C.13. Air emissions from process vents, equipment containers, and surface impoundment	

### FORM EQP 5111 ATTACHMENT TEMPLATE C11 - SUBPART AA AIR EMISSIONS FROM PROCESS VENTS

This document is an attachment to the Michigan Department of Environmental Quality's (DEQ) Instructions for Completing Form EQP 5111, Operating License Application Form for Hazardous Waste Treatment, Storage, and Disposal Facilities. See Form EQP 5111 for details on how to use this attachment.

The administrative rules promulgated pursuant to Part 111, Hazardous Waste Management, of Michigan's Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451), R 299.9504, R 299.9508, R 299.9605, and R 299.9630; and Title 40 of the Code of Federal Regulations (CFR), Part 264, Subpart AA, and 40 CFR §270.24 establish requirements for controlling organic air emissions from process vents. All references to 40 CFR citations specified herein are adopted by reference in R 299.11003.

This license application template includes the information required by 40 CFR §270.24 to address air emission control requirements for process vents at hazardous waste management facilities for the [Wayne Disposal Inc.] facility in [Belleville], Michigan.

(Check as Appropriate)
□ Applicant for Operating License for Existing Facility
Applicant for Operating License for New, Altered, Enlarged, or Expanded Facility
Process Vents Subject to 40 CFR Part 264, Subpart AA (R 299.9630)
No Process Vents Exist That Are Subject to 40 CFR Part 264, Subpart AA (R 299.9630)
More than one box may be checked. <u>If process vents exist that are associated with distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations managing hazardous wastes with organic concentrations of at least 10 parts per million by weight (ppmw) then the Subpart AA portion of Template C11 must be completed. If the last box is checked, skip the remainder of this template and include only this page of the template with the license application.</u>
EPA 1990. Hazardous Waste TSDF – Technical Guidance Document for RCRA Air Emission Standards for Process Vents and Equipment Leaks. Document No. EPA-450/3-89-021. July.

### FORM EQP 5111 ATTACHMENT TEMPLATE C11 - SUBPART BB AIR EMISSIONS FROM EQUIPMENT LEAKS

This document is an attachment to the Michigan Department of Environmental Quality's (DEQ) *Instructions for Completing Form EQP 5111, Operating License Application Form for Hazardous Waste Treatment, Storage, and Disposal Facilities.* See Form EQP 5111 for details on how to use this attachment.

The administrative rules promulgated pursuant to Part 111, Hazardous Waste Management, of Michigan's Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451), R 299.9504, R 299.9508, R 299.9605, and R 299.9631; and Title 40 of the Code of Federal Regulations (CFR), Part 264, Subpart BB, and 40 CFR §270.25 establish requirements for controlling organic air emissions from equipment leaks. All references to 40 CFR citations specified herein are adopted by reference in R 299.11003.

This license application template addresses air emission control requirements for equipment leaks at the hazardous waste management facility for the *Wayne Disposal Inc.* facility in *Belelville*, Michigan.

□ Applicant for Operating License for Existing Facility
Applicant for Operating License for New, Altered, Enlarged, or Expanded Facility
Equipment Subject 40 CFR Part 264, Subpart BB (R 299.9631)
No Equipment Exists That Is Subject to 40 CFR Part 264, Subpart BB (R 299.9631)
Applicant Elects to Document Compliance with the Relevant Provisions of the Regulations at 40 CFR Part 60, Part 61, or Part 63 Rather than 40 CFR Part 264, Subpart BB
More than one box may be checked. If equipment exists which contacts hazardous wastes with organic compound concentrations of at least 10 percent by weight then the Subpart BB portion of Template C11 must be completed. If the next to last box is checked skip the remainder of this template and include only this page of the template with the license application. If the last box is checked, skip the remainder of this template and include only this page of the template and the compliance documentation information specified in C11.B.13 with the license application.  EPA 1990. Hazardous Waste TSDF – Technical Guidance Document for RCRA Air Emission Standards for Process Vents and Equipment Leaks. Document No. EPA-450/3-89-021. July.

(Check as Appropriate)

## FORM EQP 5111 ATTACHMENT TEMPLATE C11 - SUBPART CC AIR EMISSIONS FROM TANKS, CONTAINERS, AND SURFACE IMPOUNDMENTS

This document is an attachment to the Michigan Department of Environmental Quality's (DEQ) *Instructions for Completing Form EQP 5111, Operating License Application Form for Hazardous Waste Treatment, Storage, and Disposal Facilities.* See Form EQP 5111 for details on how to use this attachment.

The administrative rules promulgated pursuant to Part 111, Hazardous Waste Management, of Michigan's Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451), R 299.9504, R 299.9508, R 299.9605, and R 299.9634; and Title 40 of the Code of Federal Regulations (CFR), Part 264, Subpart CC, and 40 CFR §270.27, establish requirements for controlling organic air emissions from tanks, containers, and surface impoundments. All references to 40 CFR citations specified herein are adopted by reference in R 299.11003.

This license application template addresses air emission control requirements for tanks, containers, and surface impoundments at the hazardous waste management facility for the [Wayne Disposal Inc. facility in [Belleville, Michigan.]

(Check as Appropriate)
Applicant for Operating License for Existing Facility
Applicant for Operating License for New, Altered, Enlarged, or Expanded Facility
No Tanks, Containers, or Surface Impoundments Subject to 40 CFR Part 264, Subpart CC, Exist at the Facility (R 299.9634)
More than one box may be checked. If the facility uses tanks, surface impoundments, or certain types of containers to manage or store hazardous waste then the 40 CFR Part 264, Subpart CC portion of Template C11 must be completed. If the last box is checked, skip the remainder of this template and include only this page of the template with the license application.
EPA 1990. Hazardous Waste TSDF – Technical Guidance Document for RCRA Air Emission Standards for Process Vents and Equipment Leaks. Document No. EPA-450/3-89-021. July.

This template is organized as follows:

C11.C AIR EMISSIONS FROM TANKS, CONTAINERS, AND SURFACE IMPOUNDMENTS C11.C.1 Waste Streams

C11.C.1(a) Average Volatile Organic (VO) Concentration Determination Via Direct Measurement at the Point of Waste Origination C11.C.1(a)(1) Identification of Point of Waste Origination

		C11.C.1(a)(2)	Sampling Parameters
		C11.C.1(a)(3)	Analytical Results
		C11.C.1(a)(4)	Calculation of Average VO Concentration
	C11.C.1(b)		concentration Determination Via Process
			the Point of Waste Origination
	C11.C.1(c)	Average VO C	concentration Determination Via Direct
		Measurement	at the Point of Waste Treatment
		C11.C.1(c)(1)	C
		C11.C.1(c)(2)	Sampling Parameters
			Analytical Results
			Calculation of Average VO Concentration
	C11.C.1(d)		anic Vapor Pressure Determination of
		Hazardous Wa	aste in a Tank Using Level 1 Controls Via Direct
		Measurement	
			Sampling Parameters
			Analytical Results
	C11.C.1(e)	Maximum Org	anic Vapor Pressure Determination of
			aste in a Tank Using Level 1 Controls Via
		Process Know	•
	C11.C.1(f)		rocedures for Determining No Detectable Organic
044.0.0	Taulu Daaa	Emissions	
C11.C.2	Tanks Desc		aval 1 Cantrala
	C11.C.2(a)	Description of L C11.C.2(a)(1)	Maximum Organic Vapor Pressure Limit Design
		011.0.2(a)(1)	Capacity
		C11.C.2(a)(2)	Description of Fixed Roof
		C11.C.2(a)(3)	Description of Closure Devices and Operating
		( )( )	Procedures
		C11.C.2(a)(4)	Description of Inspection Procedures
	C11.C.2(b)	Description of L	
		C11.C.2(b)(1)	Fixed Roof and Internal Floating Roof
		C11.C.2(b)(2)	External Floating Roof
		C11.C.2(b)(3)	
			Pressure Tank
		C11.C.2(b)(5)	Tank Located Within an Enclosure Vented to a
044.00	0		Combustion Device
C11.C.3		poundment Des	
			Floating Membrane Cover
C11 C 1	` ,	•	Cover Vented through a Closed-Vent System
C11.C.4		Descriptions	Container Lavel 1 Centrale
	C11.C.4(a)		Container Level 1 Controls
		C11.C.4(a)(1)	Michigan Department of Transportation
		C11 C 4/5\/2\	Specifications Cover and Closure Devices
			Cover and Closure Devices
		C11.C.4(a)(3)	Open-Top Containers with Organic
		C11 C 4/2\/4\	Vapor-Suppressing Barrier
	C11 C 1/b)	` , ` ,	Inspection Procedures
	U11.U.4(D)	Description of	Container Level 2 Controls

		C11.C.4(b)(1)	Michigan Department of Transportation
		044 0 4(1)(0)	Specifications
		C11.C.4(b)(2)	Container Operating with No Detectable Emissions
		C11.C.4(b)(3)	Containers Demonstrated to be Vapor-Tight
			Container Waste Transfer Procedures
			Cover and Closure Management Procedures
		, , , ,	Inspection Procedures
	C11.C.4(c)	` , ` ,	Container Level 3 Controls
	,	C11.C.4(c)(1)	Closed-Vent System Vented to a Control Device
		C11.C.4(c)(2)	Container Vented to an Enclosure That Is Vented to Control Device
		C11 C 4(c)(3)	Safety Devices
			Inspection and Monitoring Procedures
			Records Management
			Waste Transfer Procedures
C11 C 5	Description		t Systems and Control Devices
011.0.5			Closed-Vent System
			Control Devices
		Inspection Pro	
C11.C.6	Description	of Record Kee	ping Procedures
C11.C.0			Tank Record Keeping Procedures
	011.0.0(a)		Tank Identification Numbers
			Inspection Records
			Documentation for Determination of Maximum
		C11.C.0(a)(3)	Organic Vapor Pressure for Fixed Roof Level 1
		C11 C 6(a)(4)	Controls  Desumentation Showing Internal Floating Roof
		. , . ,	Documentation Showing Internal Floating Roof Design
		C11.C.6(a)(5)	
		044 0 0(-)(0)	Roof Design and Seal Inspections
		C11.C.6(a)(6)	Calculations and Records for Demonstrating Compliance with Enclosure Requirements for Level 2 Controls
	C11 C 6(b)	Description of	Surface Impoundment Record Keeping
	Procedures	<b>;</b>	
			Surface Impoundment Identification Numbers
		` , ` ,	Floating Membrane or Cover Certifications
		` , ` ,	Inspection Records
		C11.C.6(b)(4)	Closed-Vent System and Control Device Certifications and Records
	C11.C.6(c)	Description of Procedures	Container Level 3 Control Record Keeping
		C11.C.6(c)(1)	Calculations Verifying Compliance with
		.,.,	Enclosure Requirements
		C11.C.6(c)(2)	Closed-Vent System and Control Device

#### Certifications and Records

C11.C.6(d)	6(d) Closed-Vent System and Control Device Records		
( )	C11.C.6(d)(1)	Performance Certification	
	C11.C.6(d)(2)	Design Analysis Documentation	
	C11.C.6(d)(3)	Performance Test Plan and Results	
	C11.C.6(d)(4)	Descriptions of Sensors, Modifications, and	
		Locations	
	C11.C.6(d)(5)	Planned Routine Maintenance Schedules	
	C11.C.6(d)(6)	Descriptions of Unplanned Malfunctions	
	C11.C.6(d)(7)	Management of Carbon Removed from a Carbon	
		Absorption System	
C11.C.6(e)	Records Requ	ired for Exempt Units	
	C11.C.6(e)(1)	Waste Determination Results	
	C11.C.6(e)(2)	Identification Numbers of Treatment Units	
C11.C.6(f)	Description of	Covers Designated as Unsafe to Inspect and	
( )	Monitor	·	
C11.C.6(g)	Documentation	n of Alternative Compliance with 40 CFR	
,0,	Part 60, Subpa	art VV, or 40 CFR Part 61, Subpart V	
C11.C.6(h)	Documentation	Required for Tanks and Containers Not Using	
( )	Air Emission Controls		
	C11.C.6(h)(1)	List of Organic Peroxide Compounds	
		Management of Organic Peroxide Compounds	
	, , , ,	Justification for Claiming that Air Emission	
		Controls Would Create an Undue Safety	
		Hazard	
		i iazaiu	

C11.C.6(i) Certifications and Identification of Clean Air Act Requirements

#### **INSTRUCTIONS**

This template requires that you demonstrate how your facility meets, or will meet, the performance standards for Air Emissions from Tanks, Surface Impoundments and Containers. You are to specifically address the requirements below, but you may also summarize and reference information that is detailed in other existing reports, assessments, etc. You may also reference information that has been submitted in other license templates within this application (e.g., Template C1, Containers, and Template C2, Tanks). Facility-specific documentation that is referenced within this template but has not been submitted to the DEQ must be submitted as attachments to this license template with references included at the end of the template table of contents. Attachments shall be labeled sequentially starting with Attachment C11.C.1.

### C11.C AIR EMISSIONS FROM TANKS, CONTAINERS, AND SURFACE IMPOUNDMENTS

[R 299.9634 and 40 CFR Part 264, Subpart CC]

type, regulate	ch unit that is subject to 40 CFR Part 264, Subpart CC, identify the process, unit bry status, and documentation of any exemption claimed under 40 CFR and 264.1082(c). Check appropriate boxed below to identify the types of units your facility.
☐ Tanks	
	S
Surface In	npoundments
C11. C.1	Waste Streams [R 299.9634 and 40 CFR §264.1082(c)]
-	40 CFR 264.1082(c)(4) containers are exempt from standards specified in 40 CFR

As specified in 40 CFR 264.1082(c)(4) containers are exempt from standards specified in 40 CFR 264.1084 through 1087 provided that the waste meets Land Disposal Restrictions (LDRs) identified in 40 CFR 268. All waste streams being disposed of at WDI are documented to meet land disposal restrictions as specified in the Waste Analysis Plan.

WDI's application proposes to treat hazardous debris in accordance with alternative treatment standards for debris identified in 40 CFR 268.45. More specifically WDI intends to perform macroencapsulation of debris which is an immobilization technology identified in Table 1 of 40 CFR 268.45. WDI may microencapsulate hazardous waste subject to 40 CFR 264 Subpart CC requirements from off-site generators. Generators provide information on the regulatory status of the waste as part of their waste characterization. Analytical data or process knowledge may be requested to support their determination. Waste streams are reviewed as described in A.2.A.3 Chemical and Physical Waste Analysis Plan.

# C11.C.1(a) Average VO Concentration Determination Via Direct Measurement at the Point of Waste Origination

[R 299.9634 and 40 CFR §264.1083]

Not applicable.

#### C11.C.1(a)(1) Identification of Point of Waste Origination

[R 299.9634 and 40 CFR §§264.1082 and 270.27(a)(7)]

Not applicable.

#### C11.C.1(a)(2) Sampling Parameters

[R 299.9634 and 40 CFR §264.1083(a)(2)]

Not applicable.

#### C11.C.1(a)(3) Analytical Results

[R 299.9634 and 40 CFR §264.1083(a)(2)]

Not applicable.

C11.C.1(a)(4) Calculation of Average VO Concentration

[R 299.9634 and 40 CFR §264.1083(a)]

Not applicable.

C11.C.1(b) Average VO Concentration Determination Via Process Knowledge at the Point of Waste Origination

[R 299.9634 and 40 CFR §264.1083(a)(2)]

Waste characterization requirements including volatile organic concentration determinations are described in section A2.A.2 Pre-Approval Waste Characterization Requirements in Attachment A.2.A.3 Chemical and Physical Waste Analysis Plan.

C11.C.1(c) Average VO Concentration Determination Via Direct Measurement at the

**Point of Waste Treatment** 

[R 299.9634 and 40 CFR §264.1083(b)]

Not applicable.

C11.C.1(c)(1) Identification of Point of Waste Origination

[R 299.9634 and 40 CFR §264.1083(b)]

Not applicable.

C11.C.1(c)(2) Sampling Parameters

[R 299.9634 and 40 CFR §264.1083(b)]

Not applicable.

C11.C.1(c)(3) Analytical Results

[R 299.9634 and 40 CFR §264.1083(b)]

Not applicable.

C11.C.1(c)(4) Calculation of Average VO Concentration

[R 299.9634 and 40 CFR §264.1083(b)]

Not applicable.

C11.C.1(d) Maximum Organic Vapor Pressure Determination of Hazardous Waste in

a Tank Using Level 1 Controls Via Direct Measurement

[R 299.9634 and 40 CFR §264.1083(c)]

Not applicable.

C11.C.1(d)(1) Sampling Parameters

[R 299.9634 and 40 CFR §264.1083(c)]

Not applicable.

Page 6 of 19 Form EQP 5111 Attachment Template C11 Subpart CC

#### C11.C.1(d)(2) Analytical Results

[R 299.9634 and 40 CFR §264.1083(c)]

Not applicable.

## C11.C.1(e) Maximum Organic Vapor Pressure Determination of Hazardous Waste in a Tank Using Level 1 Controls Via Process Knowledge

[R 299.9634 and 40 CFR §264.1083(c)]

Not applicable.

### C11.C.1(f) Description of Procedures for Determining No Detectable Organic Compound

**Emissions** 

[R 299.9634 and 40 CFR §§264.1083(d) and 270.27(a)(6)]

Not applicable.

#### C11.C.4 Container Descriptions

[R 299.9634 and 40 CFR §§264.1086, and 270.27(a)(2)]

WDI may receive container requiring level 1 or 2 controls. Containers remain closed at all times except during sampling or transfer of the waste.

Waste containers having a design capacity greater than 0.1 m³ and less than or equal to 0.46 m³ (>121 gallons) or a design capacity greater than 0.46 m³ (>121 gallons) not in light service (containing <20% VOCs) will utilize Container Level 1 controls. The majority of the Subpart CC regulated hazardous debris requiring treatment are expected for macroencapsulation are not in light service (containing <20% VOCs). Containers having a design capacity greater than 0.46 m³ (>121 gallons) with hazardous debris requiring in light service (containing >20% VOCs) will utilize Container Level 2 controls.

Non-bulk containerized hazardous debris containing >500ppm volatile organic compounds that may be accepted for macroencapsulation will be received in packaging which meets the applicable U.S. Department of Transportation (DOT) regulations on packaging hazardous materials. Generators are responsible for ensuring containers meet regulatory requirements for the waste placed inside the container prior to transportation. Containers will remain closed unless adding or removing waste from one container to another.

Waste and the DOT shipping container will be encapsulated without exposing the waste. Bulk waste containing >500ppm volatile organic compounds that may be accepted for macroencapsulation are received in packaging which meets the applicable U.S. Department of Transportation (DOT) regulations on packaging hazardous materials and transferred from the shipping container into the macroencapsulant.

#### C11.C.4(a) Description of Container Level 1 Controls

[R 299.9634 and 40 CFR §264.1086(b) and (c)]

One of the following Container Level 1 Controls will be utilized:

### C11.C.4(a)(1) Michigan Department of Transportation Specifications

[R 299.9634 and 40 CFR §264.1086(c)(1)]

Generator shall ensure containers used meet the applicable U.S. Department of Transportation (DOT) regulations on packaging hazardous materials for transportation as follows:

- The container meets the applicable requirements specified in 49 CFR part 178 Specifications for Packaging
- Hazardous waste is managed in the container in accordance with the applicable requirements specified in 49 CFR part 107, subpart B Exemptions; 49 CFR part 172 Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements; 49 CFR part 173 Shippers General Requirements for Shipments and Packages; and 49 CFR part 180 Continuing Qualification and Maintenance of Packagings.
- For a lab pack that is managed in accordance with the requirements of 49 CFR part 178 for the purpose of complying with this subpart, an owner or operator may comply with the exceptions for combination packagings specified in 49 CFR 173.12(b).

#### C11.C.4(a)(2) Cover and Closure Devices

[R 299.9634 and 40 CFR §264.1086(c)]

Containers received will have a tight-fitting cover such that, when closed, there are no visible holes, gaps, spaces, or other openings. The cover must form a continuous barrier over the container openings. The cover may be a separate cover installed on the container (e.g., a lid on a drum or a secured tarp on a roll-off box) or an integral part of the container (e.g., screw-type caps).

# C11.C.4(a)(3) Open-Top Containers with Organic Vapor-Suppressing Barrier [R 299.9634 and 40 CFR §264.1086(c)]

Open top containers with vapor barriers (e.g., foam, 20 mil vapor barrier sheets). The organic vapor suppressing barrier will be placed on or over the hazardous waste in the container. The barrier will cover the entire area of the hazardous waste in a manner such that no hazardous waste is exposed to the atmosphere.

#### C11.C.4(a)(4) Inspection Procedures

[R 299.9634 and 40 CFR §264.1086(c)(4)]

Containers may not be stored at WDI for more than 12 months. Therefore, inspection is performed when received. Containers are visually inspected to confirm one of the above controls is utilized and that the container is closed unless adding or removing waste. Containers with UN markings visually confirm compliance with DOT shipping container requirements. Containers are inspected to be closed. In the absence of a DOT shipping container containers will be inspected to have tight fitting such that when closed have no visible holes, gaps, spaces, or other openings. Containers utilizing vapor suppressing barriers will be confirmed to have the entire are of the hazardous waste covered in a manner such that no hazardous waste is exposed to the atmosphere.

Containers that fail to meet the control requirements will either be transferred to a container that meets Level 1 control requirements or will not be accepted for storage or treatment.

### C11.C.4(b) Description of Container Level 2 Controls

[R 299.9634 and 40 CFR §264.1086(d)]

One of the following Container Level 1 Controls will be utilized:

#### C11.C.4(b)(1) Michigan Department of Transportation Specifications

[R 299.9634 and 40 CFR §264.1086(d)(1)]

Generator shall ensure containers used meet the applicable U.S. Department of Transportation (DOT) regulations on packaging hazardous materials for transportation as follows:

- The container meets the applicable requirements specified in 49 CFR part 178 Specifications for Packaging
- Hazardous waste is managed in the container in accordance with the applicable requirements specified in 49 CFR part 107, subpart B Exemptions; 49 CFR part 172 Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements; 49 CFR part 173 Shippers General Requirements for Shipments and Packages; and 49 CFR part 180 Continuing Qualification and Maintenance of Packagings.
- For a lab pack that is managed in accordance with the requirements of 49 CFR part 178 for the purpose of complying with this subpart, an owner or operator may comply with the exceptions for combination packagings specified in 49 CFR 173.12(b).

### C11.C.4(b)(2) Container Operating with No Detectable Emissions

[R 299.9634 and 40 CFR §264.1086(d)(1)]

Containers that are not DOT compliant will be inspected with a portable instrument to detect individual leaks at each potential leak interface (i.e., anywhere an organic vapor leak could occur) on the cover and associated closure devices to ensure emissions are <500ppm above background.

#### C11.C.4(b)(3) Containers Demonstrated to be Vapor-Tight

[R 299.9634 and 40 CFR §264.1086(d)(1)]

A generator may provide a demonstration that the container satisfies the vapor-tight requirements using 40 CFR Part 60 Appendix A, Method 27.

#### C11.C.4(b)(4) Container Waste Transfer Procedures

[R 299.9634 and 40 CFR §264.1086(d)(2)]

Describe transfer of hazardous waste in or out of containers using Level 2 controls. Examples of acceptable transfer procedures include: (1) using a submerged-fill pipe, (2) collecting displaced vapors with a vapor-balancing or vapor-recovery system, and

(3) using a fitted container opening and purging the transfer line before removing it from the container opening.

#### C11.C.4(b)(5) Cover and Closure Management Procedures

[R 299.9634 and 40 CFR §264.1086(d)(3)]

Describe cover and closure management procedures for containers using Level 2 controls. Show that covers are opened only for the purpose of removing or adding waste and measuring waste levels or accessing interior container equipment.

#### C11.C.4(b)(6) Inspection Procedures

[R 299.9634 and 40 CFR §264.1086(d)(4)]

Describe inspection procedures for containers using Level 2 controls in Attachment A5, Inspection Schedules, to the application form. Demonstrate that containers are inspected within 24 hours of receipt and every 12 months, thereafter. Describe repair procedures that are implemented when defects are found.

#### C11.C.4(c) Description of Container Level 3 Controls

[R 299.9634 and 40 CFR §264.1086(e)]

Describe container Level 3 controls that are used by your facility.

### C11.C.4(c)(1) Closed-Vent System Vented to a Control Device

[R 299.9634 and 40 CFR §264.1086(e)(1)(i) and (2)(ii)]

Identify all containers that are managed in a closed-vent system vented to a control device. Describe the type of control device to which the containers are vented. If detailed descriptions of control devices are described in other template sections, reference those sections here. Examples of control devices include: (1) carbon adsorption systems, (2) thermal vapor incinerators, (3) flare, (4) boilers, (5) process heaters, and (6) condensers.

# C11.C.4(c)(2) Container Vented to an Enclosure That Is Vented to a Control Device [R 299.9634 and 40 CFR §264.1086(e)(1)(ii) and (2)(i)]

Identify all containers that are vented to an enclosure vented to a control device. Describe the type of control device to which the enclosure is vented. If detailed descriptions of control devices are described in other template sections, reference those sections here. Examples of control devices include: (1) carbon adsorption systems, (2) thermal vapor incinerators, (3) flare, (4) boilers, (5) process heaters, and (6) condensers.

#### C11.C.4(c)(3) Safety Devices

[R 299.9634 and 40 CFR §264.1086(e)(3)]

Describe any safety devices that are installed to comply with container Level 3 controls.

#### C11.C.4(c) 4) Inspection and Monitoring Procedures

[R 299.9634 and 40 CFR §264.1086(e)(4)]

Describe inspection procedures in Attachment A5, Inspection Schedules, to the application form and the monitoring procedures for containers using Level 3 controls. Describe calibration and monitoring procedures for continuous emissions monitors.

#### C11.C.4(c)(5) Records Management

[R 299.9634 and 40 CFR §264.1086(e)(5)]

Describe the preparation and maintenance of records regarding containers using Level 3 controls. Provide the most recent set of emissions calculations and measurements. Provide a certification showing that the control device is designed to operate at a performance level documented by a design analysis or performance test at capacity or the highest level reasonably expected to occur.

#### C11.C.4(c)(6) Waste Transfer Procedures

[R 299.9634 and 40 CFR §264.1086(e)(2)]

Describe the method for transferring waste to and from containers while controlling emissions during the transfer process.

### C11.C.5 Description of Closed-Vent Systems and Control Devices

[R 299.9634 and 40 CFR §§264.1087 and 270.27(a)(5)]

Provide a general description of the closed-vent system and control devices used at your facility. Attach documentation that includes design and performance information, for each closed-vent system and control device, as specified in 40 CFR §270.24(c) and (d).

### C11.C.5(a)(1) Description of Closed-Vent System

[R 299.9634 and 40 CFR §264.1087(b)]

Describe, in detail, the closed-vent system used at your facility, and demonstrate that the system will prevent hazardous waste emissions to the atmosphere.

#### C11.C.5(a)(2) Description of Control Devices

[R 299.9634 and 40 CFR §264.1087(c)]

Describe, in detail, the control devices used at your facility. Show that the control device reduces the total organic content of the inlet vapor stream by at least 95 percent by weight or consists of an enclosed combustion device or flare.

#### C11.C.5(a)(3) Inspection Procedures

[R 299.9634 and 40 CFR §264.1087(b)(4) and (c)(7)]

Describe inspection procedures for closed-vent systems and control devices in Attachment A5, Inspection Schedules, to this application. Describe calibration and monitoring procedures for continuous emissions monitors.

#### C11.C.6 Description of Record Keeping Procedures

[R 299.9634 and 40 CFR §264.1089(a)]

Describe record keeping procedures to document compliance with 40 CFR Part 264, Subpart CC, and show compliance of these procedures with the requirements of 40 CFR §264.1089(a).

#### C11.C.6(a) Description of Tank Record Keeping Procedures

[R 299.9634 and 40 CFR §264.1089(b)]

Describe the types of records maintained for hazardous waste tanks. Demonstrate that these records are maintained in the operating record for at least three years.

#### C11.C.6(a)(1) Tank Identification Numbers

[R 299.9634 and 40 CFR §264.1089(b)(1)(i)]

Provide identification numbers or some other unique identification system for each affected tank.

#### C11.C.6(a)(2) Inspection Records

[R 299.9634 and 40 CFR §264.1089(b)(1)(ii)]

Describe information that is recorded during tank inspections and describe the floating roof design.

## C11.C.6(a)(3) Documentation for Determination of Maximum Organic Vapor Pressure for Fixed Roof Level 1 Controls

[R 299.9634 and 40 CFR §264.1089(b)(2)(i)]

Describe information recorded to document each determination of maximum organic vapor pressure of hazardous waste contained in each tank. Show the date and time that samples were collected, analytical methods, and results of the analyses.

#### C11.C.6(a)(4)2Documentation Showing Internal Floating Roof Design

[R 299.9634 and 40 CFR §264.1089(b)(2)(ii)]

Provide documentation showing the internal floating roof design and describe the methods by which this information is maintained.

## C11.C.6(a)(5) Documentation Showing External Floating Roof Design and Seal Inspections

[R 299.9634 and 40 CFR §264.1089(b)(2)(iii)]

Provide documentation showing the external floating roof design, dimensions of each tank, and records of seal inspections. Demonstrate that dates of measurements, raw data, and calculations of total gap surface area are recorded and maintained.

# C11.C.6(a)(6) Calculations and Records for Demonstrating Compliance with Enclosure Requirements for Level 2 Controls

[R 299.9634 and 40 CFR §264.1089(b)(2)(iv)]

Provide documentation that records that include the most recent set of calculations and measurements that demonstrate a total enclosure prevents emissions to the atmosphere are maintained at the facility. If applicable, show that records are maintained to demonstrate that closed-vent systems and control devices prevent emissions to the atmosphere.

## C11.C.6(b) Description of Surface Impoundment Record Keeping Procedures [R 299.9634 and 40 CFR §264.1089(c)]

Describe record keeping procedures for hazardous waste surface impoundments.

### C11.C.6(b)(1) Surface Impoundment Identification Numbers

[R 299.9634 and 40 CFR §264.1089(c)(1)]

Provide identification numbers or some other unique identification system for each affected surface impoundment.

### C11.C.6(b)(2) Floating Membrane or Cover Certifications

[R 299.9634 and 40 CFR §264.1089(c)(2)]

Provide a certification that each floating membrane or cover is constructed of high-density polyethylene with at thickness of 2.5 millimeters or more and prevents emissions to the atmosphere.

#### C11.C.6(b)(3) Inspection Records

#### [R 299.9634 and 40 CFR §264.1089(c)(3)]

Demonstrate the methods by which inspection records are maintained and that the records show the inspection dates, identification of defects, and actions to repair defects.

## C11.C.6(b)(4) Closed-Vent System and Control Device Certifications and Records [R 299.9634 and 40 CFR §264.1089(c)(4)]

Describe design certification and other records that will be maintained to describe design analyses, performance tests, and routine maintenance operations.

## C11.C.6(c) Description of Container Level 3 Control Record Keeping Procedures [R 299.9634 and 40 CFR §264.1089(d)]

Use this section to describe general container Level 3 control record keeping procedures and the following two sections to describe the manner in which specific information requirements are met.

## C11.C.6(c)(1) Calculations Verifying Compliance with Enclosure Requirements [R 299.9634 and 40 CFR §264.1089(d)(1)]

Describe the approach for maintaining records to show the most recent set of calculations and measurements that verify compliance with enclosure requirements.

# C11.C.6(c)(2) Closed-Vent System and Control Device Certifications and Records [R 299.9634 and 40 CFR §264.1089(d)(2)]

Describe design certification and other records that will be maintained to describe design analyses, performance tests, and routine maintenance operations.

## C11.C.6(d) Closed-Vent System and Control Device Records [R 299.9634 and 40 CFR §264.1089(e)]

Use this section to describe general closed-vent system and control device record-keeping procedures and the following sections to describe the approach for meeting specific information requirements.

### C11.C.6(d)(1) Performance Certification [R 299.9634 and 40 CFR §264.1089(e)(1)(i)]

Provide a signed certification that documents that each control device is designed to operate at a specified performance level.

## C11.C.6(d)(2) Design Analysis Documentation [R 299.9634 and 40 CFR §264.1089(e)(1)(i)(ii)]

If applicable, provide documentation of control device design analysis and a signed certification that the control equipment meets applicable specifications.

#### C11.C.6(d)(3) Performance Test Plan and Results

[R 299.9634 and 40 CFR §264.1089(e)(1)(i)(iii)]

If applicable, provide a performance test plan and results. This information can be referenced here and included as a separate attachment to this template.

#### C11.C.6(d)(4) Descriptions of Sensors, Modifications, and Locations

[R 299.9634 and 40 CFR §264.1089(e)(1)(i)(iv)]

If applicable, describe sensors, system modifications, and locations of sensors.

#### C11.C.6(d)(5) Planned Routine Maintenance Schedules

[R 299.9634 and 40 CFR §264.1089(e)(1)(i)(v)]

Provide a schedule for planned routine maintenance of control equipment for those maintenance periods when the equipment is not expected to meet emission control requirements.

#### C11.C.6(d)(6) Descriptions of Unplanned Malfunctions

[R 299.9634 and 40 CFR §264.1089(e)(1)(i)(vi)]

Describe the maintenance procedures for records that describe effects of unplanned equipment malfunctions.

### C11.C.6(d)(7) Management of Carbon Removed from a Carbon Absorption System

[R 299.9634 and 40 CFR §264.1089(e)(1)(i)(vii)]

Describe records that will be maintained to show management of carbon that is removed from carbon absorption systems.

### C11.C.6(e) Records Required for Exempt Units

[R 299.9634 and 40 CFR §264.1089(f)]

Describe units that are exempt from 40 CFR Part 264, Subpart CC, requirements.

#### C11.C.6(e)(1) Waste Determination Results

[R 299.9634 and 40 CFR §264.1089(f)(1)]

Describe maintenance procedures for waste analysis records that document exemptions from 40 CFR Part 264, Subpart CC, standards.

#### C11.C.6(e)(2) Identification Numbers of Treatment Units

[R 299.9634 and 40 CFR §264.1089(f)(2)]

For exempt tanks, surface impoundments, and containers, provide identification numbers for combustion units in which the waste is treated.

## C11.C.6(f) Description of Covers Designated as Unsafe to Inspect and Monitor [R 299.9634 and 40 CFR §264.1089(g)]

Provide identification numbers for covers that are designated as unsafe to inspect and monitor. Also provide a justification for making this designation.

# C11.C.6(g) Documentation of Alternative Compliance with 40 CFR Part 60, Subpart VV, or 40 CFR Part 61, Subpart V

[R 299.9634 and 40 CFR §264.1089(h)]

If applicable, provide documentation to show compliance with the federal Clean Air Act of 1990 requirements, instead of 40 CFR Part 264, Subpart CC, requirements.

## C11.C.6(h) Documentation Required for Tanks and Containers Not Using Air Emission Controls

[R 299.9634 and 40 CFR §264.1089(i)]

Provide a list of tanks and containers that are not using air emission controls and detailed justifications in the following sections.

### C11.C.6(h)(1) List of Organic Peroxide Compounds

[R 299.9634 and 40 CFR §264.1089(i)(1)]

Provide a list of organic peroxide compounds that are managed at your facility that result in unit exemptions from 40 CFR Part 264, Subpart CC, requirements.

### C11.C.6(h)(2) Management of Organic Peroxide Compounds

[R 299.9634 and 40 CFR §264.1089(i)(2)]

Describe how applicable organic peroxide compounds are managed in tanks and containers.

## C11.C.6(h)(3) Justification for Claiming that Air Emission Controls Would Create an Undue Safety Hazard

[R 299.9634 and 40 CFR §264.1089(i)(3)]

If applicable, provide a detailed justification for claiming that the use of emission controls on tanks and containers that contain organic peroxide compounds would create an undue safety hazard.

## C11.C.6(i) Certifications and Identification of Federal Clean Air Act of 1990 Requirements

[R 299.9634 and 40 CFR §264.1089(j)(1) and (2)]

If applicable, provide certification of compliance with the federal Clean Air Act of 1990 requirements under 40 CFR Parts 60, 61, or 63, in lieu of 40 CFR Part 264 requirements. Include a description of, excerpt or copy of, or reference to any applicable operating permits, engineering design documentation, source tests, inspection reports or work practices that are used to document or demonstrate such compliance.