

Hazardous Waste Section
File Room Document Transmittal Sheet

17

Your Name: Kathleen Z Lawson
EPA ID: NCD077840148
Facility Name: Safety-Kleen Systems, Inc. (Archdale)
Document Group: Permit (P)
Document Type: Part B Application (PB)
Description: Part B Renewal Call Letter
Date of Doc: 6/7/2016
Author of Doc: Kathleen Z. Lawson

File Room Use Only

NCD077840148

Date Recieved by File Room:

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June 7, 2016

Todd M. Blake
Environmental, Health & Safety Manager
Safety-Kleen Systems, Inc.
6182 Old Mendenhall Road
Archdale, North Carolina 27263

Re: RCRA Permit Application Renewal
Safety-Kleen Systems, Inc. – Archdale
EPA ID # NCD 077 840 148

Dear Mr. Blake:

The Safety-Kleen Systems, Inc. Hazardous Waste Management Permit will expire on May 29, 2018. Safety-Kleen must submit the original and one (1) electronic copy of a completely new application along with the fee indicated on the enclosed invoice to the Section by May 18, 2017 as described in 40 CFR 270.10(h) as adopted in 15A NCAC 13A .0113 and in condition I.D.2. of your permit. If, through no fault of Safety-Kleen, a renewal permit is not issued by the State prior to the expiration date of the existing permit, Safety-Kleen may continue to operate under the existing permit only if the application is submitted by May 18, 2017.

This Part B renewal application must describe Safety-Kleen's updated storage and treatment activities, remedial activities, and each Solid Waste Management Unit (SWMU). To assist you in preparing this application, we have enclosed a copy of:

1. The application fee invoice, (for commercial facilities only), and
2. A disk containing copies of the application checklists that the Section will use to evaluate your Part B renewal application which includes the guidelines and the forms used to document substantial compliance and financial qualifications.

Note that the Part A form 8700-23 with the associated instructions can be downloaded from the following EPA website: <http://www.epa.gov/epaoswer/hazwaste/data/form8700/forms.htm>, The most recent NC Hazardous Waste Management Rules can be found at the following DEW website: <http://deq.nc.gov/about/divisions/waste-management/waste-management-rules/hazardous-waste-rules>,

In addition certain provisions of Session Law 2007-107 as amended by Session Law 2007-495 have revised the North Carolina General Statutes. These revisions require that:

1. At least 120 days prior to submitting an application, an applicant for a permit for a hazardous waste facility shall provide to the county in which the facility is located, to any municipality with planning jurisdiction over the site of the facility, and to all emergency response agencies that have a role under the contingency plan for the facility information described in N.C.G.S 130A-295(d) for their review. There is also a requirement for receiving comments and responding to the comments. The facility must also include documentation of the mailing and responses in the permit application as described in N.C.G.S 130A-295(f).

When contacting the county or municipality you must contact the manager of the county or municipality. A USPS green card, or alternative mailing proof, is sufficient documentation to show that the notification has been sent and received. To fulfill the requirements of N.C.G.S 130A-295(e), a response letter from each county in which the facility is located, each municipality with planning jurisdiction over the site of the facility, and from all emergency response agencies that have a role under the contingency plan for the facility is required.

Safety-Kleen must provide this information to the Hazardous Waste Section with the permit renewal application. An excerpt of N.C.G.S 130A-295(d) – (f) is included with this letter.

2. Within 10 days of filing an application for a permit, notify every person who resides or owns property located within one-fourth mile of any property boundary of the facility. The notice shall be by mail to residents and by certified mail to property owners, or by any other means approved by the Hazardous Waste Section (Section). The notice shall be in a form approved by the Section, and shall include all of the following:
 - (a) The location of the facility.
 - (b) A description of the facility.
 - (c) The hazardous and nonhazardous wastes that are to be received and processed at the facility.
 - (d) A description of the emergency response plan for the facility.

The facility must provide documentation to demonstrate to the Section that the requirements have been met. An excerpt of N.C.G.S. 130A-295.01 has been included with this letter for your information.

Safety-Kleen must mail the notifications within 10 days of filing their Renewal Permit Application. Safety-Kleen must provide, to the Section, a list of residents and property owners located within one-fourth mile of the facility and documentation to demonstrate that the notifications were sent before the application can be considered complete. Safety-Kleen must also provide copies of the “green cards” demonstrating certified mailing to property owners.

Furthermore Safety-Kleen must provide a cost estimate for assessment and remediation for all known SWMUs and AOCs.

In accordance with 40 CFR 270.12 as adopted in 15A NCAC 13A .0104, you may claim confidentiality for certain information in your Part B application if the claim can be substantiated. In order to claim that information is confidential you must:

1. Determine whether or not the claim of confidentiality can be substantiated, then substantiate it (concerning each type of information claimed) by addressing the applicable element of 40 CFR 2.208 as adopted in 15A NCAC 13A .0104;
2. Precisely describe which information is claimed as confidential or stamp each page that contains such information with the words "CONFIDENTIAL" or "CONFIDENTIAL BUSINESS INFORMATION";
3. Package all pages containing confidential information separately from your total Part B application package. This means that your Part B submitted would consist of two (2) packages: (a) the Part B application without confidential information, and (b) the portion of your Part B application that has been claimed as confidential; and
4. State clearly in your transmittal letter that confidential information is included.

If no claim of confidentiality is made at the time of submission, the State and US EPA may make the information available to the public without further notice. If a claim is asserted and substantiated, the information will be treated according to the procedures in 40 CFR 2 as adopted in 15A NCAC 13A .0104.

The Section encourages you to submit your renewal application in the format of the application checklist. The Section also recommends that you arrange for a pre-application meeting with us to discuss the renewal process along with any questions you may have regarding the application requirements.

Please contact me at (919) 707-8548 or kathleen.lawson@ncdenr.gov, if you have any questions or wish to set up a meeting.

Sincerely,



Kathleen Z. Lawson, Environmental Engineer
Division of Waste Management, NC DEQ

Enclosures

ec: Mark Burnette
Todd Blake
Phil Curry
Bud McCarty
Kathleen Z. Lawson

N.C.G.S 130A-295

- (d) At least 120 days prior to submitting an application, an applicant for a permit for a hazardous waste facility shall provide to the county in which the facility is located, to any municipality with planning jurisdiction over the site of the facility, and to all emergency response agencies that have a role under the contingency plan for the facility all of the following information:
 - (1) Information on the nature and type of operations to occur at the facility.
 - (2) Identification of the properties of the hazardous waste to be managed at the facility.
 - (3) A copy of the draft contingency plan for the facility that includes the proposed role for each local government and each emergency response agency that received information under this subsection.
 - (4) Information on the hazardous waste locations within the facility.
- (e) Within 60 days of receiving the information, each local government and emergency response agency that receives information under subsection (d) of this section shall respond to the applicant in writing as to the adequacy of the contingency plan and the availability and adequacy of its resources and equipment to respond to an emergency at the facility that results in a release of hazardous waste or hazardous waste constituents into the environment according to the role set forth for the local government or emergency response agency under the contingency plan.
- (f) An applicant for a permit for a hazardous waste facility shall include documentation that each local government and emergency response agency received the information required under subsection (d) of this section, the written responses the applicant received under subsection (e) of this section, and verification by each that its resources and equipment are available and adequate to respond to an emergency at the facility in accordance with its role as set forth in the contingency plan. If the applicant does not receive a timely verification from a local government or emergency response agency notified under subsection (d) of this section, the Department shall verify the adequacy of resources and equipment for emergency response during the course of review of the permit application, taking into account any contracts entered into by the applicant for such emergency response resources.

N.C.G.S. 130A-295.01

- (e)
 - 1) Within 10 days of filing an application for a permit for a commercial hazardous waste facility, the applicant shall notify every person who resides or owns property located within one-fourth mile of any property boundary of the facility that the application has been filed. The notice shall be by mail to residents and by certified mail to property owners, or by any other means approved by the Department, shall be in a form approved by the Department, and shall include all of the following:
 - (a) The location of the facility.
 - (b) A description of the facility.
 - (c) The hazardous and nonhazardous wastes that are to be received and processed at the facility.
 - (d) A description of the emergency response plan for the facility.
 - 2) The permit holder for a commercial hazardous waste facility shall publish a notice that includes the information set out in subdivision (1) of this subsection annually beginning one year after the permit is issued. The notice shall be published in a form and manner approved by the Department in a newspaper of general circulation in the community where the facility is located.
 - 3) The permit holder for a commercial hazardous waste facility shall provide the information set out in subdivision (1) of this subsection by mail to the persons described in subdivision (1) of this subsection at the midpoint of the period for which the permit is issued.
 - 4) Each commercial hazardous waste facility applicant and permit holder shall provide documentation to demonstrate to the Department that the requirements set out in subdivisions (1), (2), and (3) of this subsection have been met.



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Secretary

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Director

INVOICE

**TO NORTH CAROLINA COMMERCIAL STORAGE, TREATMENT,
AND DISPOSAL FACILITIES**

FACILITY ID: NCD 077 840 148

COMPANY NAME: Safety-Kleen Systems, Inc.

ADDRESS: 6182 Old Mendenhall Road
 Archdale, North Carolina, 27263

**DESCRIPTION OF FEES FOR A COMMERCIAL PERMIT
APPLICATION OR MODIFICATION**

PERMIT APPLICATION FEE:		PERMIT MODIFICATION FEE:	
STORAGE FACILITY	\$ <u>14,000.00</u>	CLASS 1	\$
TREATMENT FACILITY	\$ _____	CLASS 2	\$
DISPOSAL FACILITY	\$ _____	CLASS 3	\$

TOTAL AMOUNT OF FEE(S) DUE IS \$14,000.00 AS AUTHORIZED
BY G.S. 130A-294.1

MAKE CHECK PAYABLE TO: NCDEQ / DIVISION OF WASTE MANAGEMENT
MAIL CHECK TO: 1646 MAIL SERVICE CENTER
RALEIGH, NC 27699-1646

***IMPORTANT: YOUR FACILITY ID NUMBER MUST BE ON YOUR CHECK**

**HAZARDOUS WASTE STORAGE, TREATMENT AND DISPOSAL FACILITIES
REGULATORY COMPLETENESS CHECKLIST
GUIDANCE DOCUMENT LIST**

1. RCRA Part A Permit Application Form, February 1995.
(Part A)
2. Permit Applicants' Guidance Manual for the General Facility Standards of 40 CFR 264, SW-968, October 1983.
(Parts B, F, G and H)
3. 'Waste Analysis At Facilities that Generate, Treat, Store, and Dispose of Hazardous Wastes'; A Guidance Manual. US EPA; Solid Waste and Emergency Response (OS-520); PB94-963603; OSWER 9938.4-03; April 1994.
(Part C)
4. 'Manual for Preparing RCRA Part B Permit Applications for Storage in Tanks and Containers'; Prepared by Industrial Extension Service, North Carolina State University and Solid & Hazardous Waste Management Branch, State of North Carolina; January 1983.
(Part D-1)
5. 'Technical Resource Document for the Storage and Treatment of Hazardous Waste in Tank Systems'; Prepared for US EPA, OSWER Policy Directive No. 9483.00-1; EPA/530-SW-86-044; December, 1986.
(Part D-2)
6. Guidance Manual for Hazardous Waste Incinerator Permits. Mitre Corp. NTIS PB84-100577, U.S. EPA, July 1983.
(Part D-5)
7. Guidance on Setting Permit Conditions and Reporting Trial Burn Results - Volume II of the Hazardous Waste Incineration Guidance Series, EPA/625/6-89/019, January 1989.
(Part D-5 and F)
8. Hazardous Waste Incineration Measurement Guidance Manual. EPA/625/6-89/021, June 1989.
(Part D-5)
9. Quality Assurance/Quality Control (QA/QC) Procedures for Hazardous Waste Incineration. EPA/625/6-89/023, January 1990.
(Part D-5)
10. Hazardous Waste Incinerator Inspection Manual, OSWER Directive No. 9938.6, April 1989.
(Part F)

**HAZARDOUS WASTE STORAGE, TREATMENT AND DISPOSAL FACILITIES
REGULATORY COMPLETENESS CHECKLIST
GUIDANCE DOCUMENT LIST**

11. Burning of Hazardous Waste in Boilers and Industrial Furnaces (BIF) Rule - Satellite Training Course, Solid Waste and Emergency Response, 500-B-92-003, April 1992.
(Part F)
12. RCRA Facility Assessment Guidance, EPA-OSW, October 1986.
(Part L)
13. RFA Checklist - produced in conjunction with the RCRA Facility Assessment Guidance.
(Part L)
14. Confirmatory Sampling Workplan Guidance.
(Part L)
15. Guidelines for Documentation of Substantial Compliance and Financial Qualification, North Carolina Hazardous Waste Section, July 26, 1991.
(Part N)

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**REGULATORY COMPLETENESS CHECKLIST FOR
HAZARDOUS WASTE STORAGE, TREATMENT AND DISPOSAL FACILITIES**

Facility Name _____
 EPA ID Number _____
 Address _____

 Contact Name _____
 Contact Telephone No. _____

Permit Review Team _____

 Date Application Received _____
 Date Review Completed _____

Guidance Documents for Part A

- (1) RCRA Part A Permit Application Form, November 2009.

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>PART A – APPLICATION RCRA Subtitle C Site Identification Form {270.10, 270.11 and 270.13}</p> <p>1. Reason for Submittal (Check one of the following) [Guidance(1) - pages 13 and 14]</p> <ul style="list-style-type: none"> - As a component of a First RCRA Hazardous Waste Part A Permit Application. - As a component of a Revised RCRA Hazardous Waste Part A Permit Application (provide amendment number). 	
<p>2. EPA ID Number {270.13(g)} [Guidance(1) - page 14]</p>	
<p>3. Site Name {270.13(b)} [Guidance(1) - page 14]</p>	
<p>4. Site Location {270.13(b)} [Guidance(1) - pages 14]</p> <ul style="list-style-type: none"> - Street Address 	
<ul style="list-style-type: none"> - City, Town, or Village 	
<ul style="list-style-type: none"> - County 	
<ul style="list-style-type: none"> - State 	
<ul style="list-style-type: none"> - Country Name 	
<ul style="list-style-type: none"> - Zip Code 	
<p>5. Site Land Type (Check one of the following) {270.13(b)} [Guidance(1) - page 14]</p> <ul style="list-style-type: none"> - Private - County - District - Federal - Indian - Municipal - State - Other 	
<p>6. NAICS Code (can be found at www.census.gov/epcd/naics/naicscod.txt)</p>	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
[Guidance(1) - page 14]	
7. Site Mailing Address {270.13(b)} [Guidance(1) - page 15]	
- Street or P.O. Box	
- City, Town, or Village	
- State	
- County Name	
- Zip Code	
8. Site Contact Person [Guidance(1) - page 16] (The facility contact should be someone located at the facility.)	
- First Name	
- Middle Initial	
- Last Name	
- Title	
- Street or P.O. Box	
- City, Town, or Village	
- State	
- Country	
- Zip Code	
- Email	
- Telephone number	
- Telephone Extension	
- Fax Number	
9. A. Legal Owner and Operator of Site {270.13(d)} [Guidance(1) - pages 16 and 17]	
- Name of Site's Legal Owner	
- Date Became Owner	
- Owner Type (Check one of the following) {270.13(b)} [Guidance(1) - page 16] <ul style="list-style-type: none"> · Private · County · District · Federal · Indian · Municipal · State · Other 	
- Street or P.O. Box	
- City, Town, or Village	
- Telephone Number	
- State	
- Country	
- Zip Code	
B. Legal Owner and Operator of Site {270.13(d)} [Guidance(1) - pages 16 and 17]	
- Name of Site's Operator	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<ul style="list-style-type: none"> - Date Became Operator 	
<ul style="list-style-type: none"> - Operator Type (Check one of the following) {270.13(b)} [Guidance(1) - page 26] <ul style="list-style-type: none"> • Private • County • District • Federal • Indian • Municipal • State • Other 	
<p>10. Type of Regulated Waste Activity [Guidance(1) - pages 19 to 24]</p> <p>a) Hazardous Waste Activities</p> <p>1) Generator of Hazardous Waste (Check one of the following three)</p> <ul style="list-style-type: none"> a) LQG b) SQG c) CESQG <p>(Check all that apply)</p> <ul style="list-style-type: none"> d) Short Term Generator (If yes, provide an explanation in the Comments section.) e) US Importer of Hazardous Waste f) Mixed Waste Generator 	
<p>(For items 2 through 6, check all that apply)</p> <p>2) Transporter of Hazardous Waste</p> <ul style="list-style-type: none"> a) Transporter b) Transfer Facility (at your site) <p>3) Treater, Storer or Disposer of Hazardous Waste</p> <p>4) Recycler of Hazardous Waste</p> <p>5) Exempt BIF</p> <ul style="list-style-type: none"> a) Small Quantity On-Site Burner Exemption b) Smelting, Melting, and Refining Furnace Exemption <p>6) Underground Injection Control</p> <p>7) Receives Hazardous Waste From Off-Site</p>	
<p>b) Universal Waste Activities (Check all that apply)</p> <p>1) Large Quantity Handler of Hazardous Waste</p> <ul style="list-style-type: none"> a) Batteries b) Pesticides c) Mercury containing Equipment d) Lamps e) Other (Specify) f) Other (Specify) g) Other (Specify) <p>2) Destination Facility for Universal Waste</p>	
<p>c) Used Oil Activities (Check all that apply)</p> <p>1) Used Oil Transporter</p> <ul style="list-style-type: none"> c) Transporter d) Transfer Facility (at your site) <p>2) Used Oil Processor and/or Refiner</p> <ul style="list-style-type: none"> a) Processor b) Re-refiner 	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
3) Off-Specification Used Oil Burner 4) Used Oil Marketer a) Directs Shipment b) First Claims meets Used Oil Specifications	
d) Eligible Academic Entities with Laboratories— Notification for opting into or withdrawing from managing laboratory hazardous wastes pursuant to 40 CFR Part 262 Subpart K 5) Opting into or currently operating under 40 CFR 262 Subpart K a) College or University b) Teaching Hospital c) Non-profit Institute d) Withdrawing from 40 CFR 262 Subpart K	
11. Description of Hazardous Waste [Guidance(1) - pages 24 and 25]	
12. Notification of Hazardous Secondary Material Activity [Guidance(1) - page 25]	
13. Comments [Guidance(1) - page 25]	
14. Certifications {270.11(a), 270.11(b), 270.11(d)} [Guidance(1) - page 26]	
- Owner Certification (Signature, Name and Official Title, Date)	
- Operator Certification (Signature, Name and Official Title, Date)	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>PART A – APPLICATION Hazardous Waste Permit Information Form {270.10, 270.11 and 270.13}</p> <p>1. Facility Permit Contact [Guidance(1) - page 33] (The facility contact should be someone located at the facility.)</p> <ul style="list-style-type: none"> - First Name 	
<ul style="list-style-type: none"> - Middle Initial 	
<ul style="list-style-type: none"> - Last Name 	
<ul style="list-style-type: none"> - Telephone number 	
<ul style="list-style-type: none"> - Telephone Extension 	
<ul style="list-style-type: none"> - Fax Number 	
<p>2. Facility Permit Contact Mailing Address {270.13(b)} [Guidance(1) - page 33]</p> <ul style="list-style-type: none"> - Street or P.O. Box 	
<ul style="list-style-type: none"> - City, Town, or Village 	
<ul style="list-style-type: none"> - State 	
<ul style="list-style-type: none"> - Country 	
<ul style="list-style-type: none"> - Zip Code 	
<p>3. Operator Mailing Address {270.13(b)} [Guidance(1) - page 33]</p> <ul style="list-style-type: none"> - Street or P.O. Box 	
<ul style="list-style-type: none"> - City, Town, or Village 	
<ul style="list-style-type: none"> - State 	
<ul style="list-style-type: none"> - Phone Number 	
<ul style="list-style-type: none"> - Country 	
<ul style="list-style-type: none"> - Zip Code 	
<p>4. Facility Existence Date {270.13(b)} [Guidance(1) - page 33]</p>	
<p>5. Other Environmental Permits {270.13(k)} [Guidance(1) - pages 33 and 34]</p> <ul style="list-style-type: none"> - Permit type (N, P, R, U, F or E) 	
<ul style="list-style-type: none"> - Permit number 	
<ul style="list-style-type: none"> - Description 	
<p>6. Nature of the Business {270.13(m)} [Guidance(1) - page 34]</p>	
<p>7. Process - Codes and Design Capacities {270.13(a), 270.13(i)} [Guidance(1) - page 34]</p> <ul style="list-style-type: none"> - Process codes 	
<ul style="list-style-type: none"> - Amount 	
<ul style="list-style-type: none"> - Unit of measure (See table at end of checklist) 	
<ul style="list-style-type: none"> - Process total number of units 	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
8. Other Processes {270.13(a), 270.13(i)} [Guidance(1) - page 34]	
<ul style="list-style-type: none"> - Line Number 	
<ul style="list-style-type: none"> - Process Code 	
<ul style="list-style-type: none"> - Amount 	
<ul style="list-style-type: none"> - Unit of measure (See table at end of checklist) 	
<ul style="list-style-type: none"> - Process total number of units 	
9. Description of Hazardous Wastes {270.13(j), 270.13(n)} [Guidance(1) – pages 34 and 35]	
<ul style="list-style-type: none"> - EPA hazardous waste number 	
<ul style="list-style-type: none"> - Estimated annual quantity 	
<ul style="list-style-type: none"> - Unit of measure (P, T, K or M) 	
<ul style="list-style-type: none"> - Process code 	
<ul style="list-style-type: none"> - Process description 	
10. Map {270.13(l)} [Guidance(1) - pages 35]	
<ul style="list-style-type: none"> - Topographic map 	
<ul style="list-style-type: none"> - One mile beyond property line 	
<ul style="list-style-type: none"> - Legal boundaries of facility 	
<ul style="list-style-type: none"> - Location and serial number of each existing and proposed intake and discharge structures 	
<ul style="list-style-type: none"> - Hazardous waste treatment, storage, and disposal units listed in Items XII and XIII identified by process code 	
<ul style="list-style-type: none"> - Each underground injection well 	
<ul style="list-style-type: none"> - Wells, springs, rivers, and other surface water bodies 	
<ul style="list-style-type: none"> - Drinking water wells within 1/4 mile of the facility property boundary. 	
11. Facility Drawing {270.13(h)(1)} [Guidance(1) - page 36]	
<ul style="list-style-type: none"> - Property boundaries of the facility 	
<ul style="list-style-type: none"> - Areas occupied by all storage, treatment, or disposal operations 	
<ul style="list-style-type: none"> - The name of each operation 	
<ul style="list-style-type: none"> - Areas of past storage, treatment, or disposal operations 	
<ul style="list-style-type: none"> - Areas of future storage, treatment, or disposal operations 	
<ul style="list-style-type: none"> - The approximate dimensions of the property boundaries and all storage, treatment, and disposal areas 	
12. Photographs {270.13(h)(2)} [Guidance(1) - page 36]	
Photographs should clearly delineate:	
<ul style="list-style-type: none"> - all existing structures 	
<ul style="list-style-type: none"> - all existing areas for storing, treating, or disposing of hazardous waste 	
<ul style="list-style-type: none"> - all known sites of future storage, treatment, or disposal operations 	
Process codes should be used to indicate the location of all	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
storage, treatment, or disposal areas	
The date each photograph was taken should be provided	
13. Comments [Guidance(1) - page 36]	

PROCESS CODES AND ACCEPTABLE UNITS OF MEASURE

Process Code	Process	Appropriate Unit of Measure for Process Design Capacity
D79	<u>Disposal:</u> Underground Injection Well-Disposal	G, L, U, V
D80	Landfill	Y, C, B, A, Q, F
D81	Land Application	B, Q
D82	Ocean Disposal	U, or V
D83	Surface Impoundment-Disposal	G, L, Y, C
D99	Other Disposal	G, E, U, L, H, V, D, W, N, S, J, R, Y, C, B, A, Q, F, I, X
S01	<u>Storage:</u> Container	G, L, Y, C
S02	Tank-Storage	G, L, Y, C
S03	Waste Pile	Y, C
S04	Surface Impoundment-Storage	G, L, Y, C
S05	Drip Pad	G, L, Y, C, B, Q
S06	Containment Building-Storage	Y, C
S99	Other Storage	G, E, U, L, H, V, D, W, N, S, J, R, Y, C, B, A, Q, F, I, X
T01	<u>Treatment:</u> Tank-Treatment	E, U, H, V, D, W, N, S, J, R
T02	Surface Impoundment-Treatment	E, U, H, V, D, W, N, S, J, R
T03	Incinerator	E, U, H, V, D, W, N, S, J, R
T04	Other Treatment	E, U, H, V, D, W, N, S, J, R
T80	Boiler	G, E, L, H, I, X
T81	Cement Kiln	E, U, H, V, D, W, N, S, J, R, I, X
T82	Lime Kiln	E, U, H, V, D, W, N, S, J, R, I, X
T83	Aggregate Kiln	E, U, H, V, D, W, N, S, J, R, I, X
T84	Phosphate Kiln	E, U, H, V, D, W, N, S, J, R, I, X
T85	Coke Oven	E, U, H, V, D, W, N, S, J, R, I, X
T86	Blast Furnace	E, U, H, V, D, W, N, S, J, R, I, X
T87	Smelting, Melting or Refining Furnace	E, U, H, V, D, W, N, S, J, R, I, X
T88	Titanium Dioxide Chloride Process Oxidation Reactor	E, U, H, V, D, W, N, S, J, R, I, X
T89	Methane Forming Furnace	E, U, H, V, D, W, N, S, J, R, I, X
T90	Pulping Liquor Recovery Furnace	E, U, H, V, D, W, N, S, J, R, I, X
T91	Combustion Device Used in Recovery of Sulfur Values from Spent Sulfuric Acid	E, U, H, V, D, W, N, S, J, R, I, X
T92	Halogen Acid Furnace	E, U, H, V, D, W, N, S, J, R, I, X
T93	Other Industrial Furnaces	E, U, H, V, D, W, N, S, J, R, I, X
T94	Containment Building-Treatment	E, U, H, V, D, W, N, S, J, R, Y, C
X01	<u>Miscellaneous (Subpart X):</u> Open Burning/Open Detonation	G, E, U, L, H, V, D, W, N, S, J, R, Y, C, B, A, Q, F, I, X
X02	Mechanical Processing	E, U, H, V, D, W, N, S, J, R
X03	Thermal Unit	U, V, J, D, R, W, S, N, I, X
X04	Geologic Repository	G, L, Y, C, A, F
X99	Other Subpart X	G, E, U, L, H, V, D, W, N, S, J, R, Y, C, B, A, Q, F, I, X

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**REGULATORY COMPLETENESS CHECKLIST FOR
HAZARDOUS WASTE STORAGE, TREATMENT AND DISPOSAL FACILITIES**

Facility Name _____
 EPA ID Number _____
 Permit Review Team _____

 Date Review Completed _____

Guidance Documents for Part B

(2) Permit Applicants' Guidance Manual for the General Facility Standards of 40 CFR 264, SW-968, October 1983.

Subject Requirement and 40 CFR Reference	Location in Application and Comments
PART B - FACILITY DESCRIPTION	
<p>B-1 <u>General Description</u></p> <p>A general description of the facility. This description should include: {270.14 (b)(1) and 15A NCAC 13A .0113(c)(6)} [Guidance(2) - page 5-3]</p> <ul style="list-style-type: none"> - Facility Name; - Name of owner; - Location/address; - New or existing; - Size (acres, number of units); - Type of facility (on-site, off-site; storage, treatment, disposal); - Nature of the business; - Waste types and quantities stored, treated, and/or disposed; and - For off-site facilities, the types of industry served; - For on-site facilities, a description of the process(es) involved in the generation of hazardous waste. 	
<p>B-2 <u>Topographic Map</u></p> <p>B-2a <u>General Requirements</u></p> <p>A topographic map showing the facility and a distance of 1000 feet around it. The following information is required: {270.14(b)(19) and 15A NCAC 13A .0113(c)(6)}</p> <ul style="list-style-type: none"> - Scale 1 in = 200 ft; {270.14(b)(19)} - Contours sufficient to show surface water flow; {270.14(b)(19)} - Extend 1000 ft. beyond property; {270.14(b)(19)} - Map scale; {270.14(b)(19)(i)} - Map date; {270.14(b)(19)(i)} - 100-yr floodplain; {270.14(b)(19)(ii)} 	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
- Surface waters (including intermittent streams); {270.14(b)(19)(iii)}	
- Surrounding land uses; {270.14(b)(19)(iv) and 15A NCAC 13A .0113(c)(4)}	
- Wind rose; {270.14(b)(19)(v)}	
- Map orientation; {270.14(b)(19)(vi)}	
- Legal boundaries; {270.14(b)(19)(vii)}	
- Location of access control; {270.14(b)(19)(viii)}	
- Injection and withdrawal wells both on-site and off-site; {270.14(b)(19)(ix)}	
- Buildings and structures; {270.14(b)(19)(x)}	
- Storm, sanitary and process sewers; {270.14(b)(19)(x)}	
- Loading and unloading areas; {270.14(b)(19)(x)}	
- Fire control facilities; {270.14(b)(19)(x)}	
- Flood control or drainage barriers; {270.14(b)(19)(xi)}	
- Run-off control systems; {270.14(b)(19)(x)}	
- Location of hazardous waste units; {270.14(b)(19)(xii)}	
- Location of solid waste management units; and {270.14(d)(1)(i)}	
- Access and internal roads. {270.14(b)(19)(x)}	
For large facilities, the use of other scales may be acceptable on a case-by-case basis. {Note following 270.14(b)(19)}	
B-2b <u>Additional Topographic Requirements for Land Storage, Treatment and Disposal Facilities</u> (See Checklist Module E for Topographic Map Requirements.) {270.14(c)(3), and (c)(4)(i), 264.95, and 264.97}	
B-3 <u>Traffic Information</u> A description of the means of transporting hazardous wastes. All facilities should describe movement of waste on the facility. Description must include: {270.14(b)(10)} - Estimated volume - Traffic pattern - Traffic control - Access road(s) surfacing and load-bearing capacity.	
Off-site facilities should also describe movement of waste to the facility from the point to where it leaves the nearest major highway. {15A NCAC 13A .0113(c)(5)}	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
[Guidance(2) - page 5-136]	
<p>B-4 <u>Location Information</u></p> <p>B-4a <u>Seismic Considerations</u></p> <p>For new facilities only, the applicant must identify the political jurisdiction (county, township, or election district) in which the facility will be located. If the facility is proposed to be located in any of the political jurisdictions specified in Part 264 Appendix VI, the applicant must prove that the facility is located at least 3000 ft from any fault where movement has taken place in Holocene time or that no such faults pass within 200 ft of the portions of the facility used for treatment, storage, or disposal of hazardous waste. Proof may come from geologic studies, aerial photographs, field observations, or subsurface investigations. All information gathered must be acceptable by a geologist experienced in evaluating seismic activity. {270.14(b)(11)(i) and (ii), 264.18(a), and 264 Appendix VI} [Guidance(2) pages 5-144 and 145]</p>	
<p>B-4b <u>Floodplain Standard</u></p> <p>Documentation of whether or not the facility is located within a 100-yr floodplain including the source of data (Federal Insurance Administration Map or other maps and calculations). If a map other than a FIA map is used, demonstration of equivalent mapping technique should be provided. If located in a 100-yr floodplain include: {270.14(b)(11)(iii) and Comment following 270.14(b)(11)(iii)}</p> <ul style="list-style-type: none"> - 100-yr floodplain level, {270.14(b)(11)(iii)} 	
<ul style="list-style-type: none"> - Other special flooding factors (e.g., wave action) that must be considered to withstand washout. {270.14(b)(11)(iii)} 	
<p>B-4b(1) <u>Demonstration of Compliance</u></p> <p>For facilities located within the 100-yr floodplain, a description of how the facility is designed, constructed, operated, and maintained to prevent washout of any hazardous waste during a flood. Either of the following may be used: {270.14(b)(11)(iv) and 264.18(b)}</p>	
<p>B-4b(1)(a) <u>Flood Proofing and Flood Protection</u></p> <p>A structural or other engineering study showing how design of the tanks, containers, or waste piles and the flood proofing and protection devices at the facility will prevent washout including: {270.14(b)(11)(iv)}</p> <ul style="list-style-type: none"> - Engineering analysis of hydrodynamic and hydrostatic forces, {270.14(b)(11)(iv)(A)} 	
<ul style="list-style-type: none"> - Structural or other engineering studies of hazardous waste units and flood protection devices. {270.14(b)(11)(iv)(B)} 	
<p>B-4b(1)(b) <u>Flood Plan</u></p> <p>Description of the procedures to be followed to remove</p>	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
hazardous waste to safety before the facility is flooded. The plan must address the following: {270.14(b)(11)(iv)(C)}	
<ul style="list-style-type: none"> - Timing of waste movement related to flood levels; {270.14(b)(11)(iv)(C)(1)} 	
<ul style="list-style-type: none"> - Estimated time to move the waste; {270.14(b)(11)(iv)(C)(1)} 	
<ul style="list-style-type: none"> - Description of the location to which the waste will be moved and proof of the receiving facility's eligibility to receive hazardous waste; {270.14(b)(11)(iv)(C)(2)} 	
<ul style="list-style-type: none"> - Procedures, equipment, and personnel to be used and the means to ensure that these resources will be available; {270.14(b)(11)(iv)(C)(3)} 	
<ul style="list-style-type: none"> - Potential for accidental discharge of waste during movement of waste. {270.14(b)(11)(iv)(C)(4)} 	
<p>B-4b(2) <u>Plan for Future Compliance with Floodplain Standard</u></p> <p>For facilities located within the 100-yr floodplain that do not comply with the floodplain standard, a plan showing how and when the facility will be brought into compliance. A compliance schedule must be included. {270.14(b)(11)(v)}</p>	
<p>B-4b(3) <u>Waiver for Land Storage and Disposal Facilities (Existing Facilities Only)</u></p> <p>If a waiver from the Floodplain Standard is requested, the owner or operator must demonstrate that there will be no adverse effects on human health or the environment if washout occurs. The following factors must be considered in this demonstration: {264.18(b)(1)(ii)}</p>	
<ul style="list-style-type: none"> - Volume and physical and chemical characteristics of the waste; {264.18(b)(1)(ii)(A)} 	
<ul style="list-style-type: none"> - Concentration of hazardous constituents that would potentially affect surface waters; {264.18(b)(1)(ii)(B)} 	
<ul style="list-style-type: none"> - Impact of such concentration on the current or potential uses of and water quality standard established for the affected surface waters; and {264.18(b)(1)(ii)(C)} 	
<ul style="list-style-type: none"> - Impact of hazardous constituents on the sediments of affected surface waters or the soils or the 100-yr floodplain. {264.18(b)(1)(ii)(D)} 	
<p>B-4c <u>Additional North Carolina Location Standards</u></p> <p>The following minimum separation distances shall be required of all hazardous waste management facilities except that existing facilities shall be required to meet these distances to the maximum extent feasible. {15A NCAC 13A .0109(f)(2), .0113(c)(3) and .0113(c)(5)}</p> <ul style="list-style-type: none"> - Hazardous waste management facilities shall be located at 	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
least 0.25 miles from institutions such as schools, hospitals, prisons, etc. { 15A NCAC 13A .0109(r)(2)(A) and .0113(c)(5) }	
- Hazardous waste treatment and storage facilities shall: <ul style="list-style-type: none"> • store and/or treat all hazardous waste a minimum of 50 feet from the property line of the facility; and 	
<ul style="list-style-type: none"> • store and/or treat all ignitable, incompatible, or reactive wastes a minimum of 200 feet from the facility property line if the area adjacent to the facility is zoned for any use other than industrial or is not zoned. { 15A NCAC 13A .0109(r)(2)(B) }	
- Hazardous waste landfills, long-term storage facilities, land treatment facilities, and surface impoundments shall be located 200 feet from the facility property line. { 15A NCAC 13A .0109(r)(2)(C)(i) }	
- Hazardous waste landfills, long-term storage facilities, and surface impoundments shall be constructed so that the bottom of the facility is 10 feet or more above the historical high ground water level. { 15A NCAC 13A .0109(r)(2)(C)(ii) }	
- Hazardous waste landfills, long-term storage facilities, land treatment facilities, and surface impoundments shall be located at least 1,000 feet from the zone of influence of any existing off-site ground water well used for drinking water. { 15A NCAC 13A .0109(r)(2)(C)(iii) }	
- Hazardous waste landfills, long-term storage facilities, land treatment facilities, and surface impoundments shall be located outside the zone of influence of any existing or planned on-site drinking water well. { 15A NCAC 13A .0109(r)(2)(C)(iii) }	
- Hazardous waste treatment and storage facilities for liquid waste that is TC toxic, toxic, or acutely toxic and is stored in tanks or containers shall not be located: <ul style="list-style-type: none"> • in the recharge area of an aquifer which is designated as an existing sole drinking water source unless an adequate secondary containment system is constructed and the facility can demonstrate no unreasonable risk to public health; { 15A NCAC 13A .0109(r)(2)(D)(i) }	
<ul style="list-style-type: none"> • Within 200 feet of surface water impoundments or surface water streams with continuous flow; { 15A NCAC 13A .0109(r)(2)(D)(ii) }	
<ul style="list-style-type: none"> • In an area that will allow direct surface or subsurface discharge to WS-I, WS-II, or SA waters or a Class III Reservoir as defined in 15A NCAC 2B .0200 and 15A NCAC 18C .0102; { 15A NCAC 13A .0109(r)(2)(D)(iii) }	
<ul style="list-style-type: none"> • In an area that will allow direct surface or subsurface discharge to the watershed for a Class I or Class II Reservoir as defined in 15A NCAC 18C .0102; { 15A NCAC 13A .0109(r)(2)(D)(iv) }	
<ul style="list-style-type: none"> • Within 200 feet horizontally of a 100-year floodplain elevation; { 15A NCAC 13A .0109(r)(2)(D)(v) }	
<ul style="list-style-type: none"> • Within 200 feet of a seismically active area; and { 15A NCAC 13A .0109(r)(2)(D)(vi) }	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<ul style="list-style-type: none"> • Within 200 feet of a mine cave or cavernous bedrock. { 15A NCAC 13A .0109(r)(2)(D)(vii) and .0113(c)(3) } 	
<ul style="list-style-type: none"> - A hazardous waste landfill, long-term storage, or a surface impoundment facility shall not be located: <ul style="list-style-type: none"> • In the recharge area of an aquifer which is an existing sole drinking water source; { 15A NCAC 13A .0109(r)(4)(A)(i) } 	
<ul style="list-style-type: none"> • Within 200 feet of a surface water stream with continuous flow as defined by the United States Geological Survey; { 15A NCAC 13A .0109(r)(4)(A)(ii) } 	
<ul style="list-style-type: none"> • In an area that will allow direct surface or subsurface discharge to WS-I, WS-II or SA waters or a Class III Reservoir as defined in 15A NCAC 2B .0200 and 15A NCAC 18C .0102; { 15A NCAC 13A .0109(r)(4)(A)(iii) } 	
<ul style="list-style-type: none"> • In an area that will allow direct surface or subsurface discharge to a watershed for a Class I or II Reservoir as defined in 15A NCAC 18C .0102; { 15A NCAC 13A .0109(r)(4)(A)(iv) } 	
<ul style="list-style-type: none"> • Within 200 feet horizontally of a 100-year flood hazard elevation; { 15A NCAC 13A .0109(r)(4)(A)(v) } 	
<ul style="list-style-type: none"> • Within 200 feet of a seismically active area as defined in (c) of this Rule; and { 15A NCAC 13A .0109(r)(4)(A)(vi) } 	
<ul style="list-style-type: none"> • Within 200 feet of a mine, cave or cavernous bedrock. { 15A NCAC 13A .0109(r)(4)(A)(vii) } 	
<p>B-5 <u>Additional North Carolina Requirements</u></p>	
<p>B-5a <u>Monitoring Wells for New Facilities</u></p> <p>The owners and operators of all new hazardous waste management facilities shall construct and maintain a minimum of two observation wells, one upgradient and one downgradient of the proposed facility; and shall establish background groundwater concentrations and monitor annually for all hazardous wastes that the owner or operator proposes to store, treat, or dispose at the facility. { 15A NCAC 13A .0109(r)(6) }</p>	
<p>B-5b <u>Public Participation for New Facilities</u></p>	
<p>The owners and operators of all new hazardous waste facilities shall demonstrate that the community has had an opportunity to participate in the siting process by complying with 15A NCAC 13A .0109(r)(7) and providing the following with the permit application: { 15A NCAC 13A .0109(r)(7) and .0113(c)(1) }</p>	
<ul style="list-style-type: none"> - Copies of the public notices for the two public meetings. { 15A NCAC 13A .0109(r)(7)(A) and (C) } 	
<ul style="list-style-type: none"> - Copies of the transcripts from both of the public meetings. { 15A NCAC 13A .0109(r)(7)(A) and (C) } 	
<ul style="list-style-type: none"> - Copies of all other relevant written material distributed or used at the meeting. 	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
{ 15A NCAC 13A .0109(r)(7)(C)}	

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**REGULATORY COMPLETENESS CHECKLIST FOR
HAZARDOUS WASTE STORAGE, TREATMENT AND DISPOSAL FACILITIES**

Facility Name _____
 EPA ID Number _____
 Permit Review Team _____

 Date Review Completed _____

Guidance Document for Part C

(3) 'Waste Analysis At Facilities that Generate, Treat, Store, and Dispose of Hazardous Wastes'; A Guidance Manual. US EPA; Solid Waste and Emergency Response (OS-520); PB94-963603; OSWER 9938.4-03; April 1994.

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>PART C - WASTE ANALYSIS PLAN</p> <p>The Waste Analysis Plan (WAP) should describe the chemical and physical properties of the wastes managed and the procedures implemented to obtain detailed chemical and physical data on the wastes in order to insure proper storage, treatment, and disposal as well as compliance with the land disposal restriction (LDR) program. Requirements of the WAP include: {270.14(b)(2)&(3), 264.13, 268.7}</p>	
<p>C-1 <u>Waste Management and Identification</u></p> <p>Provide a general description of the waste management activities and a description of the wastes managed at the facility. Include sufficient, yet succinct information on the following: {264.13(a)} [Guidance(3) - Section 2.1 & Appendix A]</p>	
<p>C-1a <u>Waste Management Processes and Activities</u></p> <p>Provide a brief description of the processes and activities that are used to manage wastes. This information may include facility diagrams, narrative process descriptions, and other data relevant to the waste management processes subject to waste analysis; or reference applicable sections of the application. For off-site TSDFs, the WAP should include a brief description of each generator's process contributing wastes to the facility. A statement that a brief description will be obtained, updated, and kept on file as part of the operating record may be provided along with a brief description of the generator's processes for the categories of wastes managed at the facility. (see C-5a) {264.13(a) & (b)(5)} [Guidance(3) - Section 2.1.1]</p>	
<p>C-1b <u>Waste Identification/Classification</u></p> <p>A detailed chemical and physical analysis of a representative sample of each waste managed at the facility must be obtained. At a minimum, the analysis must contain all the information which must be known to treat, store, or dispose of the waste in accordance with Part 264 and Part 268 requirements; or conditions of the permit issued under Part 270. A laboratory report of the results of the analysis should be provided. Clearly identify and describe the following:</p>	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
{270.14(b)(2), 264.13(a)(1)} [Guidance(3) - Section 2.1.2]	
<ul style="list-style-type: none"> - Each hazardous waste managed, 	
<ul style="list-style-type: none"> - Each process generating these wastes, 	
<ul style="list-style-type: none"> - Rationale for identifying each waste as hazardous, 	
<ul style="list-style-type: none"> - Appropriate EPA waste classifications including EPA waste code and classification under LDR regulations as wastewater or non- waste water, 	
<ul style="list-style-type: none"> - If necessary, any wastes or waste properties that will not be managed by the facility (i.e. inappropriate waste). 	
(For facilities which manage a large number of waste streams, sufficient information must be provided for each waste type/category in order to treat, store, or dispose of the wastes properly.)	
For new facilities, existing published or documented data on the hazardous waste or on hazardous waste from a similar process may be provided. {264.13(a)(2)}	
C-1c <u>Description of Hazardous Waste Management Units (HWMU)</u>	
In order to adequately identify all appropriate waste analysis parameters (see C-2) for each waste, a brief description of the specific operating conditions and process constraints for each HWMU may be required. The following information should be evaluated and included in the WAP as necessary:	
{264.13(a)(1)} [Guidance(3) - Section 2.1.3 & Appendix E]	
<ul style="list-style-type: none"> - A physical description of each HWMU, the waste types managed in each unit, and the management methods for each waste or unit, 	
<ul style="list-style-type: none"> - Ignitable, reactive, or incompatible wastes managed, 	
<ul style="list-style-type: none"> - Process/design considerations and limitations necessary to ensure that waste management units are operated in a safe manner and meet applicable performance standards, 	
<ul style="list-style-type: none"> - Prohibitions that apply to the facility (e.g. PCB's in incinerator feed, storage of corrosive basic waste, unpermitted RCRA hazardous waste codes). 	
C-1c(1) <u>Containers</u>	
Provide the following specific information for wastes managed in container management units:	
<ul style="list-style-type: none"> - Describe the compatibility of the hazardous wastes to be managed with respect to the containers used. {264.172} 	
<ul style="list-style-type: none"> - For each waste to be managed, identify ignitable, reactive, and incompatible wastes. {264.13(a)(1), 264.176, 264.177} 	
<ul style="list-style-type: none"> - For storage areas that store containers holding wastes that do not contain free liquids, describe test procedures and results or provide other documentation or information which show that wastes do not contain free liquids. The test for free 	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
liquids is the Paint Filter Liquids, Test Method 9095 in SW-846. {270.15(b)(1)}	
<p>C-1c(2) <u>Tanks</u></p> <p>Provide the following specific information for wastes managed in tanks:</p> <ul style="list-style-type: none"> - Specify the specific gravity of the wastes to be managed in each tank system. {264.191(a)&(b), 264.192(a)} 	
<ul style="list-style-type: none"> - For each waste to be managed, identify ignitable, reactive, and incompatible wastes. {264.13(a)(1), 264.198, 264.199} 	
<p>C-1c(3) <u>Waste Piles</u></p> <p>For waste piles that are inside or under a structure when an exemption from 264.251 is requested, the following must be provided:</p> <ul style="list-style-type: none"> - Test procedures and results, or other documentation or information, which shows that the wastes do not contain free liquids when placed on the pile. The test for free liquids is the Paint Filter Liquids Test, Method 9095 in SW-846. {264.250(c)(1)} 	
<ul style="list-style-type: none"> - Demonstration that the wastes will not generate leachate through decomposition or other reactions while being stored. {264.250(c)(4)} 	
<p>C-1c(4) <u>Surface Impoundments</u></p> <p>Provide the following specific information for wastes managed in surface impoundments:</p> <ul style="list-style-type: none"> - Describe the compatibility of the hazardous wastes to be managed with respect to the liner. {264.221(a)(1)} 	
<ul style="list-style-type: none"> - If applicable, provide test data to verify that wastes are exempt from the land disposal restrictions under Section 268.4(a). {264.13(b)(7)} 	
<p>C-1c(5) <u>Landfills</u></p> <p>Provide the following specific information for wastes managed in landfills:</p> <ul style="list-style-type: none"> - Results of the Paint Filter Liquids Test, Method 9095 in SW-846, showing that containerized or bulk wastes do not contain free liquids. {264.314(c)} 	
<ul style="list-style-type: none"> - Describe the compatibility of the hazardous wastes to be managed with respect to the liner. {264.301(a)(1)(i)} 	
<p>C-1c(6) <u>Land Treatment</u></p> <p>Provide the following specific information for wastes managed in land treatment units:</p>	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<ul style="list-style-type: none"> - For each waste that will be applied to the treatment zone, provide a demonstration that hazardous constituents in the waste can be completely degraded, transformed, or immobilized in the treatment zone. {264.272(a)} 	
<ul style="list-style-type: none"> - Concentration of Appendix VIII constituents. {264.272(c)(1)(i)} 	
<ul style="list-style-type: none"> - Cadmium concentration when foodchain crops are grown in the treatment zone. {264.276(b)} 	
<ul style="list-style-type: none"> - The following additional information should be provided: <ul style="list-style-type: none"> • percent moisture • specific gravity or bulk density • conductivity • acidity or alkalinity • TOC • concentration and identification of VOCs [Guidance(3) - Section 2.2.4] 	
<p>C-1c(7) <u>Drip Pads</u></p> <p>Provide the following specific information for wastes managed on drip pads:</p> <ul style="list-style-type: none"> - Describe the compatibility of the hazardous wastes to be managed with respect to the liner. {264.573(b)(1)(i)&(2)(i)} 	
<p>C-1c(8) <u>Containment Buildings</u></p> <p>Provide the following specific information for wastes managed in containment buildings:</p> <ul style="list-style-type: none"> - If applicable, provide results of the Paint Filter Liquids Test, Method 9095 in SW-846, showing that wastes do not contain free liquids. {264.1101(b)} 	
<ul style="list-style-type: none"> - Describe the compatibility of the hazardous wastes to be managed with respect to the materials of construction. {264.1101(b)(3)(iii)} 	
<p>C-1c(9) <u>Incinerators</u></p> <p>For each waste or mixture of wastes to be burned, the following must be provided as applicable:</p> <ul style="list-style-type: none"> - Identification and quantification of Appendix VIII constituents which are reasonably expected to be in the waste. The constituents excluded from analysis must be identified and the basis for exclusion stated. - heat content - viscosity or physical form - chlorine content - ash content - percent moisture - pH - total metals <p>{264.341(a), 270.62(b)(2)(i)}</p>	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>C-1c(10) <u>Boilers and Industrial Furnaces</u></p> <p>For each feed stream, including hazardous waste, other fuels, and industrial furnace feed stocks as fired, the following must be provided as applicable:</p> <ul style="list-style-type: none"> - Identification and quantification of Appendix VIII constituents which are reasonably expected to be in the waste. The constituents excluded from analysis must be identified and the basis for exclusion stated. 	
<ul style="list-style-type: none"> - heat content 	
<ul style="list-style-type: none"> - viscosity or physical form 	
<ul style="list-style-type: none"> - chlorine content 	
<ul style="list-style-type: none"> - ash content 	
<ul style="list-style-type: none"> - percent moisture 	
<ul style="list-style-type: none"> - pH 	
<ul style="list-style-type: none"> - total metals(antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, silver, thallium, in addition to nickel and selenium) {266.102(b)(1), 270.66(c)(1)&(c)(2)(i)&(ii)} 	
<ul style="list-style-type: none"> - If blending is to occur prior to firing, provide a detailed analysis of the hazardous waste prior to blending and of the material with which it is blended, the blending ratios, and a description of blending procedures. {270.66(c)(2)(iii)} 	
<p>C-1d <u>Waste Re-Evaluation Frequencies</u></p> <p>Specify the frequency with which the initial analysis (see C-1b) will be reviewed or repeated which is sufficient to ensure that the waste analysis information is accurate and up-to-date. At a minimum, each type of waste must be analyzed on at least an annual basis. In addition, the analysis must be repeated: {264.13(a)(3), 264.13(b)(4)} [Guidance(3) - Section 2.5]</p> <ul style="list-style-type: none"> - When the owner or operator is notified, or has reason to believe, that the process or operation generating the hazardous waste has changed, and {264.13(a)(3)(i)} 	
<ul style="list-style-type: none"> - For off-site facilities, when the results of an inspection indicate that the waste does not match the waste on the accompanying manifest or shipping paper. {264.13(a)(3)(ii)} 	
<p>C-2 <u>Parameter Selection and Rationale</u></p> <p>The WAP must include procedures for initial and annual waste analysis, as well as procedures for fingerprint analysis to be implemented when wastes are received from off-site. (see C-5) Provide a list of parameters chosen for initial, annual and fingerprint analysis and an explanation of how these parameters will provide sufficient information on the chemical and physical properties of the waste to ensure safe and effective waste management. The chosen parameters must provide sufficient information in the following categories: {264.13(b)(1), 268.7} [Guidance(3) - Section 2.2]</p>	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>C-2a <u>Waste Identification</u></p> <p>Specify parameters necessary to ensure that wastes generated and/or accepted are accurately identified. Include provisions to ensure applicable LDR requirements are fulfilled. {264.13(b)(1)} [Guidance(3) - Section 2.2.1]</p>	
<p>C-2b <u>Identification of Incompatible and Inappropriate Wastes</u></p> <p>Specify parameters to identify ignitable, reactive, or incompatible wastes or wastes that are inappropriate given the type of management practices used by the facility. {264.13(b)(1)} [Guidance(3) - Section 2.2.1 & 2.6.2]</p>	
<p>C-2c <u>Process and Design Considerations</u></p> <p>Specify parameters to ensure that wastes accepted for management will not exceed process and design operating limitations and that process performance standards can be met. {264.13(b)(1)} [Guidance(3) - Section 2.2.1]</p>	
<p>C-2d <u>TSDF Process Vents and Equipment</u></p> <p>Wastes must be analyzed in accordance with methods specified (SW-846 Methods 9060 or 8240) in order to identify and verify the total organic concentration of wastes managed in units subject to 264, Subpart AA. Wastes with a total organic concentration equal to or greater than 10 ppmw and which are managed in specific units are subject to Subpart AA. Wastes with a total organic concentration equal to or greater than 10% by weight are subject to Subpart BB. {264.1034(d); 264.1063(d)}</p>	
<p>C-2e <u>Exemption from Subpart CC</u></p> <p>For facilities seeking an exemption to the air emission standards of Subpart CC, provide the following: {264.13(b)(8)}</p> <ul style="list-style-type: none"> - The procedures and schedules for waste sampling and analysis, and the analysis of test data to verify the exemption. {264.13(b)(8)(i)} 	
<ul style="list-style-type: none"> - Each generator's notice and certification of the volatile organic concentration in the waste if the waste is received from off-site. {264.13(b)(8)(ii)} 	
<p>C-2f <u>Unit Specific Parameters</u></p> <p>Examples of parameters for complying with waste management requirements for specific hazardous waste management units are: {264.13(b)(1)&(6)} [Guidance(3) - Table 2-5]</p>	
<ul style="list-style-type: none"> - Containers <ul style="list-style-type: none"> • PH • Flash Point • Total and Amenable Cyanide/Sulfide • Appropriate Hazardous Constituents 	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<ul style="list-style-type: none"> - Tanks <ul style="list-style-type: none"> • Specific gravity • pH • Flash Point • Halogens • Total and Amenable Cyanide/Sulfide • Oxidizing Potential • Appropriate Hazardous Constituents 	
<ul style="list-style-type: none"> - Waste Piles <ul style="list-style-type: none"> • PH • Total and Amenable Cyanide/Sulfide • Oxidizing Potential • Ketones • Total Chlorine • Liner Compatibility Tests • Appropriate Hazardous Constituents 	
<ul style="list-style-type: none"> - Surface Impoundments <ul style="list-style-type: none"> • pH • Total Suspended Solids(TSS) • Flash Point • Total and Amenable Cyanide/Sulfide • Oxidizing Potential • Total Chlorine • Liner Compatibility Tests • Total Petroleum Hydrocarbons • Appropriate Hazardous Constituents 	
<ul style="list-style-type: none"> - Landfills <ul style="list-style-type: none"> • Free Liquid Content • pH • Total Chlorine • Total Nitrogen • Liner Compatibility Tests • Total and Amenable Cyanide/Sulfide • Chemical Compatibility Evaluations • Appropriate Hazardous Constituents 	
<ul style="list-style-type: none"> - Land Treatment <ul style="list-style-type: none"> • pH • Total Metals • Total and Amenable Cyanide/Sulfide • Electrical Conductivity • Appropriate Hazardous Constituents 	
<ul style="list-style-type: none"> - Incinerators <p>Throughout normal operation, sufficient waste analysis must be conducted to verify that the waste feed to the combustion unit is within the physical and chemical limits to be specified in the permit based on the results of the Trial Burn. The following analysis must be conducted as applicable:</p> <ul style="list-style-type: none"> • Appendix VIII constituents • heat content • viscosity or physical form • chlorine content • ash content • percent moisture • pH • total metals <p>{264.341(b)}</p> <p>[Guidance(3) - Section 2.6.1.1]</p> 	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>- Boilers and Industrial Furnaces Throughout normal operation, sufficient waste analysis must be conducted to verify that the waste feed to the combustion unit is within the physical and chemical limits to be specified in the permit based on the results of the Trial Burn. For each feed stream, including hazardous waste, other fuels, and industrial furnace feed stocks as fired, the following analysis must be conducted as applicable:</p> <ul style="list-style-type: none"> • Appendix VIII constituents • heat content • viscosity or physical form • chlorine content • ash content • percent moisture • pH • total metals(Ag, As, Ba, Be, Cd, Cr, Pb, Hg, Sb, Ti, Se, Ni) <p>{266.102(b)(2)} [Guidance(3) - Section 2.6.1.1]</p>	
<p>C-3 <u>Sampling Procedures</u></p> <p>Specify the sampling method which will be used to obtain a representative sample of each waste or waste type to be analyzed. A representative sample may be obtained using either one of the sampling methods described in Appendix I of Part 261 or an equivalent method. Required information includes:</p> <p>{264.13(b)(3)} [Guidance(3) - Section 2.3]</p>	
<p>C-3a <u>Sampling Methods and Equipment</u></p> <p>- Identify the sampling procedures and techniques (e.g. grab, composite) that will be used to obtain a representative sample of each type of waste to be analyzed. Specify the method number. Provide a description of and justification for any modified or non-standard procedures which are proposed.</p> <p>{264.13(b)(3) & 260.21} [Guidance(3) - Section 2.3.1]</p>	
<p>- Identify all sampling equipment and discuss applicability of equipment considering the chemical and physical characteristics of the wastes, as applicable.</p> <p>{264.13(b)(3)} [Guidance(3) - Section 2.3.2]</p>	
<p>- Identify procedures for maintenance and decontamination of all sampling equipment.</p> <p>{264.13(b)(3)} [Guidance(3) - Section 2.3.3]</p>	
<p>C-3b <u>Sampling Preservation and Storage</u></p> <p>Specify sample containers, preservation methods(if applicable), and maximum holding times. Specify procedures for proper packing and shipping, if applicable.</p> <p>{264.13(b)(3)} [Guidance(3) - Section 2.3.4]</p>	
<p>C-3c <u>Sampling QA/QC Procedures</u></p> <p>Describe the QA/QC procedures implemented to insure that</p>	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>technically valid data are obtained, including collecting blanks and duplicates, and chain-of-custody procedures. {264.13(b)(3)} [Guidance(3) - Section 2.3.5]</p>	
<p>C-3d <u>Health and Safety Protocols</u></p> <p>Specify procedures implemented for the protection of sampling personnel. OSHA requirements specified in 29 CFR 1910.120 should be followed. (Inclusion of health and safety procedures in the WAP enhances its use as a hands-on operating manual.) [Guidance(3) - Section 2.3.6]</p>	
<p>C-4 <u>Laboratory Testing and Analytical Methods</u></p> <p>Specify the test methods which will be used to test for each parameter for each waste type managed at the facility. Provide a description of and justification for any modified or non-standard methods. {264.13(b)(2) & 260.21} [Guidance(3) - Sections 2.4 & 2.4.2]</p>	
<p>C-4a <u>On-site Laboratory Procedures</u></p> <p>Describe the procedures implemented to ensure that technically valid data are obtained. Facilities with on-site laboratories must provide a description of their Standard Operating Procedures and QA/QC program. {264.13(b)(2)} [Guidance(3) - Section 2.4.1]</p>	
<p>C-4b <u>Off-site Laboratory Selection</u></p> <p>For facilities that use an off-site laboratory, provide information that the laboratory selected has comprehensive QA/QC programs, technical analytical expertise, and an effective information management system. At a minimum, state that appropriate SW-846 procedures are followed by the lab and that analytical results will include appropriate QA/QC information. {264.13(b)(2)} [Guidance(3) - Section 2.4.1]</p>	
<p>C-5 <u>Additional Requirements for Facilities Receiving Waste Generated Off-site</u></p> <p>C-5a <u>Waste Information for Facilities Receiving Waste Generated Off-site</u></p> <p>For off-site facilities, specify the waste analysis information that generators will supply. Waste information should be provided on a "Waste Profile Sheet" for each waste accepted. A discussion of the following should be provided: {264.13(b)(5)} [Guidance(3) - Sections 2.5 & 2.6.1, Figure 2-11, and Table 2-11]</p> <ul style="list-style-type: none"> - Specify how information provided by the generator is confirmed; 	
<ul style="list-style-type: none"> - Specify sampling procedures for acceptance of a shipment of waste(i.e. the percentage of containers sampled per shipment); 	
<ul style="list-style-type: none"> - Provide specific criteria for the acceptance and rejection of wastes received from off-site generators; 	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<ul style="list-style-type: none"> - Describe acceptance and rejection procedures. 	
<p>C-5b <u>Procedures for Receiving Waste Generated Off-site</u></p> <p>For off-site facilities, the WAP must specify procedures used to inspect and, if necessary, analyze each movement of hazardous waste received at the facility to ensure that the waste matches the identity of the waste on the accompanying manifest or shipping paper. At a minimum, the plan must describe: {264.13(a)(4)&(c)} [Guidance(3) - Section 2.6.1]</p> <ul style="list-style-type: none"> - The procedures which will be used to determine the identity of each movement of waste; {264.13(c)(1)} 	
<ul style="list-style-type: none"> - The sampling method which will be used to obtain a representative of the waste; and {264.13(c)(2)} 	
<ul style="list-style-type: none"> - The procedures an off-site landfill receiving containerized hazardous waste will use to determine whether a biodegradable sorbant has been added. {264.13(c)(3)} 	
<p>C-6 <u>Provisions for Complying with LDR Requirements</u></p> <p>Generators and TSDFs must conduct waste analysis to determine the regulatory status of wastes with respect to the treatment standards in Part 268, Subpart D. Supporting documentation must be submitted and maintained in the operating record. {268.7, 264.13(a)(1), 264.13(b)(6), 268 Subpart C-Prohibitions on Land Disposal} [Guidance(3) - Section 2.6.3]</p> <ul style="list-style-type: none"> - All wastes restricted under the LDRs should be identified. 	
<ul style="list-style-type: none"> - Procedures to ensure that wastes meet applicable LDR treatment standards prior to land disposal should be in place. 	

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**REGULATORY COMPLETENESS CHECKLIST FOR
HAZARDOUS WASTE STORAGE, TREATMENT AND DISPOSAL FACILITIES**

Facility Name _____
 EPA ID Number _____
 Permit Review Team _____

 Date Review Completed _____

Guidance Documents for Part D-1

(4) 'Manual for Preparing RCRA Part B Permit Applications for Storage in Tanks and Containers'; Prepared by Industrial Extension Service, North Carolina State University and Solid & Hazardous Waste Management Branch, State of North Carolina; January 1983.

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>PART D - PROCESS INFORMATION</p> <p>D-1 <u>Container Storage Area</u></p> <p>D-1a <u>Description of System for Containers with Free Liquids and/or F020, F021, F022, F023, F026, and F027 Wastes</u></p> <p>A description of the containment system to demonstrate compliance with 264.175. Show at least the following: {270.15(a)}</p>	
<p>D-1a(1) <u>Basic Design Parameters, Dimensions, and Materials of Construction</u></p> <p>Base underlying containers must be capable of containing all liquids until the liquid is collected and removed. Information which should be provided to demonstrate this includes the following: {270.15(a)(1)}</p> <ul style="list-style-type: none"> - Statement that the base is free of cracks or gaps; {264.175(b)(1)} 	
<ul style="list-style-type: none"> - Demonstration of imperviousness of base to wastes and precipitation; {264.175(b)(1)} 	
<ul style="list-style-type: none"> - Base design parameters, dimensions, and materials of construction; {270.15(a)(1)} [Guidance(4) - page B-40] 	
<ul style="list-style-type: none"> - Engineering evaluation of structural integrity of the base (This evaluation should be sufficient to verify that the base material and thickness are adequate to support the weight of the containers, vehicles, etc.); and {270.15(a)(1)} [Guidance(4) - page B-40] 	
<ul style="list-style-type: none"> - Discussion of compatibility of base with wastes. [Guidance(4) - page B-40] 	
<p>D-1a(2) <u>Description of How Design Promotes Drainage or How Containers Are Kept From Contact With Standing Liquids in Containment System</u></p>	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>Base must be sloped or the containment system must be otherwise designed and operated to drain and remove liquids resulting from leaks, spills, or precipitation, unless the containers are elevated or otherwise protected from contact with accumulated liquids. For this requirement, the applicant should address where applicable: {270.15(a)(2)}</p> <ul style="list-style-type: none"> - Stacking of containers on pallets, plywood sheets, and/or racks; or [Guidance(4) - page B-41] 	
<ul style="list-style-type: none"> - Grading of base; and {264.175(b)(2)} 	
<ul style="list-style-type: none"> - Drainage design and removal system, including trenches and sumps. {264.175(b)(2)} [Guidance(4) - page B-41] 	
<p>D-1a(3) <u>Capacity of the Containment System Relative to the Number and Volume of Containers To Be Stored</u></p> <p>Sufficient capacity to contain 10 percent of the volume of containers or the volume of the largest container, whichever is greater. Information that should be included to satisfy this requirement is: {270.15(a)(3)}</p> <ul style="list-style-type: none"> - Volume of largest container, {264.175(b)(3)} 	
<ul style="list-style-type: none"> - Total volume of containers, {270.15(a)(3) and 264.175(b)(3)} 	
<ul style="list-style-type: none"> - Containment structure capacity, {264.175(b)(3)} 	
<ul style="list-style-type: none"> - Capacity of run-off collection system, and {264.175(b)(4)} [Guidance(4) - page B-41] 	
<ul style="list-style-type: none"> - Geographic storm intensity/frequency data. [Guidance(4) - page B-41] <p>Note that the Hazardous Waste Section considers an extreme precipitation event to be a 25-year, 24-hour rainfall event.</p>	
<p>D-1a(4) <u>Provisions for Preventing or Managing Run-on</u></p> <p>Run-on into the containment system must be prevented unless the collection system has sufficient excess capacity in addition to the 10 percent minimum to contain any run-on which might enter the system. {270.15(a)(4)}</p> <ul style="list-style-type: none"> - The applicant should discuss structures used to control run-on such as: <ul style="list-style-type: none"> • Containment system auxiliary structures (curbs, dikes, etc.), and • Engineering grading design. [Guidance(4) - pages B-41 through B-42] 	
<ul style="list-style-type: none"> - Otherwise, the applicant should provide a description of the 	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<ul style="list-style-type: none"> • Potential run-on, and • Capacity of the collection and removal system design to contain the run-on. <p>{264.175(b)(4)}</p>	
<p>D-1a(5) <u>How Accumulated Liquids Can Be Analyzed and Removed to Prevent Overflow</u></p> <p>Spilled or leaked waste and accumulated precipitation must be removed from the sump or collection area in a timely manner as is necessary to prevent overflow of the collection system. Information that must be included is: {270.15(a)(5)}</p> <ul style="list-style-type: none"> - Removal methods and equipment (sump pump design, piping specifications, location, discharge point, and capacity); {264.175(b)(5)} [Guidance(4) - page B-42] 	
<ul style="list-style-type: none"> - How liquids will be analyzed; and [Guidance(4) - page B-42] 	
<ul style="list-style-type: none"> - Management of accumulated liquid including prevention of overflow. {264.175(b)(5)} [Guidance(4) - page B-42] 	
<p>D-1b <u>Containers Without Free Liquids or F020, F021, F022, F023, F026, and F027 Wastes</u></p> <p>For storage areas that store containers holding wastes that do not contain free liquids, a demonstration of compliance with 264.175(c) including: {270.15(b)}</p>	
<p>D-1b(1) <u>Test for Free Liquids</u></p> <p>Test procedures and results or other documentation or information to show that the wastes do not contain free liquids. Use of the Paint Filter Test, Method 9095 in SW-846, is recommended. {270.15(b)(1)}</p>	
<p>D-1b(2) <u>Description of Storage Area Design and Operation to Drain and Remove Liquids or How Containers Are Kept From Contact With Standing Liquids</u></p> <p>Containment system not required for containers that do not contain free liquids if: {270.15(b)(2)}</p> <ul style="list-style-type: none"> - Storage area sloped or otherwise designed and operated to drain and remove liquid resulting from precipitation, or {264.175(c)(1)} 	
<ul style="list-style-type: none"> - Containers elevated or otherwise protected from contact with accumulated liquid. {264.175(c)(2)} 	
<p>D-1b(3) <u>Containers With F020, F021, F022, F023, F026, and F027 Wastes</u></p> <p>Containers holding F020, F021, F022, F023, F026, and F027</p>	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>wastes must be managed in a secondary containment system which meets the requirements of 264.175(b) even if they contain no free liquids. {264.175(d)(1)}</p>	
<p>D-1c <u>Container Management Practices</u></p>	
<p>Description of container management practices. Information that must be included is:</p>	
<ul style="list-style-type: none"> - Type of containers and construction material should include liners (if applicable) manufacturer specifications, dimensions; [Guidance(4) - Pages B-37 through 38] 	
<ul style="list-style-type: none"> - Markings and labels placed on containers; [Guidance(4) - Page B-38] 	
<ul style="list-style-type: none"> - Containers must be made of or lined with materials which are compatible with the hazardous waste to be stored; {264.172} 	
<ul style="list-style-type: none"> - Procedures for handling to avoid rupturing or leaking; {264.173(b)} 	
<ul style="list-style-type: none"> - Waste container always kept closed during storage except when adding or removing waste; {264.173(a)} 	
<ul style="list-style-type: none"> - Weekly inspections of deterioration caused by corrosion or other factors; {264.174} 	
<ul style="list-style-type: none"> - Adequate aisle space for machinery, inspections, and to meet applicable codes (i.e., fire). "Sufficient aisle space" is determined by storage area configuration and corresponding emergency response and inspection procedures. A good rule of thumb is three (3) feet, a minimum of two (2) feet, and four (4) feet between rows which are two pallets wide. However, each facility must be evaluated individually to determine the minimum aisle space necessary for that facility's operation. {264.35} [Guidance(4) - Page B-39] 	
<ul style="list-style-type: none"> - Maximum number, height, volume, and stacking procedures of containers in storage area; [Guidance(4) - Page B-39] 	
<ul style="list-style-type: none"> - Machinery, equipment, procedures used to move containers; and [Guidance(4) - Page B-39] 	
<ul style="list-style-type: none"> - Location of ignitable, reactive and incompatible waste. Note that all hazardous wastes must be located at least 50 feet from the facility's property line, except that ignitable, reactive or incompatible wastes must be located at least 200 feet from the property line if the adjacent area is zoned for any use other than industrial. {270.15(c), 264.176 and 15A NCAC 13A .0109(r)(2)(B)} [Guidance(4) - Page B-39] 	
<p>D-1d <u>Special Requirements for Incompatible Wastes</u> {270.15(d)}</p>	
<ul style="list-style-type: none"> - Provide statements that indicate: <ul style="list-style-type: none"> • Incompatible wastes or incompatible wastes and 	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>materials will not be placed in the same container; and {264.177(a)}</p> <ul style="list-style-type: none"> • Hazardous waste will not be placed in an unwashed container that previously held an incompatible waste or material. {264.177(b)} <p>This should be elaborated on further in Part F - Procedures to Prevent Hazards.</p>	
<ul style="list-style-type: none"> - A storage container holding a waste that is incompatible with any waste or other materials stored nearby must be separated from the other materials or protected from them by means of a dike, berm, wall, or other device. {264.177(c)} 	
<p>D-1e <u>Air Emission Standards</u></p> <p>All hazardous waste placed in containers must be managed in accordance with the requirements of Subpart CC. See Module CC for details. {264.179}</p>	
<p>D-1f <u>Container Labels</u></p> <p>All containers must be labeled with the following information:</p> <ul style="list-style-type: none"> - The words “Hazardous Waste, - The accumulation date - The Hazardous Waste Codes - Generator’s Name - Generator’s Address - Manifest Document Number <p>Other useful information</p> <ul style="list-style-type: none"> - Description of waste <p>{262.34(a)(2), (a)(3) and (d)(4)}</p>	

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**REGULATORY COMPLETENESS CHECKLIST FOR
HAZARDOUS WASTE STORAGE, TREATMENT AND DISPOSAL FACILITIES**

Facility Name _____
 EPA ID Number _____
 Permit Review Team _____

 Date Review Completed _____

Guidance Documents for Part D-2

(5) 'Technical Resource Document for the Storage and Treatment of Hazardous Waste in Tank Systems'; Prepared for US EPA, OSWER Policy Directive No. 9483.00-1; EPA/530-SW-86-044; December, 1986.

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>PART D - PROCESS INFORMATION</p> <p>D-2 <u>Tank Systems</u></p> <p>Description of:</p> <ul style="list-style-type: none"> - Types (i.e., aboveground, in-ground, on- ground, etc.), material of construction, volume and number of tanks, as well as specific location of each. {270.16 and 270.14(b)(1)} [Guidance(5) - Section 5.0] 	
<p>For each tank, provide:</p> <ul style="list-style-type: none"> - Tank dimensions and capacity. {270.16(b)} [Guidance(5) - Section 5.1] 	
<ul style="list-style-type: none"> - Description of the feed systems, safety cutoff, bypass systems, and pressure controls. {270.16(c)} [Guidance(5) - Section 5.2] 	
<ul style="list-style-type: none"> - Diagram of piping, instrumentation, and process flow for each tank system. {270.16(d)} [Guidance(5) - Section 5.3] 	
<ul style="list-style-type: none"> - Type of waste contained in tanks. [Guidance(5) - Section 4.0] 	
<ul style="list-style-type: none"> - Operating pressure and temperature. {264.195(b)(2)} 	
<ul style="list-style-type: none"> - Procedures for handling ignitable or reactive wastes. {270.16(j), 264.17, and 264.198} [Guidance(5) - Section 13] 	
<ul style="list-style-type: none"> - Procedures for handling incompatible wastes. {270.16(j), 264.17, and 264.199} [Guidance(5) - Section 13.0] 	
<ul style="list-style-type: none"> - Procedures for complying with air emission standards. Refer to Module CC for air emission standard requirements. {264.200} 	
<p>D-2a <u>Existing Tank System Integrity Assessment</u></p> <p>Written assessment, reviewed and certified by an independent, qualified, NC registered professional engineer, on the structural</p>	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
integrity and suitability of each tank system for handling hazardous waste which includes: {264.191, 270.16(a), and 270.11(d)} [Guidance(5) - Section 4]	
- Design standard(s), according to which the tank and ancillary equipment were constructed. {264.191(b)(1)} [Guidance(5) - Section 4.1.A]	
- Hazardous characteristics of the wastes that have been and will be handled. {264.191(b)(2)} [Guidance(5) - Section 4.1.B]	
- Existing corrosion protection measures. {264.191(b)(3)} [Guidance(5) - Section 4.1.C, 5.4]	
- Documented/estimated age of the tank system. {264.191(b)(4)}	
- Results of a leak test, internal inspection, or other tank integrity examination. {264.191(b)(5)} [Guidance(5) - Section 4.1.E]	
D-2b New Tank Systems D-2b(1) <u>Design and Installation of New Tank Systems or Components</u> Written assessment, reviewed and certified by an independent, qualified, NC registered professional engineer, on the structural integrity and suitability of each tank system for handling hazardous waste. Assessment must show that the foundation, structural support, seams, connections and pressure controls (if applicable) are adequately designed and that the tank system has sufficient structural strength and compatibility with the waste(s) to be stored or treated to ensure that it will not collapse, rupture, or fail. {264.192, 270.16(a), and 270.11(d)} [Guidance(5) - Sections 4 and 5] Assessment includes at a minimum: <ul style="list-style-type: none"> - Design standard(s) according to which tank(s) and/or ancillary equipment are constructed. {264.192(a)(1)} [Guidance(5) - Sections 4 and 5] 	
- Hazardous characteristics of the waste(s) to be handled. {264.192(a)(2)} [Guidance(5) - Section 4.1.B]	
- Corrosion assessment by a qualified expert for new tank systems or components in which the external shell of a metal tank or any external metal component of the tank system will be in contact with the soil or with water. Include factors such as: <ul style="list-style-type: none"> • soil moisture content • soil pH • soil sulfides level • soil resistivity • structure to soil potential 	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<ul style="list-style-type: none"> • influence of nearby underground metal structures (e.g., piping) • existence of stray electric current • existing corrosion-protection measures <p>The types and degree of external corrosion protection should consist of one or more of the following:</p> <ul style="list-style-type: none"> • corrosion-resistant materials of construction • corrosion-resistant coating with cathodic protection • electrical isolation devices <p>{264.192(a)(3)} [Guidance(5) - Section 5.4]</p>	
<ul style="list-style-type: none"> - Determination of design or operational measures that will protect underground tank systems against potential damage due to vehicular traffic. <p>{264.192(a)(4)} [Guidance(5) - Section 5.5]</p>	
<ul style="list-style-type: none"> - Design considerations to ensure that tank foundations will maintain the load of a full tank and that tank systems will be anchored to prevent flotation or dislodgement where the tank system is placed in a saturated zone or is located within a seismic fault zone. Include design considerations to ensure that tank systems will withstand the effects of frost heave. <p>{264.192(a)(5)} [Guidance(5) - Section 5.7]</p>	
<p>D-2b(2) Description of Tank System Installation and Testing Plans and Procedures:</p> <p>Demonstrate that an independent, qualified installation inspector or an independent, qualified, NC registered professional engineer will inspect each new tank system prior to covering, enclosing, or placing a new tank system or component in use. {264.192(b)-(e) and 270.16(f)} [Guidance(5) - Sections 6.0, 6.1, Figure 6.4]</p> <p>Inspection should determine the presence of:</p> <ul style="list-style-type: none"> - weld breaks {264.192(b)(1)} 	
<ul style="list-style-type: none"> - punctures {264.192(b)(2)} 	
<ul style="list-style-type: none"> - scrapes of protective coatings {264.192(b)(3)} 	
<ul style="list-style-type: none"> - cracks {264.192(b)(4)} 	
<ul style="list-style-type: none"> - corrosion {264.192(b)(5)} 	
<ul style="list-style-type: none"> - other structural damage or inadequate construction/ installation. {264.192(b)(6)} 	
<p>Specify how all discrepancies will be remedied. {264.192(b)} [Guidance(5) - Section 6.3.C]</p>	
<p>New tank systems or components that are placed underground and that are back-filled must be provided with a backfill material that is a non-corrosive, porous, homogenous substance and that is</p>	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
installed so that the backfill is placed completely around the tank and compacted to ensure that the tank and piping are fully and uniformly supported. {264.192(c)} [Guidance(5) - Section 6.2]	
New tanks and ancillary equipment must be tested for tightness prior to being covered, enclosed, or placed in use. Repair procedures must be specified if the tank system is found not to be tight. {264.192(d)} [Guidance(5) - Section 6.3.A]	
Ancillary equipment must be supported and protected against physical damage and excessive stress due to settlement, vibration, expansion, or contraction. {264.192(e)} [Guidance(5) - Section 6.4]	
D-2b(3) <u>External Corrosion Protection</u> Describe the design, construction, and operation of corrosion protection systems necessary to ensure the integrity of the tank system. Show that any field-fabricated corrosion protection system will be supervised by an independent corrosion expert. {264.192(f), 270.16(e), and 264.192(a)(3)} [Guidance(5) - Sections 5.4]	
D-2b(4) <u>Record Keeping</u> Statement that all certifications as required by 264.192(g) necessary for tank design, installation, maintenance, and repairs will be kept on file at the facility. {264.192(g) and 270.11(d)}	
D-2c <u>Containment and Detection of Releases:</u> {264.193, 270.16(g)} [Guidance(5) - Sections 7.0 - 11.0]	
D-2c(1) <u>Plans and Description of the Design, Construction, and Operation of the Secondary Containment System:</u> The following information must be provided for the secondary containment system: - Age of all existing tank systems. If the age of a tank system cannot be determined, indicate the reason. {264.193(a)}	
- Design, installation, and operation to prevent any migration of waste or accumulated liquid from the tank system to the soil, groundwater, or surface water at any time during its use. {264.193(b)(1)} [Guidance(5) - Section 7.3]	
- Proof that the system is capable of detecting and collecting releases and accumulated liquids until the collected material is removed {264.193(b)(2)} [Guidance(5) - Section 7.3]	
- Materials of construction used to construct or line the system, including proof that the materials are compatible with the wastes in the tank system.	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
{264.193(c)(1)} [Guidance(5) - Sections 7.4 and 7.5]	
- System has sufficient strength and thickness to prevent failure caused by any of the following: <ul style="list-style-type: none"> • pressure gradients (including static head and external hydrological forces) • physical contact with the wastes • climatic conditions • stress of daily operation (including stresses from nearby vehicular traffic) {264.193(c)(1)} [Guidance(5) - Section 7.3]	
- Calculations to prove that it is placed on a foundation or base that is capable of providing support, resisting pressure gradients above and below the system, and preventing failure due to settlement, compression, or uplift. {264.193(c)(2)}	
- Description of the leak detection system, including its operating principle, design features, and operating procedures. {264.193(c)(3)} [Guidance(5) - Section 7.3]	
- Demonstration that the leak detection system will detect the failure of either the primary or secondary containment structure or the presence of any release of hazardous waste or accumulated liquid in the secondary containment system within 24 hours. If the prevailing site conditions or detection technologies will not allow detection of a release within 24 hours, then specify the earliest practical time that detection can take place. Indicate why this longer period does not pose a threat to human health and the environment. {264.193(c)(3)}	
- Show how the secondary containment system is sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills, or precipitation. {264.193(c)(4)}	
- Document how it will be ensured that spilled or leaked wastes and precipitation will be removed from the secondary containment system within 24 hours. If wastes and precipitation cannot be removed within 24 hours, then specify the earliest practical time that removal can take place. Indicate why this longer period does not pose a threat to human health and the environment. {264.193(c)(4)}	
<p><u>D-2c(2) Requirements for External Liner, Vault, Double-Walled Tank, or Equivalent Device:</u></p> <p>{264.193(d)-(e) and 270.16(g)} [Guidance(5) - Sections 7.4, 7.5, 7.6 and 7.7)]</p> <p>Secondary containment for each tank must include at least one of the following: a liner external to the tank, a vault, a double-walled tank, or an equivalent device approved by the Hazardous Waste Section.</p> <p>The following design and operation procedures should be given for each device:</p>	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>External liner system:</p> <ul style="list-style-type: none"> - Calculations to show that it contains 100 percent of the capacity of the largest tank within its boundary. {264.193(e)(1)(i)} 	
<ul style="list-style-type: none"> - Designed or operated to prevent run-on or infiltration of precipitation. Alternatively, show that the collection system has sufficient excess capacity to contain run-on and precipitation from a 25-year, 24-hour rainfall. {264.193(e)(1)(ii)} 	
<ul style="list-style-type: none"> - Free of cracks or gaps. {264.193(e)(1)(iii)} 	
<ul style="list-style-type: none"> - System surrounds the tank completely and covers all surrounding soil likely to come in contact with the waste if the waste is released from the tank(s). {264.193(e)(1)(iv)} 	
<p>Vault system:</p> <ul style="list-style-type: none"> - Calculations to show that it contains 100 percent of the capacity of the largest tank within its boundary. {264.193(e)(2)(i)} 	
<ul style="list-style-type: none"> - Designed or operated to prevent run-on or infiltration of precipitation. Alternatively, show that the collection system has sufficient excess capacity to contain run-on and precipitation from a 25-year, 24-hour rainfall. {264.193(e)(2)(ii)} 	
<ul style="list-style-type: none"> - Constructed using chemical-resistant water stops in place at any joints. Specify the material used. {264.193(e)(2)(iii)} 	
<ul style="list-style-type: none"> - Provided with an impermeable interior coating or lining that is compatible with the stored waste and that will prevent migration of waste into the vault material. Specify coating or lining used, and provide the manufacturer's data sheet. {264.193(e)(2)(iv)} 	
<ul style="list-style-type: none"> - Method used to protect against the formation and ignition of vapors within the vault if the wastes are ignitable or reactive. {264.193(e)(2)(v)} 	
<ul style="list-style-type: none"> - Specify the exterior moisture barrier used and provide the manufacturer's data sheet. Alternatively, describe how the vault is designed or operated to prevent the migration of moisture into the vault if the vault is subject to hydraulic pressure. {264.193(e)(2)(vi)} 	
<p>Double-walled tank:</p> <ul style="list-style-type: none"> - An integral structure so that any release from the inner tank is contained by the outer shell. {264.193(e)(3)(i)} 	
<ul style="list-style-type: none"> - If the unit is metallic, specify the type(s) of corrosion protection used for both the internal and external shell. {264.193(e)(3)(ii)} 	
<ul style="list-style-type: none"> - Description of the leak detection system used including the principle of operation, design, and operating characteristics. It must be a continuously operating unit, capable of detecting a release within 24 hours. If the prevailing site conditions or detection technologies will not allow detection of a release 	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>within 24 hours, must specify the earliest practical place and indicate why this longer period does not pose a threat to human health and the environment. {264.193(e)(3)(iii)}</p>	
<p>D-2c(3) Secondary Containment and Leak Detection Requirements for Ancillary Equipment: {264.193(f), 270.16(g)} [Guidance(5) - Section 7.8]</p> <p>Each tank system's ancillary equipment must be provided with secondary containment such as jacketing, double-walled piping, or a trench. Describe the containment system, and demonstrate that it has been (will be) designed, installed, and operated to prevent any migration of waste or accumulated liquid to the soil, ground water, or surface water at any time during its use.</p> <p>Secondary containment is not required for:</p> <ul style="list-style-type: none"> - Above ground piping (exclusive of flanges, joints, valves, and other connections) that are visually inspected daily, - Welded flanges, joints, and connections that are visually inspected daily, - Sealless or magnetic coupling pumps and sealless valves that are visually inspected daily, and - Pressurized above-ground piping systems with automatic shut-off devices that are visually inspected daily. 	
<p>Also, demonstrate that the containment system can detect and collect releases and accumulated liquids. This demonstration must include at least the following:</p> <ul style="list-style-type: none"> - Materials of construction used to construct or line the system. Show that these materials are compatible with the wastes in the tank system. {264.193(c)(1)} 	
<ul style="list-style-type: none"> - Demonstrate that the system has sufficient strength and thickness to prevent failure caused by any of the following: <ul style="list-style-type: none"> • pressure gradients (including static head and external hydrogeological forces) • physical contact with the wastes • climatic conditions • stress of daily operation (including stresses from nearby vehicular traffic). {264.193(c)(1)} 	
<ul style="list-style-type: none"> - Calculations proving that the secondary containment system is placed on a foundation or base that is capable of providing support, resisting pressure gradients above and below the system, and preventing failure due to settlement, compression or uplift. {264.193(c)(2)} 	
<ul style="list-style-type: none"> - Description of the leak detection system, including its operating principle, design features, and operating procedures. The leak detection system must detect the failure of either the primary or secondary containment structure or the presence of any release of hazardous waste or accumulated liquid in the secondary containment system 	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>within 24 hours. If the prevailing site conditions or detection technologies will not allow detection of a release within 24 hours, then specify the earliest practical time that detection can take place. Indicate why this longer period does not pose a threat to human health and the environment. {264.193(c)(3)}</p>	
<p>- Secondary containment system must be sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills, or precipitation. {264.193(c)(4)}</p>	
<p>- Document how it will be ensured that spilled or leaked wastes and precipitation will be removed from the secondary containment system within 24 hours. If wastes and precipitation cannot be removed within 24 hours, then specify the earliest practical time that removal can take place. Indicate why this longer period does not pose a threat to human health and the environment. {264.193(c)(4)}</p>	
<p>D-2c(4) <u>Requirements for Tank Systems Until Secondary Containment is Implemented:</u> {264.193(h)(4)(i)} [Guidance(5) - Sections 4.0, 7.0, 8.0, 9.0] Non-enterable underground tanks: Results of a leak test (or other tank integrity test approved by the Regional Administrator). Procedures to be repeated at least annually until secondary containment is provided. {264.193(h)(4)(i)(1)}</p>	
<p>For other than non-enterable underground tanks: results of a leak test or present a schedule and procedures for assessing the overall condition of the tank system by an independent, qualified registered professional engineer until secondary containment is provided. {264.193(h)(4)(i)(2)}</p>	
<p>Ancillary equipment: results of a leak test (or other integrity assessment measure approved by the Regional Administrator). Indicate the procedures that will be used to ensure that such test will be repeated at least annually until secondary containment is provided. {264.193(h)(4)(i)(3)}</p>	
<p>D-2c(5) <u>Variance from Secondary Containment</u> Provide information for one of the following alternatives: - Technology-based variances: detailed plans and engineering and hydrogeologic reports, as appropriate, describing alternate design and operating practices that will, in conjunction with location aspects, prevent the migration of any hazardous waste or hazardous constituents into the ground water or surface water during the life of the facility. {264.193(g),270.16(h)(1)} [Guidance(5) - Section 8.0]</p>	
<p>- Risk-based variances: detailed demonstration that no substantial present or potential hazards will be posed to human health or the environment, should a release enter the environment.</p>	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
{264.193(g),270.16(h)(2)} [Guidance(5) - Section 8.0]	
- Demonstration that tanks used to store or treat hazardous waste contain no free liquid as defined by the Paint Filter Test and that such tanks are situated inside a building with an impermeable floor. {264.190(a)}	
D-2d <u>Controls and Practices to Prevent Spills and Overflows:</u> Provide adequate information to ensure that the hazardous wastes or treatment reagents placed in a tank system will not cause any element of that system to rupture, leak, corrode, or otherwise fail. {264.194(a) and 270.16(i)} [Guidance(5) - Section 9.0] Provide detailed description of controls and practices used to prevent spills and overflows. Include at a minimum: - Spill prevention controls (e.g., check valves, dry disconnect couplings) {264.194(b)(1)}	
- Overfill prevention controls (e.g., level sensing devices, high level alarms, automatic feed cutoff, or bypass to a standby tank). {264.194(b)(2)}	
- Maintenance of sufficient freeboard in uncovered tanks to prevent overtopping by wave or wind action or by precipitation. {264.194(b)(3)}	

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**REGULATORY COMPLETENESS CHECKLIST FOR
HAZARDOUS WASTE STORAGE, TREATMENT AND DISPOSAL FACILITIES**

Facility Name _____
 EPA ID Number _____
 Permit Review Team _____

 Date Review Completed _____

Guidance Documents for Part F

- (2) Permit Applicants' Guidance Manual for the General Facility Standards of 40 CFR 264, SW-968, October 1983.
- (7) Guidance on Setting Permit Conditions and Reporting Trial Burn Results - Volume II of the Hazardous Waste Incineration Guidance Series, EPA/625/6-89/019, January 1989.
- (10) Hazardous Waste Incinerator Inspection Manual, OSWER Directive No. 9938.6, April 1989.

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>PART F - PROCEDURES TO PREVENT HAZARDS</p> <p>F-1 <u>Security</u></p> <p>F-1a <u>Security Procedures and Equipment</u></p> <p>The Part B must include a description of the security procedures and equipment required by 264.14 as detailed below, unless a waiver is granted: (See section F-1b of this checklist for waiver requirements) {264.14(a) and 270.14(b)(4)}</p>	
<p>F-1a(1) <u>24-Hour Surveillance System</u></p> <p>A 24-hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel) that continuously monitors and controls entry onto the active portion of the facility: {264.14(b)(1)}</p> <ul style="list-style-type: none"> - Procedures and personnel to be used [Guidance(2) - pg 5-67] 	
<ul style="list-style-type: none"> - Location and description of equipment. [Guidance(2) - pg 5-67] 	
<p>F-1a(2) <u>Barrier and Means to Control Entry</u></p> <p>In lieu of a 24-hour surveillance system, the applicant may elect to use a barrier and other means to control entry. {264.14(b)(2)}</p>	
<p>F-1a(2)(a) <u>Barrier</u></p> <p>An artificial or natural barrier (e.g., a fence in good repair or a fence combined with a cliff) that completely surrounds the active portion of the facility. Description should include: {264.14(b)(2)(i)} [Guidance(2) - pg 5-68]</p> <ul style="list-style-type: none"> - Height, and - Material of construction. 	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>F-1a(2)(b) <u>Means to Control Entry</u></p> <p>A means to control entry, at all times, through the gates or other entrances to the active portion of the facility (e.g., an attendant, television monitors, locked entrance, or controlled roadway access to the facility). {264.14(b)(2)(ii)} [Guidance(2) - pg 5-68]</p> <ul style="list-style-type: none"> - Description should include: <ul style="list-style-type: none"> • Procedure and personnel to be used, and • Location and description of equipment. 	
<ul style="list-style-type: none"> - The requirements of sections F-1a(1) and F-1a(2) of this checklist are satisfied if the facility or plant within which the active portion is located itself has a surveillance system, or a barrier and means to control entry, which complies with the requirements of 264.14(b)(1) or 264.14(b)(2). {Comment following 264.14(b)(2)(ii)} 	
<p>F-1a(3) <u>Warning Signs</u></p> <p>The facility must have a sign with the legend, "Danger - Unauthorized Personnel Keep Out," which must:</p> <ul style="list-style-type: none"> - Be posted at each entrance to the active portion of the facility {264.14(c)} 	
<ul style="list-style-type: none"> - Be in sufficient numbers to be seen from any approach to the active portion of the facility {264.14(c)} 	
<ul style="list-style-type: none"> - Be in English and any other language predominating in the area {264.14(c)} 	
<ul style="list-style-type: none"> - Be legible from a distance of at least 25 feet. {264.14(c)} <p>Existing signs with a legend other than "Danger - Unauthorized Personnel Keep Out" may be used if the legend on the sign indicates that only authorized personnel are allowed to enter the active portion and that entry onto the active portion can be dangerous. {264.14(c)}</p>	
<p>F-1b <u>Waiver</u></p> <p>If a waiver of these requirements is requested, the owner or operator must demonstrate the following: {264.14(a)}</p>	
<p>F-1b(1) <u>Injury to Intruder</u></p> <p>Physical contact with the waste, structure, or equipment within the active portion of the facility will not injure unknowing or unauthorized persons or livestock that may enter the active portion of a facility; and {264.14(a)(1)}</p>	
<p>F-1b(2) <u>Violation Caused by Intruder</u></p> <p>Disturbance of the waste or equipment by the unknowing or unauthorized entry of persons or livestock onto the active portion</p>	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>of a facility will not cause a violation of the requirements of 40 CFR Part 264. {264.14(a)(2)}</p> <p>Note: To address F-1b(1) and F-1b(2), the applicant should include:</p> <ul style="list-style-type: none"> - Nature and duration of hazard potential from wastes, [Guidance(2) - page 5-70] 	
<ul style="list-style-type: none"> - Equipment and structures to minimize potential for an intruder to 1) cause a spill; 2) mix incompatible wastes; 3) ignite ignitable or reactive wastes; 4) damage containment or monitoring systems, [Guidance(2) - page 5-70] 	
<ul style="list-style-type: none"> - Features that prevent contact with waste and prevent equipment and structures from unauthorized access and tampering. [Guidance(2) - page 5-70] 	
<p>F-2 <u>Inspection Schedule</u></p> <p>A copy of the general inspection schedule required by 264.15(b) and as detailed below including, where applicable, specific requirements for</p> <ul style="list-style-type: none"> - containers [264.174]; - tanks [264.193(h)(4)(i), 264.195]; - surface impoundments [264.226]; - waste piles [264.254]; - land treatment [264.273(g)]; - landfills [264.303]; - incinerators [264.347]; - drip pads [264.574]; - miscellaneous units [264.602]; - process vents [264.1033]; - equipment leaks [264.1052, 264.1053, 264.1057, 264.1058]; - air emission controls for tanks, surface impoundments, and containers [264.1101(c)(4)]; - boilers and industrial furnaces [266.102(e)(8), and 266.103(j)]. <p>{270.14(b)(5) and 264.15}</p>	
<p>F-2a <u>General Inspection Requirements</u></p> <p>A description of the facility inspection schedule (schedule must be kept at the facility) for the following equipment: {270.14(b)(5), 264.15(a), 264.15(b)(1), 264.15(b)(2), 264.15(b)(4) and 264.33}</p> <ul style="list-style-type: none"> - Monitoring equipment; - Emergency and safety equipment; - Security devices; - Operating and structural equipment that are vital to prevent, detect, or respond to environmental or human health hazards; - Testing as necessary of communications or alarm systems, fire protection equipment, and decontamination equipment; - Containers; - Tank systems; - Waste piles; - Surface Impoundments; 	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<ul style="list-style-type: none"> - Incinerators; - Landfills; - Land treatment units; - Miscellaneous Units; - Boilers and Industrial Furnaces; - Drip Pads; and - Containment buildings. 	
<p>F-2a(1) <u>Types of Problems</u></p> <p>The schedule must identify the types of problems to look for during the inspection (e.g., leaks, deterioration, readings out of specified range, missing items or materials, inoperative equipment, etc.). {264.15(b)(3)}</p>	
<p>F-2a(2) <u>Frequency of Inspection</u></p> <p>A description of the inspection frequency must be provided for items on the schedule. The frequency of inspection should be based on the rate of possible deterioration of equipment and the probability of an environmental or human health incident if the deterioration, malfunction, or operator error goes undetected between inspections. Areas subject to spills, such as loading and unloading areas, must be inspected daily when in use. {264.15(b)(4)}</p>	
<p>F-2b Facility Inspection Requirements</p> <p>F-2b(1) Monitoring Equipment</p> <p>Examples of monitoring equipment to be inspected at TSD facilities may include, but are not limited to: [Guidance(2) - page 5-77]</p> <ul style="list-style-type: none"> - Liquid level transmitters 	
<ul style="list-style-type: none"> - Conservation vents 	
<ul style="list-style-type: none"> - Leak detection/collection system 	
<ul style="list-style-type: none"> - Ground water monitoring system 	
<ul style="list-style-type: none"> - Liquid flow meters 	
<ul style="list-style-type: none"> - Scales 	
<ul style="list-style-type: none"> - Hazardous gas detectors 	
<ul style="list-style-type: none"> - pH monitors 	
<ul style="list-style-type: none"> - Pressure sensors 	
<ul style="list-style-type: none"> - Temperature gauges 	
<p>F-2b(2) <u>Emergency Equipment</u></p> <p>Examples of emergency equipment to be inspected at TSD facilities are: [Guidance(2) - page 5-77]</p> <ul style="list-style-type: none"> - Fire detection/control equipment <ul style="list-style-type: none"> • Fire blankets • Fire extinguishers • Fire alarm system • Smoke detectors • Fire fighting wagon/hoses • Alarm system (other than fire) 	
<ul style="list-style-type: none"> - Emergency backup equipment 	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<ul style="list-style-type: none"> ▪ Generators ▪ Emergency lights 	
<ul style="list-style-type: none"> - Spill control equipment <ul style="list-style-type: none"> ▪ Portable pumps/hoses ▪ Absorbants ▪ Containment booms ▪ Shovels ▪ Brooms ▪ Sump pumps 	
<ul style="list-style-type: none"> - Emergency Personal Protective Equipment <ul style="list-style-type: none"> ▪ Face shields ▪ Protective glasses/goggles ▪ Protective clothing (overalls, boots) ▪ Gas masks ▪ Chemical respirators ▪ Self-contained breathing apparatus 	
<p>F-2b(3) <u>Safety Equipment</u></p> <p>Examples of safety equipment to be inspected at TSD facilities are: [Guidance(2) - page 5-77]</p> <ul style="list-style-type: none"> - Emergency shower/eyewash 	
<ul style="list-style-type: none"> - Decontamination equipment <ul style="list-style-type: none"> ▪ Detergents ▪ Cleaning solvents 	
<ul style="list-style-type: none"> - Personal Protective Equipment <ul style="list-style-type: none"> ▪ Face shields ▪ Protective glasses/goggles ▪ Protective clothing (overalls, boots) ▪ Gas masks ▪ Chemical respirators 	
<ul style="list-style-type: none"> - First aid/equipment supplies 	
<ul style="list-style-type: none"> - Signs <ul style="list-style-type: none"> ▪ Warning ▪ No smoking 	
<ul style="list-style-type: none"> - Communication equipment <ul style="list-style-type: none"> ▪ Telephones ▪ Radios ▪ Intercoms ▪ Public address system ▪ Television monitoring system ▪ Pagers ▪ Cellular telephones 	
<p>F-2b(4) <u>Security Equipment</u></p> <p>Examples of security equipment to be inspected at TSD facilities are: [Guidance(2) - page 5-77]</p> <ul style="list-style-type: none"> - Surveillance system <ul style="list-style-type: none"> ▪ Video cameras ▪ Television monitors ▪ Alarm systems 	
<ul style="list-style-type: none"> - Barrier <ul style="list-style-type: none"> ▪ Fences-facility/area 	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<ul style="list-style-type: none"> • Gates • Locks 	
- Warning signs	
- Lighting	
<p>F-2b(5) <u>Operating and Structural Equipment</u></p> <p>Examples of operating and structural equipment to be inspected at TSD facilities are: [Guidance(2) - page 5-77]</p> <ul style="list-style-type: none"> - Structural equipment <ul style="list-style-type: none"> • Dikes • Berms • Ramps • Tank supports • Bases/foundations • Roofs • Walls • Fire and explosion barriers • Ventilation equipment 	
<ul style="list-style-type: none"> - Operating equipment <ul style="list-style-type: none"> • Lifts (elevators) 	
<ul style="list-style-type: none"> - Other areas (as applicable to hazardous waste management) <ul style="list-style-type: none"> • Loading/unloading areas • Storage areas • Main roadways • Gate areas • Periphery 	
<p>F-2b(6) <u>Testing of Equipment</u></p> <p>Examples of equipment requiring testing at TSD facilities are: {264.33} [Guidance(2) - page 5-104]</p> <ul style="list-style-type: none"> - Communication systems - Alarm systems - Fire control equipment - Spill control equipment - Decontamination equipment - Emergency water supply system 	
<p>F-2c <u>Specific Process Inspection Requirements</u></p> <p>At a minimum, the inspection schedule must include the terms and frequencies called for in 264.174, 264.195, 264.226, 264.254, 264.273(g), 264.303, 264.347 and 266.102, where applicable as detailed below. {270.14(b)(5) and 264.15(b)}</p>	
<p>F-2c(1) <u>Container Inspection</u></p> <p>A description of the weekly inspection of containers and container storage areas for leaks in containers or deterioration of containers and the containment system caused by corrosion or other factors. {264.174}</p>	
<p>F-2c(2) <u>Tank System Inspection</u></p>	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>- A description of the inspection each operating day of overfilling control equipment, monitoring equipment and levels of waste. These may include: {264.195(a)} [Guidance(2) - Section 5.5.2.3]</p> <ul style="list-style-type: none"> • Temperature gauges, • Pressure gauges, • Liquid level monitors, • Waste feed cut-off systems, • Overfill alarm systems. 	
<p>- A description of the daily inspection of aboveground portions of the tank system, if any, to detect corrosion or releases of waste. These may include: {264.195(b)(1)} [Guidance(2) - Section 5.5.2.3]</p> <ul style="list-style-type: none"> • Ancillary equipment, • Seals at manholes, gauge locations, etc., • Inlet/outlet nozzles and flanges. 	
<p>- A schedule describing the inspection each operating day of data from monitoring and leak detection equipment (e.g., pressure and temperature gauges) where present to ensure that the tank is operated according to design specifications. These may include: {264.195(b)(2)} [Guidance(2) - Section 5.5.2.3]</p> <ul style="list-style-type: none"> • Temperature, • Pressure, • Liquid level. 	
<p>- A description of the daily inspection of tank construction materials and the area surrounding the tank including secondary containment system (e.g., dikes) to detect erosion or signs of release. {264.195(b)(3)}</p>	
<p>- A schedule and procedure for assessing the condition of the tank, including detection of leaks, cracks, or wall thinning to less than minimum shell thickness. [Guidance(2) - page 5-82]</p>	
<p>- A procedure for emptying a tank to allow entry and inspection when necessary to detect corrosion or erosion of the tank sides and bottom. [Guidance(2) - page 5-82]</p>	
<p>- Confirm proper operation of cathodic protection system (if present) within six months after installation and at least annually thereafter. {264.195(c)(1)}</p>	
<p>- Schedule showing all sources of impressed current for cathodic protection system are inspected and/or tested at least bimonthly. {264.195(c)(2)}</p>	
<p>F-2c(3) <u>Waste Pile Inspection</u> Waste pile owners or operators must provide a description of procedures for:</p>	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>{270.18(d), and 264.254}</p> <ul style="list-style-type: none"> - For new facilities, inspection of liners/covers during and immediately after installation {264.254(a)} <ul style="list-style-type: none"> • Synthetic liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures and blisters, and {264.254(a)(1)} • Soil-based and admixed liners and covers must be inspected for imperfections, including lenses, cracks, channels, root holes, or other structural non-uniformities that may cause an increase in permeability. {264.254(a)(2)} 	
<ul style="list-style-type: none"> - Inspections should also include: [Guidance(2) - pages 5-86 and 5-92] <ul style="list-style-type: none"> • Raw materials prior to construction, • Construction equipment, • Construction procedures, • Post construction inspection. 	
<ul style="list-style-type: none"> - Inspections weekly and after storms to detect: <ul style="list-style-type: none"> • deterioration, malfunctions, or improper operation of run-on and run-off control systems; {264.254(b)(1)} • proper functioning of wind dispersal control systems, where present; {264.254(b)(2)} • the presence of leachate in and proper functioning of leachate collection and removal systems, where present; and {264.254(b)(3)} • the presence of liquids in and proper functioning of leak detection systems, where installed. The amount of liquid removed must be recorded. {264.254(c)} 	
<p>F-2c(4) <u>Surface Impoundment Inspection</u></p> <p>Surface impoundment owners or operators must provide a description of procedures for: {270.17(c) and 264.226(a)}</p> <ul style="list-style-type: none"> - For new facilities, inspection of liners/covers during and immediately after installation {264.226(a)} <ul style="list-style-type: none"> • Synthetic liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures and blisters, and {264.226(a)(1)} • Soil-based and admixed liners and covers must be inspected for imperfections, including lenses, cracks, channels, root holes, or other structural non-uniformities that may cause an increase in permeability. {264.226(a)(2)} <p>Inspections should also include: [Guidance(2) - page 5-86]</p>	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<ul style="list-style-type: none"> • Raw materials prior to construction, • Construction equipment, • Construction procedures, • Post construction inspection. 	
<ul style="list-style-type: none"> - Inspections weekly and after storms for: {264.226(b)} • Deterioration, malfunctions, or improper operation of overtopping control systems; {264.226(b)(1)} • Sudden drops in the level of the impoundment's contents {264.226(b)(2)} • Severe erosion or other signs of deterioration in dikes or other containment devices. {264.226(b)(3)} • the presence of liquids in and proper functioning of leak detection systems, where installed. The amount of liquid removed must be recorded. {264.226(d)(1)} 	
<p>F-2c(5) <u>Incinerator Inspection</u></p> <ul style="list-style-type: none"> - Incinerator and associated equipment must be inspected visually at least daily for leaks, spills, fugitive emissions and signs of tampering. {264.347(b)} 	
<ul style="list-style-type: none"> - Emergency waste feed cut-off system and associated alarms must be tested weekly unless the applicant demonstrates that weekly inspection is unduly restrictive and that less frequent inspection will be adequate. At a minimum, operational testing must be conducted monthly. {264.347(c)} 	
<ul style="list-style-type: none"> - Specific operating and monitoring equipment which should be inspected include: [Guidance(7) - page 80] - Incinerator equipment - Waste/fuel feed systems <ul style="list-style-type: none"> • Liquid waste feed systems, including flow meters, pumps and mixing devices; • Solid waste feed systems, including conveyor system and waste feed measurement system (scales); • Fuel feed systems, including flow meters, pumps and mixing devices. [Guidance(10) - pages II-23 - II-26] - Monitoring equipment <ul style="list-style-type: none"> • Waste flow monitors and recorders • Temperature monitors • O2 and CO monitors • Combustion gas flow monitors • Pressure monitors • Flame sensors • Pressure differential indicators • Ammeters for measuring blower current draw. [Guidance(10) - pages II-57 - II-73] - Air Pollution Control Equipment <ul style="list-style-type: none"> • Wet scrubbers (venturi, packed bed, ionizing) • Dry scrubbers (rotary atomization, and dual-fluid 	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>nozzle atomization)</p> <ul style="list-style-type: none"> • Fabric filters <p>APCE support systems and performance instrumentation should also be included in the inspection. [Guidance(10) - pages II-26 - II-57]</p>	
<p>F-2c(6) <u>Landfill Inspection</u></p> <p>Landfill owners or operators must provide a description of procedures for: {270.21(d), 264.15(a), and 264.303}</p> <ul style="list-style-type: none"> - For new facilities, inspection of liners/covers during and immediately after installation {264.303(a)} <ul style="list-style-type: none"> • Synthetic liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures and blisters, and {264.303(a)(1)} • Soil-based and admixed liners and covers must be inspected for imperfections, including lenses, cracks, channels, root holes, or other structural non-uniformities that may cause an increase in permeability. {264.303(a)(2)} <p>Inspections should also include: [Guidance(2) - page 5-86]</p> <ul style="list-style-type: none"> • Raw materials prior to construction, • Construction equipment, • Construction procedures, • Post construction inspection. 	
<ul style="list-style-type: none"> - Inspections weekly and after storms for: {264.303(b)} <ul style="list-style-type: none"> • Deterioration, malfunctions, or improper operation of run-on/run-off controls; {264.303(b)(1)} • Proper functioning of wind dispersal control systems, where present; {264.303(b)(2)} • Leachate in and proper operation of leachate collection/removal system; and {264.303(b)(3)} • Presence of liquids in and proper operation of leak detection system. The amount of liquid removed must be recorded. {264.303(c)(1)} 	
<p>F-2c(7) <u>Land Treatment Inspection</u></p> <p>Provide a description of how the unit will be inspected weekly and after storms for: {270.20(c)(5) and 264.273(g)}</p> <ul style="list-style-type: none"> - Deterioration, malfunctions, or improper operation of run-on and run-off control systems; {264.273(g)(1)} 	
<ul style="list-style-type: none"> - Improper functioning of wind dispersal control measures; and 	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>{264.273(g)(2)}</p>	
<p>- Wind breaks around unit for gaps or breakage. [Guidance(2) - page 5-96]</p>	
<p>F-2c(8) <u>Miscellaneous Unit Inspections</u></p> <p>Provide an inspection program which ensures compliance with the standards specified in F-2b(1) through F-2b(5), where applicable. Check other similar units for equipment and inspection examples. {264.602}</p>	
<p>F-2c(9) <u>Boilers and Industrial Furnaces Inspections</u></p> <p>- The boiler or industrial furnace and associated equipment must be inspected visually at least daily for leaks, spills, fugitive emissions and signs of tampering. {266.102(e)(8)(iii)}</p>	
<p>- The automatic hazardous waste feed cut-off system and associated alarms must be tested weekly when hazardous waste is burned unless the applicant demonstrates that weekly inspection is unduly restrictive and that less frequent inspection will be adequate. At a minimum, operational testing must be conducted monthly. {266.102(e)(8)(iv)}</p>	
<p>- Specific operating and monitoring equipment which should be inspected include: [Guidance(7) - page 80]</p> <p>- Boiler and/or industrial furnace</p>	
<p>- Waste/fuel feed systems</p> <ul style="list-style-type: none"> • Liquid waste feed systems, including flow meters, pumps and mixing devices; • Solid waste feed systems, including conveyor system and waste feed measurement system (scales); • Fuel feed systems, including flow meters, pumps and mixing devices • Raw material feed systems. <p>[Guidance(10) - pages II-23 - II-26]</p>	
<p>- Monitoring equipment</p> <ul style="list-style-type: none"> • Waste flow monitors and recorders • Temperature monitors • O₂, CO and HC monitors • Combustion gas flow monitors • Pressure monitors • Flame sensors • Pressure differential indicators • Ammeters for measuring blower current draw. <p>[Guidance(10) - pages II-57 - II-73]</p>	
<p>- Air Pollution Control Equipment</p> <ul style="list-style-type: none"> • Wet scrubbers (venturi, packed bed, ionizing) • Dry scrubbers (rotary atomization, and dual-fluid nozzle atomization) • Fabric filters <p>APCE support systems and performance instrumentation should also be included in the inspection.</p>	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
[Guidance(10) - pages II-26 – II-57]	
<p>F-2c(10) <u>Drip Pad Inspections</u></p> <ul style="list-style-type: none"> - Drip pad owners or operators of new facilities must provide a description of procedures for: <ul style="list-style-type: none"> {264.547(a)} • Inspection of liners/covers during installation for uniformity, damage and imperfections. • Inspection immediately after construction to certify that the drip pad was constructed in accordance with 264.573. • Inspection of liners and covers after installation to ensure tight seams and joints and the absence of tears, punctures and blisters. 	
<ul style="list-style-type: none"> - Inspections weekly and after storms for: <ul style="list-style-type: none"> • Deterioration, malfunctions, or improper operation of run-on and run-off control systems; <ul style="list-style-type: none"> {264.574(b)(1)} • Presence of leakage in or proper functioning of leak detection system; and <ul style="list-style-type: none"> {264.574(b)(2)} • Deterioration or cracking of the drip pad surface. <ul style="list-style-type: none"> {264.574(b)(3)} 	
<p>F-2c(11) <u>Containment Building Inspections</u></p> <p>A description of the inspection procedures. Specifically the unit must be inspected at least once every seven days. The inspection must include;</p> <p>{264.1101(c)(4)}</p> <ul style="list-style-type: none"> - data gathered from the monitoring equipment and leak detection equipment, and - the containment building and surrounding area for signs of release of hazardous waste. 	
<p>F-2c(12) <u>Subpart AA - Air Emission Standards for Process Vents</u></p> <p>The inspection requirements for these units will be covered under the Subpart AA checklist (Module AA).</p>	
<p>F-2c(13) <u>Subpart BB - Air Emission Standards for Equipment Leaks</u></p> <p>The inspection requirements for these units will be covered under the Subpart BB checklist (Module BB).</p>	
<p>F-2c(14) <u>Subpart CC - Air Emission Standards for Tanks, Surface Impoundments, and Containers</u></p> <p>The inspection requirements for these units will be covered under the Subpart CC checklist (Module CC).</p>	
<p>F-2d <u>Remedial Action</u></p> <p>A description of procedures for taking remedial actions when inspections reveal problems or when problems are imminent. These may alternately be described in the contingency plan (see 264.194(c), 264.227, and 264.171).</p> <p>{264.15(c)}</p>	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>F-2e <u>Inspection Log</u></p> <p>A copy or description of the inspection log or summary form including the following: {264.73(b)(5) and 264.15(d)}</p> <ul style="list-style-type: none"> - Dates and times of inspections, - Name(s) of the inspector(s), - Observations made, - Date and nature of repairs or remedial actions taken. 	
<p>F-3 <u>Waiver of Preparedness and Prevention Requirements</u></p> <p>A justification of any request for a waiver of preparedness and prevention requirements of Part 264, Subpart C. {270.14(b)(6)}</p>	
<p>F-3a <u>Equipment Requirements</u></p> <p>Unless it can be demonstrated that none of the hazards posed by waste handled at the facility would require a particular kind of equipment specified below, the facility must have the following equipment: {264.32}</p>	
<p>F-3a(1) <u>Internal Communications</u></p> <p>An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel. {264.32(a)}</p>	
<p>F-3a(2) <u>External Communications</u></p> <p>A device such as telephone (immediately available at the scene of operations) or a handheld two-way radio, for summoning emergency assistance from local police departments, or state or local emergency response teams. {264.32(b)}</p>	
<p>F-3a(3) <u>Emergency Equipment</u></p> <ul style="list-style-type: none"> - Portable fire extinguishers {264.32(c)} 	
<ul style="list-style-type: none"> - Fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals, and portable fire extinguishers) {264.32(c)} 	
<ul style="list-style-type: none"> - Spill control equipment {264.32(c)} 	
<ul style="list-style-type: none"> - Decontamination equipment. {264.32(c)} 	
<p>F-3a(4) <u>Water for Fire Control</u></p> <p>One of the following:</p> <ul style="list-style-type: none"> - Water at adequate volume and pressure to supply water hose streams, or {264.32(d)} 	
<ul style="list-style-type: none"> - Foam-producing equipment, or {264.32(d)} 	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>- Automatic sprinklers or water spray systems. {264.32(d)}</p>	
<p>F-3b <u>Aisle Space Requirements</u></p> <p>Sufficient aisle space is needed to allow the unobstructed movement of personnel, fire protection equipment, or spill control equipment to any area of facility operation in an emergency. "Sufficient" aisle space is determined by storage area configuration and corresponding emergency response and inspection procedures. A good rule of thumb is three (3) feet, a minimum of two (2) feet, and four (4) feet between rows which are two pallets wide. However, each facility must be evaluated individually to determine the minimum aisle space necessary for that facility's operation. {264.35}</p> <p>Requests for a waiver of this requirement must be accompanied by a demonstration that the aisle space is not needed.</p>	
<p>F-4 <u>Preventive Procedures, Structures, and Equipment</u></p> <p>A description of procedures, structures, or equipment used at the facility for the following must be included: {270.14(b)(8)}</p>	
<p>F-4a <u>Loading and Unloading Operations</u></p> <p>Prevention of hazards in unloading operations (e.g., use of ramps or special forklifts). {270.14(b)(8)(i)}</p>	
<p>F-4b <u>Run-Off</u></p> <p>Prevention of runoff from hazardous waste handling areas to other areas of the facility or environment, or prevention of flooding (e.g., berms, dikes, trenches). {270.14(b)(8)(ii)}</p>	
<p>F-4c <u>Water Supplies</u></p> <p>Prevention of contamination of water supplies. {270.14(b)(8)(iii)}</p>	
<p>F-4d <u>Equipment and Power Failure</u></p> <p>Mitigation of effects of equipment failure and power outages. {270.14(b)(8)(iv)}</p>	
<p>F-4e <u>Personal Protection Equipment</u></p> <p>Prevention of undue exposure of personnel to hazardous waste (e.g., protective clothing). {270.14(b)(8)(v)}</p>	
<p>F-4f <u>Ventilation Equipment</u></p> <p>Prevention of release to atmosphere. {270.14(b)(8)(vi)}</p>	
<p>F-5 <u>Prevention of Reaction of Ignitable, Reactive and Incompatible Wastes</u></p> <p>F-5a <u>Precautions to Prevent Ignition or Reaction of Ignitable or Reactive Wastes</u></p>	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>A description of the precautions taken by a facility that handles ignitable, reactive, or incompatible waste to demonstrate compliance with 264.17 including documentation demonstrating compliance with 264.17(c). Precautions to prevent actual ignition, including separation from sources of ignition such as: {270.14(b)(9) and 264.17(a) and (c)}</p> <ul style="list-style-type: none"> - Open flames - Smoking - Cutting and welding - Hot surfaces - Frictional heat - Sparks (static, electrical, or mechanical) - Spontaneous ignition (heat producing chemical reactions) - Radiant heat. <p>{264.17(a)}</p>	
<p>Demonstrations that when ignitable or reactive waste is being handled, the owner or operator confines smoking and open flames to specially designated locations. "No Smoking" signs must be conspicuously placed wherever a hazard exists for ignitable or reactive waste.</p> <p>{264.17(a)}</p>	
<p>F-5b <u>General Precautions for Handling Ignitable or Reactive Waste and Mixing of Incompatible Waste</u></p> <p>A description of the precautions taken by a facility that treats, stores, or disposes of ignitable or reactive waste, or accidentally mixes incompatible waste or incompatible wastes or other materials, to prevent reactions which: {270.14(b)(9) and 264.17(b) and (c)}</p> <ul style="list-style-type: none"> - generate extreme heat or pressure, fire or explosions, or violent reactions; {264.17(b)(1)} 	
<ul style="list-style-type: none"> - produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health or the environment; {264.17(b)(2)} 	
<ul style="list-style-type: none"> - produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions; {264.17(b)(3)} 	
<ul style="list-style-type: none"> - damage the structural integrity of the device or facility; {264.17(b)(4)} 	
<ul style="list-style-type: none"> - by similar means threaten human health or the environment. {264.17(b)(5)} 	
<p>Documentation to meet requirements of 264.17(a) or (b) may be based on references to published scientific or engineering literature, data from trial tests, waste analyses, or results of treatment of similar wastes by similar treatment processes and under similar operating conditions.</p> <p>{264.17(c)}</p>	
<p>F-5c <u>Management of Ignitable or Reactive Wastes in Containers</u></p> <p>Sketches, drawings, or data demonstrating that containers of</p>	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
ignitable or reactive waste are located at least 15 meters (50 feet) from the facility's property line or at least 60 meters (200 feet) from the property line if the area adjacent to the facility is not zoned for industrial use. {270.15(c), 264.176, and 15A NCAC 13A .0009(r)(2)(B)}	
F-5d <u>Management of Incompatible Wastes in Containers</u> A description of procedures to demonstrate compliance with 264.177(a) and (b) and 264.17(b) and (c): {270.15(d) and 264.177} - The procedures used to ensure that incompatible wastes and materials are not placed in the same container (unless 264.17(b) is complied with) or in an unwashed container that previously held an incompatible waste {264.177(a) and 264.177(b)}	
- Dikes, berms, walls, or other devices used to separate containers, holding wastes which are incompatible with wastes or materials stored nearby. {264.177(c)}	
F-5e <u>Management of Ignitable or Reactive Wastes in Tanks</u> A description of the procedures for handling incompatible, ignitable, or reactive wastes, including the use of buffer zones. {270.16(j)} - Waste must be treated, rendered, or mixed before or immediately after placement in the tank so that <ul style="list-style-type: none"> • it is no longer considered ignitable and complies with 264.17(b); {264.198(a)(1)} • or the waste is stored or treated in such a way that it is protected from any material or conditions that may cause the waste to react or ignite; {264.198(a)(2)} • or the tank is used solely for emergencies. {264.198(a)(3)} 	
- Facilities that treat or store ignitable or reactive waste in covered tanks must comply with the National Fire Protection Association's buffer zone requirements for tanks. {264.198(b)}	
F-5f <u>Incompatible Wastes in Tanks</u> A statement that incompatible wastes and materials are not stored in the same tank or in an unwashed tank that previously held an incompatible waste or material (unless 264.17(b) is complied with). {270.16(j) and 264.199}	
F-5g <u>Ignitable or Reactive Wastes in Waste Piles</u> The application must include a description of the procedures for handling ignitable or reactive wastes, including the use of buffer zones. {270.18(f)}	
- Waste must be treated, rendered, or mixed before or immediately after placement in the waste pile so that it is no longer considered ignitable or reactive and complies with	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
264.17(b); or {264.256(a)}	
- The waste is managed in such a way that it is protected from any material or conditions that may cause the waste to react or ignite. {264.256(b)}	
F-5h <u>Incompatible Wastes in Waste Piles</u> The applicant must include: {270.18(g)} - A statement that incompatible wastes or incompatible materials are not stored in the same waste pile unless 264.17(b) is complied with. {264.257(a)}	
- A description of the procedures (dikes, beams, walls, distances) utilized to separate a waste pile of hazardous waste that is incompatible with any waste or other material stored nearby. {264.257(b)}	
- A statement that hazardous wastes are not placed on the same base that previously held an incompatible waste or material unless 264.17(b) is complied with. {264.257(c)}	
F-5i <u>Ignitable or Reactive Wastes in Surface Impoundments</u> The application must include a description of the procedures for handling ignitable or reactive wastes, including the use of buffer zones. {270.17(g)}	
- Waste must be treated, rendered, or mixed before or immediately after placement in the surface impoundment so that it is no longer considered ignitable or reactive and complies with 264.17(b); or {264.229(a)}	
- The waste is stored or treated in such a way that it is protected from any material or conditions that may cause the waste to react or ignite; or {264.229(b)}	
- The impoundment is used only for emergencies. {264.229(c)}	
F-5j <u>Incompatible Wastes in Surface Impoundments</u> The application must include: - A statement that incompatible wastes and materials are not placed in the same surface impoundments or in the impoundments that previously held an incompatible waste or material unless 264.17(b) is complied with. {270.17(h) and 264.230}	
F-5k <u>Ignitable or Reactive Wastes in Landfills</u> The application must include a description of the procedures for handling ignitable or reactive wastes, including the use of buffer zones. {270.21(f)}	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<ul style="list-style-type: none"> - Waste must not be placed in a landfill cell unless the resulting waste, mixture, or dissolution of material is no longer considered ignitable or reactive and complies with 264.17(b); or {264.312(a)} 	
<ul style="list-style-type: none"> - A description of how ignitable and/or reactive waste will be landfilled in such a way that they are protected from any material which may cause them to ignite. As a minimum this should include placement in non-leaking containers, careful handling and placement to avoid any condition which might cause ignition, daily covering of containers with soil, and disposal in cells which do not contain other wastes which generate sufficient heat to cause ignition. {264.312(b)} 	
<p>F-5l <u>Incompatible Wastes in Landfills</u></p> <p>Applicant must provide procedures for insuring that incompatible wastes will not be disposed of in the same landfill cell, unless 264.17(b) is complied with. {270.21(g) and 264.313}</p>	
<p>F-5m <u>Ignitable or Reactive Wastes in Land Treatment</u></p> <p>A description of the management of ignitable or reactive wastes which will be placed in or on the treatment zone, if applicable, and an explanation of how the following requirements will be complied with: {270.20(g)}</p> <ul style="list-style-type: none"> - The waste is immediately incorporated into the soil so that the resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste and the requirements of 264.17(b) are complied with, or {264.281(a)} 	
<ul style="list-style-type: none"> - The waste is managed in such a way that it is protected from any material or conditions which may cause it to ignite or react. {264.281(b)} 	
<p>F-5n <u>Incompatible Wastes in Land Treatment</u></p> <p>A description of the management of incompatible wastes must be submitted if incompatible wastes, or incompatible wastes and materials, will be placed in or on the same treatment zone, including an explanation of how the requirements of 264.17(b) are complied with. {270.20(h) and 264.282}</p>	

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**REGULATORY COMPLETENESS CHECKLIST FOR
HAZARDOUS WASTE STORAGE, TREATMENT AND DISPOSAL FACILITIES**

Facility Name _____
 EPA ID Number _____
 Permit Review Team _____

 Date Review Completed _____

Guidance Document for Part G

(2) Permit Applicants' Guidance Manual for the General Facility Standards of 40 CFR 264, SW-968, October 1983.

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>PART G - CONTINGENCY PLAN</p> <p>A copy of the contingency plan required in Part 264, Subpart D. Include, where applicable, specific requirements in 264.196, 264.227, 264.253, and 264.304. {270.14(b)(7) and 264.50 through 264.56}</p> <p>Note that an existing spill prevention control plan can be amended to incorporate hazardous waste management provisions sufficient to comply with 264, Subpart D requirements. {264.52(b)}</p>	
<p>G-1 <u>General Information</u></p> <p>The contingency plan must be a stand alone document as it must be submitted to all local police departments, fire departments, hospitals, and State and local emergency response teams that may be called upon in the event of an emergency. Therefore the following information must be included in the contingency plan: {264.53(b)}</p> <ul style="list-style-type: none"> - Facility name and location and owner or operator name, - Site plan, and - Description of facility operations. 	
<p>G-2 <u>Emergency Coordinators</u></p> <ul style="list-style-type: none"> - An up-to-date list of emergency coordinators which should also be posted on site in various locations. This list must include names, addresses, office and home phone numbers, and duties of primary and alternate coordinators. The names on this list must be in the order in which they will assume responsibility. {264.52(d)} [Guidance(2) - page 5-116] 	
<ul style="list-style-type: none"> - A statement authorizing designated coordinators to commit the necessary resources to implement the contingency plan. {264.55} 	
<ul style="list-style-type: none"> - A statement indicating that the emergency coordinators can reach the facility in a short period of time. {264.55} 	
<p>G-3 <u>Implementation</u></p> <p>Criteria for implementation of contingency plan for any potential</p>	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>emergency:</p> <ul style="list-style-type: none"> - Fires, - Explosions, - Unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water. {264.52(a)} 	
<p>G-4 <u>Emergency Response Procedures</u></p> <p>G-4a <u>Notification</u></p> <p>Procedures for immediate notification of facility personnel and necessary state or local agencies in the event of an imminent or actual emergency. {264.56(a)}</p>	
<p>G-4b <u>Identification of Hazardous Materials</u></p> <ul style="list-style-type: none"> - Available data and/or procedures for identification of hazardous materials involved in the emergency and quantity and areal extent of release. Include information on: <ul style="list-style-type: none"> • Characteristics of waste, • Exact source, • Amount, and • Areal extent of release. {264.56(b)} 	
<ul style="list-style-type: none"> - This information may be obtained by: <ul style="list-style-type: none"> • observation, • review of facility records or manifests, and • if necessary, by chemical analysis. {264.56(b)} 	
<p>G-4c <u>Hazard Assessment</u></p> <ul style="list-style-type: none"> - Procedure for assessment of possible hazards to the environment and human health. This assessment must consider both direct and indirect effects of the release, fire or explosion. {264.56(c)} 	
<ul style="list-style-type: none"> - Procedures for determining the need for evacuation and notification of appropriate local authorities. {264.56(d)(1)} 	
<ul style="list-style-type: none"> - The authorities to be notified must include the On-Scene-Coordinator for that area or the National Response Center. A report to these authorities must include: <ul style="list-style-type: none"> • Name and telephone number of the reporter; • Name and address of the facility; • Time and type of incident; • Name and quantity of material(s) involved, to the extent known; • The extent of injuries, if any; and • The possible hazards to human health, or the environment, outside the facility. {264.56(d)(2)} 	
<p>G-4d <u>Control Procedures</u></p> <ul style="list-style-type: none"> - Specific responses and control procedures to be taken in the 	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
event of a fire, explosion, or release of hazardous waste or hazardous waste constituents to air, land, or water. {264.52(a)}	
- Procedures for deployment of these resources. {264.52(a)}	
- Methods to contain, treat, and clean up a hazardous release and decontaminate the affected area. {264.52(a) and 264.56(g)}	
<p>G-4d(1) <u>Prevention of Recurrence or Spread of Fires, Explosions, or Releases</u></p> <p>During an emergency situation, a description of the necessary steps to be taken to ensure that fires, explosions, or releases do not occur, recur, or spread to other hazardous waste at the facility. Steps must include, where applicable:</p> <ul style="list-style-type: none"> - Shut-down of processes and continued monitoring of them; {264.56(e)} - Collecting, containing, and treating released wastes; {264.56(e)} - Removing and isolating containers; and {264.56(e)} - Proper use of fire control structures (e.g., fire doors), systems (e.g., sprinkler systems), and equipment (e.g., extinguishers). [Guidance(2) - page 5-123] - Provisions to monitor for leaks, pressure buildup, gas generation, or ruptures as appropriate if operations at the facility are stopped in response to a release, fire, or explosion. {264.56(f)} 	
<p>G-4d(2) <u>Container Spills and Leakage</u></p> <p>Procedures for responding to container spills or leakage including removal of spilled waste and repair or replacement of containers. {264.171}</p>	
<p>G-4d(3) <u>Tank Spills and Leakage</u></p> <ul style="list-style-type: none"> - Procedures for responding to tank spills or leakage including: <ul style="list-style-type: none"> • Cessation of use of tanks, {264.196(a)} • Removal of waste from the tank system within 24 hours of leak or spill detection (if possible), {264.196(b)(1)} • Removal of waste from secondary containment within 24 hours of leak or spill detection (if possible), {264.196(b)(2)} • Prevention of further migration of leak or spill to soils or surface water, {264.196(c)(1)} • Removal and disposal of visibly contaminated soil or surface water. {264.196(c)(2)} - Any release must be reported to the Department within 24 hours of its detection except for leaks or spills which are: <ul style="list-style-type: none"> • Less than or equal to a quantity of one (1) pound, and • Immediately contained and cleaned up. 	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
{264.196(d)(1) and (2)}	
<ul style="list-style-type: none"> - Within 30 days of detection of a release to the environment, a report must be submitted to the Department. This report must contain the following information: <ul style="list-style-type: none"> • Likely route of migration of the release; • Characteristics of the surrounding soil; • Results of any sampling or monitoring conducted in connection with the release (submit as soon as available); • Proximity to downgradient drinking water, surface water, and populated areas; and • Description of the response actions taken or planned. {264.196(d)(3)}	
<ul style="list-style-type: none"> - Indicate that damaged tanks will be repaired or closed per the requirements of 40 CFR 264.196(e). {264.196(e)}	
<ul style="list-style-type: none"> - Indicate that a certification of major repairs by an independent, qualified, registered, professional engineer will be provided to the Department within 7 days after returning the tank system to use. {264.196(f)}	
<p>G-4d(4) <u>Waste Piles</u></p> <p>The owner/operator of waste piles must have an approved response action plan. The action plan must set forth the actions to be taken if the action leakage rate has been exceeded.</p> {264.253}	
<p>G-4d(5) <u>Surface Impoundments Spills, Leakage, and Sudden Drops</u></p> <p>A surface impoundment must be removed from service when the liquid level suddenly drops or the dike leaks. The following must be provided in the contingency plan:</p> {264.227}	
<ul style="list-style-type: none"> - Procedures for stopping waste additions, {264.227(b)(1)}	
<ul style="list-style-type: none"> - Procedures for containing any leakage, {264.227(b)(2)}	
<ul style="list-style-type: none"> - Procedures for stopping leaks and preventing sudden drops and preventing catastrophic failure, {264.227(b)(3) and 264.227(b)(4)}	
<ul style="list-style-type: none"> - Procedures and criteria for emptying impoundment, {264.227(b)(5)}	
<ul style="list-style-type: none"> - Notification of the Department in writing within 7 days after detecting the problem, {264.227(b)(6)}	
<ul style="list-style-type: none"> - If the impoundment was removed from service as the result of actual or imminent dike failure, the dike's structural integrity must be recertified in accordance with 264.266(c), {264.227(d)(1)}	
<ul style="list-style-type: none"> - Procedures for installing a liner in existing portions of the impoundment or procedures for certification of the liner in other than existing portions when the impoundment is removed form service as the result of a sudden drop in liquid 	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
level, {264.227(d)(2)}	
- Obtain independent, qualified, NC registered, professional engineer's certification of repairs and probability of leakage or failure. {264.227(d)(2)(ii)}	
G-4d(6) <u>Landfills</u> The owner/operator of landfills must have an approved response action plan. The action plan must set forth the actions to be taken if the action leakage rate has been exceeded. {264.304}	
G-4e <u>Incompatible Waste</u> Provisions for preventing waste which is incompatible with the released material from being treated, stored, or located in the affected areas until cleanup procedures are completed. {264.56(h)(1)}	
G-4f <u>Storage and Treatment of Released Material</u> Provisions for treatment, storage, or disposal of any hazardous waste, contaminated soil, contaminated surface water or any other material resulting from a release, fire, or explosion at the facility. {264.56(g)}	
G-4g <u>Post-Emergency Equipment Maintenance</u> Procedures for ensuring that all emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed. Appropriate State and local authorities must be notified before operations are resumed in the affected areas of the facility. {264.56(h)(2) and 264.56(i)}	
G-5 <u>Emergency Equipment</u> An up-to-date list of emergency equipment available at the facility. This list must be kept on site and contain the following information for each piece of emergency equipment: - Location, - Physical description, and - A description of the capabilities. {264.52(e)}	
The list should include the following equipment: {264.52(e)} [Guidance(2) - page 5-116]	
- Spill control equipment,	
- Fire control equipment,	
- Personal protective items such as respirators and protective clothing,	
- First aid and medical supplies,	
- Emergency decontamination equipment,	
- Emergency communication and alarm systems.	
G-6 <u>Coordination Agreements</u> - A description of coordination agreement with local police	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
and fire departments, hospitals, contractors, and state and local emergency response teams to familiarize them with the facility and actions needed in case of emergency. {264.37, 264.52(c) and 264.53}	
- A statement indicating that a copy of the contingency plan has been submitted to these organizations. {264.53(b)}	
- If applicable, document of refusal to enter into a coordination agreement. {264.37(b)}	
<p>G-7 <u>Evacuation Plan</u></p> <p>The plan must include: {264.52(f)}</p> <ul style="list-style-type: none"> - Criteria for evacuation, - A description of signal(s) to be used to begin evacuation, - Primary and alternate evacuation routes. 	
<p>G-8 <u>Required Reports</u></p> <ul style="list-style-type: none"> - Provisions for submission of reports of emergency incidents within 15 days of occurrence. {264.56(j)} - The report must include: <ul style="list-style-type: none"> • Name, address, and telephone number of the owner or operator; • Name, address, and telephone number of the facility; • Date, time, and type of incident; • Name and quantity of material(s) involved; • The extent of injuries, if any; • An assessment of actual or potential hazards to human health or the environment, where this is applicable, and • Estimated quantity and disposition of recovered material that resulted from the incident. {264.56(j)} - Notation of such incidents in the operating record identifying the time, date, and details of these emergency incidents. {264.56(j)} 	
<p>G-9 <u>Amendment to Contingency Plan</u></p> <p>Indicate that the contingency plan will be reviewed and amended whenever:</p> <ul style="list-style-type: none"> - The facility permit is revised; - The plan fails in an emergency; - The facility changes in a way that materially increases the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency; - The list of emergency coordinators changes; or - The list of emergency equipment changes. {264.54} 	

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**REGULATORY COMPLETENESS CHECKLIST FOR
HAZARDOUS WASTE STORAGE, TREATMENT AND DISPOSAL FACILITIES**

Facility Name _____
 EPA ID Number _____
 Permit Review Team _____

 Date Review Completed _____

Guidance Document for Part H

(2) Permit Applicants' Guidance Manual for the General Facility Standards of 40 CFR 264, SW-968, October 1983.

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>PART H - PERSONNEL TRAINING</p> <p><u>H-1 Training Program</u></p> <p>Describe the training programs provided by owners or operators to prepare the personnel to operate and maintain the facility in a safe manner as required to demonstrate compliance with 264.16. This description should include the following topics. {264.16 and 270.14(b)(12)} [Guidance(2) - Section 5.12.2]</p>	
<p><u>H-2 Job Titles and Duties</u></p> <p>For each employee whose position at the facility is related to hazardous waste management, provide the following information: {264.16(d) and comment following 264.16(a)(1)} [Guidance(2) - Sections 5.12.2.2 and 5.12.2.7]</p> <ul style="list-style-type: none"> - Job title {264.16(d)(1)} 	
<ul style="list-style-type: none"> - Written job description to include requisite skill, education or other qualifications, and job duties of employees assigned to each position. {264.16(d)(2)} 	
<p><u>H-3 Training Content</u></p> <ul style="list-style-type: none"> - Provide an outline of both the introductory and continuing training programs (including annual review of the initial training) and/or a table of contents of the training manual (if applicable). {270.14(b)(12), 264.16(c), 264.16(d)(3) and comment following 264.16(a)(1)} 	
<ul style="list-style-type: none"> - Provide a brief description of how training of facility personnel in hazardous waste management procedures (including contingency plan implementation) is relevant to each employee's position. {264.16(a)(2) and comment following 264.16(a)(1)} 	
<ul style="list-style-type: none"> - Documentation that the training program trains facility personnel to respond effectively to emergencies and trains them to be familiar with emergency procedures, emergency equipment, and emergency systems, include where applicable: {264.16(a)(3)} 	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<ul style="list-style-type: none"> • Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment; {264.16(a)(3)(i)} • Key parameters for automatic waste feed cut-off systems; {264.16(a)(3)(ii)} • Communications or alarm systems; {264.16(a)(3)(iii)} • Response to fires or explosions; {264.16(a)(3)(iv)} • Response to groundwater contamination incidents; and {264.16(a)(3)(v)} • Shutdown of operations. {264.16(a)(3)(vi)} 	
<p>H-4 <u>Training Frequency</u></p> <ul style="list-style-type: none"> - Provide the frequency at which training will be provided. Indicate that facility personnel will take part in an annual review of the initial training including a review of emergency procedures, the contingency plan, and any facility procedural revisions. {264.16(c)} 	
<ul style="list-style-type: none"> - Indicate the amount of training that each employee will receive. {264.16(d)(3)} 	
<ul style="list-style-type: none"> - Indication that training has been and will be successfully completed by facility personnel within 6 months of their employment or assignment to a facility, or transfer to a new position at a facility, whichever is later. {264.16(b)} 	
<p>H-5 <u>Training Techniques</u></p> <p>Describe the various techniques used to provide both the introductory and continuing training. This may include, but is not limited to:</p> <ul style="list-style-type: none"> - In-house class room training, - On-the-job training, and - Formal training courses. <p>{264.16(d)(3)}</p>	
<p>H-6 <u>Training Director</u></p> <p>Demonstration that the program is directed by a person trained in hazardous waste management procedures. Formal training programs should be instructed by hazardous waste management experts. On-the-job (performance) training should be provided by supervisors skilled in the actual operations of the facility. {264.16(a)(2)}</p> <p>[Guidance(2) - Section 5.12.2.1]</p>	
<p>H-7 <u>Recordkeeping</u></p> <ul style="list-style-type: none"> - For each employee whose position is related to hazardous waste management, indicate that the following documentation will be maintained at the facility: <ul style="list-style-type: none"> • Job title, {264.16(d)(1)} 	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<ul style="list-style-type: none"> • Name of employee, {264.16(d)(1)} • Job description and duties, and {264.16(d)(2)} • Documentation that the required training has been given to and completed by facility personnel. {264.16(d)(4)} 	
<ul style="list-style-type: none"> - Indicate that personnel records will be kept for current employees until facility closure or, for former employees, for three (3) years from the last date of employment at the facility. Personnel training records may accompany personnel transferred within the same company. {264.16(e)} 	

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**REGULATORY COMPLETENESS CHECKLIST FOR
HAZARDOUS WASTE STORAGE, TREATMENT AND DISPOSAL FACILITIES**

Facility Name _____
 EPA ID Number _____
 Permit Review Team _____

 Date Review Completed _____

The regulatory checklists are currently undergoing revision. While this checklist has been reformatted, it has not been reviewed for technical content.

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>PART I - CLOSURE PLANS, POSTCLOSURE PLANS, AND FINANCIAL REQUIREMENTS {270.14(b)(13), 270.14(b)(15), 270.14(b)(16), 270.14(b)(17), 270.14(b)(18), 264.110-264.151, 264.178, 264.197, 264.228, 264.258, 264.280, 264.310, and 264.351}</p> <p>I-1 <u>Closure Plans</u></p> <p>A copy of the written closure plan required by 264.112 and consistent with Items I-1a through I-1e. {270.14(b)(13) and 264.112}</p>	
<p>I-1a <u>Closure Performance Standard</u></p> <p>A description of how closure: {264.111 (264.112 requires consistency with 264.111)}</p> <ul style="list-style-type: none"> - Minimizes the need for further maintenance 	
<ul style="list-style-type: none"> - Controls, minimizes, or eliminates post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated run-off, or hazardous waste decomposition products to the ground or surface waters or to the atmosphere. 	
<ul style="list-style-type: none"> - Complies with the closure requirements of Subpart G and unit-specific closure requirements. 	
<ul style="list-style-type: none"> - Estimated expected year of closure for facilities that use trust funds to establish financial assurance and that are expected to close prior to the expiration of the permit. 	
<p>I-1b <u>Partial Closure and Final Closure Activities</u></p> <p>Fully describe time and all activities required for: {264.112(b) (264.112(b)(1) through 264.112(b)(7) outline minimum acceptable plan elements)}</p> <ul style="list-style-type: none"> - Partial closure, if applicable - Final closure - Maximum extent of operation which will be active during life of facility 	
<p>Description must identify how requirements of 264.111, 264.113, 264.114, 264.115 and applicable requirements of 264.178, 264.197, 264.228, 264.258, 264.280, 264.310, and 264.351 will</p>	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>be met.</p>	
<p>I-1c <u>Maximum Waste Inventory</u></p> <p>A description of the maximum inventory of wastes that could be in storage, treatment, and disposal at any time during the life of the facility. {264.112(b)(3)}</p> <p>Methods for removing, transporting, treating, storing, or disposing of all hazardous wastes. Identification of the type(s) of off-site hazardous waste management units to be used.</p>	
<p>I-1d <u>Schedule for Closure</u></p> <p>A schedule for final closure including: {264.112(b)(6)}</p> <ul style="list-style-type: none"> - Each HWMU and final closure of the facility 	
<ul style="list-style-type: none"> - Closure schedule with total time to close, time for intervening closure activities, and inspection schedule during closure. 	
<ul style="list-style-type: none"> - Estimated expected year of closure for facilities that use trust funds to establish financial assurance and that are expected to close prior to the expiration of the permit. 	
<p>I-d1(1) <u>Time Allowed for Closure</u></p> <p>The schedule for closure must show: {264.112(b)(2), 264.113(a) and (b)}</p> <ul style="list-style-type: none"> - All hazardous wastes will be treated, removed off-site, or disposed of on-site within 90 days from receipt of final volume of waste at the unit or facility 	
<ul style="list-style-type: none"> - All closure activities will be completed within 180 days from receipt of final volume of waste at the unit or facility. 	
<p>I-1d(1)(a) <u>Extensions for Closure Time</u></p> <p>A petition made to the Regional Administrator for a schedule for closure which exceeds the 90 days for treatment, removal, or disposal of wastes and/or the 180 days for completion of closure activities made to the Regional Administrator. One of the following must be demonstrated. {264.113(a) and 264.113(b)}</p> <ul style="list-style-type: none"> - Closure activities require longer than 90 or 180 days, 	
<ul style="list-style-type: none"> - Unit or facility has capacity to receive additional wastes, 	
<ul style="list-style-type: none"> - There is a reasonable likelihood that another person other than owner or operator will recommence operation of the site within one year, and 	
<ul style="list-style-type: none"> - Closure would be incompatible with continued operation. Demonstrate that all steps have and will be taken to prevent threats to human health and environment from unclosed but inactive facility. 	
<p>I-1e <u>Closure Procedures</u></p> <p>I-1e(1) <u>Inventory Removal, Disposal, or Decontamination of Equipment</u></p>	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>A description of how all facility equipment and structures will be decontaminated or disposed of when closure is completed. The following should be included: {264.112, 264.112(b)(4) and 264.114}</p>	
<ul style="list-style-type: none"> - Decontamination procedures 	
<ul style="list-style-type: none"> - Criteria for determining decontamination 	
<ul style="list-style-type: none"> - List of equipment, structures, and soils 	
<ul style="list-style-type: none"> - Disposal of contaminated soil and residues 	
<ul style="list-style-type: none"> - Decontamination of clean-up materials and equipment 	
<ul style="list-style-type: none"> - Demonstrate decontamination has been effective. 	
<p>A demonstration that any hazardous constituents left will not impact environmental media in excess of agency established exposure levels, and direct contact will not pose a threat to human health and the environment. {264.111(b)} [Guidance (Preamble 51 FR 16444, May 2, 1986)]</p>	
<p>I-1e(2) <u>Closure of Disposal Units</u></p> <p>Closure plans for all piles, landfills, surface impoundments, and miscellaneous disposal units in which wastes or contaminated materials are to remain at closure must describe how the unit will be closed, including a description of the final cover to be established and its expected performance. Contingent closure plans for tanks, surface impoundments, and waste piles also must provide these descriptions. {270.14(b)(13), 270.17(f), 270.18(h), 270.21(e), 264.228(a)(2), 264.228(c)(1)(i), 264.258(c), 264.310(a), and 264.601 }</p>	
<p>I-1e(3) <u>Closure of Containers</u></p> <p>A description of how at closure, all hazardous waste residues will be removed from the containment system, and how remaining containers, bases, and soil containing or contaminated with hazardous waste or hazardous waste residues will be decontaminated or removed. {264.178}</p> <p>The description should address the following:</p>	
<ul style="list-style-type: none"> - Hazardous waste removal and disposal [Guidance] 	
<ul style="list-style-type: none"> - Container decontamination and disposal [Guidance] 	
<ul style="list-style-type: none"> - Site decontamination and disposal including linings, soil, and washes [Guidance] 	
<ul style="list-style-type: none"> - Verification of decontamination [Guidance] 	
<ul style="list-style-type: none"> - Maximum inventory {264.112(b)(3)} 	
<p>I-1e(4) <u>Closure of Tanks</u></p> <p>A description of how at closure, all hazardous waste residues will be removed from tanks, discharge control equipment, and secondary containment structures, and the facility will be decontaminated. The description should address the following: {264.197(a)}</p>	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<ul style="list-style-type: none"> - Waste removal from tanks and equipment [Guidance] 	
<ul style="list-style-type: none"> - Decontamination of all components [Guidance] 	
<ul style="list-style-type: none"> - Verification of decontamination [Guidance] 	
<ul style="list-style-type: none"> - Disposal of wastes and residues [Guidance] 	
<ul style="list-style-type: none"> - Maximum inventory {264.112(b)(3)} 	
<p>If not all contaminated soils can be removed or decontaminated at closure, a closure and post-closure plan for a landfill must be included. If the tank systems do not have secondary containment or are not exempt, then a contingent closure and post-closure plan for a landfill must be provided. {264.197(b) and 264.197(c)}</p>	
<p>I-1e(5) Closure of Waste Piles</p> <p>The application must describe how all hazardous waste residues, contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leachate will be removed or decontaminated at closure and managed as hazardous waste. {270.18(h), 264.258 and 264.112(b)(4)}</p>	
<p>If any wastes, waste residues, or contaminated materials or soils will remain after closure, provide plans for closing the pile as a landfill [I-1f(6)] and provide postclosure plan [I-2]. Piles without liners or with liners that do not meet the requirement of D-3e must also provide contingent plans for closing the facility as a landfill {I-1d(6)} and a contingent post-closure [I-2], except for dry, enclosed piles meeting the requirements of D-3b or piles for which a liner exemption is sought in accordance with D-3c.</p> <p>The description should address the following:</p> <ul style="list-style-type: none"> - Procedure and criteria for determining whether or not decontamination has been successful 	
<ul style="list-style-type: none"> - Sampling and analytical techniques 	
<p>I-1e(6) Closure of Surface Impoundments</p> <p>A description of how all hazardous waste residues, contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leachate will be removed or decontaminated at closure and managed as hazardous waste. {270.17(f), 264.228(a)(1) and (2), and 264.228(b)}</p> <p>The description should address the following:</p> <ul style="list-style-type: none"> - Procedure and criteria for determining whether or not decontamination has been successful [Guidance] 	
<ul style="list-style-type: none"> - Sampling and analytical techniques [Guidance] 	
<ul style="list-style-type: none"> - Continuance of treatment during closure (if appropriate). [Guidance] 	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>If any wastes, waste residues or contaminated materials or soils will remain after closure, provide plans for closing the surface impoundment in place and provide post-closure plans [I-2]. Plans for closing a surface impoundment in place must address the following:</p>	
<ul style="list-style-type: none"> - Elimination of liquids by removal or solidification 	
<ul style="list-style-type: none"> - Stabilization of wastes to sufficient bearing capacity 	
<ul style="list-style-type: none"> - Final cover designed and constructed to provide long-term minimization of migration of liquids through the closed impoundment, function with minimal maintenance, promote drainage, and minimize erosion of final cover, accommodate settling and subsidence, and have a permeability less than or equal to that of the bottom liner system or natural subsoils present. 	
<p>Surface impoundments without liners or with liners that do not meet requirements of D-4c must also provide contingent plans for closure in place and a contingent post-closure plan [I-2], except for impoundments requesting a liner exemption in accordance with D-4b.</p>	
<p>I-1e(7) <u>Closure of Incinerators</u></p> <p>Description of how at closure all hazardous waste and hazardous waste residues including ash, scrubber waters, and scrubber sludges will be removed from the incinerator, associated duct work, piping, air pollution control equipment, sumps, and any other structures or operating equipment such as pumps, valves, etc., that have come into contact with the hazardous waste. Alternatively, a description of how the incinerator and associated units and equipment will be dismantled and disposed of as a hazardous waste will suffice. {264.351}</p>	
<p>I-1e(8) <u>Closure for Landfills</u></p> <p>Provide detailed plans and an engineering report which describes the final cover components in detail. Cover installation and construction quality assurance procedures should be thoroughly described. These detailed plans and engineering reports must describe how the final cover will: {270.21(e), 264.310(a) and 264.280(b)}</p> <ul style="list-style-type: none"> - Provide long-term minimization of migration of liquids through closed landfill - Function with minimum maintenance - Promote drainage and minimize erosion/abrasion - Settle/subside without losing integrity - Be less permeable than bottom liners or subsoils - Withstand freeze/thaw cycles. 	
<p>I-1e(9) <u>Closure of Land Treatment</u></p> <p>During closure of land treatment facilities, the owner or operator must comply with the following: {270.20(f) and 264.280(a)}</p> <ul style="list-style-type: none"> - Continue all operations (including pH control) necessary to maximize degradation, transformation, or immobilization of 	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
hazardous constituents within the treatment zone as required, except to the extent such measures are inconsistent with 264.280(a)(8)	
- Continue all operations in the treatment zone to minimize run-off of hazardous constituents	
- Maintain the run-on control system	
- Maintain the run-off management system	
- Control wind dispersal of hazardous waste if required	
- Continue to comply with any prohibitions or conditions concerning growth of food-chain crops	
- Continue unsaturated zone monitoring except that soil-pore liquid monitoring may be terminated 90 days after the last application of waste to the treatment zone	
- Establish a vegetative cover on the portion of the facility being closed at such time that the cover will not substantially impede degradation, transformation, or immobilization of hazardous constituents in the treatment zone. The vegetative cover must be capable of maintaining growth without extensive maintenance.	
When closure is complete the owner-operator may submit to the Regional Administrator certification by an independent qualified soil scientist, in lieu of an independent registered professional engineer that the facility has been closed in accordance with the specifications in the approved closure plan.	
<p>I-1e(10) <u>Closure of Miscellaneous Units</u></p> <p>Show that at closure, all hazardous waste and hazardous waste residues will be removed from the treatment process or equipment, discharge control equipment, and discharge confinement structures, and that the facility will be decontaminated. Description of the sampling/test procedures or other means used to ensure that no contamination remains on, in, or around the units and associated equipment and structures. If any wastes, waste residues, or contaminated materials or soils will remain after closure, provide plans for closing the miscellaneous unit as a disposal unit [I-1e(2)] and provide post-closure plans [I-2]. {264.601 and 270.23(a)(2)}</p>	
<p>I-2 <u>Post-Closure Plan</u></p> <p>An owner/operator of a disposal facility must have a written post-closure plan, or, if applicable, a contingent post-closure plan. A copy of the approved plan and all revisions to the plan must be kept at the facility until the post-closure care begins. Landfill, surface impoundment, waste pile, and tank post-closure plans should address items I-2a, b, c, f, g, h; land treatment unit post-closure plan, items I-2d f, g, and h; miscellaneous units should address items I-2a, b, c, e, f, g, and h. {270.14(b)(13), 270.17(f), 270.18(h), 270.20(f), 270.21(e), 270.23(a)(3), 264.118, 264.197(b), 264.197(c)(2), 264.228(b), 264.228(c)(1)(ii), 264.258(b), 264.258(c)(1)(ii), 264.280(c), 264.310(b), and 264.603}</p>	
<p>I-2a <u>Inspection Plan</u></p> <p>A description of the inspections to be conducted during the post-closure care period, their frequency, the inspection procedure,</p>	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>and the logs to be kept. The following items, as applicable, should be included in the inspection plan: {264.118(a), 264.197(b), 264.197(c)(2), 264.228(b), 264.228(c)(1)(ii), 264.258(b), 264.258(c)(1)(ii), and 264.310(b)}</p> <ul style="list-style-type: none"> - Security control devices 	
<ul style="list-style-type: none"> - Erosion damage 	
<ul style="list-style-type: none"> - Cover settlement, subsidence, and displacement 	
<ul style="list-style-type: none"> - Vegetative cover condition 	
<ul style="list-style-type: none"> - Integrity of run-on and run-off control measures 	
<ul style="list-style-type: none"> - Cover drainage system function 	
<ul style="list-style-type: none"> - Leachate collection/detection and removal system maintenance 	
<ul style="list-style-type: none"> - Gas venting system 	
<ul style="list-style-type: none"> - Well condition 	
<ul style="list-style-type: none"> - Benchmark integrity 	
<p>The rationale to be used to determine the need for corrective maintenance activities.</p>	
<p><u>I-2b Monitoring Plan</u></p> <p>A description of the monitoring to be conducted during the post-closure care period, including, as applicable, the procedures for conducting the following operations and evaluating the data gathered should include: {264.118(b)(1), 264.228(b), 264.197(b), 264.197(c)(2), 264.228(c)(1)(ii), 264.258(b), 264.258(c)(1)(ii), and 264.310(b)}</p> <ul style="list-style-type: none"> - Groundwater monitoring - Leachate collection/detection and removal. 	
<p><u>I-2c Maintenance Plan</u></p> <p>A description of preventative and corrective maintenance procedures, equipment procedures, equipment requirements, and material needs. Include the following items in the maintenance plan, as applicable: {264.118(b)(2), 264.197(b), 264.197(c)(2), 264.228(b), 264.228(c)(1)(ii), 264.258(b), 264.258(c)(1)(ii), and 264.310(b)}</p> <ul style="list-style-type: none"> - Repair of security control devices - Erosion damage repair - Correction of settlement, subsidence, and displacement - Mowing, fertilization, and other vegetative cover maintenance - Repair of run-on and run-off control structures - Leachate collection/detection system maintenance - Well replacement - The rationale to be used to determine the need for corrective maintenance activities. 	
<p><u>I-2d Land Treatment</u></p> <p>A description of the operation, inspection, and maintenance programs to be used at the closed facility. Include descriptions of the procedures for conducting the following activities and identify frequencies at which they are to be conducted: {264.280(c)}</p>	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
- Continuance of land treatment	
- Vegetative cover maintenance	
- Maintenance of run-on control systems and run-off management systems	
- Wind dispersal control	
- Control of food chain crops	
- Unsaturated zone monitoring	
<p><u>I-2e Post-Closure Care for Miscellaneous Units</u></p> <p>A detailed description of the plans to ensure protection of human health and the environment. Include the prevention of any releases to groundwater or subsurface environment; surface water or wetlands or on the soil surface; or to air. This will include providing related information form [D-8]. {270.23(a)(3) and 264.603}</p>	
<p><u>I-2f Post-Closure Security</u></p> <p>Indicate which security provisions will continue during closure when hazardous waste will remain exposed after completion of partial or final closure or access by the public or domestic livestock may pose a hazard to human health. {264.117(b)}</p>	
<p><u>I-2g Post-Closure Contact</u></p> <p>Provide the name, address, and phone number of the person or office to contact about the hazardous waste disposal unit or facility during the post-closure care period. {264.118(b)(3)}</p>	
<p><u>I-3 Notices Required for Disposal Facilities</u></p> <p><u>I-3a Certification of Closure</u></p> <p>A statement by the applicant which indicates that within 60 days of completion of closure of each hazardous waste surface impoundment, waste pile, land treatment, and landfill unit, and within 60 days of the completion of final closure, closure certification will be submitted to the Regional administrator. The certification must certify that the hazardous waste management unit or facility, as applicable, has been closed in accordance with the specifications of the approved closure plan. The certification must be signed by the owner/operator and by an independent registered professional engineer (or by an independent qualified soil scientist in the case of a land treatment closure). {264.115 and 264.280(b)}</p>	
<p><u>I-3b Survey Plat</u></p> <p>A statement by the applicant which indicates that no later than the submission of certification of closure of each hazardous waste disposal unit, a survey plat indicating the location and dimensions of landfill cells or other disposal units with respect to permanently surveyed benchmarks, will be submitted to the local zoning authority (or authority with jurisdiction over local land use) and to the Regional Administrator. The plat must be prepared and certified by a professional land surveyor and must contain a note, prominently displayed, which states the owner-operator's obligation to restrict disturbance of the disposal unit in</p>	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>accordance with applicable 40 CFR 264 Subpart G regulations. {264.116}</p>	
<p><u>I-3c Notice to Local and Authority</u></p> <p>Documentation by applicant that within 60 days after closure, a record of the type, location, and quantity of hazardous waste within each cell or disposal area will be submitted to the appropriate local land use authority and to the Regional Administrator. {264.119}</p>	
<p><u>I-3d Post-Closure Certification</u></p> <p>Provide a statement which indicates that within 60 days of completion of the post-closure care period for each hazardous waste disposal unit, certification will be submitted to the Regional Administrator. The certification must certify that the post-closure care period for the hazardous waste disposal unit was performed in accordance with the specifications of the approved post-closure plan. The certification must be signed by the owner/ operator and by an independent registered professional engineer. {264.120}</p>	
<p><u>I-3e Notice in Deed to Property</u></p> <p>Documentation by applicant that s/he has or will record a notation on the facility deed, or other instrument examined during a title search, that notifies any potential purchase of the property that: {270.14(b)(14) and 264.119}</p>	
<ul style="list-style-type: none"> - The property has been used to manage hazardous wastes 	
<ul style="list-style-type: none"> - Use of the land is restricted to activities that will not disturb integrity of final cover system, or monitoring system during post-closure care period 	
<ul style="list-style-type: none"> - Requirements stated under I-3a above have been complied with. 	
<p><u>I-4 Closure Cost Estimate</u></p> <p>A copy of the most recent closure or contingent closure cost estimate, prepared in accordance with 264.142. {270.14(b)(15)}</p>	
<ul style="list-style-type: none"> - Cost estimate based on third party costs {264.142(a)(2)} 	
<ul style="list-style-type: none"> - Fully loaded (most costly) [Guidance] 	
<ul style="list-style-type: none"> - No salvage credits {264.142(a)(3) and (4)} 	
<ul style="list-style-type: none"> - Current year costs {264.142(a)} 	
<ul style="list-style-type: none"> - Cost adjusted annually from anniversary date of first cost estimate {264.142(b)} 	
<ul style="list-style-type: none"> - Based on point in operating life when extent and manner of operation would make closure most expensive. {264.142(a)} 	
<p><u>I-5 Financial Assurance Mechanism for Closure</u></p>	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>A copy of the established financial assurance mechanism for facility closure adopted in compliance with 264.143. The mechanism must be one of the following [I-5(a) through I[5(f)] and include due dates and use standard wording. {270.14(b)(15), 264.143 and 264.151}</p>	
<p><u>I-5a Closure Trust Fund</u></p> <p>A copy of the closure trust fund agreement with the wording required in 264.151(a)(1) and a formal certification of acknowledgement. {264.143(a) and 264.151(a)(1)}</p> <ul style="list-style-type: none"> - Bank or approval institution 	
<ul style="list-style-type: none"> - Mechanics: <ul style="list-style-type: none"> · pay-in period; life of permit or remaining life of facility, whichever is shorter, · annual payment; unfunded liability divided by years left in pay-in period. 	
<p><u>I-5b Surety Bond</u></p> <p>A surety bond from a federally acceptable surety company meeting one of the following requirements: {264.143(b) and(c), 264.151(b) and (c)}</p> <ul style="list-style-type: none"> - Surety bond guaranteeing payment into a closure trust fund. A copy of the surety bond with the wording required in 264.151(b), a copy of the standby trust fund agreement {264.143(b) and 264.151(b)} 	
<ul style="list-style-type: none"> - Surety bond guaranteeing performance of closure. A copy of the surety bond with the wording required in Part 264.151(c), Guaranteeing that the owner/operator will perform closure according to the closure plan and the requirements of Subpart G. {264.143(c) and 264.151(c)} 	
<p><u>I-5c Closure Letter of Credit</u></p> <p>A copy of a closure letter of credit with the wording required in 264.151(d): {264.143(d) and 264.151(d)}</p> <ul style="list-style-type: none"> - Irrevocable letter of credit - At least one year period, automatic renewal - Standby trust fund - Amount reflects current cost estimate. 	
<p><u>I-5d Closure Insurance</u></p> <p>To demonstrate that the owner/operator has closure insurance, s/he must submit to the Regional Administrator 60 days before hazardous waste is received a certificate of insurance worded as specified in 264.151(e). {264.143(e) and 264.151(e)}</p> <ul style="list-style-type: none"> - Non-cancelable policy, automatic renewal - Insurer licensed or eligible surplus lines carrier - Certificate of insurance 	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>- Funds available whenever final closure occurs.</p>	
<p><u>I-5e Financial Test and Corporate Guarantee for Closure</u></p> <p>To demonstrate that this test is met, an owner/operator must submit a letter signed by the company's chief financial officer that is worded as specified in 264.151(f) and meets the following criteria: {264.143(f), 264.151(f), and 264.151(h)}</p>	
<p>- Tangible net worth \$10 million</p>	
<p>- Tangible net worth 6 x all closure and post-closure costs</p>	
<p>- U.S. assets at least 90% of total assets or at least six times all closure and post-closure costs</p>	
<p>- Bond rating requirement or alternative financial ratio tests</p>	
<p>- Application must include:</p> <ul style="list-style-type: none"> • copy of a report from the owner's/ operator's independent CPA to the owner/operator stating that s/he has examined the data in the letter from the chief financial officer and that it is consistent with the amounts in the independently-audited year-end financial statements for the latest fiscal year and that no matters came to attention to cause her/him to believe that the data should be adjusted. 	
<p>In lieu of the above items, the owner/ operator may submit a corporate guarantee worded as required by 264.151(h). This guarantee provides that the guarantor must be the parent company of the owner/ operator. A copy of these items should be submitted with the Part B for review by the permit writer. {264.143(f)(10)}</p>	
<p><u>I-5f Combinations</u></p>	
<p><u>I-5f(1) Use of Multiple Financial Mechanisms</u></p> <p>A copy of a combination of trust fund agreements, surety bond guaranteeing payment into a closure trust fund, letter of credit, or insurance, and state assumption of responsibility, which provide financial assurance for the amount of closure. Combined financial assurance must be at least equal to the adjusted closure cost estimate. Financial assurance instruments must meet requirements 264.143(a),(b),(d), or (e) which include closure trust fund, surety bond guaranteeing payment into a closure trust fund, closure letter of credit, and closure insurance, respectively. {264.143(g)}</p>	
<p><u>I-5f(2) Use of Financial Mechanism for Multiple Facilities</u></p>	
<p>A copy of a financial assurance mechanism for more than one facility showing for each facility, the EPA ID number, name, address, and amount of closure funds assured by the mechanism. {264.143(h)}</p> <p>Total funding must be no less than the sum required for each facility considered separately. Documents must be submitted to each Region where facilities are located. Financial test applies to sum of closure and post-closure costs for all facilities. {264.143(h)}</p>	
<p><u>I-6 Post-Closure Cost Estimate</u></p>	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>If landfill, land treatment, surface impoundments, or waste piles are utilized, the application must include a post-closure or a contingent post-closure cost estimate prepared in accordance with 264.144: {270.14(b)(16) and 264.144}</p> <ul style="list-style-type: none"> - Fully loaded labor rate (third party) [Guidance] 	
<ul style="list-style-type: none"> - No salvage values [Guidance] 	
<ul style="list-style-type: none"> - No operation credits (gas, crops, livestock) [Guidance] 	
<ul style="list-style-type: none"> - Current year [Guidance] 	
<ul style="list-style-type: none"> - Based on the extent of operation most likely to make post-closure most expensive [Guidance] 	
<ul style="list-style-type: none"> - Inspection costs [Guidance] 	
<ul style="list-style-type: none"> - Administration [Guidance] 	
<ul style="list-style-type: none"> - Transportation [Guidance] 	
<p>I-7 <u>Financial Assurance Mechanism for post-Closure</u></p> <p>A copy of the established financial assurance mechanism for post-closure care adopted in compliance with 264.145. The mechanism must be one of the following: {270.14(b)(16), 264.145 and 264.151}</p> <p>[I-7(a) through I-7(f)] and include due dates and use standard wording.</p>	
<p>I-7a <u>Post-Closure Trust Fund</u></p> <p>A copy of the post-closure trust fund agreement with the wording required in 264.151(a)(1) and a formal certification of acknowledgement: {264.145(a) and 264.151(a)(1)}</p> <ul style="list-style-type: none"> - Bank or approval institution 	
<ul style="list-style-type: none"> - Mechanics <ul style="list-style-type: none"> • pay-in period; life of permit or remaining life of facility, whichever is shorter • annual payment; unfunded liability divided by years left in pay-in period. 	
<p>I-7b <u>Surety Bond</u></p> <p>A surety bond from a federally acceptable surety company meeting one of the following requirements: {264.145(b) and (c), 264.151(b) and (c)}</p> <ul style="list-style-type: none"> - Surety bond guaranteeing payment into a post-closure trust fund. A copy of the surety bond with the wording required in 264.151(b), a copy of the standby trust fund agreement. {264.145(b) and 264.151(b)} 	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<ul style="list-style-type: none"> - Surety bond guaranteeing performance of post-closure activities. A copy of the surety bond with the wording required in Part 264.151(c), guaranteeing that the owner/operator will perform post-closure plan and the requirements of Subpart H. {264.145(c) and 264.151(c)} 	
<p><u>I-7c Post-Closure Letter of Credit</u></p> <p>A copy of post-closure letter of credit with the wording required in 264.151(d): {264.145(d) and 264.151(d)}</p> <ul style="list-style-type: none"> - Irrevocable letter of credit 	
<ul style="list-style-type: none"> - At least one year period, automatic renewal 	
<ul style="list-style-type: none"> - Standby trust fund 	
<ul style="list-style-type: none"> - Amount reflects current cost estimate 	
<p><u>I-7d Post-Closure Insurance</u></p> <p>To demonstrate that the owner/operator has post-closure insurance, s/he must submit to the Regional Administrator 60 days before hazardous waste is received a certificate of insurance worded as specified in 264.151(e): {264.145(e) and 264.151(e)}</p> <ul style="list-style-type: none"> - Noncancellable policy, automatic renewal 	
<ul style="list-style-type: none"> - Insurer licensed or eligible surplus lines carrier 	
<ul style="list-style-type: none"> - Certificate of insurance 	
<ul style="list-style-type: none"> - Funds available whenever final post-closure occurs. 	
<p><u>I-7e Financial Test and Corporate Guarantee for Post-Closure</u></p> <p>To demonstrate that this test is met, an owner/operator must submit a letter signed by the company's chief financial officer that is worded as specified in 264.151(f) and meets the following criteria: {264.145(f), 264.151(f) and 264.151(h)}</p> <ul style="list-style-type: none"> - Tangible net worth \$10 million 	
<ul style="list-style-type: none"> - Tangible net worth 6 x all closure and post-closure costs 	
<ul style="list-style-type: none"> - U.S. assets at least 90 percent of total assets or at least six times all closure and post-closure costs 	
<ul style="list-style-type: none"> - Bond rating requirements or alternative 	
<ul style="list-style-type: none"> - Application must include: <ul style="list-style-type: none"> • copy of a report on the company's latest financial statements drafted by an independent certified public accountant (CPA) • copy of a report from the owner's/ operator's independent CPA to the owner/operator stating that s/he has examined the data in the letter from the chief financial officer and that it is consistent with the amounts in the independently-audited year-end financial statements for the latest fiscal year and that no matters came to attention to cause him to believe that the data should be adjusted. 	
<p>In lieu of the above items, the owner/ operator may submit a corporate guarantee worded as required by 264.151(h). This</p>	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>guarantee provides that the guarantor, which must be the parent company of the owner/operator, will perform post-closure activities in accordance with the post-closure plan if the owner/operator fails to do so or will establish a post-closure trust fund for the owner/operator. A copy of these items should be submitted with the Part B for review by the permit writer. {264.145(f)(10)}</p>	
<p><u>I-7f Combinations</u></p> <p><u>I-7f(1) Use of Multiple Financial Mechanisms</u></p> <p>A copy of a combination of trust fund agreements, surety bond guaranteeing payment into a post-closure trust fund or letters of credit, insurance, and state assumption of responsibility, which provide financial assurance for the amount of post-closure. Combined financial assurance must be at least equal to the adjusted post-closure cost estimate. Financial assurance instruments must meet requirements of 264.143(a),(b), (d), or (e) which include post-closure trust fund, surety bond guaranteeing payment into a post-closure trust fund, post-closure letter of credit, and post-closure insurance, respectively. {264.145(g)}</p>	
<p><u>I-7f(2) Use of Financial Mechanism for Multiple Facilities</u></p> <p>A copy of a financial assurance mechanism for more than one facility showing for each facility, the EPA ID number, name, address, and amount of closure funds assured by the mechanism. Total funding must be no less than the sum required for each facility considered separately. Documents must be submitted to each Region where facilities are located. Financial test applies to the sum of closure and post-closure costs for all facilities. {264.145(h)}</p>	
<p><u>I-8 Liability Requirements</u></p> <p>Where applicable, a copy of the insurance policy or other documentation which comprise compliance with the requirements of 264.147. (Coverage is for all facilities owned and operated and applies until certification for closure and post-closure is completed. For facilities in Phase I authorized states, originally signed duplicates of executed instruments or certificates of insurance are not required until the time of permit issuance, except as required by state law.) {270.147(b)(17), 264.147(a) and (b)}</p>	
<p><u>I-8a Sudden Insurance</u></p> <p>Hazardous waste treatment, storage, or disposal facilities must demonstrate financial responsibility for bodily injury and property damage to third parties caused by sudden accidental occurrences. {264.147(a), 264.147(g), and 264.151(g, i, j)}</p>	
<p>- Amount of at least \$1 million per occurrence</p>	
<p>- An annual total of at least \$2 million, exclusive of legal costs</p>	
<p>- A signed duplicate original of the Hazardous Waste Facility Liability Endorsement worded as specified in ?????</p>	
<p>- A Certificate of Liability Insurance worded as specified in 264.151(j), or</p>	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<ul style="list-style-type: none"> - Financial test <ul style="list-style-type: none"> • letter from CFO • auditor report • auditor opinion • other information requested by R.A. • acceptable ratios • notification to EPA by Attorneys General or insurance commissioner of guarantor's state and facility state that corporate guarantee is legally valid and enforceable. 	
<ul style="list-style-type: none"> - A combination of endorsement of certification and financial test or a combination of endorsement or certification and corporate guarantee. Amounts of coverage must total at least the minimum amounts required by 264.147(a). 	
<p>I-8b <u>Nonsudden Insurance</u></p> <p>This applies to high risk storage facilities (designated by Regional Administrator), surface impoundments, land disposal and land treatment. {264.147(b) and (d), 264.151(i) and (j), and 264.147(f)}</p>	
<ul style="list-style-type: none"> - A least \$3 million per occurrence 	
<ul style="list-style-type: none"> - An annual total of at least \$6 million is required, exclusive of legal costs 	
<ul style="list-style-type: none"> - Same endorsement or certification requirements as for sudden insurance coverage, or 	
<ul style="list-style-type: none"> - Financial test <ul style="list-style-type: none"> • letter from CFO (264.151(g)) • auditor's report • auditor's opinion • other information requested by R.A. 	
<ul style="list-style-type: none"> - Corporate guarantee - {264.147(b)(2), 264.147(g)(2)(i), and 264.151(h)(2)} <ul style="list-style-type: none"> • guarantor must be parent corporation • certified copy of corporate guarantee with wording as specified in 264.151(h)(2) • financial test for guarantor 	
<p>I-8c <u>Variance Procedures and R.A. Adjustments</u></p> <p>Evaluation of degree and duration of risk sufficient to allow R.A. to make a judgment on reduction of required liability. The financial responsibility levels specified above for liability insurance for sudden accidental occurrences may be adjusted downward if the owner/operator can prove to the Regional Administrator that these levels are not consistent with the degree and duration of risk at the owner's/operator's facility. Conversely, the Regional Administrator may adjust the levels of financial responsibility up or down, based on the administrator's assessment of the degree and duration of risk associated with the facility. {264.147(c) and (d)}</p>	
<p>I-9 <u>State Financial Mechanism</u></p> <p>Where appropriate, proof of coverage by a state financial mechanism in compliance with 264.149 or 264.150. {270.14(b)(18)}</p>	
<p>I-9a <u>Use of State-Required mechanisms</u></p>	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>Where a state has hazardous waste regulations with equivalent or greater liability requirements for financial assurance for closure and post-closure care, evidence of establishment of the state-required financial mechanisms, including the facility EPA ID number, name, address, and required mechanism do not satisfy amount of funds required, funds may be made available through the state-required mechanisms or by using additional mechanisms specified in 264.143. {264.149(a) and 264.149(b)}</p>	
<p><u>I-9b State Assumption of Responsibility</u></p> <p>If a state assumes legal responsibility for compliance with closure, post-closure, or liability requirements or the state assures that state funds are available to cover those requirements, then facility is in compliance and must include a copy of a letter from the state describing the state assumption of responsibility and a letter from the owner/operator requesting that the state's assumption of responsibility be considered acceptable in meeting the financial coverage requirements, and including the facility EPA ID number, name, address, and amounts of liability coverage or funds for closure or post-closure care that are assured by the state. {264.150}</p>	

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**REGULATORY COMPLETENESS CHECKLIST FOR
HAZARDOUS WASTE STORAGE, TREATMENT AND DISPOSAL FACILITIES**

Facility Name _____
 EPA ID Number _____
 Permit Review Team _____

 Date Review Completed _____

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>PART J - OTHER FEDERAL LAWS</p> <p>Applicants may be required to submit information that will enable the Department to carry out his duties under other Federal laws. The applicant must provide demonstration of compliance with applicable Federal laws such as the following, or at a minimum, the applicant must state that these laws do not apply:</p> <ul style="list-style-type: none"> - Wild and Scenic Rivers Act, - National Historic Preservation Act of 1966, - Endangered Species Act, - Coastal Zone Management Act, - Fish and Wildlife Coordination Act. <p>{270.3, 270.14(b)(20)}</p>	

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**REGULATORY COMPLETENESS CHECKLIST FOR
HAZARDOUS WASTE STORAGE, TREATMENT AND DISPOSAL FACILITIES**

Facility Name _____
 EPA ID Number _____
 Permit Review Team _____

 Date Review Completed _____

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>PART K - CERTIFICATION</p> <p>K-1 <u>Application Signature</u></p> <p>For a corporation, certification of the application by a responsible corporate officer meaning:</p> <ul style="list-style-type: none"> - a president, secretary, treasurer, vice-president, or any other person who performs similar policy or decisionmaking functions for the corporation, or - the manager of one or more manufacturing, production or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million. <p>{270.11(a)(1)(i)and (ii)}</p>	
<p>For a partnership or sole proprietorship, certification by a general partner or the proprietor, respectively.</p> <p>{270.11(a)(2)}</p>	
<p>For a municipality, State, Federal, or other public agency, certification by a principal executive officer or ranking elected official.</p> <p>{270.11(a)(3)}</p>	
<p>K-2 <u>Certification Statement</u></p> <p>The person signing the application shall make the following certification statement:</p> <p>"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."</p> <p>{270.11(d)}</p>	

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**REGULATORY COMPLETENESS CHECKLIST FOR
HAZARDOUS WASTE STORAGE, TREATMENT AND DISPOSAL FACILITIES**

Facility Name _____
 EPA ID Number _____
 Permit Review Team _____

 Date Review Completed _____

Guidance Documents for Part L

- (12) RCRA Facility Assessment Guidance, EPA-OSW, October 1986.
- (13) RFA Checklist - produced in conjunction with the RCRA Facility Assessment Guidance.
- (14) Confirmatory Sampling Workplan Guidance.

For information about SWMUs and AOCs a facility can submit the RCRA Facility Assessment and all subsequently identified SWMUs or AOCs reported or submit the information listed in the following checklist.

<p>PART L - INFORMATION REQUIREMENTS FOR SOLID WASTE MANAGEMENT UNITS</p>	
<p>Provide a tabular listing of all SWMUs and AOCs. For each SWMU and AOC provide the following in the table:</p> <ul style="list-style-type: none"> - SWMU Number - SWMU name - Current status of SWMU; (No Further Action, Under Assessment, Remedy Selected, Remedy Construction Complete (include selected remedy), etc.) - Date current status achieved 	
<p>For SWMUs and AOCs that are NOT listed as No Further Action provide the following information</p>	
<p>L-1 <u>Minimum Information Requirements for Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs)</u></p>	
<p>L-1a <u>Description of Solid Waste Management Units and Areas of Concern:</u></p> <p>A description of each solid waste management unit or area of concern that was not listed as No Further Action at the facility including:</p> <ul style="list-style-type: none"> - Location of the unit on the topographic map and a facility site map required under 270.14(b)(19), {270.14(d)(1)(i)} 	
<ul style="list-style-type: none"> - General Description of the SWMU or AOC (e.g. concrete sump, land disposal area, spill, etc.), {270.14(d)(1)(ii)} 	
<ul style="list-style-type: none"> - General dimensions and structural description (provide 	

drawings if available), {270.14(d)(1)(iii)}	
- Dates of operation of the unit, and {270.14(d)(1)(iv)}	
- Specification of all wastes that have been managed at the unit. {270.14(d)(1)(v)}	
L-1b <u>Information Pertaining to Releases:</u> The applicant must provide a summary of all available information pertaining to releases of hazardous wastes or hazardous constituents from solid waste management units and areas of concern at the facility. {270.14(d)(2)}	
L-1c <u>Sampling and Analysis:</u> The applicant must provide a summary of the results of sampling and analysis of groundwater, land surface and subsurface strata, surface water, and air. (270.14(d)(3))	

Additional Requirements	Location in Application and Comments
<p>Sampling frequency and constituents sampled for SWMUs or AOC where long term monitoring is part of the selected remedy or is used to demonstrate remedy effectiveness.</p> <p>Identify on a facility site map the locations of monitoring points (wells, indoor air, soil samples, etc) where long term monitoring is part of the selected remedy or is used to demonstrate remedy effectiveness.</p> <p>Cost Estimate for the assessment and remediation of all SWMUs and AOC. [Note: this estimate can be combined with the cost estimate for closure or post-closure of the regulated unit.]</p>	

**REGULATORY COMPLETENESS CHECKLIST FOR
HAZARDOUS WASTE STORAGE, TREATMENT AND DISPOSAL FACILITIES**

Facility Name _____
 EPA ID Number _____
 Permit Review Team _____

 Date Review Completed _____

Guidance Document for Part N

(15) Guidelines for Documentation of Substantial Compliance and Financial Qualification, North Carolina Hazardous Waste Section, July 26, 1991.

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>PART N - SUBSTANTIAL COMPLIANCE AND FINANCIAL QUALIFICATION</p> <p>The following requirements apply to any applicant for a hazardous waste management permit, including certain modifications to existing permits and transfer of permit ownership. { 15A NCAC 13A .0113(l) and GS 130A-295 }</p>	
<p>N-1 <u>General Information</u> [Guidance(15) - Instructions]</p> <p>- A brief description of the form of the business (e.g., partnership, corporation, etc.)</p>	
<p>- The names, addresses, and titles of all officers, directors, or partners of the applicant and of any parent or subsidiary corporation if the applicant is a corporation.</p>	
<p>- The name and address of any hazardous waste facilities constructed or operated after October 21, 1976, by the applicant or any parent or subsidiary corporation if the applicant is a corporation.</p>	
<p>N-2 <u>Substantial Compliance</u></p> <p>Documentation that the facilities in the list required by N-1 above have been operated in accordance with sound management practices and in substantial compliance with federal and state laws, regulations, and rules. { 15A NCAC 13A .0113(l)(1) and GS 130A-295(a)(1) }</p>	
<p>N-2a In-State Facilities</p> <p>The documentation must include the following information for each environmental program at each in-state facility listed above: [Guidance(15) - In-state Form]</p> <p>- General facility information;</p> <ul style="list-style-type: none"> • Applicant name, • Facility name, • Facility EPA ID number, • Facility location, • Environmental program, and • Permit type and number (if permitted). <p>- Specific compliance information;</p>	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
Date of violation, <ul style="list-style-type: none"> • Description of violation (including violation class), • Amount of penalty assessed, • Amount of penalty paid, and • Court docket number. 	
- Compliance information summary; <ul style="list-style-type: none"> • Total number of inspections, • Total number of violations, • Total amount of penalties assessed, and • Total amount of penalties paid. 	
- Whether the facility has ever been denied an environmental permit (include explanation if yes); and	
- If there is an pending enforcement action against the facility which has not already been described.	
<p>N-2b <u>Out-of-State Facilities</u></p> <p>The documentation must include the following information for each environmental program: [Guidance(15) - Out-of-State Form]</p> <ul style="list-style-type: none"> - Applicant name; - Environmental program; - Permit type and number (if permitted). 	
<p>For each out-of-state facility in each program: [Guidance(14) - Out-of-State Form]</p> <ul style="list-style-type: none"> - Facility information; <ul style="list-style-type: none"> • Facility name, • Facility location, • Facility EPA ID number, • Interim status period, • Permit issue date, and • Permit expiration date. 	
<ul style="list-style-type: none"> - Compliance history; <ul style="list-style-type: none"> • Number of state/EPA inspections, • Total number of violations, • Number of violations with penalties, and • Total amount of penalties assessed. 	
<ul style="list-style-type: none"> - List of facilities which have been denied a permit (including EPA ID number and date of denial). 	
<p>N-3 <u>Financial Qualification</u></p> <p>Documentation that the applicant, or any parent or subsidiary corporation if the applicant is a corporation, is financially qualified to operate the proposed facility. This documentation may consist of a financial statement, auditor's report, or other document that addresses the applicant's financial qualification to operate the proposed facility. { 15A NCAC 13A .0113(1)(2) and GS 130A-295(a)(2) } [Guidance(15) - instructions]</p>	
<p>N-4 <u>Justification of Need</u></p> <p>All applicants for commercial hazardous waste management permits must satisfy the Department that there is a need for a new facility or modifications to an existing permitted commercial facility based on the current or projected hazardous waste</p>	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
management needs of this State. { 15A NCAC 13A .0113(m) and GS 130A-295(c)}	

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GUIDELINES FOR DOCUMENTATION OF SUBSTANTIAL COMPLIANCE AND FINANCIAL QUALIFICATIONS

North Carolina General Statute 130A-295 requires the Department to consider the compliance history and financial qualifications of an applicant for a hazardous waste management facility permit. A disclosure statement, supported by an affidavit attesting to the truth and completeness of the facts asserted in the statement [40 CFR 270.11(d) as adopted in 15A NCAC 13A .0113] shall be submitted to the Department and shall include:

- (1) A brief description of the form of business (e.g., partnership corporation, other).
- (2) The names, addresses and titles of all officers, directors, or partners of the applicant and of any parent or subsidiary corporation if the applicant is a corporation.
- (3) The name and address of any hazardous waste management facility constructed or operated after October 21, 1976, by the applicant or any parent or subsidiary corporation if the applicant is a corporation.
- (4) A list describing any notice of violation or legal action taken against any facility identified in (3) above. (The enclosed worksheets may be used to summarize the required information.)
- (5) A financial statement, auditor's report, or other document that addresses the applicant's financial qualification to operate the subject facility.

The disclosure statement shall address any administrative ruling or order issued by any state, federal or local authority relating to revocation of any environmental or waste management permit or license; or to a violation of any state or federal statutes, or local ordinance relating to waste management or environmental protection.

[15A NCAC 13A .0113(1)]

**REGULATORY COMPLETENESS CHECKLIST FOR
HAZARDOUS WASTE STORAGE, TREATMENT AND DISPOSAL FACILITIES**

Facility Name _____
 EPA ID Number _____
 Permit Review Team _____

 Date Review Completed _____

The regulatory checklists are currently undergoing revision. While this checklist has been reformatted, it has not been reviewed for technical content.

Groundwater Monitoring - Module E

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>PART AA - AIR EMISSION STANDARDS FOR PROCESS VENTS</p> <p>AA-1 <u>General Definition of Process Vents</u></p> <p>Description of process vents. {264.1030 and 264.1031}</p>	
<p>AA-2 <u>Applicability</u></p> <p>This subpart is applicable to process vents associated with the following operations that manage hazardous waste with organic concentrations of at least 10 parts per million by weight (ppmw). {264.1030(b) and 264.1030}</p> <ul style="list-style-type: none"> - Distillation - Fractionation - Thin-Film Evaporation - Solvent Extraction - Air Stripping - Stream Stripping 	
<p>AA-3 <u>Standards</u></p> <p>AA-3a <u>Reducing Emissions from Process Vents</u></p> <p>The owner or operator must:</p> <ul style="list-style-type: none"> - Reduce total organic emission below 1.4 kilogram per hour (3 pounds per hour) and 2.8 million grams per year (3.1 tons per year), or {264.1032(a)(1)} - Reduce total organic emissions of 95 percent by weight with the use of a control device. {264.1032(a)(2)} 	
<p>Engineering calculations or performance tests may be used to determine vent emissions and emissions reductions or total organic compound concentrations achieved by add-on control devices. {264.1032(c)}</p>	
<p>AA-3b <u>Reducing Emissions for Various Control Devices with</u></p>	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p><u>Closed-vent Systems Under the Following Operational Conditions</u></p> <p>Closed-vent systems are optional devices but shall comply with regulations if they are used. {264.1032(a-b),264.1033(b-j), and 270.24(b)}</p>	
<p>- Control device involving vapor recovery (condenser or adsorber) shall recover at least 95 percent by weight of the organic vapors. {264.1032(b)}</p>	
<p>- Enclosed combustion device (a vapor incinerator, boiler, or process heater) shall recover at least 95 percent by weight of organic emissions. {264.1032(c)}</p>	
<p>- A flare shall operate under the following four conditions:</p> <ul style="list-style-type: none"> • No visible emissions, • A flame present at all times, • An acceptable net heating value as specified in 264.1033(d)(3), and • Appropriate exit velocity as specified in 264.1033(d)(4) and (5). <p>{264.1033(d)}</p>	
<p>AA-4 <u>Monitoring and Inspection of Control Devices</u></p> <p>Inspection readings shall be conducted at least daily. Vent stream flow information shall be provided at least hourly. {264.1033(f)(1) and (3)}</p>	
<p>AA-4a <u>Continuous Monitoring</u></p> <p>Continuous monitoring must be provided for the following control devices: {264.1033(f)(2)}</p>	
<p>- Thermal vapor incinerator (one temperature sensor with an accuracy of + 1 percent C or + 0.5 C, whichever is greater). {264.1033(f)(2)(i)}</p>	
<p>- Catalytic vapor incinerator (two temperature sensors with an accuracy of + 1 percent C or + 0.5 C, whichever is greater). {264.1033(f)(2)(ii)}</p>	
<p>- Flare (heating sensing device). {264.1033(f)(2)(iii)}</p>	
<p>- Boiler or process heater with heater input capacity less than 44 MW (a temperature monitoring device with an accuracy of \square percent of the temperature being monitored in \squareC or \square0.5 \squareC, whichever is greater). {264.1033(f)(2)(iv)}</p>	
<p>- Boiler or process heater with heater input capacity equal or greater than 44 megawatts (recorder which indicates good combustion practices). {264.1033(f)(2)(v)}</p>	
<p>- Condenser (device to measure organic vapors or a temperature sensor with an accuracy of + 1 percent C or + 0.5 C, whichever is greater). {264.1033(f)(2)(vi)(A) and (B)}</p>	
<p>- Carbon adsorption system (device to measure organic vapors or a recorder that verifies predetermined regeneration cycle).</p>	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>{264.1033(f)(2)(vii)(A) and (B)}</p>	
<p>AA-4b <u>Alternate Monitoring of Control Device</u></p> <p>An alternative operational or process parameter may be monitored if it can be demonstrated that another parameter will ensure that the control device is operated in conformance with these standards and the control device's design specifications. {264.1033(i)}</p>	
<p>AA-4c <u>Inspection of Control Devices</u></p> <p>Inspection of control devices must satisfy the following:</p> <ul style="list-style-type: none"> - Carbon replacement schedule for regenerable carbon adsorption systems must be no longer than the carbon service life. {264.1033(g)} 	
<ul style="list-style-type: none"> - Carbon in nonregenerable carbon adsorption system shall be replaced when breakthrough is observed or at an interval that is less than the design carbon replacement interval. {264.1033(h)} 	
<p>AA-4d <u>Use of Reference Method 21 for Compliance Testing</u></p> <p>Test method shall be Reference Method 21 for compliance testing. {264.1034}</p>	
<p>AA-5 <u>Properties of Closed-vent Systems</u></p> <p>AA-5a <u>Basic Design and Operation</u></p> <p>Closed-vent systems shall be operated at all times when emissions may be vented to them. In addition, the closed vent system shall be designed to operate according to either of the following: {264.1033(m) and 264.1033(k)}</p> <ul style="list-style-type: none"> - With no detectable emissions as indicated by an instrument reading of less than 500 parts per million (ppm) above background. {264.1033(k)(1)} 	
<ul style="list-style-type: none"> - At a pressure below atmospheric pressure {264.1033(k)(2)} 	
<p>AA-5b <u>Inspection and Monitoring Schedule</u></p> <p>Owner/Operate shall monitor and inspect each system as follows: {264.1033(1)(1)}</p> <ul style="list-style-type: none"> - By the date the system is subject to the regulation, {264.1033(1)(1)(i)} - Annually, and {264.1033(1)(1)(ii)} - Other times as requested by the Regional Administrator of the EPA. {264.1033(1)(1)(iii)} 	
<p>AA-5c <u>Exemption from Monitoring</u></p> <p>Any components of a closed-vent system that are designated as</p>	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>unsafe to monitor are exempt from the monitoring requirements of 40 CFR 1033(1)(1)(ii)(B) if: {264.1033(o)}</p> <ul style="list-style-type: none"> - The systems' components are unsafe to monitor and {264.1033(o)(1)} 	
<ul style="list-style-type: none"> - The operator adheres to a written plan requiring monitoring using the procedures in 40 CFR 264.1033 (1)(ii)(B) as frequently as practicable during safe-to-monitor times. {264.1033(o)(2)} 	
<p>AA-6 <u>Recording Keeping Requirements for Control Devices and Closed-vent Systems</u></p> <p>Owner/Operator must comply with the following record keeping requirements. {264.1033,264.1035, and 270.24(d)}</p> <ul style="list-style-type: none"> - Semiannual report is submitted which includes the following information: <ul style="list-style-type: none"> • EPA identification number, • facility name, • address of the facility, • Dates when the control device exceeded or operated outside of the design specifications or that a flare operated with visible emissions, and • Any corrective measures taken. {264.1036} 	
<ul style="list-style-type: none"> - A schedule shall be provided when facilities cannot install a closed-vent system and control device to comply with 40 CFR Part 264 on the date the facility is subject to the requirements. {264.1033(a)(2) and 270.24(a)} 	
<ul style="list-style-type: none"> - A performance test plan shall be provided where owner/operator applies for permission to use a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system, and chooses to use test data to determine the organic removal efficiency achieved by the control device. {264.1035(b)(3) and 270.24(c)} 	

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**REGULATORY COMPLETENESS CHECKLIST FOR
HAZARDOUS WASTE STORAGE, TREATMENT AND DISPOSAL FACILITIES**

Facility Name _____
 EPA ID Number _____
 Permit Review Team _____

 Date Review Completed _____

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Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>PART BB - AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS</p> <p>BB-1 <u>Applicability</u></p> <p>Except as otherwise specified, equipment leaks are associated with operations that manage hazardous waste with organic concentrations of at least 10 parts per million by weight (ppmw). This includes: {264.1050(b)}</p> <ul style="list-style-type: none"> - Units that are subject to the permitting requirements of 40 CFR part 270, or {264.1050(b)(1)} - Units (including a hazardous waste recycling unit) that are not exempt from permitting under the provisions of 40 CFR 262.34(a), or {264.1050(b)(2)} - Units (including hazardous waste recycling units) that are exempt from permitting under the provisions of 40 CFR 262.34(a) (i.e., a "90-day" tank or container). {264.1050(b)(3)} <p>Each piece of equipment must be marked such that it can be readily distinguished from other pieces of equipment. {264.1050(b)}</p>	
<p>BB-2 <u>Exclusions</u></p> <p>The following equipment is excluded from the requirements of 40 CFR 264.1052 to 1060 provided the equipment is identified in a log in the facility's operating record: {264.1050(e) and (f)}</p> <ul style="list-style-type: none"> - Equipment in a vacuum or {264.1050(e)} 	
<ul style="list-style-type: none"> - Equipment that contains or contacts hazardous waste with an organic concentration of at least 10 percent by weight for a period of less than 300 hours per calendar year {264.1050(f)} <p>BB-3 <u>Equipment Standards</u></p>	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>BB-3a <u>Pumps in Light Liquid Service</u></p> <p>The owner/operator must meet the following standards for pumps in light liquid service:</p> <ul style="list-style-type: none"> - Pumps must monitored monthly for leaks. {264.1052(a)(1) and 270.25(d)} 	
<ul style="list-style-type: none"> - Visual inspection for pump seal leakage must be conducted on a weekly basis. {264.1052(a)(2) and 270.25(d)} 	
<ul style="list-style-type: none"> - Leak detection occurs if: <ul style="list-style-type: none"> • A leak detection instrument reads 10,000 parts per million (ppm) or greater, or • There are indications of liquids dripping from the pump seal. <p>{264.1052(b),264.1063, and 270.25(d)}</p>	
<ul style="list-style-type: none"> - Leak repairs are to be made within 15 calendar days after detection with the first attempt at repair being made within five days of detection. {264.1052(c),264.1059, and 270.25(d)} 	
<p>Specific exceptions to these standards are dual mechanical seal systems or no detectable emissions.. {264.1052(d) and (e) and 270.25(d)}</p>	
<p>BB-3b <u>Compressors</u></p> <p>The owner/operator must meet the following standards for compressors:</p> <ul style="list-style-type: none"> - Barrier fluid pressure must be greater than the compressor stuffing box pressure, or {264.1053(b)(1) and 270.25(d)} 	
<ul style="list-style-type: none"> - Barrier fluid system connected by a closed-vent system to a control device as described in Subpart AA, or {264.1053.(b)(2) and 270.25(d)} 	
<ul style="list-style-type: none"> - No detectable atmospheric emissions of hazardous contaminants from the barrier system. {264.1053(b)(3) and 270.25(d)} 	
<ul style="list-style-type: none"> - Each barrier fluid system shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both. Sensors must be checked daily or an audible alarm checked monthly. {264.1053(d) and (e) and 270.25(d)} 	
<ul style="list-style-type: none"> - Leak detection occurs if sensor indicates a failure of: <ul style="list-style-type: none"> • The seal system, or • The barrier fluid system. <p>{264.1053(f) and 270.25(d)}</p>	
<ul style="list-style-type: none"> - Leak repairs are to be made within 15 calendar days after detection with the first attempt at repair being made within five days of detection. Repair extensions are allowed under conditions specified in 40 CFR 264.1059. {264.1053(g)(1), 264.1059, and 270.25(d)} 	
<p>Specific exceptions to these standards are certain closed vent systems or no detectable emissions. {264.1053(h) and (i) and 270.25)(d)}</p>	
<p>BB-3c <u>Pressure Relief Devices in Gas/Vapor Service</u></p>	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>The owner/operator must meet the following standards for pressure relief devices:</p> <ul style="list-style-type: none"> - Except during pressure releases, no pressure relief device shall release detectable emissions. {264.1054(a) and 270.25(d)} 	
<ul style="list-style-type: none"> - Within 5 calendar days after a pressure release, no detectable emissions shall emanate from pressure release device. {264.1054(b) and 270.25(d)} 	
<ul style="list-style-type: none"> - Specific exceptions to these standards are certain closed vent system. {264.1054(c) and 270.25(d)} 	
<p>BB-3(d) <u>Sampling Connecting Systems</u></p> <p>Each sampling connecting system shall be equipped with a closed-purge, close-loop, or closed-vent system. Closed-vent systems and control of devices are also subject to 40 CFR 264.1033. Each closed-purge, closed-loop, or closed-vent system shall either: {264.1055(a) and (b) and 264.1060}</p> <ul style="list-style-type: none"> - Return the purged process fluid directly to the process line, {264.1055(b)(1)} 	
<ul style="list-style-type: none"> - Collect and recycle the purged process liquid, or {264.1055(b)(2)} 	
<ul style="list-style-type: none"> - Be designed and operated to capture and transport all the purged process fluid to a waste management unit or control device that satisfies applicable requirements. {264.1055(b)(3)} 	
<p>In-situ sampling systems and sampling systems without purges are exempt from the requirements of 40 CFR 264.1055(a) and (b). {264.1055(c)}</p>	
<p>BB-3e Valves</p> <ul style="list-style-type: none"> - Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve that seals the open end at all times except during operations. A double check and bleed system will follow the same operating procedures except when operations require venting the line between block valves. {264.1056(a), (b) and (c) and 270.25(d)} 	
<ul style="list-style-type: none"> - A second valve shall be operated such that the primary valve shall be closed before the second valve is opened. {264.1056(b) and 270.25(d)} 	
<p>BB-3f Valves in Gas/Vapor Service or in Light Liquid Service</p> <p>The owner/operator must meet the following standards for valves in gas/vapor service or in light liquid service: {264.1057(a) through (e) and 270.25(d)}</p> <ul style="list-style-type: none"> - Each valve in gas/vapor or light liquid service shall be monitored monthly. {264.1057(a)} 	
<ul style="list-style-type: none"> - If an instrument reading of 10,000 ppm or greater is 	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
measured, a leak is detected. {264.1057(b)}	
- Any valve for which a leak is not detected for two successive months may be monitored the first month of every succeeding quarter, beginning with the next quarter, until a leak is detected. However, if a leak is detected, the valve shall be monitored monthly until a leak is not detected for two successive months. {264.1057(c)}	
- Leak repairs are to be made within 15 calendar days after detection with the first attempt at repair being made within five days of detection. {264.1057(d)}	
- First attempts at repair include, but are not limited to, the following best practices where practicable: <ul style="list-style-type: none"> • Tightening of bonnet bolts, • Replacement of bonnet bolts, • Tightening of packing gland nuts, and • Injection of lubricant into lubricated packing. {264.1057(e)}	
Specific exceptions to the monitoring schedule include unsafe-to-monitor valves, no detectable emissions, and difficult-to-monitor valves. {264.1057(f), (g) and (h), 264.1061, 264.1062, and 270.25(d)}	
<p>BB-3g <u>Pumps and Valves in Heavy Liquid Service, Pressure Relief Device in Light Service, and Flanges and Other Connectors</u></p> <p>The owner/operator must meet the following standards for pumps and valves in heavy liquid service, pressure relief device in light service, and flanges and other connectors: {264.1058,264.1063(b), and 270.25(d)}</p> <p>- Monitoring is required within 5 days after a leak is found by sight, sound, smell, or other detection method. {264.1058(a)}</p>	
- A leak is detected if a leak detection instrument reads 10,000 ppm or greater. {264.1058(b)}	
- Leak repairs are to be made within 15 calendar days after detection with the first attempt at repair being made within five days of detection. {264.1058(c) and 264.1059}	
Any connector that is inaccessible or is ceramic or ceramic-lined is exempt from the monitoring requirements of 40 CFR 264.1058(a) and 264.1064. {264.1058(e)}	
<p>BB-4 <u>Testing</u></p> <p>The owner/operator shall use Reference Method 21 for compliance testing. {264.1063}</p>	
<p>BB-5 <u>Record Keeping and Reporting Requiements</u></p> <p>- The owner/operator must comply with record keeping requirements.</p>	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
{264.1064}	
- The semiannual report shall be submitted according to requirements. {264.1065}	

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**REGULATORY COMPLETENESS CHECKLIST FOR
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Facility Name _____
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 Permit Review Team _____

 Date Review Completed _____

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Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>PART CC - AIR EMISSION STANDARDS FOR TANKS, SURFACE IMPOUNDMENTS AND CONTAINERS</p> <p>CC-1 <u>General Applicability</u></p> <p>Standards apply to all facilities that treat, store, or dispose of hazardous waste in tanks, surface impoundments, or containers subject to 40 CFR Part 264, Subparts I,J, or K except as provided otherwise. {246.1080(a)}</p>	
<p>CC-2 <u>Exemptions from 40 CFR 264.1084 -264.1087 Standards</u></p> <p>Following is a list of units that are exempt from 40 CFR 264.1084 - 264.1087 standards: {264.1082(c)}</p> <ul style="list-style-type: none"> - A tank, surface impoundment, or container for which all hazardous waste entering the unit has an average volatile organic concentration at the point of waste origination of less than 500 parts per million by weight (ppmw) {264.1082(c)(1)} 	
<ul style="list-style-type: none"> - 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 the specified criteria in 264.1082(c)(2)(i) through (ix). {264.1082(c)(2)} 	
<ul style="list-style-type: none"> - A tank used for biological treatment of hazardous waste that destroys or degrades the organics contained in the hazardous waste such that the requirements of 40 CFR 264.1082 (c)(2)(iv) are met. {264.1082(c)(3)} 	
<ul style="list-style-type: none"> - A tank, surface impoundment or container for which all hazardous waste placed in the unit meets applicable organic concentration limits or has been treated by appropriate treatment technology. {264.1082(c)(4)} 	
<ul style="list-style-type: none"> - A tank used for bulk feed of hazardous waste to a waste 	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
incinerator that meets all of the specified criteria in 264.1082(c)(5)(i) through (iii). {264.1082(c)(5)}	
CC-3 <u>Standards: Tanks</u> CC-3a <u>Applicability of Tank Standards: Tank Level 1 and Tank Level 2</u> Tanks that satisfy the conditions below (specified in 40 CFR 264.1084(b)(1)(i-iii)) can use Tank Level 1 or Tank Level 2 controls. Tanks that do not satisfy these conditions shall use Tank Level 2 controls. {264.1084(b)(1) and (2)}	
1. Have maximum organic vapor pressure which is less than maximum organic vapor pressure limit for tanks's design capacity category. {264.1084(b)(1)(i)}	
1. Not be heated to temperature greater than temperature at which maximum organic vapor pressure of waste is determined for purposes of compliance. {264.1084(b)(1)(ii)}	
- Not be treated using a waste stabilization process, as defined in 40 CFR 265.1081. {264.1084(b)(1)(iii)}	
CC-3b <u>Design Standards: Tanks</u> CC-3b(1) <u>Tank Level 1</u> Owner/operators shall equip tanks with fixed roof and closure devices as needed. {264.1084(c)(2)and(3)}	
CC-3b(2) <u>Tank Level 2</u> Owner/operators shall use one of the following tanks: {264.1084(d)}	
- Fixed-roof tank equipped with internal floating roof. {264.1084(d)(1) and (e)(1)}	
- Tank equipped with an external floating roof. {264.1084(d)(2) and (f)(1)}	
- Tank vented through closed-vent system to a control device. {264.1084(d)(3) and (g)(1)}	
- Pressure tank. {264.1084(d)(4), (h)(1) and (h)(2)}	
- Tank located inside an enclosure that is vented through a closed-system to an enclosed combustion control device. {264.1084(d)(5), (i)(1), (i)(2) and (i)(3)}	
CC-3c <u>Operating Standards: Tanks</u> CC-3c(1) <u>Tank Level 1</u> Owner/operators shall: {264.1084(c)(1) and (3)}	
- Determine maximum organic vapor pressure for hazardous waste at the frequencies specified in 264.1084(c)(1). {264.1084(c)(1)}	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<ul style="list-style-type: none"> - Ensure that, whenever hazardous waste is in tank, the fixed roof is installed with each closure device secured in closed position. {264.1084(c)(3)} 	
<p>CC-3c(2) <u>Tank Level 2</u></p> <p>Owner/operators shall adhere to the following operating procedures for each unit type: {264.1084(e)-(i)}</p> <ul style="list-style-type: none"> - Fixed-roof tank equipped with internal floating roof. {264.1084(e)(2)} 	
<ul style="list-style-type: none"> - Tank equipped with an external floating roof. {264.1084(f)(2)} 	
<ul style="list-style-type: none"> - Tank vented through closed-vent system to a control device. {264.1084(g)(2)} 	
<ul style="list-style-type: none"> - Pressure tank. {264.1084(h)(3)} 	
<ul style="list-style-type: none"> - Tank located inside an enclosure that is vented through a closed-vent system to an enclosed combustion control device. {264.1084(i)(1) and (2)} 	
<p>CC-3d <u>Transfer of Hazardous Waste from Other Tanks or Surface Impoundments</u></p> <p>Transfer of hazardous waste shall be conducted using continuous hard-piping or another closed system that does not allow exposure of hazardous waste to environment. {264.1084(j)(1)}</p>	
<p>CC-4 <u>Surface Impoundments</u></p> <p>CC-4a <u>Design Standards</u></p> <p>Owner/operators shall install either of the following controls: {264.1085(b)-(d)}</p> <ul style="list-style-type: none"> - Floating membrane cover. {264.1085(b)(1) and (c)} 	
<ul style="list-style-type: none"> - Cover that is vented through a closed-vent system to a control device. {264.1085(b)(2) and (d)} 	
<p>CC-4b <u>Transfer of Hazardous Waste from Other Tanks or Surface Impoundments</u></p> <p>Transfer of hazardous waste shall be conducted using continuous hard-piping or another closed system. {264.1085(e)(1)}</p>	
<p>CC-5 <u>Containers</u></p> <p>CC-5a <u>Applicability of Container Standards: Container Levels 1 - 3</u></p> <p>Container Level 1 standards apply to: {264.1086(b)(1)}</p> <ul style="list-style-type: none"> • Containers with design capacity greater than 0.1 m³ and 	

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less than or equal to 0.46 m ³ . {264.1086(b)(1)(i)} • Containers with design capacity greater than 0.46 m ³ that are not in light material service. {264.1086(b)(1)(ii)}	
- Container Level 2 standards apply to containers with a design capacity greater than 0.46 m ³ that are in light material service. {264.1086(b)(1)(iii)}	
- Container Level 3 standards apply to containers with design capacity greater than 0.1 m ³ that are used for stabilization. {264.1086(b)(2)}	
CC-5b <u>Design Standards: Containers</u> CC-5b(1) <u>Container Level 1</u> A container using Level 1 controls is defined as one of the following: {264.1086(c)(1)}	
- Container that meets DOT regulations on packaging. {264.1086(c)(1)(i) and (f)}	
- Container equipped with cover and closure devices. {264.1086(c)(1)(ii) and (2)}	
- Open-top container equipped with organic-vapor suppressing barrier. {264.1086(c)(1)(iii) and (2)}	
CC-5b(2) <u>Container Level 2</u> A container using Level 2 controls is defined as one of the following: {264.1086(d)(1),(f), (g) and (h)}	
- Container that meets DOT regulations on packaging. {264.1086(d)(1)(i) and (f)}	
- Container that operates with no detectable organic emissions. {264.1086(d)(1)(ii) and (g)}	
- Container that has been demonstrated within preceding 12 months to be vapor- tight. {264.1086(d)(1)(iii) and (h)}	
CC-5b(3) <u>Container Level 3</u> A container using Level 3 controls is defined as one of the following: {264.1086(e)(1)}	
- Container that is vented directly through a closed-vent system to a control device. {264.1086(e)(1)(i)}	
- Container that is vented inside an enclosure which is exhausted through a closed-vent system to a control device. {264.1086(e)(1)(ii) and (2)}	
CC-5c <u>Operating Standards: Containers</u> CC-5c(1) <u>Container Level 1</u>	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
<p>Owner/operators shall install covers and closure devices for the container and secure and maintain each closure device in closed position, except as specified. {264.1086(c)(3)}</p>	
<p>CC-5c(2) <u>Container Level 2</u></p> <p>Owner/operators shall install all covers and closure devices for the container and maintain and secure each closure device in closed position, except as specified. {264.1086(d)(3)}</p>	
<p>CC-5c(3) <u>Container Level 3</u></p> <p>Owner/operators shall operate the system in accordance with 40 CFR 52.741, Appendix B; 40 CFR 264.1087; and 40 CFR 265.1081, as needed. {264.1086(e)(2) and (3)}</p>	
<p>CC-6 <u>Closed-Vent Systems and Control Devices</u></p> <p>Standards apply to each closed-vent system and control device used to control air emissions under 40 CFR Part 264, Subpart CC. {264.1087(a)}</p>	
<p>CC-6a <u>Design and Operating Standards: Closed-Vent Systems</u></p> <p>Closed-vent systems shall: {264.1087(b)}</p> <ul style="list-style-type: none"> - Route gases, vapors, and fumes to control device. {264.1087(b)(1)} 	
<ul style="list-style-type: none"> - Be designed and operated in accordance with 40 CFR 264.1033(k) {264.1087(b)(2)} 	
<ul style="list-style-type: none"> - Meet the requirements for bypass devices, if applicable. {264.1087(b)(3)} 	
<p>CC-6b <u>Design and Operating Standards: Control Devices</u></p> <p>The control device shall be one of the following: {264.1087(c)(1)}</p>	
<ul style="list-style-type: none"> - A control device designed and operated to reduce total organic content on inlet vapor stream vented to the control device by at least 95 percent by weight. {264.1087(c)(1)(i)} 	
<ul style="list-style-type: none"> - An enclosed combustion device. {264.1087(c)(1)(ii)} 	
<ul style="list-style-type: none"> - A flare. {264.1087(c)(1)(iii)} 	
<ul style="list-style-type: none"> - Each control device shall be operated and maintained in accordance with 40 CFR 264.1033(j), except for certain devices identified (e.g., flare). {264.1087(c)(4)} 	
<ul style="list-style-type: none"> - The owner/operators shall demonstrate that a control device achieves the performance requirements using a performance test or design analysis, except for specific devices identified (e.g., flare). {264.1087(c)(5)} 	
<ul style="list-style-type: none"> - Each closed-vent system and control device shall comply with the operating requirements of 40 CFR 264.1087(c)(2). 	

Subject Requirement and 40 CFR Reference	Location in Application and Comments
{264.1087(c)(2)}	
<p>CC-7 <u>Inspection, Monitoring, and Repair</u></p> <p>Each tank, surface impoundment and container shall be inspected, monitored, and repaired in accordance with the 40 CFR Part 264, Subpart CC requirements. {264.1084 - 264.1088}</p>	
<p>CC-8 <u>Recording and Reporting</u></p> <p>- Each owner/operator shall comply with the recordkeeping requirements specified at 40 CFR 264.1089. {264.1089}</p>	
<p>- Each of the following owner/operators shall comply with the reporting requirements at 40 CFR 264.1090. {264.1090}</p>	
<p>- Each owner/operator managing hazardous waste in a tank, surface impoundment, or container exempted from using air emission controls under 40 CFR 264.1082(c). {264.1090(b)}</p>	
<p>- Each owner/operator using a control device in accordance with 40 CFR 264.1087. {264.1090(c) and (d)}</p>	

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