openings to allow worker access; passage of containers through the enclosure by conveyor or other mechanical means; entry of permanent mechanical or electrical equipment; or direct airflow into the enclosure. The owner or operator shall perform the verification procedure for the enclosure as specified in Section 5.0 to "Procedure T-Criteria for and Verification of a Permanent or Temporary Total Enclosure" initially when the enclosure is first installed and, thereafter, annually.

(ii) The closed-vent system and control device shall be designed and operated in accordance with the requirements of Section R315-265-1088.

(3) Safety devices, as defined in Section R315-265-1081, may be installed and operated as necessary on any container, enclosure, closed-vent system, or control device used to comply with the requirements of Subsection R315-265-1087(e) (1).

(4) Owners and operators using Container Level 3 controls in accordance with the provisions of Sections R315-265-1080 through R315-265-1090 shall inspect and monitor the closed-vent systems and control devices as specified in Section R315-265-1088.

(5) Owners and operators that use Container Level 3 controls in accordance with the provisions of Sections R315-265-1080 through R315-265-1090 shall prepare and maintain the records specified in Subsection R315-265-1090 (d).

(6) Transfer of hazardous waste in or out of a container using Container Level 3 controls shall be conducted in such a manner as to minimize exposure of the hazardous waste to the atmosphere, to the extent practical, considering the physical properties of the hazardous waste and good engineering and safety practices for handling flammable, ignitable, explosive, reactive, or other hazardous materials. Examples of container loading procedures that the Director considers to meet the requirements of Subsection R315-265-1087(e) include using any one of the following: A submerged-fill pipe or other submerged-fill method to load liquids into the container; a vapor-balancing system or a vapor-recovery system to collect and control the vapors displaced from the container during filling operations; or a fitted opening in the top of a container through which the hazardous waste is filled and subsequently purging the transfer line before removing it from the container opening.

(f) For the purpose of compliance with Subsections R315-265-1087(c) (1) (i) or R315-265-1087(d) (1) (i), containers shall be used that meet the applicable U.S. Department of Transportation (DOT) regulations on packaging hazardous materials for transportation as follows:

(1) The container meets the applicable requirements specified in 49 CFR part 178—Specifications for Packaging or 49 CFR part 179—Specifications for Tank Cars.

(2) Hazardous waste is managed in the container in accordance with the applicable requirements specified in 49 CFR part 107, subpart B—Exemptions; 49 CFR part 172—Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements; 49 CFR part 173—Shippers—General Requirements for Shipments and Packages; and 49 CFR part 180—Continuing Qualification and Maintenance of Packagings.

(3) For the purpose of complying with Sections R315-265-1080 through R315-265-1090, no exceptions to the 49 CFR part 178 or part 179 regulations are allowed except as provided for in Subsection R315-265-1087(f) (4).

(4) For a lab pack that is managed in accordance with the

requirements of 49 CFR part 178 for the purpose of complying with Sections R315-265-1080 through R315-265-1090, an owner or operator may comply with the exceptions for combination packagings specified in 49 CFR 173.12(b).

(g) To determine compliance with the no detectable organic emissions requirements of Subsection R315-265-1087(d)(1)(ii), the procedure specified in Subsection R315-265-1084(d) shall be used.

(1) Each potential leak interface, for example, a location where organic vapor leakage could occur, on the container, its cover, and associated closure devices, as applicable to the container, shall be checked. Potential leak interfaces that are associated with containers include, but are not limited to: The interface of the cover rim and the container wall; the periphery of any opening on the container or container cover and its associated closure device; and the sealing seat interface on a spring-loaded pressure-relief valve.

(2) The test shall be performed when the container is filled with a material having a volatile organic concentration representative of the range of volatile organic concentrations for the hazardous wastes expected to be managed in this type of container. During the test, the container cover and closure devices shall be secured in the closed position.

(h) Procedure for determining a container to be vapor-tight using Method 27 of 40 CFR part 60, appendix A for the purpose of complying with Subsection R315-265-1087(d)(1)(iii).

(1) The test shall be performed in accordance with Method 27 of 40 CFR part 60, appendix A.

(2) A pressure measurement device shall be used that has a precision of plus or minus 2.5 mm water and that is capable of measuring above the pressure at which the container is to be tested for vapor tightness.

(3) If the test results determined by Method 27 indicate that the container sustains a pressure change less than or equal to 750 Pascals within 5 minutes after it is pressurized to a minimum of 4,500 Pascals, then the container is determined to be vapor-tight.

**R315-265-1088. Air Emission Standards for Tanks, Surface Impoundments, and Containers -- Standards: Closed-Vent Systems and Control Devices.**

(a) Section R315-265-1088 applies to each closed-vent system and control device installed and operated by the owner or operator to control air emissions in accordance with standards of Sections R315-265-1080 through R315-265-1090.

(b) The closed-vent system shall meet the following requirements:

(1) The closed-vent system shall route the gases, vapors, and fumes emitted from the hazardous waste in the waste management unit to a control device that meets the requirements specified in Subsection R315-265-1088(c).

(2) The closed-vent system shall be designed and operated in accordance with the requirements specified in Subsection R315-265-1033(j).

(3) In the case when the closed-vent system includes bypass devices that could be used to divert the gas or vapor stream to the atmosphere before entering the control device, each bypass device shall be equipped with either a flow indicator as specified in Subsection R315-265-1088(b)(3)(i) or a seal or locking device as specified in Subsection R315-265-1088(b)(3)(ii). For the purpose of complying with Subsection R315-265-1088(b), low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, spring-loaded pressure relief valves, and other fittings used for safety purposes are not considered to be bypass devices.

(i) If a flow indicator is used to comply with Subsection R315-265-1088(b)(3), the indicator shall be installed at the inlet to the bypass line used to divert gases and vapors from the closed-vent system to the atmosphere at a point upstream of the control device inlet. For Subsection R315-265-1088(b), a flow indicator means a device which indicates the presence of either gas or vapor flow in the bypass line.

(ii) If a seal or locking device is used to comply with Subsection R315-265-1088(b)(3), the device shall be placed on the mechanism by which the bypass device position is controlled, for example, valve handle, damper lever, when the bypass device is in the closed position such that the bypass device cannot be opened without breaking the seal or removing the lock. Examples of such devices include, but are not limited to, a car-seal or a lock-and-key configuration valve. The owner or operator shall visually inspect the seal or closure mechanism at least once every month to verify that the bypass mechanism is maintained in the closed position.

(4) The closed-vent system shall be inspected and monitored by the owner or operator in accordance with the procedure specified in Subsection R315-265-1033(k).

(c) The control device shall meet the following requirements:

(1) The control device shall be one of the following devices:

(i) A control device designed and operated to reduce the total organic content of the inlet vapor stream vented to the control device by at least 95 percent by weight;

(ii) An enclosed combustion device designed and operated in accordance with the requirements of Subsection R315-265-1033(c); or

(iii) A flare designed and operated in accordance with the requirements of Subsection R315-265-1033(d).

(2) The owner or operator who elects to use a closed-vent system and control device to comply with the requirements of Section R315-265-1088 shall comply with the requirements specified in Subsections R315-265-1088(c)(2)(i) through R315-265-1088(c)(2)(vi).

(i) Periods of planned routine maintenance of the control device,

during which the control device does not meet the specifications of Subsections R315-265-1088(c)(1)(i), R315-265-1088(c)(1)(ii), or R315-265-1088(c)(1)(iii), as applicable, shall not exceed 240 hours per year.

(ii) The specifications and requirements in Subsections R315-265-1088(c)(1)(i), R315-265-1088(c)(1)(ii), or R315-265-1088(c)(1)(iii) for control devices do not apply during periods of planned routine maintenance.

(iii) The specifications and requirements in Subsections R315-265-1088(c)(1)(i), R315-265-1088(c)(1)(ii), or R315-265-1088(c)(1)(iii) for control devices do not apply during a control device system malfunction.

(iv) The owner or operator shall demonstrate compliance with the requirements of Subsection R315-265-1088(c)(2)(i), for example, planned routine maintenance of a control device, during which the control device does not meet the specifications of Subsections R315-265-1088(c)(1)(i), R315-265-1088(c)(1)(ii), or R315-265-1088(c)(1)(iii), as applicable, shall not exceed 240 hours per year, by recording the information specified in Subsection R315-265-1090(e)(1)(v).

(v) The owner or operator shall correct control device system malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of air pollutants.

(vi) The owner or operator shall operate the closed-vent system such that gases, vapors, and fumes are not actively vented to the control device during periods of planned maintenance or control device system malfunction, for example, periods when the control device is not operating or not operating normally, except in cases when it is necessary to vent the gases, vapors, or fumes to avoid an unsafe condition or to implement malfunction corrective actions or planned maintenance actions.

(3) The owner or operator using a carbon adsorption system to comply with Subsection R315-265-1088(c)(1) shall operate and maintain the control device in accordance with the following requirements:

(i) Following the initial startup of the control device, all activated carbon in the control device shall be replaced with fresh carbon on a regular basis in accordance with the requirements of Subsections R315-265-1033(g) or R315-265-1033(h).

(ii) All carbon that is a hazardous waste and that is removed from the control device shall be managed in accordance with the requirements of Subsection R315-265-1033(m), regardless of the average volatile organic concentration of the carbon.

(4) An owner or operator using a control device other than a thermal vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system to comply with Subsection R315-265-1088(c)(1) shall operate and maintain the control device in accordance with the requirements of R315-265-1033(i).

(5) The owner or operator shall demonstrate that a control device achieves the performance requirements of Subsection R315-265-1088(c) (1) as follows:

(i) An owner or operator shall demonstrate using either a performance test as specified in Subsection R315-265-1088(c) (5) (iii) or a design analysis as specified in Subsection R315-265-1088(c) (5) (iv) the performance of each control device except for the following:

(A) A flare;

(B) A boiler or process heater with a design heat input capacity of 44 megawatts or greater;

(C) A boiler or process heater into which the vent stream is introduced with the primary fuel;

(D) A boiler or industrial furnace burning hazardous waste for which the owner or operator has been issued a final permit under Rule R315-270 and has designed and operates the unit in accordance with the requirements of Sections R315-266-100 through R315-266-112; or

(E) A boiler or industrial furnace burning hazardous waste for which the owner or operator has designed and operates in accordance with the interim status requirements of Sections R315-266-100 through R315-266-112.

(ii) An owner or operator shall demonstrate the performance of each flare in accordance with the requirements specified in Subsection R315-265-1033(e).

(iii) For a performance test conducted to meet the requirements of Subsection R315-265-1088(c) (5) (i), the owner or operator shall use the test methods and procedures specified in Subsections R315-265-1034(c) (1) through R315-265-1034(c) (4).

(iv) For a design analysis conducted to meet the requirements of Subsection R315-265-1088(c) (5) (i), the design analysis shall meet the requirements specified in Subsection R315-265-1035(b) (4) (iii).

(v) The owner or operator shall demonstrate that a carbon adsorption system achieves the performance requirements of Subsection R315-265-1088(c) (1) based on the total quantity of organics vented to the atmosphere from all carbon adsorption system equipment that is used for organic adsorption, organic desorption or carbon regeneration, organic recovery, and carbon disposal.

(6) If the owner or operator and the Director do not agree on a demonstration of control device performance using a design analysis then the disagreement shall be resolved using the results of a performance test performed by the owner or operator in accordance with the requirements of Subsection R315-265-1088(c) (5) (iii). The Director may choose to have an authorized representative observe the performance test.

(7) The closed-vent system and control device shall be inspected and monitored by the owner or operator in accordance with the procedures specified in Subsections R315-265-1033(f) (2) and

R315-265-1033(k). The readings from each monitoring device required by Subsection R315-265-1033(f) (2) shall be inspected at least once each operating day to check control device operation. Any necessary corrective measures shall be immediately implemented to ensure the control device is operated in compliance with the requirements of Section R315-265-1088.

**R315-265-1089. Air Emission Standards for Tanks, Surface Impoundments, and Containers -- Inspection and Monitoring Requirements.**

(a) The owner or operator shall inspect and monitor air emission control equipment used to comply with Sections R315-265-1080 through R315-265-1090 in accordance with the applicable requirements specified in Sections R315-265-1085 through R315-265-1088.

(b) The owner or operator shall develop and implement a written plan and schedule to perform the inspections and monitoring required by Subsection R315-265-1089(a). The owner or operator shall incorporate this plan and schedule into the facility inspection plan required under Section R315-265-15.

**R315-265-1090. Air Emission Standards for Tanks, Surface Impoundments, and Containers -- Recordkeeping Requirements.**

(a) Each owner or operator of a facility subject to requirements in Sections R315-265-1080 through R315-265-1090 shall record and maintain the information specified in Subsections R315-265-1090(b) through R315-265-1090(j), as applicable to the facility. Except for air emission control equipment design documentation and information required by Subsections R315-265-1090(i) and R315-265-1090(j), records required by Section R315-265-1090 shall be maintained in the operating record for a minimum of 3 years. Air emission control equipment design documentation shall be maintained in the operating record until the air emission control equipment is replaced or otherwise no longer in service. Information required by Subsections R315-265-1090(i) and R315-265-1090(j) shall be maintained in the operating record for as long as the waste management unit is not using air emission controls specified in Sections R315-265-1085 through R315-265-1088 in accordance with the conditions specified in Subsections R315-265-1080(d) or R315-265-1080(b) (7), respectively.

(b) The owner or operator of a tank using air emission controls in accordance with the requirements of Section R315-265-1085 shall prepare and maintain records for the tank that include the following information:

(1) For each tank using air emission controls in accordance with the requirements of Section R315-265-1085, the owner or operator shall record:

(i) A tank identification number, or other unique identification description as selected by the owner or operator.

(ii) A record for each inspection required by Section R315-265-1085 that includes the following information:

(A) Date inspection was conducted.

(B) For each defect detected during the inspection: The location of the defect, a description of the defect, the date of detection, and corrective action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the provisions of Section R315-265-1085, the owner or operator shall also record the reason for the delay and the date that completion of repair of the defect is expected.

(2) In addition to the information required by Subsection R315-265-1090(b)(1), the owner or operator shall record the following information, as applicable to the tank:

(i) The owner or operator using a fixed roof to comply with the Tank Level 1 control requirements specified in Subsection R315-265-1085(c) shall prepare and maintain records for each determination for the maximum organic vapor pressure of the hazardous waste in the tank performed in accordance with the requirements of Subsection R315-265-1085(c). The records shall include the date and time the samples were collected, the analysis method used, and the analysis results.

(ii) The owner or operator using an internal floating roof to comply with the Tank Level 2 control requirements specified in Subsection R315-265-1085(e) shall prepare and maintain documentation describing the floating roof design.

(iii) Owners and operators using an external floating roof to comply with the Tank Level 2 control requirements specified in Subsection R315-265-1085(f) shall prepare and maintain the following records:

(A) Documentation describing the floating roof design and the dimensions of the tank.

(B) Records for each seal gap inspection required by Subsection R315-265-1085(f)(3) describing the results of the seal gap measurements. The records shall include the date that the measurements were performed, the raw data obtained for the measurements, and the calculations of the total gap surface area. In the event that the seal gap measurements do not conform to the specifications in Subsection R315-265-1085(f)(1), the records shall include a description of the repairs that were made, the date the repairs were made, and the date the tank was emptied, if necessary.

(iv) Each owner or operator using an enclosure to comply with the Tank Level 2 control requirements specified in Subsection R315-265-1085(i) shall prepare and maintain the following records:

(A) Records for the most recent set of calculations and measurements performed by the owner or operator to verify that the enclosure meets the criteria of a permanent total enclosure as specified in "Procedure T-Criteria for and Verification of a Permanent

or Temporary Total Enclosure" under 40 CFR 52.741, appendix B.

(B) Records required for the closed-vent system and control device in accordance with the requirements of Subsection R315-265-1090 (e).

(c) The owner or operator of a surface impoundment using air emission controls in accordance with the requirements of Section R315-265-1086 shall prepare and maintain records for the surface impoundment that include the following information:

(1) A surface impoundment identification number, or other unique identification description as selected by the owner or operator.

(2) Documentation describing the floating membrane cover or cover design, as applicable to the surface impoundment, that includes information prepared by the owner or operator or provided by the cover manufacturer or vendor describing the cover design, and certification by the owner or operator that the cover meets the specifications listed in Subsection R315-265-1086(c).

(3) A record for each inspection required by Section R315-265-1086 that includes the following information:

(i) Date inspection was conducted.

(ii) For each defect detected during the inspection the following information: The location of the defect, a description of the defect, the date of detection, and corrective action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the provisions of Subsection R315-265-1086(f), the owner or operator shall also record the reason for the delay and the date that completion of repair of the defect is expected.

(4) For a surface impoundment equipped with a cover and vented through a closed-vent system to a control device, the owner or operator shall prepare and maintain the records specified in Subsection R315-265-1090 (e).

(d) The owner or operator of containers using Container Level 3 air emission controls in accordance with the requirements of Section R315-265-1087 shall prepare and maintain records that include the following information:

(1) Records for the most recent set of calculations and measurements performed by the owner or operator to verify that the enclosure meets the criteria of a permanent total enclosure as specified in "Procedure T-Criteria for and Verification of a Permanent or Temporary Total Enclosure" under 40 CFR 52.741, appendix B.

(2) Records required for the closed-vent system and control device in accordance with the requirements of Subsection R315-265-1090 (e).

(e) The owner or operator using a closed-vent system and control device in accordance with the requirements of Section R315-265-1088 of this subpart shall prepare and maintain records that include the following information:

(1) Documentation for the closed-vent system and control device

that includes:

(i) Certification that is signed and dated by the owner or operator stating that the control device is designed to operate at the performance level documented by a design analysis as specified in Subsection R315-265-1090(e)(1)(ii) or by performance tests as specified in Subsection R315-265-1090 (e)(1)(iii) when the tank, surface impoundment, or container is or would be operating at capacity or the highest level reasonably expected to occur.

(ii) If a design analysis is used, then design documentation as specified in Subsection R315-265-1035(b)(4). The documentation shall include information prepared by the owner or operator or provided by the control device manufacturer or vendor that describes the control device design in accordance with Subsection R315-265-1035(b)(4)(iii) and certification by the owner or operator that the control equipment meets the applicable specifications.

(iii) If performance tests are used, then a performance test plan as specified in Subsection R315-265-1035(b)(3) and all test results.

(iv) Information as required by Subsections R315-265-1035(c)(1) and R315-265-1035(c)(2), as applicable.

(v) An owner or operator shall record, on a semiannual basis, the information specified in Subsections R315-265-1090(e)(1)(v)(A) and R315-265-1090(e)(1)(v)(B) for those planned routine maintenance operations that would require the control device not to meet the requirements of Subsections R315-265-1088(c)(1)(i), R315-265-1088(c)(1)(ii), or R315-265-1088(c)(1)(iii), as applicable.

(A) A description of the planned routine maintenance that is anticipated to be performed for the control device during the next 6-month period. This description shall include the type of maintenance necessary, planned frequency of maintenance, and lengths of maintenance periods.

(B) A description of the planned routine maintenance that was performed for the control device during the previous 6-month period. This description shall include the type of maintenance performed and the total number of hours during those 6 months that the control device did not meet the requirements of Subsections R315-265-1088(c)(1)(i), R315-265-1088(c)(1)(ii), or R315-265-1088(c)(1)(iii), as applicable, due to planned routine maintenance.

(vi) An owner or operator shall record the information specified in Subsections R315-265-1090(e)(1)(vi)(A) through R315-265-1090(e)(1)(vi)(C) for those unexpected control device system malfunctions that would require the control device not to meet the requirements of Subsections R315-265-1088(c)(1)(i), R315-265-1088(c)(1)(ii), or R315-265-1088(c)(1)(iii), as applicable.

(A) The occurrence and duration of each malfunction of the control device system.

(B) The duration of each period during a malfunction when gases, vapors, or fumes are vented from the waste management unit through the

closed-vent system to the control device while the control device is not properly functioning.

(C) Actions taken during periods of malfunction to restore a malfunctioning control device to its normal or usual manner of operation.

(vii) Records of the management of carbon removed from a carbon adsorption system conducted in accordance with Subsection R315-265-1088(c) (3) (ii).

(f) The owner or operator of a tank, surface impoundment, or container exempted from standards in accordance with the provisions of Subsection R315-265-1083(c) shall prepare and maintain the following records, as applicable:

(1) For tanks, surface impoundments, or containers exempted under the hazardous waste organic concentration conditions specified in Subsections R315-265-1083(c) (1) or R315-265-1083(c) (2) (i) through R315-265-1090(c) (2) (vi), the owner or operator shall record the information used for each waste determination, for example, test results, measurements, calculations, and other documentation, in the facility operating log. If analysis results for waste samples are used for the waste determination, then the owner or operator shall record the date, time, and location that each waste sample is collected in accordance with applicable requirements of Section R315-265-1084.

(2) For tanks, surface impoundments, or containers exempted under the provisions of Subsections R315-265-1083(c) (2) (vii) or R315-265-1083(c) (2) (viii), the owner or operator shall record the identification number for the incinerator, boiler, or industrial furnace in which the hazardous waste is treated.

(g) An owner or operator designating a cover as "unsafe to inspect and monitor" pursuant to Subsections R315-265-1085(1) or R315-265-1086(g) shall record in a log that is kept in the facility operating record the following information: The identification numbers for waste management units with covers that are designated as "unsafe to inspect and monitor," the explanation for each cover stating why the cover is unsafe to inspect and monitor, and the plan and schedule for inspecting and monitoring each cover.

(h) The owner or operator of a facility that is subject to Sections R315-265-1080 through R315-265-1090 and to the control device standards in 40 CFR part 60, subpart VV, or 40 CFR part 61, subpart V, may elect to demonstrate compliance with the applicable sections of Sections R315-265-1080 through R315-265-1090 by documentation either pursuant to Sections R315-265-1080 through R315-265-1090, or pursuant to the provisions of 40 CFR part 60, subpart VV or 40 CFR part 61, subpart V, to the extent that the documentation required by 40 CFR parts 60 or 61 duplicates the documentation required by Section R315-265-1090.

(i) For each tank or container not using air emission controls specified in Sections R315-265-1085 through R315-265-1088 in

accordance with the conditions specified in Subsection R315-265-1080(d), the owner or operator shall record and maintain the following information:

(1) A list of the individual organic peroxide compounds manufactured at the facility that meet the conditions specified in Subsection R315-265-1080(d)(1).

(2) A description of how the hazardous waste containing the organic peroxide compounds identified in Subsection R315-265-1090(i)(1) are managed at the facility in tanks and containers. This description shall include the following information:

(i) For the tanks used at the facility to manage this hazardous waste, sufficient information shall be provided to describe for each tank: A facility identification number for the tank; the purpose and placement of this tank in the management train of this hazardous waste; and the procedures used to ultimately dispose of the hazardous waste managed in the tanks.

(ii) For containers used at the facility to manage these hazardous wastes, sufficient information shall be provided to describe: A facility identification number for the container or group of containers; the purpose and placement of this container, or group of containers, in the management train of this hazardous waste; and the procedures used to ultimately dispose of the hazardous waste handled in the containers.

(3) An explanation of why managing the hazardous waste containing the organic peroxide compounds identified in Subsection R315-265-1090(i)(1) in the tanks and containers as described in Subsection R315-265-1090(i)(2) would create an undue safety hazard if the air emission controls, as required under Sections R315-265-1085 through R315-265-1088, are installed and operated on these waste management units. This explanation shall include the following information:

(i) For tanks used at the facility to manage these hazardous wastes, sufficient information shall be provided to explain: How use of the required air emission controls on the tanks would affect the tank design features and facility operating procedures currently used to prevent an undue safety hazard during the management of this hazardous waste in the tanks; and why installation of safety devices on the required air emission controls, as allowed under this subpart, will not address those situations in which evacuation of tanks equipped with these air emission controls is necessary and consistent with good engineering and safety practices for handling organic peroxides.

(ii) For containers used at the facility to manage these hazardous wastes, sufficient information shall be provided to explain: How use of the required air emission controls on the containers would affect the container design features and handling procedures currently used to prevent an undue safety hazard during the management of this hazardous waste in the containers; and why installation of safety

devices on the required air emission controls, as allowed under this subpart, will not address those situations in which evacuation of containers equipped with these air emission controls is necessary and consistent with good engineering and safety practices for handling organic peroxides.

(j) For each hazardous waste management unit not using air emission controls specified in Sections R315-265-1085 through R315-265-1088 in accordance with the provisions of Subsection R315-265-1080(b) (7), the owner and operator shall record and maintain the following information:

(1) Certification that the waste management unit is equipped with and operating air emission controls in accordance with the requirements of an applicable Clean Air Act regulation codified under 40 CFR part 60, part 61, or part 63.

(2) Identification of the specific requirements codified under 40 CFR part 60, part 61, or part 63 with which the waste management unit is in compliance.

**KEY: hazardous waste, TSD facilities, interim status**

**Date of Enactment or Last Substantive Amendment: October 15, 2019**

**Authorizing, and Implemented or Interpreted Law: 19-6-105; 19-6-106**

**WASTE MANAGEMENT AND RADIATION CONTROL BOARD**  
**Executive Summary**  
**Public Comment -- Proposed Rule Changes**  
**UAC R315-15-14**  
**February 13, 2020**

<b>What is the issue before the Board?</b>	Approval from the Board to proceed with formal rulemaking and public comment on a proposed change to R315-15-14 of the rules for management of used oil clarifying the type of documents that DIYer collection centers must submit in order to qualify for the reimbursement.
<b>What is the historical background or context for this issue?</b>	R315-15-14.2(a) currently requires DIYer collection centers to submit a copy of all records of used oil collected during the collection period for which they are seeking reimbursement. Many of the copies being received by the Division are poor quality, or are photographs taken with a mobile device, that are difficult to read. The poor quality and readability of the copies is making it difficult for the Division to process reimbursements in a timely manner. Additionally, photographs of documents cannot be used as legal documentation for audit purposes. In order to solve these problems the rule is being changed to require the submission of either original documents or legible copies. The amendment also clarifies that photographs of documents are not acceptable.  The proposed changes to R315-15-14 follow this Executive Summary.
<b>What is the governing statutory or regulatory citation?</b>	The Board is authorized under Subsection 19-6-704(1) to make rules necessary to administer the used oil program.  The rule changes also meet existing DEQ and state rulemaking procedures.
<b>Is Board action required?</b>	Yes. Board approval is necessary to begin the formal rulemaking process by filing the appropriate documents with the Office of Administrative Rules for publishing the proposed rule changes in the <i>Utah State Bulletin</i> and conducting a public comment period.
<b>What is the Division Director's recommendation?</b>	The Director recommends the Board approve proceeding with formal rulemaking and public comment by publishing in the March 1, 2020, <i>Utah State Bulletin</i> the proposed changes to UAC R315-15-14 and conducting a public comment period from March 1 to March 31, 2020.
<b>Where can more information be obtained?</b>	Please contact Tom Ball (801-536-0251, <a href="mailto:tball@utah.gov">tball@utah.gov</a> ), Rusty Lundberg (801-536-4257, <a href="mailto:rlundberg@utah.gov">rlundberg@utah.gov</a> ) or Deborah Ng (801-536-0218, <a href="mailto:dng@utah.gov">dng@utah.gov</a> ).

**R315. Environmental Quality, Waste Management and Radiation Control,  
Waste Management.**

**R315-15. Standards for the Management of Used Oil.**

**R315-15-14. DIYer Reimbursement.**

14.1 DIYER USED OIL COLLECTION CENTER INCENTIVE PAYMENT  
APPLICABILITY

(a) The Director shall pay a semi-annual recycling fee incentive to registered DIYer used oil collection centers and curbside programs approved by the Director for each gallon of used oil collected from DIYer used oil generators, and transported by a permitted used oil transporter to a permitted used oil processor/re-refiner, burner, registered marketer or burned in accordance with R315-15-2.4(b).

(b) All registered DIYer used oil collection centers can qualify for a recycling incentive payment of up to \$0.25 per gallon, subject to availability of funds and the priorities of Utah Code Annotated 19-6-720.

14.2 REIMBURSEMENT PROCEDURES

In order for DIYer collection centers to qualify for the recycling incentive payment they are required to comply with the following procedures.

(a) Submit an original document or a legible copy, photographs of documents are not acceptable, of all records of DIYer and farmer, as defined in R315-15-2.1(a)(4), used oil collected during the semi-annual collection periods of January through June and July through December for which the reimbursement is requested. These records shall be submitted within 30 days following the end of the semi-annual collection period.

(b) Reimbursements will be issued by the Director within 30 days following the report filing period.

(c) Reports received later than 60 days after the end of the semi-annual collection period for which reimbursement is requested will be paid during the next reimbursement period.

(d) Any reimbursement requests outside the timeframe outlined in R315-15-14.2(a) will not be granted unless approved by the Director.

**KEY: grants, registration, recycling, used oil**

**Date of Enactment or Last Substantive Amendment: April 15, 2019**

**Notice of Continuation: March 10, 2016**

**Authorizing, and Implemented or Interpreted Law: 19-6-704; 19-6-720**

**WASTE MANAGEMENT AND RADIATION CONTROL BOARD**  
**Executive Summary**  
**Public Comment -- Proposed Rule Changes**  
**UAC R313-16-293**  
**February 13, 2020**

<p><b>What is the issue before the Board?</b></p>	<p>Approval from the Board to proceed with formal rulemaking and public comment on a proposed change to R313-16-293 of the radiation control rules to clarify the rule regarding who must submit x-ray equipment inspection reports to the Director.</p>
<p><b>What is the historical background or context for this issue?</b></p>	<p>Rule R313-16-293(2)(h) currently states that qualified experts must attest that they or the registrant will submit to the Director, a written report within 30 days of the completion of an inspection. Recent events have brought to the attention of the Division of Waste Management and Radiation Control that this wording is confusing and is causing problems by not clearly defining who is required to submit inspection reports to the Director. This confusion is causing the Division problems and delays in meeting its regulatory obligations in regards to the x-ray inspection program. The proposed amendment to the rule will make it clear that the qualified experts are required to submit reports of the inspections they conduct to the Director and will eliminate the option of having the registrant submit the report.</p> <p>The proposed changes to R313-16-293 follow this Executive Summary.</p>
<p><b>What is the governing statutory or regulatory citation?</b></p>	<p>The Board is authorized under Subsection 19-6-104 to make rules that are necessary to implement the provision of the Radiation Control Act.</p> <p>The rule changes also meet existing DEQ and state rulemaking procedures.</p>
<p><b>Is Board action required?</b></p>	<p>Yes. Board approval is necessary to begin the formal rulemaking process by filing the appropriate documents with the Office of Administrative Rules for publishing the proposed rule changes in the <i>Utah State Bulletin</i> and conducting a public comment period.</p>
<p><b>What is the Division Director's recommendation?</b></p>	<p>The Director recommends the Board approve proceeding with formal rulemaking and public comment by publishing in the March 1, 2020, <i>Utah State Bulletin</i> the proposed changes to UAC R315-15-14 and conducting a public comment period from March 1 to March 31, 2020.</p>
<p><b>Where can more information be obtained?</b></p>	<p>Please contact Tom Ball (801-536-0251, <a href="mailto:tball@utah.gov">tball@utah.gov</a>) or Rusty Lundberg (801-536-4257, <a href="mailto:rlundberg@utah.gov">rlundberg@utah.gov</a>).</p>



**R313. Environmental Quality, Waste Management and Radiation Control, Radiation.**

**R313-16. General Requirements Applicable to the Installation, Registration, Inspection, and Use of Radiation Machines.**

**R313-16-293. Application for Registration of Inspection Services.**

(1) Each qualified expert who is providing or offering to provide inspection services at facilities registered with the Director shall complete an application for registration on a form prescribed by the Director and shall submit all information required by the Director as indicated on the form. A qualified expert must complete the registration process prior to providing services.

(2) Individuals applying for registration under Section R313-16-293 shall personally sign and submit to the Director an attestation statement:

(a) that they have read and understand the requirements of these rules; and

(b) that they will document inspection items defined by the Director on a form prescribed by the Director; and

(c) that they will follow guidelines for the evaluation of x-ray equipment defined by the Director; and

(d) that, except for those facilities where a registered qualified expert is a full-time employee, they will limit inspections to facilities with which they have no direct conflict of interest; and

(e) that radiation exposure measurements and peak tube potential measurements will be made with instruments which have been calibrated biennially by the manufacturer of the instrument or by a calibration laboratory accredited in x-ray calibration procedures by the American Association of Physicians in Medicine, American Association for Laboratory Accreditation, Conference of Radiation Control Program Directors, Health Physics Society or the National Voluntary Laboratory Accreditation Program; and

(f) that the calibration of radiation exposure measuring and peak tube potential measuring instruments used to evaluate compliance of x-ray systems with the requirements of these rules will include at least secondary level traceability to a National Institute of Standards and Technology, or similar international agency, transfer standard instrument or transfer standard source; and

(g) that they will make available to representatives of the Director documents concerning the calibration of any radiation exposure measuring or peak tube potential measuring instrument used to evaluate compliance of x-ray systems; and

(h) that they ~~[-or the registrant]~~ will submit to the Director, within 30 calendar days after completion of an inspection, a written report of compliance or noncompliance; and

(i) that reports of items of noncompliance will include:

(i) the name of the facility inspected, and

- (ii) the date of the inspection, and
  - (iii) the manufacturer, model number, and serial number or Utah identification number of the control unit for the radiation machine, and
  - (iv) the requirements of the rule where compliance was not achieved, and
  - (v) the manner in which the facility or radiation machine failed to meet the requirements, and
  - (vi) a signed commitment from the registrant of the radiation machine facility that the problem will be fixed within 30 days of the date the written report of noncompliance is submitted to the Director; and
  - (vii) that all reports of compliance or noncompliance will contain a statement signed by the qualified expert acknowledging under penalties of law that all information contained in the report is truthful, accurate, and complete; and
  - (viii) that they acknowledge that they are subject to the provisions of Section R313-16-300.
- (3) Individuals applying for registration under Section R313-16-293 shall attach to their application a copy of two inspection reports that demonstrate their work product follows the evaluation guidelines defined by the Director pursuant to Subsection R313-16-293(2)(c). The inspection reports shall pertain to inspections performed within the last two years.

**KEY: x-rays, inspections**

**Date of Enactment or Last Substantive Amendment: September 14, 2007**

**Notice of Continuation: July 1, 2016**

**Authorizing, and Implemented or Interpreted Law: 19-3-104**

**EXECUTIVE SUMMARY**

**Final Adoption of Amendments to the Radiation Control Rules  
R313-15-1006, Transfer for Disposal and Manifests; R313-19-100,  
Transportation; and  
R313-36-3, Clarifications or Exceptions  
February 13, 2020**

<p><b>What is the issue before the Board?</b></p>	<p>Final adoption by the Board of changes to R313-15-1006, <i>Transfer for Disposal and Manifests</i>; R313-19-100, <i>Transportation</i>; and R313-36-3, <i>Clarifications or Exceptions</i> of the radiation control rules to incorporate federal regulatory changes promulgated by the Nuclear Regulatory Commission (NRC) and published in the <i>Federal Register</i> on <a href="#">December 1, 2015 (80 FR 74974)</a>, <a href="#">November 15, 2017 (82 FR 52823)</a>, <a href="#">June 28, 2018 (83 FR 30285)</a>, and <a href="#">November 21, 2018 (83 FR 58721)</a>.</p>
<p><b>What is the historical background or context for this issue?</b></p>	<p>The proposed changes affect the following sections of the radiation control rules that incorporate by reference the selected sections of the noted parts of the federal radiation control regulations of 10 CFR:</p> <ul style="list-style-type: none"> <li>R313-15-1006 incorporates Appendix G of 10 CFR Part 20;</li> <li>R313-19-100 incorporates selected sections of 10 CFR Part 71; and</li> <li>R313-36-3 incorporates selected sections of 10 CFR Part 34.</li> </ul> <p>The proposed changes update the incorporation-by-reference dates in each of the noted rules. By updating these dates, the minor corrections made by the NRC in the above referenced <i>Federal Registers</i> are incorporated into the state radiation control rules. As an Agreement State with the NRC for the radioactive materials program, Utah is required to maintain regulatory compatibility with the corresponding NRC radioactive materials regulations. While the proposed changes are minor in nature, the NRC designated the changes as necessary for an Agreement State to adopt in order to maintain regulatory compatibility with the NRC.</p> <p>At its November 14, 2019 meeting, the Board approved the proposed changes to be filed and published in the <i>Utah State Bulletin</i>, initiating formal rulemaking and a public comment period. The proposed rule changes were published in the December 1, 2019 issue of the Bulletin. A copy of the pertinent pages of that issue follows this executive summary. The public comment period concluded on December 31, 2019. No comments were received.</p>
<p><b>What is the governing statutory or regulatory citation?</b></p>	<p>The Board is authorized under Subsection 19-3-104(4)(b) to make rules to meet the requirements of federal law and maintain primacy of the radioactive materials program from the federal government and under Subsection 19-6-104(1) to make rules necessary to implement the Radiation Control Act. The proposed rule changes also meet existing DEQ and state rulemaking procedures.</p>
<p><b>Is Board action required?</b></p>	<p>Yes, Board action is required for final adoption of the rule changes published in the December 1, 2019, issue of the <i>Utah State Bulletin</i> and to set an effective date of February 14, 2020.</p>
<p><b>What is the Division Director's recommendation?</b></p>	<p>The Director recommends that the Board adopt the rule changes published in the December 1, 2019 issue of the <i>Utah State Bulletin</i> and set an effective date of February 14, 2020.</p>

**Where can more information be obtained?**

For questions or additional information, please contact Rusty Lundberg (801-536-4257, [rlundberg@utah.gov](mailto:rlundberg@utah.gov)).

# UTAH STATE BULLETIN

OFFICIAL NOTICES OF UTAH STATE GOVERNMENT  
Filed November 02, 2019, 12:00 a.m. through November 15, 2019, 11:59 p.m.

Number 2019-23  
December 01, 2019

Nancy L. Lancaster, Managing Editor

The *Utah State Bulletin (Bulletin)* is an official noticing publication of the executive branch of Utah state government. The Office of Administrative Rules, part of the Department of Administrative Services, produces the *Bulletin* under authority of Section 63G-3-402.

The Portable Document Format (PDF) version of the *Bulletin* is the official version. The PDF version of this issue is available at <https://rules.utah.gov/>. Any discrepancy between the PDF version and other versions will be resolved in favor of the PDF version.

Inquiries concerning the substance or applicability of an administrative rule that appears in the *Bulletin* should be addressed to the contact person for the rule. Questions about the *Bulletin* or the rulemaking process may be addressed to: Office of Administrative Rules, PO Box 141007, Salt Lake City, Utah 84114-1007, telephone 801-538-3003. Additional rulemaking information and electronic versions of all administrative rule publications are available at <https://rules.utah.gov/>.

The information in this *Bulletin* is summarized in the *Utah State Digest (Digest)* of the same volume and issue number. The *Digest* is available by e-mail subscription or online. Visit <https://rules.utah.gov/> for additional information.

Office of Administrative Rules, Salt Lake City 84114

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## **EDITOR'S NOTES**

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The Office of Administrative Rules has gone live with a new filing management and publication system. One piece of the old system, the creation of indexes, is not in the new system. Therefore, there are no longer indexes in this publication.

If the index was useful to you, please contact our office at [rulesonline.utah.gov](http://rulesonline.utah.gov) and we will explore alternatives.

**End of the Editor's Notes Section**

## NOTICES OF PROPOSED RULES

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A state agency may file a **PROPOSED RULE** when it determines the need for a substantive change to an existing rule. With a **NOTICE OF PROPOSED RULE**, an agency may create a new rule, amend an existing rule, repeal an existing rule, or repeal an existing rule and reenact a new rule. Filings received between November 02, 2019, 12:00 a.m., and November 15, 2019, 11:59 p.m. are included in this, the December 01, 2019, issue of the *Utah State Bulletin*.

In this publication, each **PROPOSED RULE** is preceded by a **RULE ANALYSIS**. This analysis provides summary information about the **PROPOSED RULE** including the name of a contact person, anticipated cost impact of the rule, and legal cross-references.

Following the **RULE ANALYSIS**, the text of the **PROPOSED RULE** is usually printed. New rules or additions made to existing rules are underlined (example). Deletions made to existing rules are struck out with brackets surrounding them (~~example~~). Rules being repealed are completely struck out. A row of dots in the text between paragraphs (. . . . .) indicates that unaffected text from within a section was removed to conserve space. Unaffected sections are not usually printed. If a **PROPOSED RULE** is too long to print, the Office of Administrative Rules may include only the **RULE ANALYSIS**. A copy of each rule that is too long to print is available from the filing agency or from the Office of Administrative Rules.

The law requires that an agency accept public comment on **PROPOSED RULES** published in this issue of the *Utah State Bulletin* until at least December 31, 2019. The agency may accept comment beyond this date and will indicate the last day the agency will accept comment in the **RULE ANALYSIS**. The agency may also hold public hearings. Additionally, citizens or organizations may request the agency hold a hearing on a specific **PROPOSED RULE**. Section 63G-3-302 requires that a hearing request be received by the agency proposing the rule "in writing not more than 15 days after the publication date of the proposed rule."

From the end of the public comment period through March 30, 2020, the agency may notify the Office of Administrative Rules that it wants to make the **PROPOSED RULE** effective. The agency sets the effective date. The date may be no fewer than seven calendar days after the close of the public comment period nor more than 120 days after the publication date of this issue of the *Utah State Bulletin*. Alternatively, the agency may file a **CHANGE IN PROPOSED RULE** in response to comments received. If the Office of Administrative Rules does not receive a **NOTICE OF EFFECTIVE DATE** or a **CHANGE IN PROPOSED RULE**, the **PROPOSED RULE** lapses.

The public, interest groups, and governmental agencies are invited to review and comment on **PROPOSED RULES**. *Comment may be directed to the contact person identified on the **RULE ANALYSIS** for each rule.*

**PROPOSED RULES** are governed by Section 63G-3-301, Rule R15-2, and Sections R15-4-3, R15-4-4, R15-4-5a, R15-4-9, and R15-4-10.

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**The Proposed Rules Begin on the Following Page**

**R277. Education, Administration.**

**R277-715. Out-of-School Time Program Standards.**

**R277-715-1. Authority and Purpose.**

- (1) This rule is authorized by:
  - (a) Utah Constitution Article X, Section 3, which vests general control and supervision over public education in the Board;
  - (b) Subsection 53E-4-301(4), which allows the Board to make rules to execute the Board's duties and responsibilities under the Utah Constitution and state law; and
  - (c) Section 53E-3-508, which requires the Board to adopt rules to set standards for high quality out-of-school time programs.
- (2) The purpose of this rule is to set standards for high quality out-of-school time programs[;] and define[establish] the programs required to adopt those standards.

**R277-715-2. Definitions.**

- (1) "Assessment tool" means the Utah After-school Program Quality Assessment and Improvement Tool developed by a statewide multi-agency stakeholder group, and administered by the Utah After-school Network.
- (2) "Out-of-school time" means time that a student at a participating program is engaged in a learning environment that is not during regular school hours, including before school, after school, and during the summer.
- (3) "Participating program" means a program that receives funds from the Board or from the Department of Workforce Services to support the program's out-of-school time programming.
- (4) "Program quality assessment tool" or "POA tool" means the evidence-based program quality assessment tool used to assess program quality during an observation in classrooms with school age and teen children, including children five years old and older.
- (5) "Reliable observer" means a Department of Workforce Services or Superintendent approved individual who is trained to utilize an evidence-based classroom observation tool to fidelity.

**R277-715-3. Requirements and Standards for High Quality Out-of-School Time Programs.**

- (1) A participating program shall:
  - (a)(i) use the assessment tool to determine the extent to which the program is meeting the standards described in this Section; or
  - (ii) allow a reliable observer to use the quality assessment tool to determine the extent to which the program is meeting the standards described in this Section;
  - (b) ensure that it is working toward achieving the standards described in this Section; and
  - (c) for a participating program that receives after school program funds from the Board, collect and submit student attendance data to the Superintendent in a format prescribed by the Superintendent.
- (2) The Superintendent shall provide for a flag in a student's data file to indicate the student's attendance in a participating program.
- (3) The safety standard includes the following components in order to provide a safe, healthy, and nurturing environment for all participants, including that:
  - (a) staff are professionally qualified to work with program participants;

- (b) policies and procedures are established and implemented to ensure the health and safety of all program participants;
- (c) program participants are carefully supervised to maintain safety;
- (d) a transportation policy is established and communicated to staff and families of participants; and
- (e) a consistent and responsive behavior management plan is established and implemented.
- (4) The relationships standard includes the following components in order to develop and maintain positive relationships among staff, participants, families, schools, and communities, including that:
  - (a) staff and participants know, respect, and support each other;
  - (b) the program communicates and collaborates with the school and the community; and
  - (c) the program fosters family involvement to support program goals.
- (5) The skills standard includes the following components in order to encourage participants to learn new skills, including that:
  - (a) participants are actively engaged in learning activities that promote critical thinking, creative thinking, and that build on the individual's interests and strengths;
  - (b) the program aligns academic support and interventions to the school-day curricula to address student learning needs; and
  - (c) the program offers a variety of life skill activities and needs-based support to promote leadership skills, personal growth, and responsible behaviors toward self and others.
- (6) The administration standard includes the following components in order to ensure that the program is effectively administered, including that the program:
  - (a) has established a plan for increasing capacity, ensuring program quality, and promoting sustainability, including sound fiscal management;
  - (b) establishes and consistently implements clearly-defined policies and procedures;
  - (c) recruits, hires, and trains diverse and qualified staff members who value and nurture all participants; and
  - (d) provides professional development and training opportunities to enhance staff job performance.

**KEY: out-of-school time, programs, standards, students**  
**Date of Enactment or Last Substantive Amendment:**  
**[November 7, 2016]2020**  
**Authorizing, and Implemented or Interpreted Law: Art X Sec 3; 53E-3-401(4); 53E-3-508**

NOTICE OF PROPOSED RULE			
TYPE OF RULE: Amendment			
Utah Admin. Code Ref (R no.):	R313-15-1006	Filing No. 52329	

Agency Information	
1. Agency:	Environmental Quality, Waste Management and Radiation Control
Room no.:	Second Floor

## NOTICES OF PROPOSED RULES

<b>Building:</b>	Multi-Agency State Office Building (MASOB)	
<b>Street address:</b>	195 North 1950 West	
<b>City, state:</b>	Salt Lake City, UT	
<b>Mailing address:</b>	PO Box 144880	
<b>City, state, zip:</b>	Salt Lake City, UT 84114-4880	
<b>Contact person(s):</b>		
<b>Name:</b>	<b>Phone:</b>	<b>Email:</b>
Rusty Lundberg	801-536-4257	rlundberg@utah.gov
Please address questions regarding information on this notice to the agency.		

**General Information****2. Rule or section catchline:**

Transfer for Disposal and Manifests

**3. Purpose of the new rule or reason for the change:**

These proposed rule changes update the dates of incorporation by reference in R313-15-1006 from 2010 to 2019 in order to incorporate the minor corrections promulgated by the U.S. Nuclear Regulatory Commission (NRC) and published in the December 1, 2015 (80 FR 74974) issue of the Federal Register. The NRC replaced the reference to NRC's former "Office of Information Services" with the current office name of "Office of the Chief Information Officer" in order to properly reflect the organizational change made by the NRC. Utah's

adoption of this minor correction is required for regulatory compatibility as an Agreement State with the NRC for administering the radioactive materials program in Utah.

**4. Summary of the new rule or change:**

These proposed changes revise the dates of incorporation of the referenced sections to 10 CFR Part 20 from 2010 to 2019. This results in incorporating the changes the NRC made to Appendix G of 10 CFR Part 20 and published in the Federal Register on December 1, 2015 (80 FR 74974). Specifically, the NRC changed the references in 10 CFR Part 20 Appendix G from the "Office of Information Services" to the "Office of the Chief Information Officer." This reference change simply reflects the organizational changes the NRC has made and thus references the correct office that is responsible for information services at the NRC. As an Agreement State with the NRC for the radioactive materials program, Utah is required to maintain regulatory compatibility with the corresponding NRC radioactive materials regulations. While the change to the referenced NRC office is minor in nature, the NRC designated the change as necessary for an Agreement State to adopt in order to maintain regulatory compatibility with the NRC. Thus, the proposed changes to the dates of the incorporation by reference in R313-15-1006 from 2010 to 2019 incorporate the minor corrections to reference the correct

office within the NRC as found in Appendix G of 10 CFR Part 20.

**Fiscal Information****5. Aggregate anticipated cost or savings to:****A) State budget:**

The change in the dates of the incorporation by reference results in referencing the proper office at the NRC. As a minor reference correction there is no fiscal impact to the state budget or to any of the state entities that have a radioactive materials license.

**B) Local governments:**

There are fewer than five local governments that have a radioactive materials license associated with the possession and use of portable gauges. These changes in the dates of the incorporation by reference result in referencing the proper office at the NRC. As a minor reference correction there is no fiscal impact to any of the local government licensees.

**C) Small businesses** ("small business" means a business employing 1-49 persons):

These changes in the dates of the incorporation by reference result in referencing the proper office at the NRC. As a minor reference correction, there is no fiscal impact to any of the small business radioactive materials licensees.

**D) Non-small businesses** ("non-small business" means a business employing 50 or more persons):

These changes in the dates of the incorporation by reference result in referencing the proper office at the NRC. As a minor reference correction, there is no fiscal impact to any non-small business radioactive materials licensees.

**E) Persons other than small businesses, non-small businesses, state, or local government entities** ("person" means any individual, partnership, corporation, association, governmental entity, or public or private organization of any character other than an **agency**):

These changes in the dates of the incorporation by reference result in referencing the proper office at the NRC. As a minor reference correction, there is no fiscal impact to any of the other radioactive materials licensees.

**F) Compliance costs for affected persons:**

As a minor correction to reference the correct office at the NRC, there are no compliance costs for any of the radioactive materials licensees in Utah.

**G) Regulatory Impact Summary Table** (This table only includes fiscal impacts that could be measured. If there are inestimable fiscal impacts, they will not be included in

this table. Inestimable impacts will be included in narratives above.)

**Regulatory Impact Summary Table**

<b>Fiscal Costs</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
State Government	\$0	\$0	\$0
Local Government	\$0	\$0	\$0
Small Businesses	\$0	\$0	\$0
Non-Small Businesses	\$0	\$0	\$0
Other Person	\$0	\$0	\$0
<b>Total Fiscal Costs:</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Fiscal Benefits</b>			
State Government	\$0	\$0	\$0
Local Government	\$0	\$0	\$0
Small Businesses	\$0	\$0	\$0
Non-Small Businesses	\$0	\$0	\$0
Other Persons	\$0	\$0	\$0
<b>Total Fiscal Benefits:</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Net Fiscal Benefits:</b>			
<b>Net Fiscal Benefits:</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

**H) Department head sign-off on regulatory impact:**

The interim executive director of the Department of Environmental Quality, Scott Baird, has reviewed and approved this fiscal analysis.

**6. A) Comments by the department head on the fiscal impact this rule may have on businesses:**

As a minor correction to reference the correct office at the NRC, there are no compliance costs for any of the radioactive materials licensees in Utah.

**B) Name and title of department head commenting on the fiscal impacts:**

Scott Baird, Interim Executive Director

**Citation Information**

**7. This rule change is authorized or mandated by state law, and implements or interprets the following state and federal laws. State code or constitution citations (required):**

Section 19-3-104	Section 19-6-104
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**Incorporations by Reference Information**

**8. A) This rule adds, updates, or removes the following title of materials incorporated by references :**

	<b>First Incorporation</b>
<b>Official Title of Materials Incorporated (from title page)</b>	Title 10 Part 20, Appendix G, Code of Federal Regulations, Requirements for Transfers of Low-Level Radioactive Waste Intended for Disposal at Licensed Land Disposal Facilities and Manifests (10 CFR Part 20, App. G)
<b>Publisher</b>	U.S. Government Publishing Office
<b>Date Issued</b>	2019
<b>Issue, or version</b>	January 1, 2019

**Public Notice Information**

9. The public may submit written or oral comments to the agency identified in box 1. (The public may also request a hearing by submitting a written request to the agency. The agency is required to hold a hearing if it receives requests from ten interested persons or from an association having not fewer than ten members. Additionally, the request must be received by the agency not more than 15 days after the publication of this rule in the Utah State Bulletin. See Section 63G-3-302 and Rule R15-1 for more information.)

<b>A) Comments will be accepted until:</b>	12/31/2019
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<b>10. This rule change MAY* become effective on:</b>	02/14/2020
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\*NOTE: The date above is the date on which this rule MAY become effective. It is NOT the effective date. After the date designated in Box 10, the agency must submit a Notice of Effective Date to the Office of Administrative Rules to make this rule effective. Failure to submit a Notice of Effective Date will result in this rule lapsing and will require the agency to start the rulemaking process over.

**Agency Authorization Information**

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## NOTICES OF PROPOSED RULES

<b>Agency head or designee, and title:</b>	Ty Howard, Division Director	<b>Date:</b>	11/07/2019
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**R313. Environmental Quality, Waste Management and Radiation Control, Radiation.****R313-15. Standards for Protection Against Radiation.****R313-15-1006. Transfer for Disposal and Manifests.**

(1) The requirements of Section R313-15-1006 and Appendix G of 10 CFR 20.1001 to 20.2402, [(2010)](2019), which are incorporated into these rules by reference, are designed to:

(a) control transfers of low-level radioactive waste by any waste generator, waste collector, or waste processor licensee, as defined in Appendix G in 10 CFR 20.1001 to 20.2402, [(2010)](2019), who ships low-level waste either directly, or indirectly through a waste collector or waste processor, to a licensed low-level waste land disposal facility as defined in Section R313-25-2;

(b) establish a manifest tracking system; and

(c) supplement existing requirements concerning transfers and recordkeeping for those wastes.

(2) Any licensee shipping radioactive waste intended for ultimate disposal at a licensed land disposal facility must document the information required on the U.S. Nuclear Regulatory Commission's Uniform Low-Level Radioactive Waste Manifest and transfer this recorded manifest information to the intended consignee in accordance with Appendix G to 10 CFR 20.1001 to 20.2402, [(2010)](2019), which is incorporated into these rules by reference.

(3) Each shipment manifest shall include a certification by the waste generator as specified in Section II of Appendix G to 10 CFR 20.1001 to 20.2402, [(2010)](2019), which is incorporated by reference.

(4) Each person involved in the transfer of waste for disposal or in the disposal of waste, including the waste generator, waste collector, waste processor, and disposal facility operator, shall comply with the requirements specified in Section III of Appendix G to 10 CFR 20.1001 to 20.2402, [(2010)](2019), which is incorporated by reference.

(5) A licensee shipping byproduct material as defined in paragraphs (c) and (d) of the Section R313-12-3 definition of byproduct material intended for ultimate disposal at a land disposal facility licensed under Rule R313-25 must document the information required on the NRC's Uniform Low-Level Radioactive Waste Manifest and transfer the recorded manifest information to the intended consignee in accordance with Appendix G to 10 CFR Part 20 [(2010 edition)](2019).

**KEY:** radioactive materials, contamination, waste disposal, safety  
**Date of Enactment or Last Substantive Amendment:** ~~March 15, 2016~~2020

**Notice of Continuation:** January 17, 2017

**Authorizing, and Implemented or Interpreted Law:** 19-3-104; ~~19-6-107~~19-6-104

NOTICE OF PROPOSED RULE			
<b>TYPE OF RULE:</b> Amendment			
<b>Utah Admin. Code Ref (R no.):</b>	<b>R313-19-100</b>	<b>Filing No.</b>	<b>52330</b>

**Agency Information**

<b>1. Agency:</b>	Environmental Quality, Waste Management and Radiation Control		
<b>Room no.:</b>	Second Floor		
<b>Building:</b>	Multi-Agency State Office Building (MASOB)		
<b>Street address:</b>	195 North 1950 West		
<b>City, state:</b>	Salt Lake City, UT		
<b>Mailing address:</b>	PO Box 144880		
<b>City, state, zip:</b>	Salt Lake City, UT 84114-4880		
<b>Contact person(s):</b>			
<b>Name:</b>	<b>Phone:</b>	<b>Email:</b>	
Rusty Lundberg	801-536-4257	rlundberg@utah.gov	
Please address questions regarding information on this notice to the agency.			

**General Information**

<b>2. Rule or section catchline:</b>
Transportation
<b>3. Purpose of the new rule or reason for the change:</b>
The proposed rule change updates the date of incorporation by reference of selected sections of 10 CFR Part 71 in R313-19-100 from 2014 to 2019 in order to incorporate the minor corrections to Part 71 as promulgated by the U.S. Nuclear Regulatory Commission (NRC) and published in the December 1, 2015 (80 FR 74974), November 15, 2017 (82 FR 52823), and June 28, 2018 (83 FR 30285) issues of the Federal Register. Utah's adoption of these minor corrections is required for regulatory compatibility as an Agreement State with the NRC for administering the radioactive materials program in Utah. While the changes made by the NRC are relatively minor in nature, the NRC designated the changes as necessary for an Agreement State to adopt in order to maintain regulatory compatibility with the NRC. Thus, the proposed change to the date of the incorporation by reference in R313-19-100 from 2014 to 2019 incorporates minor corrections promulgated by the NRC in order to maintain regulatory compatibility with the NRC.
<b>4. Summary of the new rule or change:</b>
The proposed change in R313-19-100 revises the date of the incorporation by reference of selected sections of 10 CFR Part 71 from 2014 to 2019. This results in incorporating the changes the NRC made to selected sections of 10 CFR Part 71 and published in the Federal Register on December 1, 2015 (80 FR 74974), November 15, 2017 (82 FR 52823), and June 28, 2018 (83 FR 30285). Specifically, in the 2015 regulatory changes, the NRC replaced in the definition of "Indian Tribe" in subsection 71.4 each instance of the word "tribe" with "Tribe", and in subsection 71.97 replacing the word "tribes" with "Tribes", and each instance of the word

"tribal" with "Tribal." In the 2017 change, the NRC replaced in subsection 71.4 the reference to "25 U.S.C. 479a" with "25 U.S.C. 5130" in the definition of "Indian Tribe." In the 2018 change, the NRC replaced in subsection 71.97 the former name of the NRC's "Division of Material Safety, State, Tribal and Rulemaking Programs" with the revised name of "Division of Materials Safety, Security, State, and Tribal Programs" due to an organizational change at the NRC. As an Agreement State with the NRC for the radioactive materials program, Utah is required to maintain regulatory compatibility with the corresponding NRC radioactive materials regulations. While the NRC changes are minor in nature, the NRC designated the changes as necessary for an Agreement State to adopt in order to maintain regulatory compatibility with the NRC. Thus, the proposed change to the date of the incorporation by reference in R313-19-100 from 2014 to 2019 incorporates the minor corrections found in the appropriate sections of 10 CFR Part 71.

**Fiscal Information**

**5. Aggregate anticipated cost or savings to:**

**A) State budget:**

The change in the date of the incorporation by reference results in making the noted minor corrections for purposes of maintaining regulatory compatibility with the NRC. As minor corrections, there is no fiscal impact to the state budget or to any of the state entities that are a radioactive materials licensee.

**B) Local governments:**

There are fewer than five local governments that have a radioactive materials license associated with the possession and use of portable gauges. The change in the date of the incorporation by reference results in making the noted minor corrections for purposes of maintaining regulatory compatibility with the NRC. As minor corrections, there is no fiscal impact to any of the local government licensees.

**C) Small businesses** ("small business" means a business employing 1-49 persons):

The change in the date of the incorporation by reference results in making the noted minor corrections for purposes of maintaining regulatory compatibility with the NRC. As minor corrections, there is no fiscal impact to any of the small business radioactive materials licensees.

**D) Non-small businesses** ("non-small business" means a business employing 50 or more persons):

The change in the date of the incorporation by reference results in making the noted minor corrections for purposes of maintaining regulatory compatibility with the NRC. As minor corrections, there is no fiscal impact to any of the non-small business radioactive materials licensees.

**E) Persons other than small businesses, non-small businesses, state, or local government entities** ("person" means any individual, partnership, corporation, association, governmental entity, or public or private organization of any character other than an **agency**):

The change in the date of the incorporation by reference results in making the noted minor corrections for purposes of maintaining regulatory compatibility with the NRC. As minor corrections, there is no fiscal impact to any of the other radioactive materials licensees.

**F) Compliance costs for affected persons:**

As minor corrections, there are no compliance costs for any of the radioactive materials licensees in Utah.

**G) Regulatory Impact Summary Table** (This table only includes fiscal impacts that could be measured. If there are inestimable fiscal impacts, they will not be included in this table. Inestimable impacts will be included in narratives above.)

**Regulatory Impact Summary Table**

<b>Fiscal Costs</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>
State Government	\$0	\$0	\$0
Local Government	\$0	\$0	\$0
Small Businesses	\$0	\$0	\$0
Non-Small Businesses	\$0	\$0	\$0
Other Person	\$0	\$0	\$0
<b>Total Fiscal Costs:</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Fiscal Benefits</b>			
State Government	\$0	\$0	\$0
Local Government	\$0	\$0	\$0
Small Businesses	\$0	\$0	\$0
Non-Small Businesses	\$0	\$0	\$0
Other Persons	\$0	\$0	\$0
<b>Total Fiscal Benefits:</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Net Fiscal Benefits:</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

## NOTICES OF PROPOSED RULES

<b>H) Department head sign-off on regulatory impact:</b>
The interim executive director of the Department of Environmental Quality, Scott Baird, has reviewed and approved this fiscal analysis.
<b>6. A) Comments by the department head on the fiscal impact this rule may have on businesses:</b>
The change in the date of the incorporation by reference results in making the noted minor corrections for purposes of maintaining regulatory compatibility with the NRC. As minor corrections, there is no fiscal impact to any of the radioactive materials licensees.
<b>B) Name and title of department head commenting on the fiscal impacts:</b>
Scott Baird, Interim Executive Director

## Citation Information

<b>7. This rule change is authorized or mandated by state law, and implements or interprets the following state and federal laws. State code or constitution citations (required):</b>
Section 19-3-104    Section 19-6-104

## Incorporations by Reference Information

<b>8. A) This rule adds, updates, or removes the following title of materials incorporated by references :</b>	
	<b>First Incorporation</b>
<b>Official Title of Materials Incorporated (from title page)</b>	Title 10 Part 71, Code of Federal Regulations, Packaging and Transportation of Radioactive Material (10 CFR Part 71)
<b>Publisher</b>	U.S. Government Publishing Office
<b>Date Issued</b>	2019
<b>Issue, or version</b>	January 1, 2019

## Public Notice Information

<b>9. The public may submit written or oral comments to the agency identified in box 1. (The public may also request a hearing by submitting a written request to the agency. The agency is required to hold a hearing if it receives requests from ten interested persons or from an association having not fewer than ten members. Additionally, the request must be received by the agency not more than 15 days after the publication of this rule in the Utah State Bulletin. See Section 63G-3-302 and Rule R15-1 for more information.)</b>	
<b>A) Comments will be accepted until:</b>	12/31/2019

<b>10. This rule change MAY* become effective on:</b>	02/14/2020
*NOTE: The date above is the date on which this rule MAY become effective. It is NOT the effective date. After the date designated in Box 10, the agency must submit a Notice of Effective Date to the Office of Administrative Rules to make this rule effective. Failure to submit a Notice of Effective Date will result in this rule lapsing and will require the agency to start the rulemaking process over.	

## Agency Authorization Information

<b>Agency head or designee, and title:</b>	Ty Howard, Division Director	<b>Date:</b>	11/07/2019
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**R313. Environmental Quality, Waste Management and Radiation Control, Radiation.****R313-19. Requirements of General Applicability to Licensing of Radioactive Material.****R313-19-100. Transportation.**

For purposes of Section R313-19-100, 10 CFR 71.0(c), 71.1(a), 71.3, 71.4, 71.13, 71.14(a), 71.15, 71.17, 71.19(a), 71.19(b), 71.19(c), 71.20 through 71.23, 71.47, 71.83 through 71.89, 71.97, 71.101(a), 71.101(b), 71.101(c)(1), 71.101(g), 71.105, 71.127 through 71.137, and Appendix A to Part 71 [(2014)](2019) are incorporated by reference with the following clarifications or exceptions:

- (1) The exclusion of the following:
  - (a) In 10 CFR 71.4 the following definitions:
    - (i) "close reflection by water";
    - (ii) "licensed material";
    - (iii) "optimum interspersed hydrogenous moderation";
    - (iv) "spent nuclear fuel or spent fuel"; and
    - (v) "state."
  - (2) The substitution of the following date reference:
    - (a) "October 1, 2011" for "October 1, 2008".
    - (3) The substitution of the following rule references:
      - (a) "R313-36 (incorporating 10 CFR 34.31(b) by reference)" for "Sec. 34.31(b) of this chapter" as found in 10 CFR 71.101(g);
      - (b) "R313-15-502" for reference to "10 CFR 20.1502";
      - (c) "R313-14" for reference to "10 CFR Part 2 Subpart B";
      - (d) "Rule R313-32, 10 CFR Part 35," for reference to "10 CFR part 35";
      - (e) "R313-15-906(5)" for reference to "10 CFR 20.1906(e)";
      - (f) "R313-19-100(5)" for "Sec.71.5";
      - (g) "10 CFR 71.101(a), 71.101(b), 71.101(c)(1), 71.101(g), 71.105, and 71.127 through 71.137" for "subpart H of this part" or for "subpart H" except in 10 CFR 71.17(b), 71.20(b), 71.21(b), 71.22(b), 71.23(b);
      - (h) "10 CFR 71.0(c), 71.1(a), 71.3, 71.4, 71.17(c)(2), 71.20(c)(2), 71.21(d)(2), 71.83 through 71.89, 71.97, 71.101(a), 71.101(b), 71.101(c)(1), 71.101(g), 71.105, and 71.127 through 71.137" for "subparts A, G, and H of this part";
      - (i) "10 CFR 71.47" for "subparts E and F of this part"; and

(j) "10 CFR 71.101(a), 71.101(b), 71.101(c)(1), 71.101(g), 71.105, and 71.127 through 71.137" for "Sec. Sec. 71.101 through 71.137."

(4) The substitution of the following terms:

(a) "Director" for:

(i) "Commission" in 10 CFR 71.0(c), 71.17(a), 71.20(a), 71.21(a), 71.22(a), 71.23(a), and 71.101(c)(1);

(ii) "Director, Division of Nuclear Safety, Office of Nuclear Security and Incident Response" in 10 CFR 71.97(c)(1), and 71.97(f)(1);

(iii) "Director, Office of State Programs, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001" in 10 CFR 71.97(c)(3)(iii);

(iv) "NRC" in 10 CFR 71.101(f);

(b) "Director, the U.S. Nuclear Regulatory Commission, or an Agreement State" for "Commission" in 10 CFR 71.3;

(c) "The Governor of Utah" for:

(i) "the governor of a State" in 71.97(a);

(ii) "each appropriate governor" in 10 CFR 71.97(c)(1);

(iii) "the governor" in 10 CFR 71.97(c)(3);

(iv) "the governor of the state" in 10 CFR 71.97(e);

(v) "the governor of each state" in 10 CFR 71.97(f)(1);

(vi) "a governor" in 10 CFR 71.97(e);

(d) "State of Utah" for "State" in 71.97(a), 71.97(b)(2), and 71.97(d)(4);

(e) "the Governor of Utah's" for:

(i) "the governor's" in 10 CFR 71.97(a), 71.97(c)(3), 71.97(c)(3)(iii), 71.97(e), and 71.97(f)(1);

(ii) "governor's" in 10 CFR 71.97(c)(1), and 71.97(e);

(f) "Specific or general" for "NRC" in 10 CFR 71.0(c);

(g) "The Director at the address specified in R313-12-110" for reference to "ATTN: Document Control Desk, Director, Spent Fuel Project Office, Office of Nuclear Material Safety and Safeguards" in 10 CFR 71.101(c)(1);

(h) "Each" for "Using an appropriate method listed in Sec. 71.1(a), each" in 10 CFR 71.101(c)(1);

(i) "The material must be contained in a Type A package meeting the requirements of 49 CFR 173.417(a)." for "The fissile material need not be contained in a package which meets the standards of subparts E and F of this part; however, the material must be contained in a Type A package. The Type A package must also meet the DOT requirements of 49 CFR 173.417(a)." as found in 10 CFR 71.22(a) and 71.23(a);

(j) "Licensee" for "licensee, certificate holder, and applicant for a COC"; and

(k) "Licensee is" for reference to "licensee, certificate holder, and applicant for a COC are."

(5) Transportation of licensed material

(a) Each licensee who transports licensed material outside the site of usage, as specified in the license issued by the Director, the U.S. Nuclear Regulatory Commission or an Agreement State, or where transport is on public highways, or who delivers licensed material to a carrier for transport, shall comply with the applicable requirements of the U.S. Department of Transportation regulations in 49 CFR parts 107, 171 through 180, and 390 through 397 (2009), appropriate to the mode of transport.

(i) The licensee shall particularly note DOT regulations in the following areas:

(A) Packaging--49 CFR part 173: subparts A (49 CFR 173.1 through 49 CFR 173.13), B (49 CFR 173.21 through 49 CFR 173.40), and I (49 CFR 173.401 through 49 CFR 173.477).

(B) Marking and labeling--49 CFR part 172: subpart D (49 CFR 172.300 through 49 CFR 172.338); and 49 CFR 172.400 through 49 CFR 172.407 and 49 CFR 172.436 through 49 CFR 172.441 of subpart E.

(C) Placarding--49 CFR part 172: subpart F (49 CFR 172.500 through 49 CFR 172.560), especially 49 CFR 172.500 through 49 CFR 172.519 and 49 CFR 172.556; and appendices B and C.

(D) Accident reporting--49 CFR part 171: 49 CFR 171.15 and 171.16.

(E) Shipping papers and emergency information--49 CFR part 172: subparts C (49 CFR 172.200 through 49 CFR 172.205) and G (49 CFR 172.600 through 49 CFR 172.606).

(F) Hazardous material employee training--49 CFR part 172: subpart H (49 CFR 172.700 through 49 CFR 172.704).

(G) Security plans--49 CFR part 172: subpart I (49 CFR 172.800 through 49 CFR 172.804).

(H) Hazardous material shipper/carrier registration--49 CFR part 107: subpart G (49 CFR 107.600 through 49 CFR 107.606).

(ii) The licensee shall also note DOT regulations pertaining to the following modes of transportation:

(A) Rail--49 CFR part 174: subparts A through D (49 CFR 174.1 through 49 CFR 174.86) and K (49 CFR 174.700 through 49 CFR 174.750).

(B) Air--49 CFR part 175.

(C) Vessel--49 CFR part 176: subparts A through F (49 CFR 176.1 through 49 CFR 176.99) and M (49 CFR 176.700 through 49 CFR 107.720).

(D) Public Highway--49 CFR part 177 and parts 390 through 397.

(b) If DOT regulations are not applicable to a shipment of licensed material, the licensee shall conform to the standards and requirements of the DOT specified in paragraph (a) of this section to the same extent as if the shipment or transportation were subject to

DOT regulations. A request for modification, waiver, or exemption from those requirements, and any notification referred to in those requirements, must be filed with, or made to, the Director, P.O. Box 144850, Salt Lake City, Utah 84114-4850.

**KEY: licenses, reciprocity, transportation, exemptions**

**Date of Enactment or Last Substantive Amendment:** ~~August 9, 2019~~ **2020**

**Notice of Continuation:** July 1, 2016

**Authorizing, and Implemented or Interpreted Law:** 19-3-104; 19-6-104

**NOTICE OF PROPOSED RULE**

**TYPE OF RULE:** Amendment

<b>Utah Admin. Code Ref (R no.):</b>	<b>R313-36</b>	<b>Filing</b>	<b>No.</b>
		<b>52331</b>	

**Agency Information**

<b>1. Agency:</b>	Environmental Quality, Waste Management and Radiation Control
<b>Room no.:</b>	Second Floor
<b>Building:</b>	Multi-Agency State Office Building (MASOB)

## NOTICES OF PROPOSED RULES

<b>Street address:</b>	195 North 1950 West	
<b>City, state:</b>	Salt Lake City, UT	
<b>Mailing address:</b>	PO Box 144880	
<b>City, state, zip:</b>	Salt Lake City, UT 84114-4880	
<b>Contact person(s):</b>		
<b>Name:</b>	<b>Phone:</b>	<b>Email:</b>
Rusty Lundberg	801-536-4257	rlundberg@utah.gov
Please address questions regarding information on this notice to the agency.		

**General Information****2. Rule or section catchline:**

Special Requirements for Industrial Radiographic Operations

**3. Purpose of the new rule or reason for the change:**

The proposed rule change updates the date of the incorporation by reference of selected sections of 10 CFR Part 34 in R313-36-3 from 2015 to 2019 in order to incorporate the minor corrections to Part 34 as promulgated by the U.S. Nuclear Regulatory Commission (NRC) and published in the June 28, 2018 (83 FR 30285) issue of the Federal Register. Utah's adoption of these minor corrections is required for regulatory compatibility as an Agreement State with the NRC for administering the radioactive materials program in Utah. While the changes made by the NRC are relatively minor in nature, the NRC designated the changes as necessary for an Agreement State to adopt in order to maintain regulatory compatibility with the NRC. Thus, the proposed change to the date of the incorporation by reference in R313-36-3 from 2015 to 2019 incorporates a minor correction promulgated by the NRC in order to maintain regulatory compatibility with the NRC.

**4. Summary of the new rule or change:**

The proposed change in R313-36-3 revises the date of the incorporation by reference of selected sections to 10 CFR Part 34 from 2015 to 2019. This results in incorporating the change the NRC made to Section 34.101 of 10 CFR Part 34 and published in the Federal Register on June 28, 2018 (83 FR 30285). Specifically, in Section 34.101, the NRC corrected the existing cross reference from 30.6(a)(2) to 30.6(b)(2). As an Agreement State with the NRC for the radioactive materials program, Utah is required to maintain regulatory compatibility with the corresponding NRC radioactive materials regulations. While the NRC reference correction is minor in nature, the NRC designated the changes as necessary for an Agreement State to adopt in order to maintain regulatory compatibility with the NRC. Thus, the proposed change to the date of the incorporation by reference in R313-36-3 from 2015 to 2019 incorporates the minor correction found in the appropriate Section 34.101 of 10 CFR Part 34.

**Fiscal Information****5. Aggregate anticipated cost or savings to:****A) State budget:**

The change in the date of the incorporation by reference results in making the noted minor reference correction for purposes of maintaining regulatory compatibility with the NRC. As a minor correction, there is no fiscal impact to the state budget or to any of the state entities that are radioactive materials licensee.

**B) Local governments:**

There are fewer than five local governments that have a radioactive materials license associated with the possession and use of portable gauges, and does not include industrial radiographic operations. The change in the date of the incorporation by reference results in making the noted minor correction for purposes of maintaining regulatory compatibility with the NRC. As a minor correction, there is no fiscal impact to any of the local government licensees.

**C) Small businesses** ("small business" means a business employing 1-49 persons):

The change in the date of the incorporation by reference results in making the noted minor corrections for purposes of maintaining regulatory compatibility with the NRC. As a minor correction, there is no fiscal impact to any of the small business radioactive materials licensees.

**D) Non-small businesses** ("non-small business" means a business employing 50 or more persons):

The change in the date of the incorporation by reference results in making the noted minor corrections for purposes of maintaining regulatory compatibility with the NRC. As minor corrections, there is no fiscal impact to any of the non-small business radioactive materials licensees.

**E) Persons other than small businesses, non-small businesses, state, or local government entities** ("person" means any individual, partnership, corporation, association, governmental entity, or public or private organization of any character other than an **agency**):

The change in the date of the incorporation by reference results in making the noted minor corrections for purposes of maintaining regulatory compatibility with the NRC. As a minor correction, there is no fiscal impact to any of the other radioactive materials licensees.

**F) Compliance costs for affected persons:**

As a minor reference correction, there are no compliance costs for any of the radioactive materials licensees in Utah.

**G) Regulatory Impact Summary Table** (This table only includes fiscal impacts that could be measured. If there are inestimable fiscal impacts, they will not be included in this table. Inestimable impacts will be included in narratives above.)

Regulatory Impact Summary Table				
Fiscal Costs		FY 2020	FY 2021	FY 2022
State	Government	\$0	\$0	\$0
Local	Government	\$0	\$0	\$0
Small	Businesses	\$0	\$0	\$0
Non-Small	Businesses	\$0	\$0	\$0
Other Person		\$0	\$0	\$0
<b>Total</b>	<b>Fiscal Costs:</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Fiscal Benefits</b>				
State	Government	\$0	\$0	\$0
Local	Government	\$0	\$0	\$0
Small	Businesses	\$0	\$0	\$0
Non-Small	Businesses	\$0	\$0	\$0
Other Persons		\$0	\$0	\$0
<b>Total</b>	<b>Fiscal Benefits:</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Net Fiscal Benefits:</b>		<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

**H) Department head sign-off on regulatory impact:**

The interim executive director of the Department of Environmental Quality, Scott Baird, has reviewed and approved this fiscal analysis.

**6. A) Comments by the department head on the fiscal impact this rule may have on businesses:**

The change in the date of the incorporation by reference results in making the noted minor corrections for purposes of maintaining regulatory compatibility with the NRC. As a minor reference correction, there is no fiscal impact to any of the radioactive materials licensees.

**B) Name and title of department head commenting on the fiscal impacts:**

Scott Baird, Interim Executive Director

**Citation Information**

**7. This rule change is authorized or mandated by state law, and implements or interprets the following state and federal laws. State code or constitution citations (required):**

Section 19-3-104	Section 19-6-104
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**Incorporations by Reference Information**

**8. A) This rule adds, updates, or removes the following title of materials incorporated by references:**

	First Incorporation
<b>Official Title of Materials Incorporated (from title page)</b>	Title 10 Part 34, Code of Federal Regulations, Licenses for Industrial Radiography and Radiation Safety Requirements for Industrial Radiographic Operations (10 CFR Part 34)
<b>Publisher</b>	U.S. Government Publishing Office
<b>Date Issued</b>	2019
<b>Issue, or version</b>	January 1, 2019

**Public Notice Information**

**9. The public may submit written or oral comments to the agency identified in box 1.** (The public may also request a hearing by submitting a written request to the agency. The agency is required to hold a hearing if it receives requests from ten interested persons or from an association having not fewer than ten members. Additionally, the request must be received by the agency not more than 15 days after the publication of this rule in the Utah State Bulletin. See Section 63G-3-302 and Rule R15-1 for more information.)

<b>A) Comments will be accepted until:</b>	12/31/2019
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<b>10. This rule change MAY* become effective on:</b>	02/14/2020
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\*NOTE: The date above is the date on which this rule MAY become effective. It is NOT the effective date. After the date designated in Box 10, the agency must submit a Notice of Effective Date to the Office of Administrative Rules to make this rule effective. Failure to submit a Notice of Effective Date will result in this rule lapsing and will require the agency to start the rulemaking process over.

**Agency Authorization Information**

## NOTICES OF PROPOSED RULES

<b>Agency head or designee, and title:</b>	Ty Howard, Division Director	<b>Date:</b>	11/07/2019
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**R313. Environmental Quality, Radiation Control.****R313-36. Special Requirements for Industrial Radiographic Operations.****R313-36-1. Purpose and Authority.**

(1) The rules in R313-36 prescribe requirements for the issuance of licenses and establish radiation safety requirements for persons utilizing sources of radiation for industrial radiography.

(2) The rules set forth herein are adopted pursuant to the provisions of Subsections 19-3-104(4) and 19-3-104(7).

(3) The requirements of R313-36 are in addition to, and not in substitution for, the other requirements of these rules.

**R313-36-2. Scope.**

(1) The requirements of R313-36 shall apply to licensees using radioactive materials to perform industrial radiography.

(2) The requirements of R313-36 shall not apply to persons using electronic sources of radiation to conduct industrial radiography.

**R313-36-3. Clarifications or Exceptions.**

For purposes of R313-36, 10 CFR 34.3; 34.13; 34.20(a)(1); 34.20(b) through 34.41(b); 34.42(a) through 34.42(c); 34.43(a)(1); 34.43(b) through 34.45(a)(8); 34.45(a)(10) through 34.101 [(2015)](2019), are incorporated by reference with the following clarifications or exceptions:

(1) The exclusion of the following:

(a) In 10 CFR 34.3, exclude definitions for "Lay-barge radiography," "Offshore platform radiography," and "Underwater radiography";

(b) In 10 CFR 34.27(d), exclude "A copy of the report must be sent to the Administrator of the appropriate Nuclear Regulatory Commission's Regional Office listed in appendix D of 10 CFR part 20 of this chapter "Standards for Protection Against Radiation.""; and

(c) In 10 CFR 34.27(e), exclude "Licensees will have until June 27, 1998, to comply with the DU leak-testing requirements of this paragraph."

(2) The substitution of the following wording:

(a) "radioactive materials" for references to "byproduct materials";

(b) "Utah Radiation Control Rules" for references to:

(i) "Commission's regulations";

(ii) "Federal regulations";

(iii) "NRC regulations"; and

(iv) "Commission regulations.";

(c) "Director" for references to:

(i) "Commission";

(ii) "appropriate NRC regional office listed in Section 30.6(a)(2)";

(iii) "Director, Office of Federal and State Materials and Environmental Management Programs" except as used in 10 CFR 34.43(a)(1); and

(iv) "NRC's Office of Federal and State Materials and Environmental Management Programs";

(d) "Director, the U.S. Nuclear Regulatory Commission, or an Agreement State" for references to:

(i) "NRC or an Agreement State"; and

(ii) "Commission or an Agreement State";

(e) "Director, the U.S. Nuclear Regulatory Commission, or by an Agreement State" for references to "Commission or by an Agreement State";

(f) "License(s)" for references to "NRC license(s)";

(g) "NRC or Agreement State License" for references to "Agreement State license"; and

(h) "the Utah Radiation Control Rules" for references to "this chapter, such as Section 21.21."

(3) The substitution of the following rule references:

(a) In 10 CFR 34.51, "R313-12" for references to "10 CFR part 20 of this chapter";

(b) "R313-15" for references to "10 CFR part 20" and "10 CFR part 20 of this chapter" except as found in 10 CFR 34.51;

(c) "R313-15-601(1)(a)" for references to "Section 20.1601(a)(1) of this chapter";

(d) "R313-15-902(1) and (2)" for references to "10 CFR 20.1902(a) and (b) of this chapter";

(e) "R313-15-903" for references to "Section 20.1903 of this chapter";

(f) "R313-15-1203" for references to "10 CFR 20.2203" and "Section 20.2203 of this chapter";

(g) "R313-12-110" for references to "Section 30.6(a) of this chapter" except as used in 10 CFR 34.43(a)(1);

(h) "R313-19-30" for references to "Section 150.20 of this chapter";

(i) "R313-19-50" for references to "Section 30.50";

(j) "R313-19-100" for references to "10 CFR part 71", and "49 CFR parts 171 - 173";

(k) "R313-22-33" for references to "Section 30.33 of this chapter";

(l) "R313-36" for references to "NRC regulations contained in this part";

(m) "R313-19-100(5)" for references to "Section 71.5 of this chapter"

(n) "R313-19-5" for references to "Sections 30.7, 30.9, and 30.10 of this chapter."

**KEY: industry, radioactive material, licensing, surveys**

**Date of Enactment or Last Substantive Amendment:** ~~June 16, 2015~~ **2020**

**Notice of Continuation:** July 1, 2016

**Authorizing, and Implemented or Interpreted Law:** 19-3-104; ~~19-6-107~~ **19-6-104**

NOTICE OF PROPOSED RULE			
<b>TYPE OF RULE:</b> Amendment			
<b>Utah Admin. Code Ref (R no.):</b>	<b>R386-900</b>	<b>Filing No.</b>	<b>52320</b>
<b>Agency Information</b>			
<b>1. Agency:</b>	Utah Department of Health, Disease Control and Prevention, Epidemiology		
<b>Building:</b>	Cannon Health Building		
<b>Street address:</b>	288 North 1460 West		
<b>City, state:</b>	Salt Lake City, UT 84116		
<b>Contact person(s):</b>			
<b>Name:</b>	<b>Phone:</b>	<b>Email:</b>	
Amelia Self	801-538-6221	aself@utah.gov	

WASTE MANAGEMENT AND RADIATION CONTROL BOARD  
 Executive Summary  
 REQUEST FOR A SITE-SPECIFIC TREATMENT VARIANCE EnergySolutions, LLC  
 February 13, 2020

<b>What is the issue before the Board?</b>	On December 10, 2019, EnergySolutions, LLC submitted a request to the Director of the Division of Waste Management and Radiation Control for a one-time site-specific treatment variance from the Utah Hazardous Waste Management Rules. EnergySolutions seeks authorization to receive high concentration arsenic waste for disposal.
<b>What is the historical background or context for this issue?</b>	<p>The Mixed Waste Facility proposes to receive approximately 150 cubic feet of Natural Gas Sweetener Filter Media.</p> <p>This material retains hazardous waste codes for high concentrations of arsenic along with cadmium and benzene. Treatability tests of a similar waste were unsuccessful in reducing the arsenic to required levels.</p> <p>EnergySolutions proposes to treat this waste for all contaminants except arsenic by stabilization. Following stabilization, the residue will be encapsulated using the facility's permitted Macroencapsulation process. This treatment will encapsulate the waste and protect it from contact with precipitation, thereby eliminating the potential of leaching.</p> <p>A notice for public comment was published in the <i>Salt Lake Tribune</i>, the <i>Deseret News</i> and the <i>Tooele County Transcript Bulletin</i> on January 7, 2020. The comment period began January 8, 2020 and ends on February 7, 2020.</p>
<b>What is the governing statutory or regulatory citation?</b>	Variances are provided for in 19-6-111 of the Utah Solid and Hazardous Waste Act. This is a one-time site-specific variance from an applicable treatment standard as allowed by R315-268.44 of the Utah Administrative Code.
<b>Is Board action required?</b>	No. This is an informational item before the Board.
<b>What is the Division/Director's recommendation?</b>	The Director will provide a recommendation following the public comment period at the next Board meeting.
<b>Where can more information be obtained?</b>	For technical questions, please contact Otis Willoughby (801) 536-0220. For legal questions, please contact Bret Randall at (801) 536-0284.

  
**ENERGYSOLUTIONS**  
DSHW-2019-017041Div of Waste Management  
and Radiation Control**DEC 10 2019**

December 9, 2019

CD19-0239

Mr. Ty Howard  
Director  
Division of Waste Management and Radiation Control  
195 North 1950 West  
Salt Lake City, UT 84114-4880

Subject: EPA ID Number UTD982598898 ✓  
Request for a Site-Specific Treatment Variance for  
High Concentration Arsenic Waste

Dear Mr. Howard:

EnergySolutions herein requests an exemption from Utah Administrative Code (UAC) R315-268-40(a)(3) for waste that contains high concentrations of arsenic (greater than 1,000 mg/L) that cannot be treated to the specified treatment standard. This request is submitted in accordance with the requirements of UAC R315-260-19.

The regulatory requirement authorizing this request is found in UAC R315-268-44 which allows a site-specific variance from an applicable treatment standard provided that the following condition is met:

*UAC R315-268-44(h)(1) It is not physically possible to treat the waste to the level specified in the treatment standard.*

EnergySolutions requests approval to stabilize, macroencapsulate and dispose of approximately 150 cubic feet of Natural Gas Sweetener Filter Media (clay pellets) that will be characteristically hazardous for arsenic (D004), cadmium (D006), and benzene (D018). The stabilization treatment process will meet Universal Treatment Standards (described in R315-268) for all contaminants except arsenic. All actions requested in this variance will be performed in accordance with EnergySolutions' state-issued Part B Permit.

Similar waste from the same generator was received at the Clive Facility in 2015. Analysis of a sample of that waste detected arsenic at 69,700 mg/L in the aqueous liquid phase (a small portion of the waste) and 1,800 mg/L in the solid. Over the course of two months, eight separate treatability studies of increasing intensity were conducted on that waste. Both single phase and multiple phase formulas were attempted with all contaminants meeting treatment standards except arsenic. Arsenic was reduced from the baseline concentration and plateaued at around



Mr. Ty Howard  
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CD19-0239  
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130 mg/L (a reduction factor of approximately 16) with a formula dilution up to 5:1 reagents to waste. This concentration is greatly reduced from the baseline concentration, but remained greater than 25 times the treatment standard of 5.0 mg/L.

R315-268-44(h)(1) allows a variance if it can be demonstrated that “because the physical or chemical properties of the waste differ significantly from waste analyzed in developing the treatment standard, the waste cannot be treated to the specified level or by the specified method.” The treatment standard was developed using a finely grained soil-like material; the filter media of this waste stream is physically different in that it is coarse clay pellets. In this media, it is much more difficult for intimate reagent-waste contact to treat the high concentration arsenic down to the treatment standard. Furthermore, the results described above demonstrate that large amounts of absorbent would be needed to meet the treatment standard, if it could be met. This would bring into question whether actual treatment was occurring or whether dilution was causing the reduction in arsenic concentration.

As an alternative to chemical treatment of arsenic to its treatment standard, EnergySolutions proposes to first treat the waste such that all contaminants other than arsenic meet their respective treatment standards, then macroencapsulate the treatment residual in accordance with requirements in Attachment II-1-5, *Macroencapsulation Plan*, of the state-issued Part B Permit. Macroencapsulation is a permitted process that significantly reduces the potential for migration (leaching) of waste. This process would ensure protection of public health and the environment.

A similar variance request was made for this previous waste in a letter dated January 22, 2016 (CD16-0019). This previous request was approved by the Waste Management and Radiation Control Board at a meeting on March 10, 2016.

EnergySolutions requests that a variance be granted to allow macroencapsulation and land disposal of waste that will meet all treatment standards except the treatment standard for arsenic.

The name, phone number, and address of the person who should be contacted to notify EnergySolutions of decisions by the Director is

Mr. Vern Rogers  
Director of Regulatory Affairs  
EnergySolutions LLC  
299 South Main Street, Suite 1700  
Salt Lake City, UT 84111  
(801) 649-2000



Mr. Ty Howard  
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Page 3 of 3

Should there be any questions to this request, please contact me at (801) 649-2144.

Sincerely,

A handwritten signature in black ink that reads "Timothy L. Orton". The signature is fluid and cursive.

Timothy L. Orton, P.E.  
Environmental Engineer

cc: Don Verbica, DWMRC

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WASTE MANAGEMENT AND RADIATION CONTROL BOARD  
 Executive Summary  
 REQUEST FOR A SITE-SPECIFIC TREATMENT VARIANCE *EnergySolutions*, LLC  
 February 13, 2020

<b>What is the issue before the Board?</b>	On December 10, 2019, <i>EnergySolutions</i> , LLC submitted a request to the Director of the Division of Waste Management and Radiation Control for a one-time site-specific treatment variance from the Utah Hazardous Waste Management Rules. <i>EnergySolutions</i> seeks authorization to receive Cemented Uranium Extraction Process Residues for disposal.
<b>What is the historical background or context for this issue?</b>	<p>The Mixed Waste Facility proposes to receive up to 1,500 cubic feet of cemented monoliths containing enriched uranium residuals.</p> <p>This material retains hazardous waste codes for barium, cadmium, chromium, lead, and spent solvents. The generator has encapsulated the waste in concrete for security reasons.</p> <p><i>EnergySolutions</i> proposes to receive this waste for macroencapsulation in the Mixed Waste Landfill Cell rather than chemical stabilization, as required. This request is based on the fact that the waste has already been encapsulated in concrete at the generator's site. Treating this waste by the required method would mean grinding the waste and potentially exposing workers to unnecessary contamination.</p> <p>The proposed treatment will further encapsulate the waste and protect it from contact with precipitation, thereby eliminating the potential of leaching.</p> <p>A notice for public comment was published in the <i>Salt Lake Tribune</i>, the <i>Deseret News</i> and the <i>Tooele County Transcript Bulletin</i> on January 7, 2020. The comment period began January 8, 2020 and ends on February 7, 2020.</p>
<b>What is the governing statutory or regulatory citation?</b>	Variances are provided for in 19-6-111 of the Utah Solid and Hazardous Waste Act. This is a one-time site-specific variance from an applicable treatment standard as allowed by R315-268.44 of the Utah Administrative Code.
<b>Is Board action required?</b>	No. This is an informational item before the Board.
<b>What is the Division/Director's recommendation?</b>	The Director will provide a recommendation following the public comment period at the next Board meeting.
<b>Where can more information be obtained?</b>	For technical questions, please contact Otis Willoughby (801) 536-0220. For legal questions, please contact Bret Randall at (801) 536-0284.

  
**ENERGYSOLUTIONS**

DSHW-2019-017042

Div of Waste Management  
and Radiation Control

DEC 10 2019

December 9, 2019

CD19-0240

Mr. Ty Howard  
Director  
Division of Waste Management and Radiation Control  
195 North 1950 West  
Salt Lake City, UT 84114-4880

Subject: EPA ID Number UTD982598898 - Request for a Site-Specific Treatment  
Variance for Cemented Uranium Extraction Process Residues

Dear Mr. Howard,

EnergySolutions herein requests an exemption from the treatment standards described in Utah Administrative Code (UAC) R315-40(a)(2) for uranium extraction process residuals that retain the hazardous waste codes D005 (barium); D006 (cadmium); D007 (chromium); D008 (lead); D030 (2,4-dinitrotoluene); D032 (hexachlorobenzene) and F001, F002, and F005 (spent solvents) and are encased in cement. This exemption is requested for the purposes of safety, security, and transportation of the radioactive waste. This request is submitted in accordance with the requirements of UAC R315-260-19.

The regulatory requirement authorizing this request is found in UAC R315-268-44 which allows a site-specific variance from an applicable treatment standard provided the following condition is met:

*UAC R315-268-44(h)(2) It is inappropriate to require the waste to be treated to the level specified in the treatment standard, or by the method specified as the treatment standard, even though such treatment is technically possible.*

This variance is being requested for approximately 1,000 cubic feet of cemented uranium extraction process residuals from EnergySolutions generator 9061-06. The waste is generated as part of a uranium recovery process that involves creating an enriched uranium contaminated ash through a thermal process and then recovering the enriched uranium through an organic solvent extraction process. The residual waste from this extraction system is collected in small cans (~ 2 ½ gallons each) and stored at the generator's facility. The process residuals within these cans are in the form of an ash generated through this process. The process residuals within the cans have been characterized through a random sampling and analysis process. At the beginning of this



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campaign, approximately 2,000 cans of process residues were collected and stored by the generator. The process is ongoing and additional cans are being generated every year. Further, due to safety concerns, some of the cans are being split prior to the repackaging process described below; thereby generating more total material for disposal.

F-listed solvent codes within this waste are derived from rags that are burned in a furnace in order to recover the uranium present within them. None of the F-listed constituents were present above their respective treatment standard concentrations within the random characterization samples of the process residues. The random characterization samples were also analyzed for metals using the Toxicity Characteristic Leaching Procedure (TCLP). These samples detected elevated concentrations of barium (up to 6,740 mg/L TCLP), cadmium (up to 16.4 mg/L TCLP), chromium (up to 15.2 mg/L TCLP), and lead (up to 10.5 mg/L TCLP). Based on these elevated metal concentrations, the characteristic waste codes D005, D006, D007, and D008 were applied to the process residue. Slightly elevated concentrations of 2,4-dinitrotoluene (D030) and hexachlorobutadiene (D032) were also detected in separate analyses. The residue may potentially contain these codes also.

The uranium content within the process residues is enriched. From a health and safety standpoint, the enrichment makes the waste more hazardous to employees managing the waste. Further, enriched material has increased security concerns and must be managed appropriately. To ensure the enriched uranium concentration limits required for worker safety, security, and transportation of this waste are met, appropriate packaging procedures were created and are currently being utilized at the generator's facility. These packaging procedures include repackaging the cans into 16-gallon drums and filling the void spaces with cement; formal treatment for the elevated metals concentrations is not performed during this process. The generator has assessed other options, including treatment for the hazardous constituents; however, additional processing introduced unacceptable hazards from a health and safety, and security viewpoint. Additionally, the waste within the cans is inherently safe from a criticality aspect and the generator concluded that it is unwise to perform extra processing that could potentially change this aspect. Furthermore, encasing enriched uranium within concrete is the preferred method of stabilization as recommended by the Nuclear Regulatory Commission (NRC). The waste material packaged in these 16-gallon monolithic forms is inherently safe and is the form that will be shipped and received at the EnergySolutions Clive facility.

The characteristic hazardous waste codes associated with the process residues has numerical concentration-based treatment standards based upon the leachability of the contaminants. Treatment of the monolithic form for these concentration-based treatment



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standards would entail a process that includes shredding of the monolith followed by mixing with a stabilizing reagent in a permitted mixer. Both of these steps could mobilize the enriched uranium and possibly cause airborne contamination, increasing the potential for releases to the environment as well as the potential for personnel exposure; thereby violating radiation protection (ALARA – As Low As Reasonably Achievable) principles. Also, the shredding of the solidified uranium ash results in a more accessible form of enriched uranium with potential security ramifications.

EnergySolutions proposes to macroencapsulate the waste, thereby isolating the waste from potential leaching media. Macroencapsulation is a permitted process utilized at the Clive facility that significantly reduces the potential for migration (leaching) of waste. Macroencapsulation requires less handling of the waste and creates a waste form for disposal that is protective of human health and the environment. Macroencapsulation also adds a further level of security restricting access to the enriched uranium.

In summary, a variance should be granted based upon three considerations:

1. for both health and security reasons, enriched uranium concentration within the waste precludes actual treatment of the waste;
2. processing this waste in preparation for stabilization treatment would increase worker exposures and the potential for releases to the environment; and
3. the leachability of the waste would be significantly reduced through macroencapsulation, thereby protecting human health and the environment.

EnergySolutions requested this same variance for this generator in letters dated July 20, 2007; July 28, 2008; July 15, 2009; July 15, 2010; July 28, 2011; August 13, 2012; July 15, 2013; July 25, 2015; November 4, 2015; October 27, 2016; and November 20, 2018. These previous requests were approved on September 13, 2007; September 13, 2008; September 10, 2009; September 9, 2010; September 8, 2011; September 13, 2012; September 12, 2013; August 14, 2014; December 10, 2015; January 12, 2017; September 27, 2017; and January 10, 2019.

Shipments began in April, 2008 and have been relatively continuous since that time. Since the last variance was approved, EnergySolutions has received approximately 1,580 cubic feet of this waste (the 16-gallon monoliths). EnergySolutions has received approximately 11,120 cubic feet of this waste since the first variance approval in 2008.



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This variance request is for the ongoing processing and disposal of additional uranium extraction process residues created by the generator.

EnergySolutions requests that a variance be granted to allow the receipt, macroencapsulation treatment and disposal of approximately 1,500 cubic feet of cemented uranium extraction process residuals that retain hazardous waste codes. Upon approval of this variance, the monolithic waste will be managed as debris.

The name, phone number, and address of the person who should be contacted to notify EnergySolutions of decisions by the Director is:

Mr. Vern C. Rogers  
Director of Regulatory Affairs  
EnergySolutions LLC  
299 South Main Street, Suite 1700  
Salt Lake City, UT 84111  
(801) 649-2000

Should there be any questions to this request, please contact me at 801-649-2144.

Sincerely,

A handwritten signature in black ink that reads "Timothy L. Orton". The signature is fluid and cursive.

Timothy L. Orton, P.E.  
Environmental Engineer and Manager

cc: Don Verbica, DWMRC

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

WASTE MANAGEMENT AND RADIATION CONTROL BOARD  
 Executive Summary  
 REQUEST FOR A SITE-SPECIFIC TREATMENT VARIANCE EnergySolutions, LLC  
 February 13, 2020

<b>What is the issue before the Board?</b>	On December 10, 2019, EnergySolutions, LLC submitted a request to the Director of the Division of Waste Management and Radiation Control for a one-time site-specific treatment variance from the Utah Hazardous Waste Management Rules. EnergySolutions seeks authorization to receive magnesium/thorium dross for disposal.
<b>What is the historical background or context for this issue?</b>	<p>The Mixed Waste Facility proposes to receive approximately 700 cubic feet of magnesium/thorium dross.</p> <p>This material retains hazardous waste codes for high concentrations of barium. The treatment standard for barium requires stabilization to a concentration of 21mg/L. Generation of the dross has created a waste comprised of hard, disk-like metal pieces. Stabilization of this material would not be viable.</p> <p>EnergySolutions proposes to receive this waste for macroencapsulation in the Mixed Waste Landfill Cell rather than chemical stabilization, as required. This request is based on the fact that the waste does not lend itself to stabilization treatment.</p> <p>The facility proposes to encapsulate the waste using its permitted Macroencapsulation process. This treatment will encapsulate the waste and protect it from contact with precipitation, thereby eliminating the potential of leaching.</p> <p>A notice for public comment was published in the <i>Salt Lake Tribune</i>, the <i>Deseret News</i> and the <i>Tooele County Transcript Bulletin</i> on January 7, 2020. The comment period began January 8, 2020 and ends on February 7, 2020.</p>
<b>What is the governing statutory or regulatory citation?</b>	Variances are provided for in 19-6-111 of the Utah Solid and Hazardous Waste Act. This is a one-time site-specific variance from an applicable treatment standard as allowed by R315-268.44 of the Utah Administrative Code.
<b>Is Board action required?</b>	No. This is an informational item before the Board.
<b>What is the Division/Director's recommendation?</b>	The Director will provide a recommendation following the public comment period at the next Board meeting.
<b>Where can more information be obtained?</b>	For technical questions, please contact Otis Willoughby (801) 536-0220. For legal questions, please contact Bret Randall at (801) 536-0284.

DEC 10 2019

**ENERGYSOLUTIONS**  
DSHW-2019-017061

December 9, 2019

CD19-0241

Mr. Ty Howard  
Director  
Division of Waste Management and Radiation Control  
195 North 1950 West  
Salt Lake City, UT 84114-4880

Subject: EPA ID Number UTD982598898 ✓  
Request for a Site-Specific Treatment Variance for Magnesium/Thorium Dross

Dear Mr. Howard:

EnergySolutions herein requests an exemption from Utah Administrative Code (UAC) R315-268-40(a)(1) for magnesium/thorium dross that contains high concentrations of barium and cannot be treated to the specified treatment standard. This request is submitted in accordance with the requirements of UAC R315-260-19.

The regulatory requirement authorizing this request is found in UAC R315-268-44 which allows a site-specific variance from an applicable treatment standard provided that the following condition is met:

*UAC R315-268-44(h)(1) It is not physically possible to treat the waste to the level specified in the treatment standard.*

EnergySolutions requests approval to treat, by macroencapsulation, approximately 700 cubic feet of magnesium/thorium dross that is characteristically hazardous for barium (D005). The treatment standards table described in R315-268-40 (Treatment Standards for Hazardous Wastes Table in 40 CFR 268.40, 2015 edition, adopted and incorporated by reference) lists only one option for barium contaminated waste: treatment below a Toxicity Characteristic Leaching Procedure (TCLP) concentration of 21 mg/L. To perform this treatment and meet this treatment standard, the waste would need to be shredded to allow intimate waste-reagent contact throughout the waste. Formation of the dross waste has created extremely hard disc-like metal pieces which cannot be shredded using conventional shredding processes.

The waste is better managed as a debris as it physically similar to debris; however, the regulatory definition in R315-268-2(g) explicitly excludes “process residuals such as smelter slag” (dross is very similar to smelter slag). The reason provided for this exclusion is described by the Environmental Protection Agency (EPA) in the Federal Register (57 FR 37224, August 18, 1992, footnote 20 – attached):

*The Agency . . . has determined the slag is not debris because it is not the type of material for which today’s debris treatment standards were developed – objects contaminated (generally superficially) with hazardous waste.*



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This action was done to preserve the integrity of the surface treatment standards (extraction and destruction technologies) described as Alternate Treatment Standards for Hazardous Debris in R315-268-45 (40 CFR 268.45). This requirement is not necessary to preserve the integrity of immobilization technologies such as Macroencapsulation since those technologies do not remove the hazard and still require disposal in a hazardous waste landfill.

In lieu of the discussion above, EnergySolutions requests a variance to manage the magnesium-thorium dross as debris and use the macroencapsulation treatment technology to safely treat this waste prior to disposal in the Clive Facility Mixed Waste Landfill Cell. This treatment will be conducted in accordance with the requirements of Attachment II-1-5, *Macroencapsulation Plan*, of the Clive Facility state-issued Part B Permit. Macroencapsulation is a permitted process that significantly reduces the potential for migration (leaching) of waste. This process would ensure protection of public health and the environment.

The name, phone number, and address of the person who should be contacted to notify EnergySolutions of decisions by the Director is

Mr. Vern Rogers  
Director of Regulatory Affairs  
EnergySolutions LLC  
299 South Main Street, Suite 1700  
Salt Lake City, UT 84111  
(801) 649-2000

Should there be any questions to this request, please contact me at (801) 649-2144.

Sincerely,

A handwritten signature in black ink that reads "Timothy L. Orton". The signature is fluid and cursive.

Timothy L. Orton, P.E.  
Environmental Engineer

cc: Don Verbica, DWMRC

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

regulated as debris, they would be subject to the LDRs for the waste contaminating them and would remain subject to subtitle C regulation after treatment. Basing the size criterion on particle size rather than sieve size precludes the potential for such sham activities.

(4) Implementation of the Particle Size Criterion. To make today's rule workable, equipment operators need to be able to determine quickly whether material being remediated is debris or nondebris (e.g., soil, waste). In some cases, the determination will vary from one front end loader bucketfull of material to another. Accordingly, the Agency intends for the size criterion to be implemented by visual observation. Screening is not required. If screening is used, however, the screen may be either a square grid with openings 60 mm on a side or a circular grid with circles with a 60 mm diameter.

(d) Waste for Which a Specific Treatment Standard Has Been Established is not Debris. There is one further exception to this definition of debris. EPA is indicating that debris-like material for which the Agency has promulgated a specific treatment standard is not considered to be debris. The reason is that the Agency will have determined that specific treatment standards are appropriate for the material, rather than the assortment of technologies adopted for debris generally. See 57 FR 983 c.3 (Jan. 9, 1992).

The chief examples of a material subject to a specific treatment standard rather than the general debris standards are lead acid batteries and cadmium batteries. EPA has promulgated a treatment standard of metal recovery for each of these materials. See § 268.42. Thus, this more specific treatment standard takes precedence over the more general debris standard adopted today.<sup>17</sup>

d. Mixtures of Debris with Other Materials are Subject to Regulation as Debris if Debris is the Primary Material Present. A further issue needing to be addressed is the status of mixtures of debris and other materials such as soils or sludge. This situation arises often, particularly in remedial situations where debris is rarely present in a pristine state. Since the treatment standards for debris and other materials—sludge or contaminated soil—differ, the issue of

classification is an important one. In developing a means of classification, the Agency on the one hand is seeking to prevent the debris classification from invariably overriding the treatment standards for other hazardous wastes. On the other hand, it is important to have a means of classification that is easy to apply by equipment operators in the field.

The Agency has therefore decided to classify<sup>18</sup> as debris any mixture where the debris portion comprises the largest amount of material present by volume, to be determined by visual inspection.<sup>19</sup> Thus, for example, if upon examination, a mixture of cobbles (i.e., with a particle size of 60 mm or more), soil, and sludge is comprised mostly of cobbles, the mixture is classified as debris. After being treated by one of the treatment methods for debris promulgated in today's rule, it could then be land disposed. (Residues from applying the treatment method could be land disposed after being treated to meet the treatment standards for the prohibited waste contaminating the debris.)

The definition of debris encompasses this classification principle by stating that "A mixture of debris and other material such as soil or sludge is also debris if the mixture is comprised primarily of debris by volume, based on visual inspection." It should be clear from this discussion that the rule does not require debris and nondebris materials to be separated prior to treatment (an unintended implication of the proposed rule). Rather, mixtures are either classified as debris or some other type of waste treatability group according to the classification test discussed above.

We note that the "primary material" test for classifying debris does not apply to intact, nonempty containers. Given that such containers are not debris (see discussion below in section V.B.1.f) and can be readily separated from debris (or

mixtures of debris and other materials), they are not considered in applying the "primary material" test. Consequently, intact, nonempty containers must not be included in making the volume determinations to classify mixtures of debris.

There is one further point to be made. Although EPA is classifying mixtures that are predominantly debris as debris, this does not mean that debris can be deliberately mixed with other wastes in order to change their treatment classification. Such mixing is impermissible dilution under § 268.3 since it is a substitute for adequate treatment. See also 53 FR 31145 (Aug. 17, 1988); dilution to change treatability groups is ordinarily impermissible. In addition, such situations where debris is used merely to dilute another prohibited waste, the mixture would remain subject to the most stringent treatment standard of any waste that is part of the mixture. See § 268.41(b).

**e. Process Residuals Are Not Debris.** Today's definition of debris explicitly excludes process residuals by stating: "Process residuals such as smelter slag and residues from the treatment of waste (e.g., incinerator ash), wastewater, sludges, or air emissions residues (e.g., collected particulate matter) are not debris." The Agency believes that debris should be limited to manufactured objects (e.g., metal, glass) and naturally occurring objects (e.g., boulders, tree stumps). The Agency developed the treatment standards generally to ensure effective treatment of hazardous waste contaminating an object, rather than effective treatment of a large particle size hazardous waste such as slag.<sup>20</sup>

Several commenters requested clarification as to what the Agency meant in the proposed rule by excluding from the definition of debris "solids that are listed wastes or can be identified as being residues from treatment of wastes and/or wastewaters." The commenters felt that it was unclear whether this phrase exempts from the definition of debris only pollution control residues, or material such as metal filters, ceramic column packing, or discarded pollution control equipment. Commenters suggested that EPA clarify, through examples, that discarded industrial equipment (such as filters, pumps, etc.) would be included in the definition of

<sup>18</sup> We note that although such mixtures are classified as debris and are subject to the debris treatment standards, if the nondebris materials are separated from the debris prior to treatment by a specified technology, the separated material is no longer classified as debris. If the separated material is a hazardous waste (or soil contaminated with a hazardous waste), it is subject to the waste-specific treatment standards. When treatment residue (i.e., soil, waste, or other nondebris material) is separated from treated debris as required by today's debris standards for extraction or destruction technologies, the residue is subject to the waste-specific standards for the waste contaminating the debris.

<sup>19</sup> Some materials (e.g., soil) mixed with debris may contain free liquids that may still be oozing from the material. The volume of such entrapped liquids need not be considered in determining whether the mixture is primarily debris because it is impracticable to determine the volume of such liquids by visual inspection.

<sup>20</sup> We note that previous debris definitions (see § 268.2(g)) considered "slag" as debris. The Agency has reconsidered this issue and has determined the slag is not debris because it is not the type of material for which today's debris treatment standards were developed—objects contaminated (generally superficially) with hazardous waste.

<sup>17</sup> A number of commenters questioned the jurisdictional basis for regulating battery plates and groups from lead acid batteries as "solid wastes" subject to subtitle C regulation. EPA adheres to the response set out at 57 FR 960-961 in the proposed rule.