



DIVISION OF ENVIRONMENTAL QUALITY

DRAFT OPERATING AIR PERMIT

PERMIT NUMBER: 1779-AOP-R11

IS ISSUED TO:
Greenbrier Central, LLC
901 Jones Road
Paragould, AR 72450
Greene County
AFIN: 28-00251

PURSUANT TO THE RULES OF THE ARKANSAS OPERATING AIR PERMIT PROGRAM, 8 CAR PT. 42: THIS PERMIT AUTHORIZES THE ABOVE REFERENCED PERMITTEE TO INSTALL, OPERATE, AND MAINTAIN THE EQUIPMENT AND EMISSION UNITS DESCRIBED IN THE PERMIT APPLICATION AND ON THE FOLLOWING PAGES. THIS PERMIT IS VALID BETWEEN:

AND

THE PERMITTEE IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:

Demetria Kimbrough
Deputy Director, Office of Air Quality

Date

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List of Acronyms and Abbreviations

Ark. Code Ann.	Arkansas Code Annotated
AFIN	Arkansas DEQ Facility Identification Number
CAR	Code of Arkansas Rules
C.F.R.	Code of Federal Regulations
CO	Carbon Monoxide
COMS	Continuous Opacity Monitoring System
HAP	Hazardous Air Pollutant
Hp	Horsepower
lb/hr	Pound Per Hour
NESHAP	National Emission Standards (for) Hazardous Air Pollutants
MVAC	Motor Vehicle Air Conditioner
No.	Number
NO _x	Nitrogen Oxide
NSPS	New Source Performance Standards
PM	Particulate Matter
PM ₁₀	Particulate Matter Equal To Or Smaller Than Ten Microns
PM _{2.5}	Particulate Matter Equal To Or Smaller Than 2.5 Microns
SNAP	Significant New Alternatives Program (SNAP)
SO ₂	Sulfur Dioxide
SSM	Startup, Shutdown, and Malfunction Plan
Tpy	Tons Per Year
UTM	Universal Transverse Mercator
VOC	Volatile Organic Compound

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SECTION I: FACILITY INFORMATION

PERMITTEE:	Greenbrier Central, LLC
AFIN:	28-00251
PERMIT NUMBER:	1779-AOP-R11
FACILITY ADDRESS:	901 Jones Road Paragould, AR 72450
MAILING ADDRESS:	901 Jones Road Paragould, AR 72450
COUNTY:	Greene County
CONTACT NAME:	Curtis Stehle
CONTACT POSITION:	Regional Environmental Manager
TELEPHONE NUMBER:	(870) 335-6976
REVIEWING ENGINEER:	Shai Sabaroche
UTM North South (Y):	Zone 15: 3989737.3 m
UTM East West (X):	Zone 15: 725641.86 m

SECTION II: INTRODUCTION

Summary of Permit Activity

Greenbrier Central, LLC owns and operates a railcar fabrication and assembly plant in Paragould, AR. With this renewal,

- The process description is revised to define the facility as a railcar fabrication and assembly plant.
- Redesigned ductwork for the North Bay Tracks 1, 2, and 3 is incorporated, noting the changes were made for health, safety, and quality with no impact on emissions.
- The names of sources SN-01 through SN-08 and SN-12 through SN-16 are updated to specifically identify Dust Collection Systems #1–7, Blast operations, and General Building Ventilation for Tracks 1, 2, and 3.
- The single stack for SN-06 (Track 1 and 2 Interior/Exterior Prime North Bay) is split into three separate stacks designated as SN-06a, b, and c.
- The single stack for SN-15 (Track 3 Interior/Exterior Topcoat North Bay) is split into three separate stacks designated as SN-15a, b, and c.
- Emission limits for SN-02 and SN-03 are revised based on updated equipment specifications, and limits for SN-01, SN-04, SN-05, and SN-13 are adjusted for rounding consistency.
- Monthly HAP and VOC deadlines are adjusted from the 15th to the 30th of each month.
- The Insignificant Activities list is updated to include five heaters (A-1), two MEK tanks (A-13), and three parts washers (A-13).
- Welding is reclassified on the Insignificant Activities list from an A-13 source to an A-7 source.
- A header is added to demarcate Specific Conditions #13 through 34 as those owed to 40 C.F.R. Part 63, Subpart M.
- Citations are updated as needed.

Permitted annual emissions increased by 0.2 tpy of PM/PM₁₀.

Process Description

Greenbrier Central, LLC owns and operates a railcar fabrication and assembly plant in Paragould, Arkansas. The facility also refurbishes and repairs customers' existing railcars to extend their lifecycles. The various parts of the process are described below.

Fabrication and Assembly

The fabrication and assembly plant consists of welding operations (Insignificant Activities) and one plasma burn table equipped with a dust collector (SN-18).

Surface Preparation, Blast, and Coating

There are three primary process lines located at the Paragould facility. Track 1 and Track 2 are adjacent parallel lines. Track 3 is located in a separate building. The painting and lining operations include the following process operations: general preparation of the car, blasting, general cleanup after blasting in preparation for painting and lining, railcar interior primer application, railcar exterior primer application, two curing bays with inspection and touchup capabilities, railcar interior topcoat application, railcar exterior topcoat application, drying/curing bays with inspection and touchup capabilities, assembly, and final inspection with scale room and marking capabilities.

Pre-Blast Prep and Dry-off Bay

In this position, the cars are dried and/or de-iced with natural gas fueled heaters (SN-09). The cars are then prepared for the blasting operations by covering areas and equipment that would otherwise be damaged by blasting. The car is also checked for oil or grease; if present, they are removed by wiping down the car using a rag and mild soap solution. Emissions from the pre-blast prep and dry-off areas are routed through general building ventilation (SN-08 for Tracks 1 and 2 and SN-16 for Track 3).

Sand and Weld Seam Blasting

In this bay (Track 1 and 2 only), the mounting frame-to-slope sheet weld seams are hand blasted to check for porosity and other defects. If required, the cars are sand blasted. Emissions are routed to a dust collector (SN-01).

Interior Blast

In this area, cars requiring lining (i.e., interior painting) have their complete interiors grit blasted inside a fully enclosed blast booth. A lance is inserted into each compartment until blasting is complete. Equipment in this area includes two interior blast cabinets with lances, two dust collection systems (SN-02, SN-03) for Tracks 1 and 2, one dust collection system (SN-12) for Track 3, and gas-fired comfort heating systems (SN-09).

Exterior Blast and Touch-Up

Prior to exterior painting, railcars will have their exteriors completely cleaned by automated blasting inside a fully enclosed booth. Following exterior blasting, the car is manually blasted and grit is removed. Emissions are routed through dust collection systems SN-04 and SN-05 (Track 1 and 2) and SN-13 (Track 3).

General Prep

Tracks 1 through 3 have a general preparation area prior to the application of interior primer. In this general preparation area, the stainless steel hatch rings are cleaned and covered if necessary. The cars are then vibrated to remove any imbedded grit. If the car requires lining, a coating of lining material is applied manually to selected interior weld seams. Applicable emissions sources are general combustion for heaters (SN-09) and general building ventilation (SN-08 for Tracks 1 and 2 and SN-16 for Track 3).

Interior/Exterior Prime Bays

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In this area, the cars receive a prime coat. The coating is applied by means of an airless spray system. Air containing overspray is drawn through a three-stage filter located below (between the rails). The filtered air is transported by an underground duct system to stacks (SN-06a,b,c for Tracks 1 and 2 North Bay and SN-14 for Track 3 South Bay) for dispersion. Heater emissions in the bay are included in the general combustion sources SN-09.

Interior /Exterior Topcoat Bays

In this area, if required, the cars receive a topcoat. The coating is applied by means of an airless spray system. Air containing overspray is drawn through a three-stage filter located below (between the rails). The filtered air is transported by an underground duct system to stacks (SN-07 for Tracks 1 and 2 South Bay and SN-15a,b,c for Track 3 North Bay) for dispersion. Heater emissions in the bay are included in the general combustion sources SN-09.

Drying and Preparation Bays

In these bays the curing of the coating is accomplished using a forced air system. Air is introduced to the interior of the railcar through ducts inserted into the outlet frame openings. Natural gas-fired heaters (SN-09) are used to enhance drying time. The heat is removed from the room by means of roof mounted exhaust fans, SN-08 (Tracks 1 and 2) and SN-16 (Track 3).

Assembly Bays

In these bays, the touch-up and final assembly process begins; interior and exterior coatings are touched up, non-skid coating is applied on top of the car, running boards and hatches are installed, outlets are installed on the bottom, and car marking may take place. If the railcar is a pressure-aide type, functional testing may begin. Emissions are routed through the general building ventilation, SN-08 for Tracks 1 and 2 and SN-16 for Track 3.

Scale and Final Inspection Bays

In these bays the weight of the car is tabulated and the railcar is marked. Following this, the railcar receives a final inspection and some touch-ups will take place if needed. After final inspection and approval, the railcar is moved to the shipping track. Emissions are routed through the general building ventilation, SN-08 (Tracks 1 and 2) and SN-16 (Track 3).

Aluminum Components Building

Aluminum parts used on the railcars are produced in the Aluminum Components Building located across the street from the main facility. Natural gas fueled furnaces (emissions included in SN-09) are used to melt aluminum ingots. Aluminum parts are cast and welded.

Natural Gas Combustion

The emissions from all natural gas combustion sources at Paragould are combined into one source. SN-09 contains all natural gas sources located at the facility.

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Rules and Regulations

The following table contains the rules and regulations applicable to this permit.

Rules and Regulations
Arkansas Air Pollution Control Code, 8 CAR pt. 40, effective March 14, 2016
Rules of the Arkansas Plan of Implementation for Air Pollution Control, 8 CAR pt. 41, effective May 6, 2022
Rules of the Arkansas Operating Air Permit Program, 8 CAR pt. 42, effective March 14, 2016
40 C.F.R. Part 63, Subpart M – <i>National Emission Standards for Hazardous Air Pollutants: Surface Coating of Miscellaneous Metal Parts and Products</i>
40 C.F.R. Part 64 – Compliance Assurance Monitoring

Emission Summary

The following table is a summary of emissions from the facility. This table, in itself, is not an enforceable condition of the permit.

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
Total Allowable Emissions		PM	4.3	17.5
		PM ₁₀	4.3	17.5
		PM _{2.5}	See Note*	
		SO ₂	0.1	0.3
		VOC	590.0	492.5
		CO	8.4	36.8
		NO _x	10.4	45.3
HAPs		Total HAPs	490.30	491.10
Air Contaminants ****		Acetone	20.0	20.0
01	Track 1 and 2 Dust Collection System #1 (Sand and Weld Seam Blast – North Bay)	PM	0.3	1.0
		PM ₁₀	0.3	1.0
		Total PM HAPs	0.01	0.02
02	Track 1 Dust Collection System #2 (Interior Blast – North Bay)	PM	0.3	1.1
		PM ₁₀	0.3	1.1
		Total PM HAPs	0.01	0.02
03	Track 2 Dust Collection System #3 (Interior Blast – North Bay)	PM	0.3	1.1
		PM ₁₀	0.3	1.1
		Total PM HAPs	0.01	0.02
04	Track 2 Dust Collection System #4 (Exterior Blast – North Bay)	PM	0.7	3.1
		PM ₁₀	0.7	3.1
		Total PM HAPs	0.02	0.06
05	Track 1 Dust Collection System #5 (Exterior Blast – North Bay)	PM	0.7	3.1
		PM ₁₀	0.7	3.1
		Total PM HAPs	0.02	0.06
06a,b,c	Track 1 and 2 Interior/Exterior Prime North Bay	VOC	245.0**	245.0**
		HAPs from Painting Operations	245.0**	245.0**
		Acetone	10.0**	10.0**

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
07	Track 1 and 2 Interior/Exterior Topcoat South Bay	VOC HAPs from Painting Operations Acetone	245.0** 245.0** 10.0**	245.0** 245.0** 10.0**
08	Track 1 and 2 General Building Ventilation	VOC HAPs from Painting Operations Acetone	245.0** 245.0** 10.0**	245.0** 245.0** 10.0**
14	Track 3 Interior/Exterior Prime South Bay	VOC HAPs from Painting Operations Acetone	245.0*** 245.0*** 10.0***	245.0*** 245.0*** 10.0***
15a,b,c	Track 3 Interior/Exterior Topcoat North Bay	VOC HAPs from Painting Operations Acetone	245.0*** 245.0*** 10.0***	245.0*** 245.0*** 10.0***
16	Track 3 General Building Ventilation	VOC HAPs from Painting Operations Acetone	245.0*** 245.0*** 10.0***	245.0*** 245.0*** 10.0***
09	Plantwide Natural Gas Combustion Sources	PM PM ₁₀ SO ₂ VOC CO NO _x Total HAPs	0.8 0.8 0.1 0.6 8.4 10.0 0.19	3.4 3.4 0.3 2.5 36.8 43.8 0.83
12	Track 3 Dust Collection System #6 (Interior Blast – South Bay)	PM PM ₁₀ Total PM HAPs	0.3 0.3 0.01	1.1 1.1 0.02
13	Track 3 Dust Collection System #7 (Exterior Blast – South Bay)	PM PM ₁₀ Total PM HAPs	0.7 0.7 0.02	3.1 3.1 0.06
18	Plasma Burn Table Dust Collector	PM PM ₁₀ NO _x Total PM HAPs	0.2 0.2 0.4 0.01	0.5 0.5 1.5 0.01

*PM_{2.5} limits are source specific, if required. Not all sources have PM_{2.5} limits.

** VOC, HAP, and Acetone emissions for all Track 1 and 2 sources are bubbled. 245 lb/hr is a practical maximum based on current operations and requested 12-month permit limit for VOC.

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*** VOC, HAP, and Acetone emissions for all Track 3 sources are bubbled. 245 lb/hr is a practical maximum based on current operations and requested 12-month permit limit for VOC.

****Air Contaminants such as ammonia, acetone, and certain halogenated solvents are not VOCs or HAPs.

SECTION III: PERMIT HISTORY

American Railcar began operations in the 1990's. At the time, no painting took place, and no air permit was issued because emissions were below 10 tons per year.

Permit 1779-AOP-R0 was issued to American Railcar on April 21, 1998. This permit was the first permit for the facility. This permit allowed for painting operations in addition to the railcar manufacturing.

An administrative amendment to permit 1779-AOP-R0 was issued on February 19, 2001. This amendment clarified the language in Specific Condition 7, which regards HAP TLV limitations.

Permit 1179-AOP-R1 was issued on January 4, 2005. This permit was the Title V renewal for the facility. The only changes to the permit were the updating of combustion emissions to reflect current AP-42 emission factors, and in the original application, dust collector sizes for SN-02 and 03 were inadvertently switched with sources SN-04 and 05. This permit corrected the error and assigned the emissions to the proper source. ARI submitted a minor modification to their permit that included the installation of a new railcar assembly track. The addition of the new track caused their existing tracks to no longer be considered insignificant. Tracks 1 and 2 were added as SN-10. The new track, Track 3, was added as source SN-11.

Permit 1179-AOP-R2 was issued on August 29, 2005. ARI added a new railcar painting building which added 6 new sources to the permit. These sources were SN-12 thru 17. These sources resulted in a 150 ton increase in VOC emissions and a 15 ton increase in CO and NO_x.

Permit 1179-AOP-R3 was issued on July 18, 2006. This permit incorporated the Miscellaneous Metal Parts MACT requirements into the permit.

Permit 1179-AOP-R4 was issued on September 2, 2011. This permit was the Title V renewal for the facility. In this modification, the facility added a Plasma Burn Table Dust Collector, SN-18, and increased HDI and MDI usage at its painting sources.

Permit 1179-AOP-R5 was issued on January 30, 2015. In this modification, the facility replaced the baghouses that control the Exterior Blasting at Tracks 1 and 2, SN-04 and SN-05.

Permit 1179-AOP-R6 was issued on December 1, 2015. In this modification, the HAP TLV restrictions on SN-06, 07, 08, 14, 15, and 16 were removed. HDI, MDI, and all other painting HAPs were grouped together in the permit under "HAPs from Painting Operations." There was no change to the permitted emission rates.

Permit 1179-AOP-R7 was issued on May 24, 2016. In this modification, ARI increased the VOC and HAP limits for Tracks 1, 2, and 3 (SN-06 through SN-08 and SN-14 through SN-16) as the existing painting equipment experienced increased annual utilization. The increase in emissions was due to an increased demand for railcar production. No physical changes were

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made in this permit modification. The permitted VOC emission rate increased by 242.8 tpy and the permitted Total HAPs from Painting Operations increased by 242.8 tpy.

Permit 1179-AOP-R8 was issued on August 19, 2016. In this renewal, a CAM Plan was submitted for the dust collectors, all natural gas sources were grouped under SN-09 (previously SN-09 and SN-17), and trace HAPs were identified and permitted for the dust collectors and natural gas sources. A minor modification was also included in this permitting action. In this minor modification, the welding operations (previously SN-10 and SN-11) were reclassified as insignificant activities and a new aluminum melt furnace area was added to the SN-09 natural gas combustion sources. As a result of this revision, PM/PM₁₀ emissions decreased by 0.1 tpy, SO₂ emissions decreased by 0.5 tpy, VOC emissions increased by 0.6 tpy, CO emissions increased by 12 tpy, NO_x emissions increased by 16.2 tpy, and Total HAP emissions increased by 1.1 tpy.

Permit 1179-AOP-R9 was issued September 26, 2017. In this modification, the facility changed the stack configuration on SN-06 and SN-07, which resulted in a need to reevaluate Specific Condition #9 to keep an accurate TLV limit. There were no permitted emission changes as a result of this modification.

Permit 1179-AOP-R10 was issued October 18, 2021. In this renewal, the permit was updated to match updates to NESHAP MMMM. Hourly emission rates were lowered for painting operations to represent a practical maximum limit rather than a theoretical maximum limit. Permitted emission rates increased by 10 tpy of Acetone.

SECTION IV: SPECIFIC CONDITIONS

SN-01, 02, 03, 04, 05, 12, 13 and 18 Dust Collection Systems

Source Description

SN-01, Track 1 and 2 Dust Collection System #1 (Sand and Weld Seam Blast – North Bay). This source accounts for emissions from the weld seam blast and repair bay. Emissions are controlled by a 12,000 cfm dust collector.

SN-02, Track 1 Dust Collection System #2 (Interior Blast – North Bay)
SN-03, Track 2 Dust Collection System #3 (Interior Blast – North Bay)
Two 15,000 cfm dust collectors control emissions from the interior blast area.

SN-04, Track 2 Dust Collection System #4 (Exterior Blast – North Bay)
SN-05, Track 1 Dust Collection System #5 (Exterior Blast – North Bay)
Two 40,000 cfm dust collection systems control emissions from the exterior blast and touch-up area.

SN-12, Track 3 Dust Collection System #6 (Interior Blast – South Bay)
SN-13, Track 3 Dust Collection System #7 (Exterior Blast – South Bay)
One 14,500 cfm dust collector, SN-12, controls emissions from the interior blast, and one 40,000 cfm dust collector, SN-13 controls emissions from the exterior blast and touch up areas.

SN-18, Plasma Burn Table Dust Collector.
Emissions from the Plasma Burn Table are controlled by a 6,000 cfm dust collector.

The uncontrolled emissions from SN-01, 02, 03, 04, 05, 12, 13, and 18 fulfill the applicability criteria of the Compliance Assurance Monitoring (CAM) Rule (40 Code of Federal Regulations (C.F.R.) Part (§ 64). Accordingly, the (CAM) Plan for the facility is provided in Appendix B. Per § 64.2(a), the aforementioned sources are regulated under the CAM Rule because it meets the following criteria:

- (1) The units are subject to emission limitations for PM₁₀,
- (2) The sources are equipped with a control device, and
- (3) The units have potential pre-control emissions of PM₁₀ that exceed the applicable major source threshold.

In accordance with § 64.3, Greenbrier Central, LLC has developed a CAM Plan for the affected sources. The Plan establishes the operating parameters that will be monitored in order to demonstrate compliance with the PM₁₀ emission limits at these sources.

Specific Conditions

1. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Plantwide Condition #5. [8 CAR § 41-401 *et seq.* and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
01	Track 1 and 2 Dust Collection System #1 (Sand and Weld Seam Blast – North Bay)	PM ₁₀	0.3	1.0
02	Track 1 Dust Collection System #2 (Interior Blast – North Bay)	PM ₁₀	0.3	1.1
03	Track 2 Dust Collection System #3 (Interior Blast – North Bay)	PM ₁₀	0.3	1.1
04	Track 2 Dust Collection System #4 (Exterior Blast – North Bay)	PM ₁₀	0.7	3.1
05	Track 1 Dust Collection System #5 (Exterior Blast – North Bay)	PM ₁₀	0.7	3.1
12	Track 3 Dust Collection System #6 (Interior Blast – South Bay)	PM ₁₀	0.3	1.1
13	Track 3 Dust Collection System #7 (Exterior Blast – South Bay)	PM ₁₀	0.7	3.1
18	Plasma Burn Table Dust Collector	PM ₁₀ NO _x	0.2 0.4	0.5 1.5

2. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Plantwide Condition #5. [8 CAR § 40-701 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

SN	Description	Pollutant	lb/hr	tpy
01	Track 1 and 2 Dust Collection System #1 (Sand and Weld Seam Blast – North Bay)	PM Total PM HAPs	0.3 0.01	1.0 0.02
02	Track 1 Dust Collection System #2 (Interior Blast – North Bay)	PM Total PM HAPs	0.3 0.01	1.1 0.02
03	Track 2 Dust Collection System #3 (Interior Blast – North Bay)	PM Total PM HAPs	0.3 0.01	1.1 0.02
04	Track 2 Dust Collection System #4 (Exterior Blast – North Bay)	PM Total PM HAPs	0.7 0.02	3.1 0.06
05	Track 1 Dust Collection System #5 (Exterior Blast – North Bay)	PM Total PM HAPs	0.7 0.02	3.1 0.06

12	Track 3 Dust Collection System #6 (Interior Blast – South Bay)	PM Total PM HAPs	0.3 0.01	1.1 0.02
13	Track 3 Dust Collection System #7 (Exterior Blast – South Bay)	PM Total PM HAPs	0.7 0.02	3.1 0.06
18	Plasma Burn Table Dust Collector	PM Total PM HAPs	0.1 0.01	0.5 0.01

3. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9.

SN	Limit	Regulatory Citation
01, 02, 03, 04, 05, 12, 13, and 18	5%	8 CAR § 40-701 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4- 311

CAM Conditions (SN-01, SN-02, SN-03, SN-04, SN-05, SN-12, SN-13, and SN-18)

4. SN-01, 02, 03, 04, 05, 12, 13, and 18 are subject to the Compliance Assurance Monitoring (CAM) Rule. Greenbrier Central, LLC developed a CAM Plan for these sources and a copy is included in Appendix B of this permit. Compliance with this condition shall be demonstrated by compliance with Specific Conditions #5 and #6. [8 CAR § 41-204 and 40 C.F.R. § 64.2(a)]
5. The permittee shall ensure that the filters for each of the affected sources are in operation prior to operation of the underlying process equipment generating dust emissions. [8 CAR § 41-204 and 40 C.F.R. § 64]
6. The permittee shall conduct daily opacity observations at each exhaust point and keep a record of these observations. If the permittee detects visible emissions, the permittee must immediately take action to identify and correct the cause of the visible emissions. After implementing the corrective action, the permittee must document that the source complies with the visible emission requirements. The opacity observations will be performed while the control device and underlying process equipment is in operation and will be performed by trained personnel. The permittee shall maintain records of the cause of any visible emissions and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request. [8 CAR § 41-204 and 40 C.F.R. § 64]

SN-06a,b,c, 07, 08, 14, 15a,b,c, and 16
 Painting Operation

Source Description

Painting operations at the facility consist of interior and exterior primer applications, interior and exterior topcoat operations, and several curing bays with inspection and touch up capabilities.

SN-06a,b,c; Track 1 and 2 Interior/Exterior Prime North Bay
 SN-07; Track 1 and 2 Interior/Exterior Topcoat South Bay
 SN-08; Track 1 and 2 General Building Ventilation

All emissions from SN-08 are included in those from SN-06a,b,c and SN-07.

SN-14; Track 3 Interior/Exterior Prime South Bay
 SN-15a,b,c; Track 3 Interior/Exterior Topcoat North Bay
 SN-16; Track 3 General Building Ventilation

All emissions from SN-16 are included in those from SN-14 and SN-15a,b,c.

Specific Conditions

7. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Condition #12. [8 CAR § 41-401 *et seq.* and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
06a,b,c	Track 1 and 2 Interior/Exterior Prime North Bay	VOC	245.0*	245.0*
07	Track 1 and 2 Interior/Exterior Topcoat South Bay	VOC		
08	Track 1 and 2 General Building Ventilation	VOC		
14	Track 3 Interior/Exterior Prime South Bay	VOC	245.0**	245.0**
15a,b,c	Track 3 Interior/Exterior Topcoat North Bay	VOC		
16	Track 3 General Building Ventilation	VOC		

*VOC emissions for all Track 1 and 2 sources are bubbled. 245 lb/hr is a practical maximum based on current operations and requested 12-month permit limit for VOC.

****VOC emissions for all Track 3 sources are bubbled. 245 lb/hr is a practical maximum based on current operations and requested 12-month permit limit for VOC.**

8. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by compliance with Specific Conditions #10. [8 CAR § 40-701 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

SN	Description	Pollutant	lb/hr	tpy
06a,b,c 07 08	Track 1 and 2	Other HAPs from Painting Operations Acetone	245.0* 10.0*	245.0* 10.0*
14 15a,b,c 16	Track 3	Other HAPs from Painting Operations Acetone	245.0** 10.0**	245.0** 10.0**

*HAP/Acetone emissions for all Track 1 and 2 sources are bubbled. 245 lb/hr is a practical maximum based on current operations and requested 12-month permit limit for HAP

**HAP/Acetone emissions for all Track 3 sources are bubbled. 245 lb/hr is a practical maximum based on current operations and requested 12-month permit limit for HAP

9. The permittee may not emit any HAP with a TLV less than 21.8 mg/m³ at or above ten tons per year at sources SN-06a,b,c, 07, 08, 14, 15a,b,c, and 16. Compliance with this condition will be shown by compliance with Specific Condition #10. [8 CAR § 40-904 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
10. The permittee shall maintain monthly records of the HAP emissions in sources SN-06a,b,c, 07, 08, 14, 15a,b,c, and 16. These records shall include, the name of the HAP containing material, the amount of each HAP containing material used, the HAP content of each individual HAP in the material, as documented by the manufacturer's MSDS sheet or equivalent, the TLV of each HAP emitted, and the consecutive 12 month rolling total of HAPs emitted. These records shall be updated by the 30th day of the month following the month which the records represent and made available to Department personnel upon request. [8 CAR § 40-904 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
11. The individual emissions of VOCs for the Tracks #1 + #2 emissions unit (SN-06a,b,c, 07, and 08) and the Track #3 emissions unit (SN-14, 15a,b,c, 16) shall not exceed the limits below on a 12-month rolling basis. Compliance with this condition shall be shown by compliance with Specific Condition #12. [8 CAR § 41-605, Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. § 70.6]
- Tracks #1 and #2 emissions unit: 245 tons/year
 - Track #3 emissions unit: 245 tons/year

12. The permittee shall maintain separate monthly and 12-month rolling total records of the VOC emissions from the Tracks #1 and #2 emissions unit (SN-06a,b,c, 07, and 08) and the Track #3 emissions unit (SN-14, 15a,b,c, 16). These records shall include the name of the VOC containing material, the VOC content of each material as applied, the amount of each material used, and the amount of VOC emissions from each material. These records shall be updated by the 30th day of the month following the month which the records represent, submitted to the Department in accordance with General Provision 7, and made available to Department personnel upon request. [8 CAR § 41-605 and 40 C.F.R. Part 52, Subpart E]

NESHAP Subpart M

13. The permittee shall limit organic HAP emissions to the atmosphere from sources SN-06a,b,c, 07, 08, 14, 15a,b,c, and 16 to the limit specified in the following table. [8 CAR § 41-204 and 40 C.F.R. § 63.3890]

Coating Subcategory	Organic HAP Emission Limit (lb HAP/gal solids)
General Use Coating	2.6
High Performance Coating	27.5
Magnet Wire Coating	1.0
Rubber-to-Metal Coating	37.7
Extreme Performance Fluoropolymer Coating	12.4

14. The permittee shall comply with each specific subcategory emission limit in Specific Condition 13 or may elect to comply with one of two alternatives outlined in § 63.3890(c). If 90% or more of the coating operations at the facility are General Use Coating the facility may elect to comply with the 2.6 lb organic HAP/gal of solid limit for all coating operations at the facility. Or, the permittee may elect to comply with a facility-specific emission limit as described in § 63.3890(c)(2). [8 CAR § 41-204 and 40 C.F.R. § 63.3890]
15. The permittee must demonstrate that, based on the coatings, thinners, and/or other additives, and cleaning materials used in the coating operation(s), the organic HAP emission rate for the coating operation(s) is less than or equal to the applicable emission limit in § 63.3890, calculated as a rolling 12-month emission rate and determined on a monthly basis. The permittee must meet all the requirements of §§63.3950, 63.3951, and 63.3952 to demonstrate compliance with the emission limit using this option. [8 CAR § 41-204 and 40 C.F.R. § 63.3891(b)]
16. The permittee must, for any coating operation(s) for which the permittee uses the compliant material option or the emission rate without add-on controls option, be in

compliance with the applicable emission limit in §63.3890 at all times. [8 CAR § 41-204 and 40 C.F.R. §63.3900(a)(1)]

17. The permittee must always operate and maintain the affected source(s), including all air pollution control and monitoring equipment used for the purposes of complying with this subpart in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Division that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the affected source. [8 CAR § 41-204 and 40 C.F.R. § 63.3900(b)]
18. The permittee must submit semiannual compliance reports which include all information specified in § 63.3920. The first semiannual report is not due until 6 months after the initial compliance period. The date the first report is due will be July 31, 2008. [8 CAR § 41-204 and 40 C.F.R. § 63.3920]
19. On and after January 5, 2021, or once the reporting template has been available on the CEDRI website for 1 year, whichever date is later, the permittee shall submit the semiannual compliance report required in PC-14 to the EPA via the CEDRI. The CEDRI interface can be accessed through the EPA's CDX (<https://cdx.epa.gov/>). The owner or operator must use the appropriate electronic template on the CEDRI website for this subpart or an alternate electronic file format consistent with the XML schema listed on the CEDRI website (<https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri>). The date report templates become available will be listed on the CEDRI website. If the reporting form for the semiannual compliance report specific to this subpart is not available in CEDRI at the time that the report is due, the permittee must submit the report to the Administrator at the appropriate addresses listed in §63.13. Once the form has been available in CEDRI for 1 year, the permittee must begin submitting all subsequent reports via CEDRI. The reports must be submitted by the deadlines specified in this subpart, regardless of the method in which the reports are submitted. Owners or operators who claim that some of the information required to be submitted via CEDRI is CBI shall submit a complete report generated using the appropriate form in CEDRI or an alternate electronic file consistent with the XML schema listed on the EPA's CEDRI website, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage medium to the EPA. The electronic medium shall be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted shall be submitted to the EPA via the EPA's CDX as described earlier in this paragraph. [8 CAR § 41-204 and 40 C.F.R. § 63.3920(f)]

20. If the permittee is required to electronically submit a report through the CEDRI in the EPA's CDX, and due to a planned or actual outage of either the EPA's CEDRI or CDX systems within the period of time beginning 5 business days prior to the date that the submission is due, the permittee will be or are precluded from accessing CEDRI or CDX and submitting a required report within the time prescribed, the permittee may assert a claim of the EPA system outage for failure to timely comply with the reporting requirement. The permittee must submit notification to the Administrator in writing as soon as possible following the date the permittee first knew, or through due diligence should have known, that the event may cause or caused a delay in reporting. The permittee must provide to the Administrator a written description identifying the date, time, and length of the outage; a rationale for attributing the delay in reporting beyond the regulatory deadline to the EPA system outage; describe the measures taken or to be taken to minimize the delay in reporting; and identify a date by which the permittee propose to report, or if the permittee have already met the reporting requirement at the time of the notification, the date the permittee reported. In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved. The decision to accept the claim of the EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator. [8 CAR § 41-204 and 40 C.F.R. § 63.3920(g)]
21. If the permittee are required to electronically submit a report through CEDRI in the EPA's CDX and a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning 5 business days prior to the date the submission is due, the owner or operator may assert a claim of force majeure for failure to timely comply with the reporting requirement. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents the permittee from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (e.g., hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (e.g., large scale power outage). If the permittee intend to assert a claim of force majeure, the permittee must submit notification to the Administrator in writing as soon as possible following the date the permittee first knew, or through due diligence should have known, that the event may cause or caused a delay in reporting. The permittee must provide to the Administrator a written description of the force majeure event and a rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event; describe the measures taken or to be taken to minimize the delay in reporting; and identify a date by which the permittee propose to report, or if the permittee have already met the reporting requirement at the time of the notification, the date the permittee reported. In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs. The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator. [8 CAR § 41-204 and 40 C.F.R. § 63.3920(h)]

22. The permittee shall maintain records which consist of a copy of each notification of compliance and report that the facility submitted and the documentation supporting each notification and report. If the permittee conducted testing to determine mass fraction of organic HAP, density, or volume fraction of coating solids, the permittee must keep a copy of the complete test report. If the permittee uses information provided by the manufacturer or supplier of the material that was based on testing, the permittee must keep the summary sheet of results provided by the manufacturer or supplier. The permittee is not required to obtain the test report or other supporting documentation from the manufacturer or supplier. [8 CAR § 41-204 and 40 C.F.R. § 63.3930]
23. The permittee shall maintain records which consist of a current copy of information provided by materials suppliers or manufacturers, such as manufacturer's formulation data, or test data used to determine the mass fraction of organic HAP and density for each coating, thinner and/or other additive, and cleaning material, and the volume fraction for each coating. [8 CAR § 41-204 and 40 C.F.R. § 63.3930]
24. The permittee must maintain records for each compliance period. These records must include: (1) A record of the coating operations on which you used each compliance option and the time periods (beginning and ending dates and times) for each option you used. (2) For the compliant material option, a record of the calculation of the organic HAP content for each coating, using Equation 2 of § 63.3941. (3) For the emission rate without add-on controls option, a record of the calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month using Equations 1, 1A through 1C, and 2 of § 63.3951; and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to § 63.3951(e)(4); the calculation of the total volume of coating solids used each month using Equation 2 of § 63.3951; and the calculation of each 12-month organic HAP emission rate using Equation 3 of § 63.3951. [8 CAR § 41-204 and 40 C.F.R. § 63.3930]
25. The permittee shall maintain records which include: (1) A record of the name and volume of each coating, thinner and/or other additive, and cleaning material used during each compliance period. If the permittee is using the compliant material option for all coatings at the source, the permittee may maintain purchase records for each material used rather than a record of the volume used. (2) A record of the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during each compliance period unless the material is tracked by weight. (3) A record of the volume fraction of coating solids for each coating used during each compliance period. (4) If the permittee uses either the emission rate without add-on controls or the emission rate with add-on controls compliance option, the density for each coating, thinner and/or other additive, and cleaning material used during each compliance period. [8 CAR § 41-204 and 40 C.F.R. § 63.3930]
26. Before January 5, 2021, the permittee must collect and keep records of the date, time, and duration of each deviation. On and after January 5, 2021, for each deviation from an

emission limitation reported under §63.3920(a)(5) through (7), a record of the information specified in paragraphs (j)(1) through (4) of this section, as applicable.

- a. The date, time, and duration of the deviation, as reported under § 63.3920(a)(5) through (7).
- b. A list of the affected sources or equipment for which the deviation occurred and the cause of the deviation, as reported under § 63.3920(a)(5) through (7).
- c. An estimate of the quantity of each regulated pollutant emitted over any applicable emission limit in §63.3890 or any applicable operating limit in table 1 to this subpart, and a description of the method used to calculate the estimate, as reported under § 63.3920(a)(5) through (7).
- d. A record of actions taken to minimize emissions in accordance with § 63.3900(b) and any corrective actions taken to return the affected unit to its normal or usual manner of operation.

[8 CAR § 41-204 and 40 C.F.R. § 63.3930(j)]

27. If the permittee uses an allowance in Equation 1 of § 63.3951 for organic HAP contained in waste materials sent to or designated for shipment to a treatment, storage, and disposal facility (TSDF) according to § 63.3951(e)(4), the permittee must keep records of the information: (1) The name and address of each TSDF to which you sent waste materials for which were used as an allowance in Equation 1 of § 63.3951; a statement of which subparts under 40 C.F.R. parts 262, 264, 265, and 266 apply to the facility; and the date of each shipment. (2) Identification of the coating operations producing waste materials included in each shipment and the month or months in which the allowance for these materials in Equation 1 of § 63.3951 were used. (3) The methodology used in accordance with § 63.3951(e)(4) to determine the total amount of waste materials sent to or the amount collected, stored, and designated for transport to a TSDF each month; and the methodology to determine the mass of organic HAP contained in these waste materials. This must include the sources for all data used in the determination, methods used to generate the data, frequency of testing or monitoring, and supporting calculations and documentation, including the waste manifest for each shipment. [8 CAR § 41-204 and 40 C.F.R. § 63.3930]
28. The permittee must keep records in a form suitable and readily available for expeditious review, according to § 63.10(b)(1). Where appropriate, the records may be maintained as electronic spreadsheets or as a database. On and after January 5, 2021, any records required to be maintained by this subpart that are in reports that were submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation. [8 CAR § 41-204 and 40 C.F.R. § 63.3931(a)]
29. The permittee must maintain the records in Specific Conditions 22-27 for 5 years after the date of occurrence, measurement, maintenance, corrective action, report, or record.

The permittee must keep each record on-site for at least 2 years. Records may be kept offsite for the remaining 3 years. Records must be in a form suitable and readily available for expeditious review, according to § 63.10(b)(1). Where appropriate, the records may be maintained as electronic spreadsheets or as a database. [8 CAR § 41-204 and 40 C.F.R. § 63.3931]

30. The permittee must, to demonstrate continuous compliance, ensure that the organic HAP emission rate for each compliance period, determined according to § 63.3951(a) through (g), must be less than or equal to the applicable emission limit in §63.3890. A compliance period consists of 12 months. Each month after the end of the initial compliance period described in § 63.3950 is the end of a compliance period consisting of that month and the preceding 11 months. The permittee must perform the calculations in § 63.3951(a) through (g) on a monthly basis using data from the previous 12 months of operation. If the permittee is complying with a facility-specific emission limit under § 63.3890(c), the permittee must also perform the calculation using Equation 1 in § 63.3890(c)(2) on a monthly basis using the data from the previous 12 months of operation. [8 CAR § 41-204 and 40 C.F.R. § 63.3952(a)]
31. If the organic HAP emission rate for any 12-month compliance period exceeded the applicable emission limit in § 63.3890, this is a deviation from the emission limitation for that compliance period and must be reported as specified in §§ 63.3910(c)(6) and 63.3920(a)(6). [8 CAR § 41-204 and 40 C.F.R. § 63.3952(b)]
32. As part of each semiannual compliance report required by § 63.3920, the permittee must identify the coating operation(s) for which the permittee used the emission rate without add-on controls option. If there were no deviations from the emission limitations, the permittee must submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the reporting period because the organic HAP emission rate for each compliance period was less than or equal to the applicable emission limit in § 63.3890, determined according to § 63.3951(a) through (g). [8 CAR § 41-204 and 40 C.F.R. § 63.3952(c)]
33. The permittee must maintain records as specified in §§ 63.3930 and 63.3931. [8 CAR § 41-204 and 40 C.F.R. § 63.3952(d)]
34. The permittee must comply with the applicable General Provisions to Subpart 63 in accordance with Table 2 of 40 C.F.R. Part 63, Subpart Mmmm. [8 CAR § 41-204 and Ark. Code Ann. § 8-4-203 as referenced by §§ 8-4-304 and 8-4-311]

SN-09
 Natural Gas Combustion Sources

Source Description

This source includes all natural gas combustion sources at the facility. These sources have a total heat input capacity of 95.2 MMBtu/hr. The emissions calculations for this source are based on a limit of 100 MMBtu/hr. The following table provides a list of the equipment included in this source and its capacity. The facility shall maintain an updated list of all equipment and associated firing rates designated under SN-09 as required by Specific Condition #39.

Specific Conditions

35. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by combusting only natural gas in the equipment included in this source. [8 CAR § 41-401 *et seq.* and 40 C.F.R. § 52 Subpart E]

SN	Description	Pollutant	lb/hr	tpy
09	Natural Gas Combustion Sources	PM ₁₀	0.8	3.4
		SO ₂	0.1	0.3
		VOC	0.6	2.5
		CO	8.4	36.8
		NO _x	10.0	43.8

36. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by combusting only natural gas in the equipment included in this source. [8 CAR § 40-701 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

SN	Description	Pollutant	lb/hr	tpy
09	Natural Gas Combustion Sources	PM	0.8	3.4
		Total HAPs	0.19	0.83

37. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. Compliance with this condition will be shown by combustion of pipeline quality natural gas only in the source.

SN	Limit	Regulatory Citation
09	5%	8 CAR § 40-701 Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311

38. The permittee shall limit the total heat input for all equipment designated as SN-09 at the facility to no more than 100 MMBtu/hr. Compliance with this condition shall be demonstrated through compliance with Specific Condition #39. [8 CAR § 41-605, Ark. Code Ann. § 8-4-203 as referenced by §§ 8-4-304 and 8-4-311, and 40 C.F.R. § 70.6]
39. The permittee shall maintain an updated list of all equipment and associated firing rates designated under SN-09. The permittee shall update the list immediately after a change, keep records onsite, and make the records available to Department personnel upon request. [8 CAR § 41-204 and Ark. Code Ann. § 8-4-203 as referenced by §§ 8-4-304 and 8-4-311]
40. In order to be considered exempt from 40 C.F.R. Part 63, Subpart RRR, the permittee shall melt only the following aluminum types in the melt furnaces: Clean charge, customer returns, and internal scrap. The permittee shall show compliance with this condition in the Annual Compliance Certification report required by General Provision #21. [8 CAR § 41-204 and Ark. Code Ann. § 8-4-203 as referenced by §§ 8-4-304 and 8-4-311]

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SECTION V: COMPLIANCE PLAN AND SCHEDULE

Greenbrier Central, LLC will continue to operate in compliance with those identified regulatory provisions. The facility will examine and analyze future rules and regulations that may apply and determine their applicability with any necessary action taken on a timely basis.

SECTION VI: PLANTWIDE CONDITIONS

1. The permittee shall notify the Director in writing within thirty (30) days after commencing construction, completing construction, first placing the equipment and/or facility in operation, and reaching the equipment and/or facility target production rate. [8 CAR § 41-604, 40 C.F.R. § 52 Subpart E, and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
2. If the permittee fails to start construction within eighteen months or suspends construction for eighteen months or more, the Director may cancel all or part of this permit. [8 CAR § 41-310(b) and 40 C.F.R. § 52 Subpart E]
3. The permittee must test any equipment scheduled for testing, unless otherwise stated in the Specific Conditions of this permit or by any federally regulated requirements, within the following time frames: (1) new equipment or newly modified equipment within sixty (60) days of achieving the maximum production rate, but no later than 180 days after initial start up of the permitted source or (2) operating equipment according to the time frames set forth by the Division of Environmental Quality or within 180 days of permit issuance if no date is specified. The permittee must notify the Division of Environmental Quality of the scheduled date of compliance testing at least fifteen (15) business days in advance of such test. The permittee shall submit the compliance test results to the Division of Environmental Quality within sixty (60) calendar days after completing the testing. [8 CAR § 41-602 and/or 8 CAR § 40-902 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
4. The permittee must provide:
 - a. Sampling ports adequate for applicable test methods;
 - b. Safe sampling platforms;
 - c. Safe access to sampling platforms; and
 - d. Utilities for sampling and testing equipment.

[8 CAR § 41-602 and/or 8 CAR § 40-902 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
5. The permittee must operate the equipment, control apparatus and emission monitoring equipment within the design limitations. The permittee shall maintain the equipment in good condition at all times. [8 CAR § 41-203 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
6. This permit subsumes and incorporates all previously issued air permits for this facility. [8 CAR pt. 42 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

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7. Unless otherwise specified in the permit, approval to construct any new major stationary source or a major modification subject to 40 C.F.R. § 52.21 shall become invalid if construction is not commenced within 18 months after receipt of such approval, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The Division of Environmental Quality may extend the 18-month period upon a satisfactory showing that an extension is justified. [8 CAR § 41-801 et seq. and 40 C.F.R. § 52 Subpart E]

SECTION VII: INSIGNIFICANT ACTIVITIES

The Division of Environmental Quality deems the following types of activities or emissions as insignificant on the basis of size, emission rate, production rate, or activity in accordance with Group A of the Insignificant Activities list found in 8 CAR pt. 40 and pt. 41 Appendix A. Group B insignificant activities may be listed but are not required to be listed in permits. Insignificant activity emission determinations rely upon the information submitted by the permittee in an application dated April 16, 2026. [8 CAR § 42-204 and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]

Description	Category
MAX 16 Heater	A-1
MAX 10 Heater	A-1
Aluminum Melt Furnace #1	A-1
Aluminum Melt Furnace #2	A-1
Aluminum Melt Furnace #3	A-1
Two - 1,000 Gallon Diesel Storage Tanks	A-3
Welding Operations	A-7
Two - 300 Gallon Gasoline Storage Tanks	A-13
Two - 3,500 Gallon MEK Tanks*	A-13
Track 3 Steel Parts Washer	A-13
Best Engineering Parts Washer	A-13
Magnus Equipment Parts Washer	A-13

*Emissions from MEK usage are already accounted by the emissions from coating operations.

SECTION VIII: GENERAL PROVISIONS

1. Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission 8 CAR pt. 40 or the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. § 8-4-101 et seq.) as the sole origin of and authority for the terms or conditions are not required under the Clean Air Act or any of its applicable requirements, and are not federally enforceable under the Clean Air Act. Arkansas Pollution Control & Ecology Commission 8 CAR pt. 40 was adopted pursuant to the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. § 8-4-101 et seq.). Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission 8 CAR pt. 40 or the Arkansas Water and Air Pollution Control Act (Ark. Code Ann. § 8-4-101 et seq.) as the origin of and authority for the terms or conditions are enforceable under this Arkansas statute. [40 C.F.R. § 70.6(b)(2)]
2. This permit shall be valid for a period of five (5) years beginning on the date this permit becomes effective and ending five (5) years later. [40 C.F.R. § 70.6(a)(2) and 8 CAR § 42-601(2)]
3. The permittee must submit a complete application for permit renewal at least six (6) months before permit expiration. Permit expiration terminates the permittee's right to operate unless the permittee submitted a complete renewal application at least six (6) months before permit expiration. If the permittee submits a complete application, the existing permit will remain in effect until the Division of Environmental Quality takes final action on the renewal application. The Division of Environmental Quality will not necessarily notify the permittee when the permit renewal application is due. [8 CAR § 42-306]
4. Where an applicable requirement of the Clean Air Act, as amended, 42 U.S.C. 7401, et seq. (Act) is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, the permit incorporates both provisions into the permit, and the Director or the Administrator can enforce both provisions. [40 C.F.R. § 70.6(a)(1)(ii) and 8 CAR § 42-601(1)(C)]
5. The permittee must maintain the following records of monitoring information as required by this permit.
 - a. The date, place as defined in this permit, and time of sampling or measurements;
 - b. The date(s) analyses performed;
 - c. The company or entity performing the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of such analyses; and
 - f. The operating conditions existing at the time of sampling or measurement.

[40 C.F.R. § 70.6(a)(3)(ii)(A) and 8 CAR § 42-601(3)(C)]

6. The permittee must retain the records of all required monitoring data and support information for at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. [40 C.F.R. § 70.6(a)(3)(ii)(B) and 8 CAR § 42-601(3)(C)(ii)]
7. The permittee must submit reports of all required monitoring every six (6) months. If the permit establishes no other reporting period, the reporting period shall end on the last day of the month six months after the issuance of the initial Title V permit and every six months thereafter. The report is due on the first day of the second month after the end of the reporting period. The first report due after issuance of the initial Title V permit shall contain six months of data and each report thereafter shall contain 12 months of data. The report shall contain data for all monitoring requirements in effect during the reporting period. If a monitoring requirement is not in effect for the entire reporting period, only those months of data in which the monitoring requirement was in effect are required to be reported. The report must clearly identify all instances of deviations from permit requirements. A responsible official as defined in 8 CAR § 42-104 must certify all required reports. The permittee will send the reports electronically using <https://portal.adeq.state.ar.us> or mail them to the address below:

Division of Environmental Quality
Office of Air Quality
ATTN: Compliance Inspector Supervisor
5301 Northshore Drive
North Little Rock, AR 72118-5317

[40 C.F.R. § 70.6(a)(3)(iii)(A) and 8 CAR § 42-601(3)(D)(i)]

8. The permittee shall report to the Division of Environmental Quality all deviations from permit requirements, including those attributable to upset conditions as defined in the permit.
 - a. For all upset conditions (as defined in 8 CAR § 41-501), the permittee will make an initial report to the Division of Environmental Quality by the next business day after the discovery of the occurrence. The initial report may be made by telephone and shall include:
 - i. The facility name and location;
 - ii. The process unit or emission source deviating from the permit limit;
 - iii. The permit limit, including the identification of pollutants, from which deviation occurs;
 - iv. The date and time the deviation started;
 - v. The duration of the deviation;

- vi. The emissions during the deviation;
- vii. The probable cause of such deviations;
- viii. Any corrective actions or preventive measures taken or being taken to prevent such deviations in the future; and
- ix. The name of the person submitting the report.

The permittee shall make a full report in writing to the Division of Environmental Quality within five (5) business days of discovery of the occurrence. The report must include, in addition to the information required by the initial report, a schedule of actions taken or planned to eliminate future occurrences and/or to minimize the amount the permit's limits were exceeded and to reduce the length of time the limits were exceeded. The permittee may submit a full report in writing (by facsimile, overnight courier, or other means) by the next business day after discovery of the occurrence, and the report will serve as both the initial report and full report.

- b. For all deviations, the permittee shall report such events in semi-annual reporting and annual certifications required in this permit. This includes all upset conditions reported in 8a above. The semi-annual report must include all the information as required by the initial and full reports required in 8a.

[8 CAR § 41-501, 8 CAR § 41-502, 8 CAR § 42-601(3)(D)(ii), and 40 C.F.R. § 70.6(a)(3)(iii)(B)]

- 9. If any provision of the permit or the application thereof to any person or circumstance is held invalid, such invalidity will not affect other provisions or applications hereof which can be given effect without the invalid provision or application, and to this end, provisions of this Rule are declared to be separable and severable. [40 C.F.R. § 70.6(a)(5), 8 CAR § 42-601(5), and Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
- 10. The permittee must comply with all conditions of this Part 70 permit. Any permit noncompliance with applicable requirements as defined in 8 CAR pt. 42 constitutes a violation of the Clean Air Act, as amended, 42 U.S.C. § 7401, et seq. and is grounds for enforcement action; for permit termination, revocation and reissuance, for permit modification; or for denial of a permit renewal application. [40 C.F.R. § 70.6(a)(6)(i) and 8 CAR § 42-601(6)(A)]
- 11. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the conditions of this permit. [40 C.F.R. § 70.6(a)(6)(ii) and 8 CAR § 42-601(6)(B)]
- 12. The Division of Environmental Quality may modify, revoke, reopen and reissue the permit or terminate the permit for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or of a notification of

- planned changes or anticipated noncompliance does not stay any permit condition. [40 C.F.R. § 70.6(a)(6)(iii) and 8 CAR § 42-601(6)(C)]
13. This permit does not convey any property rights of any sort, or any exclusive privilege. [40 C.F.R. § 70.6(a)(6)(iv) and 8 CAR § 42-601(6)(D)]
 14. The permittee must furnish to the Director, within the time specified by the Director, any information that the Director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee must also furnish to the Director copies of records required by the permit. For information the permittee claims confidentiality, the Division of Environmental Quality may require the permittee to furnish such records directly to the Director along with a claim of confidentiality. [40 C.F.R. § 70.6(a)(6)(v) and 8 CAR § 42-601(6)(E)]
 15. The permittee must pay all permit fees in accordance with the procedures established in 8 CAR pt. 12. [40 C.F.R. § 70.6(a)(7) and 8 CAR § 42-601(7)]
 16. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes provided for elsewhere in this permit. [40 C.F.R. § 70.6(a)(8) and 8 CAR § 42-601(8)]
 17. If the permit allows different operating scenarios, the permittee shall, contemporaneously with making a change from one operating scenario to another, record in a log at the permitted facility a record of the operational scenario. [40 C.F.R. § 70.6(a)(9)(i) and 8 CAR § 42-601(9)(B)(i)]
 18. The Administrator and citizens may enforce under the Act all terms and conditions in this permit, including any provisions designed to limit a source's potential to emit, unless the Division of Environmental Quality specifically designates terms and conditions of the permit as being federally unenforceable under the Act or under any of its applicable requirements. [40 C.F.R. § 70.6(b) and 8 CAR § 42-602(a) and (b)]
 19. Any document (including reports) required by this permit pursuant to 40 C.F.R. § 70 must contain a certification by a responsible official as defined in 8 CAR § 42-104. [40 C.F.R. § 70.6(c)(1) and 8 CAR § 42-603(1)]
 20. The permittee must allow an authorized representative of the Division of Environmental Quality, upon presentation of credentials, to perform the following: [40 C.F.R. § 70.6(c)(2) and 8 CAR § 42-603(2)]
 - a. Enter upon the permittee's premises where the permitted source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

- b. Have access to and copy, at reasonable times, any records required under the conditions of this permit;
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
 - d. As authorized by the Act, sample or monitor at reasonable times substances or parameters for assuring compliance with this permit or applicable requirements.
- 21. The permittee shall submit a compliance certification with the terms and conditions contained in the permit, including emission limitations, standards, or work practices. The permittee must submit the compliance certification annually. If the permit establishes no other reporting period, the reporting period shall end on the last day of the anniversary month of the initial Title V permit. The report is due on the first day of the second month after the end of the reporting period. The permittee must also submit the compliance certification to the Administrator as well as to the Division of Environmental Quality. All compliance certifications required by this permit must include the following: [40 C.F.R. § 70.6(c)(5) and 8 CAR § 42-603(5)(B)(iii)]
 - a. The identification of each term or condition of the permit that is the basis of the certification;
 - b. The compliance status;
 - c. Whether compliance was continuous or intermittent;
 - d. The method(s) used for determining the compliance status of the source, currently and over the reporting period established by the monitoring requirements of this permit; and
 - e. Such other facts as the Division of Environmental Quality may require elsewhere in this permit or by § 114(a)(3) and § 504(b) of the Act.
- 22. Nothing in this permit will alter or affect the following: [8 CAR § 42-604(c)]
 - a. The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that section;
 - b. The liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance;
 - c. The applicable requirements of the acid rain program, consistent with § 408(a) of the Act; or
 - d. The ability of EPA to obtain information from a source pursuant to § 114 of the Act.
- 23. This permit authorizes only those pollutant emitting activities addressed in this permit. [Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311]
- 24. The permittee may request in writing and at least 15 days in advance of the deadline, an extension to any testing, compliance or other dates in this permit. No such extensions are authorized until the permittee receives written Division of Environmental Quality

approval. The Division of Environmental Quality may grant such a request, at its discretion in the following circumstances:

- a. Such an extension does not violate a federal requirement;
- b. The permittee demonstrates the need for the extension; and
- c. The permittee documents that all reasonable measures have been taken to meet the current deadline and documents reasons it cannot be met.

[8 CAR § 40-214(a), 8 CAR § 41-316(a), 8 CAR § 42-913(a), Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. § 52 Subpart E]

25. The permittee may request in writing and at least 30 days in advance, temporary emissions and/or testing that would otherwise exceed an emission rate, throughput requirement, or other limit in this permit. No such activities are authorized until the permittee receives written Division of Environmental Quality approval. Any such emissions shall be included in the facility's total emissions and reported as such. The Division of Environmental Quality may grant such a request, at its discretion under the following conditions:

- a. Such a request does not violate a federal requirement;
- b. Such a request is temporary in nature;
- c. Such a request will not result in a condition of air pollution;
- d. The request contains such information necessary for the Division of Environmental Quality to evaluate the request, including but not limited to, quantification of such emissions and the date/time such emission will occur;
- e. Such a request will result in increased emissions less than five tons of any individual criteria pollutant, one ton of any single HAP and 2.5 tons of total HAPs; and
- f. The permittee maintains records of the dates and results of such temporary emissions/testing.

[8 CAR § 40-214(b), 8 CAR § 41-316(b), 8 CAR § 42-913(b), Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. § 52 Subpart E]

26. The permittee may request in writing and at least 30 days in advance, an alternative to the specified monitoring in this permit. No such alternatives are authorized until the permittee receives written Division of Environmental Quality approval. The Division of Environmental Quality may grant such a request, at its discretion under the following conditions:

- a. The request does not violate a federal requirement;
- b. The request provides an equivalent or greater degree of actual monitoring to the current requirements; and
- c. Any such request, if approved, is incorporated in the next permit modification application by the permittee.

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[8 CAR § 40-214(c), 8 CAR § 41-316(c), 8 CAR § 42-913(c), Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. § 52 Subpart E]

27. Any credible evidence based on sampling, monitoring, and reporting may be used to determine violations of applicable emission limitations. [8 CAR § 40-901, 8 CAR § 41-601, Ark. Code Ann. § 8-4-203 as referenced by Ark. Code Ann. §§ 8-4-304 and 8-4-311, and 40 C.F.R. § 52 Subpart E]

Appendix A

40 C.F.R. Part 63, Subpart M MMM – *National Emission Standards for Hazardous Air Pollutants: Surface Coating of Miscellaneous Metal Parts and Products*

This content is from the eCFR and is authoritative but unofficial.

Title 40 —Protection of Environment

Chapter I —Environmental Protection Agency

Subchapter C —Air Programs

Part 63 —National Emission Standards for Hazardous Air Pollutants for Source Categories

Authority: 42 U.S.C. 7401 *et seq.*

Source: 57 FR 61992, Dec. 29, 1992, unless otherwise noted.

Subpart M National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products

What This Subpart Covers

- § 63.3880 What is the purpose of this subpart?
- § 63.3881 Am I subject to this subpart?
- § 63.3882 What parts of my plant does this subpart cover?
- § 63.3883 When do I have to comply with this subpart?

Emission Limitations

- § 63.3890 What emission limits must I meet?
- § 63.3891 What are my options for meeting the emission limits?
- § 63.3892 What operating limits must I meet?
- § 63.3893 What work practice standards must I meet?

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Compliance Requirements for the Compliant Material Option

- § 63.3940 By what date must I conduct the initial compliance demonstration?
- § 63.3941 How do I demonstrate initial compliance with the emission limitations?
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Controls Option

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Compliance Requirements for the Emission Rate With Add-On Controls

Option

- § 63.3960 By what date must I conduct performance tests and other initial compliance demonstrations?
- § 63.3961 How do I demonstrate initial compliance?
- § 63.3962 *[Reserved]*
- § 63.3963 How do I demonstrate continuous compliance with the emission limitations?
- § 63.3964 What are the general requirements for performance tests?
- § 63.3965 How do I determine the emission capture system efficiency?
- § 63.3966 How do I determine the add-on control device emission destruction or removal

efficiency?

§ 63.3967 How do I establish the emission capture system and add-on control device operating limits during the performance test?

§ 63.3968 What are the requirements for continuous parameter monitoring system installation, operation, and maintenance?

Other Requirements and Information

§ 63.3980 Who implements and enforces this subpart?

§ 63.3981 What definitions apply to this subpart?

Table 1 to Subpart Mmmm of Part 63

Operating Limits if Using the Emission Rate With Add-On Controls Option

Table 2 to Subpart Mmmm of Part 63

Applicability of General Provisions to Subpart Mmmm of Part 63

Table 3 to Subpart Mmmm of Part 63

Default Organic HAP Mass Fraction for Solvents and Solvent Blends

Table 4 to Subpart Mmmm of Part 63

Default Organic HAP Mass Fraction for Petroleum Solvent Groups ^a

Table 5 to Subpart Mmmm of Part 63

List of HAP That Must Be Counted Toward Total Organic HAP Content If Present at 0.1 Percent or More by Mass

Appendix A to Subpart Mmmm of Part 63

Alternative Capture Efficiency and Destruction Efficiency Measurement and Monitoring Procedures for Magnet Wire Coating Operations

Subpart Mmmm—National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products

Source: 69 FR 157, Jan. 2, 2004, unless otherwise noted.

WHAT THIS SUBPART COVERS

§ 63.3880 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for miscellaneous metal parts and products surface coating facilities. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations.

§ 63.3881 Am I subject to this subpart?

- (a) Miscellaneous metal parts and products include, but are not limited to, metal components of the following types of products as well as the products themselves: motor vehicle parts and accessories, bicycles and sporting goods, recreational vehicles, extruded aluminum structural components, railroad cars, heavy duty trucks, medical equipment, lawn and garden equipment, electronic equipment, magnet wire, steel drums, industrial machinery, metal pipes, and numerous other industrial, household, and consumer products. Except as provided in paragraph (c) of this section, the source category to which this subpart applies is the surface coating of any miscellaneous metal parts or products, as described in paragraph (a)(1) of this section, and it includes the subcategories listed in paragraphs (a)(2) through (6) of this section.
 - (1) Surface coating is the application of coating to a substrate using, for example, spray guns or dip tanks. When application of coating to a substrate occurs, then surface coating also includes associated activities, such as surface preparation, cleaning, mixing, and storage. However, these activities do not comprise surface coating if they are not directly related to the application of the coating. Coating application with handheld, non-refillable aerosol containers, touch-up markers, marking pens, or the application of paper film or plastic film which may be pre-coated with an adhesive by the manufacturer are not coating operations for the purposes of this subpart.
 - (2) The general use coating subcategory includes all surface coating operations that are not high performance, magnet wire, rubber-to-metal, or extreme performance fluoropolymer coating operations.
 - (3) The high performance coating subcategory includes surface coating operations that are performed using coatings that meet the definition of high performance architectural coating or high temperature coating in § 63.3981.
 - (4) The magnet wire coating subcategory includes surface coating operations that are performed using coatings that meet the definition of magnet wire coatings in § 63.3981.
 - (5) The rubber-to-metal coatings subcategory includes surface coating operations that are performed using coatings that meet the definition of rubber-to-metal coatings in § 63.3981.
 - (6) The extreme performance fluoropolymer coatings subcategory includes surface coating operations that are performed using coatings that meet the definition of extreme performance fluoropolymer coatings in § 63.3981.
- (b) You are subject to this subpart if you own or operate a new, reconstructed, or existing affected source, as defined in § 63.3882, that uses 946 liters (250 gallons (gal)) per year, or more, of coatings that contain hazardous air pollutants (HAP) in the surface coating of miscellaneous metal parts and products defined in paragraph (a) of this section; and that is a major source, is located at a major source, or is part of a major source of emissions of HAP. A major source of HAP emissions is any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit any single HAP at a rate of 9.07 megagrams (Mg) (10 tons) or more per year or any

combination of HAP at a rate of 22.68 Mg (25 tons) or more per year. You do not need to include coatings that meet the definition of non-HAP coating contained in § 63.3981 in determining whether you use 946 liters (250 gal) per year, or more, of coatings in the surface coating of miscellaneous metal parts and products.

- (c) This subpart does not apply to surface coating or a coating operation that meets any of the criteria of paragraphs (c)(1) through (17) of this section.
- (1) A coating operation conducted at a facility where the facility uses only coatings, thinners and other additives, and cleaning materials that contain no organic HAP, as determined according to § 63.3941(a).
 - (2) Surface coating operations that occur at research or laboratory facilities, or is part of janitorial, building, and facility maintenance operations, or that occur at hobby shops that are operated for noncommercial purposes.
 - (3) Coatings used in volumes of less than 189 liters (50 gal) per year, provided that the total volume of coatings exempt under this paragraph does not exceed 946 liters (250 gal) per year at the facility.
 - (4) The surface coating of metal parts and products performed on-site at installations owned or operated by the Armed Forces of the United States (including the Coast Guard and the National Guard of any such State) or the National Aeronautics and Space Administration, or the surface coating of military munitions manufactured by or for the Armed Forces of the United States (including the Coast Guard and the National Guard of any such State).
 - (5) Surface coating where plastic is extruded onto metal wire or cable or metal parts or products to form a coating.
 - (6) Surface coating of metal components of wood furniture that meet the applicability criteria for wood furniture manufacturing (subpart JJ of this part).
 - (7) Surface coating of metal components of large appliances that meet the applicability criteria for large appliance surface coating (subpart NNNN of this part).
 - (8) Surface coating of metal components of metal furniture that meet the applicability criteria for metal furniture surface coating (subpart RRRR of this part).
 - (9) Surface coating of metal components of wood building products that meet the applicability criteria for wood building products surface coating (subpart QQQQ of this part).
 - (10) Surface coating of metal components of aerospace vehicles that meet the applicability criteria for aerospace manufacturing and rework (40 CFR part 63, subpart GG).
 - (11) Surface coating of metal parts intended for use in an aerospace vehicle or component using specialty coatings as defined in appendix A to subpart GG of this part.
 - (12) Surface coating of metal components of ships that meet the applicability criteria for shipbuilding and ship repair (subpart II of this part).
 - (13) Surface coating of metal using a web coating process that meets the applicability criteria for paper and other web coating (subpart JJJJ of this part).
 - (14) Surface coating of metal using a coil coating process that meets the applicability criteria for metal coil coating (subpart SSSS of this part).

- (15) Surface coating of boats or metal parts of boats (including, but not limited to, the use of assembly adhesives) where the facility meets the applicability criteria for boat manufacturing facilities (subpart VVVV of this part), except where the surface coating of the boat is a metal coating operation performed on personal watercraft or parts of personal watercraft. This subpart does apply to metal coating operations performed on personal watercraft and parts of personal watercraft.
 - (16) Surface coating of assembled on-road vehicles that meet the applicability criteria for the assembled on-road vehicle subcategory in plastic parts and products surface coating (40 CFR part 63, subpart PPPP).
 - (17) Surface coating of metal components of automobiles and light-duty trucks that meets the applicability criteria in § 63.3082(b) for the Surface Coating of Automobiles and Light-Duty Trucks NESHAP (40 CFR part 63, subpart IIII) at a facility that meets the applicability criteria in § 63.3081(b).
- (d) If your facility meets the applicability criteria in § 63.3081(b) of the Surface Coating of Automobiles and Light-Duty Trucks NESHAP (40 CFR part 63, subpart IIII), and you perform surface coating of metal parts or products that meets both the applicability criteria in § 63.3082(c) and the applicability criteria of the Surface Coating of Miscellaneous Metal Parts and Products (40 CFR part 63, subpart MMMM), then for the surface coating of any or all of your metal parts or products that meets the applicability criteria in § 63.3082(c), you may choose to comply with the requirements of subpart IIII of this part in lieu of complying with the Surface Coating of Miscellaneous Metal Parts and Products NESHAP. Surface coating operations on metal parts or products (e.g., parts for motorcycles or lawnmowers) not intended for use in automobiles, light-duty trucks, or other motor vehicles as defined in § 63.3176 cannot be made part of your affected source under subpart IIII of this part.
- (e) If you own or operate an affected source that meets the applicability criteria of this subpart and at the same facility you also perform surface coating that meets the applicability criteria of any other final surface coating NESHAP in this part you may choose to comply as specified in paragraph (e)(1), (2), or (3) of this section.
- (1) You may have each surface coating operation that meets the applicability criteria of a separate NESHAP comply with that NESHAP separately.
 - (2) You may comply with the emission limitation representing the predominant surface coating activity at your facility, as determined according to paragraphs (e)(2)(i) and (ii) of this section. However, you may not establish high performance, rubber-to-metal, or extreme performance fluoropolymer coating operations as the predominant activity. You must not consider any surface coating activity that is subject to the Surface Coating of Automobiles and Light-Duty Trucks NESHAP (40 CFR part 63, subpart IIII) in determining the predominant surface coating activity at your facility.
 - (i) If a surface coating operation accounts for 90 percent or more of the surface coating activity at your facility (that is, the predominant activity), then compliance with the emission limitations of the predominant activity for all surface coating operations constitutes compliance with these and other applicable surface coating NESHAP. In determining predominant activity, you must include coating activities that meet the applicability criteria of other surface coating NESHAP and constitute more than 1 percent of total coating activities at your facility. Coating activities that meet the applicability criteria of other surface coating NESHAP but comprise less than 1 percent of coating activities need not be included in the determination of predominant activity but must be included in the compliance calculation.

- (ii) You must use liters (gal) of solids used as a measure of relative surface coating activity over a representative period of operation. You may estimate the relative volume of coating solids used from parameters other than coating consumption and volume solids content (e.g., design specifications for the parts or products coated and the number of items produced). The determination of predominant activity must accurately reflect current and projected coating operations and must be verifiable through appropriate documentation. The use of parameters other than coating consumption and volume solids content must be approved by the Administrator. You may use data for any reasonable time period of at least 1 year in determining the relative amount of coating activity, as long as they represent the way the source will continue to operate in the future and are approved by the Administrator. You must determine the predominant activity at your facility and submit the results of that determination with the initial notification required by § 63.3910(b). You must also determine predominant activity annually and include the determination in the next semi-annual compliance report required by § 63.3920(a).
- (3) You may comply with a facility-specific emission limit calculated from the relative amount of coating activity that is subject to each emission limit. If you elect to comply using the facility-specific emission limit alternative, then compliance with the facility-specific emission limit and the emission limitations in this subpart for all surface coating operations constitutes compliance with this and other applicable surface coating NESHAP. The procedures for calculating the facility-specific emission limit are specified in § 63.3890. In calculating a facility-specific emission limit, you must include coating activities that meet the applicability criteria of other surface coating NESHAP and constitute more than 1 percent of total coating activities at your facility. You must not consider any surface coating activity that is subject to the Surface Coating of Automobiles and Light-Duty Trucks NESHAP (40 CFR part 63, subpart IIII) in determining a facility-specific emission limit for your facility. Coating activities that meet the applicability criteria of other surface coating NESHAP but comprise less than 1 percent of total coating activities need not be included in the calculation of the facility-specific emission limit but must be included in the compliance calculations.

[69 FR 157, Jan. 2, 2004, as amended at 69 FR 22660, Apr. 26, 2004; 71 FR 76927, Dec. 22, 2006]

§ 63.3882 What parts of my plant does this subpart cover?

- (a) This subpart applies to each new, reconstructed, and existing affected source within each of the four subcategories listed in § 63.3881(a).
- (b) The affected source is the collection of all of the items listed in paragraphs (b)(1) through (4) of this section that are used for surface coating of miscellaneous metal parts and products within each subcategory.
 - (1) All coating operations as defined in § 63.3981;
 - (2) All storage containers and mixing vessels in which coatings, thinners and/or other additives, and cleaning materials are stored or mixed;
 - (3) All manual and automated equipment and containers used for conveying coatings, thinners and/or other additives, and cleaning materials; and
 - (4) All storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation.

- (c) An affected source is a new affected source if you commenced its construction after August 13, 2002 and the construction is of a completely new miscellaneous metal parts and products surface coating facility where previously no miscellaneous metal parts and products surface coating facility had existed.
- (d) An affected source is reconstructed if it meets the criteria as defined in § 63.2.
- (e) An affected source is existing if it is not new or reconstructed.

§ 63.3883 When do I have to comply with this subpart?

The date by which you must comply with this subpart is called the compliance date. The compliance date for each type of affected source is specified in paragraphs (a) through (c) of this section. The compliance date begins the initial compliance period during which you conduct the initial compliance demonstration described in §§ 63.3940, 63.3950, and 63.3960.

- (a) For a new or reconstructed affected source, the compliance date is the applicable date in paragraph (a)(1) or (2) of this section:
 - (1) If the initial startup of your new or reconstructed affected source is before January 2, 2004, the compliance date is January 2, 2004.
 - (2) If the initial startup of your new or reconstructed affected source occurs after January 2, 2004, the compliance date is the date of initial startup of your affected source.
- (b) For an existing affected source, the compliance date is the date 3 years after January 2, 2004.
- (c) For an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP emissions, the compliance date is specified in paragraphs (c)(1) and (2) of this section.
 - (1) For any portion of the source that becomes a new or reconstructed affected source subject to this subpart, the compliance date is the date of initial startup of the affected source or January 2, 2004, whichever is later.
 - (2) For any portion of the source that becomes an existing affected source subject to this subpart, the compliance date is the date 1 year after the area source becomes a major source or 3 years after January 2, 2004, whichever is later.
- (d) You must meet the notification requirements in § 63.3910 according to the dates specified in that section and in subpart A of this part. Some of the notifications must be submitted before the compliance dates described in paragraphs (a) through (c) of this section.

EMISSION LIMITATIONS

§ 63.3890 What emission limits must I meet?

- (a) For a new or reconstructed affected source, you must limit organic HAP emissions to the atmosphere from the affected source to the applicable limit specified in paragraphs (a)(1) through (5) of this section, except as specified in paragraph (c) of this section, determined according to the requirements in § 63.3941, § 63.3951, or § 63.3961.
 - (1) For each new general use coating affected source, limit organic HAP emissions to no more than 0.23 kilograms (kg) (1.9 pound (lb)) organic HAP per liter (gal) coating solids used during each 12-month compliance period.

- (2) For each new high performance coating affected source, limit organic HAP emissions to no more than 3.3 kg (27.5 lb) organic HAP per liter (gal) coating solids used during each 12-month compliance period.
 - (3) For each new magnet wire coating affected source, limit organic HAP emissions to no more than 0.050 kg (0.44 lb) organic HAP per liter (gal) coating solids used during each 12-month compliance period.
 - (4) For each new rubber-to-metal coating affected source, limit organic HAP emissions to no more than 0.81 kg (6.8 lb) organic HAP per liter (gal) coating solids used during each 12-month compliance period.
 - (5) For each new extreme performance fluoropolymer coating affected source, limit organic HAP emissions to no more than 1.5 kg (12.4 lb) organic HAP per liter (gal) coating solids used during each 12-month compliance period.
- (b) For an existing affected source, you must limit organic HAP emissions to the atmosphere from the affected source to the applicable limit specified in paragraphs (b)(1) through (5) of this section, except as specified in paragraph (c) of this section, determined according to the requirements in § 63.3941, § 63.3951, or § 63.3961.
- (1) For each existing general use coating affected source, limit organic HAP emissions to no more than 0.31 kg (2.6 lb) organic HAP per liter (gal) coating solids used during each 12-month compliance period.
 - (2) For each existing high performance coating affected source, limit organic HAP emissions to no more than 3.3 kg (27.5 lb) organic HAP per liter (gal) coating solids used during each 12-month compliance period.
 - (3) For each existing magnet wire coating affected source, limit organic HAP emissions to no more than 0.12 kg (1.0 lb) organic HAP per liter (gal) coating solids used during each 12-month compliance period.
 - (4) For each existing rubber-to-metal coating affected source, limit organic HAP emissions to no more than 4.5 kg (37.7 lb) organic HAP per liter (gal) coating solids used during each 12-month compliance period.
 - (5) For each existing extreme performance fluoropolymer coating affected source, limit organic HAP emissions to no more than 1.5 kg (12.4 lbs) organic HAP per liter (gal) coating solids used during each 12-month compliance period.
- (c) If your facility's surface coating operations meet the applicability criteria of more than one of the subcategory emission limits specified in paragraphs (a) or (b) of this section, you may comply separately with each subcategory emission limit or comply using one of the alternatives in paragraph (c)(1) or (2) of this section.
- (1) If the general use or magnet wire surface coating operations subject to only one of the emission limits specified in paragraphs (a)(1), (3), (b)(1), or (3) of this section account for 90 percent or more of the surface coating activity at your facility (i.e., it is the predominant activity at your facility), then compliance with that one emission limitations in this subpart for all surface coating operations constitutes compliance with the other applicable emission limits. You must use liters (gal) of solids used as a measure of relative surface coating activity over a representative period of operation. You may estimate the relative volume of coating solids used from parameters other than coating

consumption and volume solids content (e.g., design specifications for the parts or products coated and the number of items produced). The determination of predominant activity must accurately reflect current and projected coating operations and must be verifiable through appropriate documentation. The use of parameters other than coating consumption and volume solids content must be approved by the Administrator. You may use data for any reasonable time period of at least 1 year in determining the relative amount of coating activity, as long as they represent the way the source will continue to operate in the future and are approved by the Administrator. You must determine the predominant activity at your facility and submit the results of that determination with the initial notification required by § 63.3910(b). Additionally, you must determine the facility's predominant activity annually and include the determination in the next semi-annual compliance report required by § 63.3920(a).

- (2) You may calculate and comply with a facility-specific emission limit as described in paragraphs (c)(2)(i) through (iii) of this section. If you elect to comply using the facility-specific emission limit alternative, then compliance with the facility-specific emission limit and the emission limitations in this subpart for all surface coating operations constitutes compliance with this and other applicable surface coating NESHAP. In calculating a facility-specific emission limit, you must include coating activities that meet the applicability criteria of the other subcategories and constitute more than 1 percent of total coating activities. Coating activities that meet the applicability criteria of other surface coating NESHAP but comprise less than 1 percent of coating activities need not be included in the determination of predominant activity but must be included in the compliance calculation.
 - (i) You are required to calculate the facility-specific emission limit for your facility when you submit the notification of compliance status required in § 63.3910(c), and on a monthly basis afterward using the coating data for the relevant 12-month compliance period.
 - (ii) Use Equation 1 of this section to calculate the facility-specific emission limit for your surface coating operations for each 12-month compliance period.

$$\text{Facility - Specific Emission Limit} = \frac{\sum_{i=1}^n (\text{Limit}_i)(\text{Solids}_i)}{\sum_{i=1}^n (\text{Solids}_i)} \quad (\text{Eq. 1})$$

Where:

Facility-specific emission limit = Facility-specific emission limit for each 12-month compliance period, kg (lb) organic HAP per kg (lb) coating solids used.

Limit_i = The new source or existing source emission limit applicable to coating operation, i, included in the facility-specific emission limit, converted to kg (lb) organic HAP per kg (lb) coating solids used, if the emission limit is not already in those units. All emission limits included in the facility-specific emission limit must be in the same units.

Solids_i = The liters (gal) of solids used in coating operation, i, in the 12-month compliance period that is subject to emission limit, i. You may estimate the volume of coating solids used from parameters other than coating consumption and volume solids content (e.g., design specifications for the parts or products coated and the number of items produced). The use of parameters other than coating consumption and volume solids content must be approved by the Administrator.

n = The number of different coating operations included in the facility-specific emission limit.

- (iii) If you need to convert an emission limit in another surface coating NESHAP from kg (lb) organic HAP per kg (lb) coating solids used to kg (lb) organic HAP per liter (gal) coating solids used, you must use the default solids density of 1.26 kg solids per liter coating solids (10.5 lb solids per gal solids).

§ 63.3891 What are my options for meeting the emission limits?

You must include all coatings (as defined in § 63.3981), thinners and/or other additives, and cleaning materials used in the affected source when determining whether the organic HAP emission rate is equal to or less than the applicable emission limit in § 63.3890. To make this determination, you must use at least one of the three compliance options listed in paragraphs (a) through (c) of this section. You may apply any of the compliance options to an individual coating operation, or to multiple coating operations as a group, or to the entire affected source. You may use different compliance options for different coating operations, or at different times on the same coating operation. You may employ different compliance options when different coatings are applied to the same part, or when the same coating is applied to different parts. However, you may not use different compliance options at the same time on the same coating operation. If you switch between compliance options for any coating operation or group of coating operations, you must document this switch as required by § 63.3930(c), and you must report it in the next semiannual compliance report required in § 63.3920.

- (a) **Compliant material option.** Demonstrate that the organic HAP content of each coating used in the coating operation(s) is less than or equal to the applicable emission limit in § 63.3890, and that each thinner and/or other additive, and cleaning material used contains no organic HAP. You must meet all the requirements of §§ 63.3940, 63.3941, and 63.3942 to demonstrate compliance with the applicable emission limit using this option.
- (b) **Emission rate without add-on controls option.** Demonstrate that, based on the coatings, thinners and/or other additives, and cleaning materials used in the coating operation(s), the organic HAP emission rate for the coating operation(s) is less than or equal to the applicable emission limit in § 63.3890, calculated as a rolling 12-month emission rate and determined on a monthly basis. You must meet all the requirements of §§ 63.3950, 63.3951, and 63.3952 to demonstrate compliance with the emission limit using this option.
- (c) **Emission rate with add-on controls option.** Demonstrate that, based on the coatings, thinners and/or other additives, and cleaning materials used in the coating operation(s), and the emissions reductions achieved by emission capture systems and add-on controls, the organic HAP emission rate for the coating operation(s) is less than or equal to the applicable emission limit in § 63.3890, calculated as a rolling 12-month emission rate and determined on a monthly basis. If you use this compliance option, you must also demonstrate that all emission capture systems and add-on control devices for the coating operation(s) meet the operating limits required in § 63.3892, except for solvent recovery systems for which you conduct liquid-liquid material balances according to § 63.3961(j), and that you meet the work

practice standards required in § 63.3893. You must meet all the requirements of §§ 63.3960 through 63.3968 to demonstrate compliance with the emission limits, operating limits, and work practice standards using this option.

§ 63.3892 What operating limits must I meet?

- (a) For any coating operation(s) on which you use the compliant material option or the emission rate without add-on controls option, you are not required to meet any operating limits.
- (b) For any controlled coating operation(s) on which you use the emission rate with add-on controls option, except those for which you use a solvent recovery system and conduct a liquid-liquid material balance according to § 63.3961(j), you must meet the operating limits specified in Table 1 to this subpart. These operating limits apply to the emission capture and control systems on the coating operation(s) for which you use this option, and you must establish the operating limits during the performance test according to the requirements in § 63.3967. You must meet the operating limits at all times after you establish them.
- (c) If you use an add-on control device other than those listed in Table 1 to this subpart, or wish to monitor an alternative parameter and comply with a different operating limit, you must apply to the Administrator for approval of alternative monitoring under § 63.8(f).

§ 63.3893 What work practice standards must I meet?

- (a) For any coating operation(s) on which you use the compliant material option or the emission rate without add-on controls option, you are not required to meet any work practice standards.
- (b) If you use the emission rate with add-on controls option, you must develop and implement a work practice plan to minimize organic HAP emissions from the storage, mixing, and conveying of coatings, thinners and/or other additives, and cleaning materials used in, and waste materials generated by the controlled coating operation(s) for which you use this option; or you must meet an alternative standard as provided in paragraph (c) of this section. The plan must specify practices and procedures to ensure that, at a minimum, the elements specified in paragraphs (b)(1) through (5) of this section are implemented.
 - (1) All organic-HAP-containing coatings, thinners and/or other additives, cleaning materials, and waste materials must be stored in closed containers.
 - (2) Spills of organic-HAP-containing coatings, thinners and/or other additives, cleaning materials, and waste materials must be minimized.
 - (3) Organic-HAP-containing coatings, thinners and/or other additives, cleaning materials, and waste materials must be conveyed from one location to another in closed containers or pipes.
 - (4) Mixing vessels which contain organic-HAP-containing coatings and other materials must be closed except when adding to, removing, or mixing the contents.
 - (5) Emissions of organic HAP must be minimized during cleaning of storage, mixing, and conveying equipment.
- (c) As provided in § 63.6(g), we, the U.S. Environmental Protection Agency, may choose to grant you permission to use an alternative to the work practice standards in this section.

GENERAL COMPLIANCE REQUIREMENTS

§ 63.3900 What are my general requirements for complying with this subpart?

- (a) You must be in compliance with the emission limitations in this subpart as specified in paragraphs (a)(1) and (2) of this section.
 - (1) Any coating operation(s) for which you use the compliant material option or the emission rate without add-on controls option, as specified in § 63.3891(a) and (b), must be in compliance with the applicable emission limit in § 63.3890 at all times.
 - (2) Any coating operation(s) for which you use the emission rate with add-on controls option, as specified in § 63.3891(c), must be in compliance with the emission limitations as specified in paragraphs (a)(2)(i) through (iii) of this section.
 - (i) Before January 5, 2021, the coating operation(s) must be in compliance with the applicable emission limit in § 63.3890 at all times except during periods of SSM. On or after January 5, 2021, you must be in compliance with the applicable emission limits in § 63.3890 and the operating limits in table 1 of this subpart at all times.
 - (ii) Before January 5, 2021, the coating operation(s) must be in compliance with the operating limits for emission capture systems and add-on control devices required by § 63.3892 at all times except during periods of SSM and except for solvent recovery systems for which you conduct liquid-liquid material balances according to § 63.3961(j). On or after January 5, 2021, the coating operation(s) must be in compliance with the operating limits for emission capture systems and add-on control devices required by § 63.3892 at all times, except for solvent recovery systems for which you conduct liquid-liquid material balances according to § 63.3961(j).
 - (iii) The coating operation(s) must be in compliance with the work practice standards in § 63.3893 at all times.
- (b) Before January 5, 2021, you must always operate and maintain your affected source, including all air pollution control and monitoring equipment you use for purposes of complying with this subpart, according to the provisions in § 63.6(e)(1)(i). On and after January 5, 2021, at all times, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the affected source.
- (c) Before January 5, 2021, if your affected source uses an emission capture system and add-on control device, you must develop a written SSMP according to the provisions in § 63.6(e)(3). The plan must address the startup, shutdown, and corrective actions in the event of a malfunction of the emission capture system or the add-on control device. The plan must also address any coating operation equipment that may cause increased emissions or that would affect capture efficiency if the process equipment malfunctions, such as conveyors that move parts among enclosures. On and after January 5, 2021, the SSMP is not required.

[69 FR 157, Jan. 2, 2004, as amended at 71 FR 20465, Apr. 20, 2006; 85 FR 41138, July 8, 2020]

§ 63.3901 What parts of the General Provisions apply to me?

Table 2 to this subpart shows which parts of the General Provisions in §§ 63.1 through 63.15 apply to you.

NOTIFICATIONS, REPORTS, AND RECORDS

§ 63.3910 What notifications must I submit?

- (a) **General.** You must submit the notifications in §§ 63.7(b) and (c), 63.8(f)(4), and 63.9(b) through (e) and (h) that apply to you by the dates specified in those sections, except as provided in paragraphs (b) and (c) of this section.
- (b) **Initial notification.** You must submit the initial notification required by § 63.9(b) for a new or reconstructed affected source no later than 120 days after initial startup, 120 days after January 2, 2004, or no later than 120 days after the source becomes subject to this subpart, whichever is later. For an existing affected source, you must submit the initial notification no later than 1 year after January 2, 2004, or no later than 120 days after the source becomes subject to this subpart, whichever is later. If you are using compliance with the Surface Coating of Automobiles and Light-Duty Trucks NESHAP (subpart IIII of this part) as provided for under § 63.3881(d) to constitute compliance with this subpart for any or all of your metal parts coating operations, then you must include a statement to this effect in your initial notification, and no other notifications are required under this subpart in regard to those metal parts coating operations. If you are complying with another NESHAP that constitutes the predominant activity at your facility under § 63.3881(e)(2) to constitute compliance with this subpart for your metal parts coating operations, then you must include a statement to this effect in your initial notification, and no other notifications are required under this subpart in regard to those metal parts coating operations. If you own or operate an existing loop splitter or flame lamination affected source, submit an initial notification no later than 120 days after April 14, 2003, or no later than 120 days after the source becomes subject to this subpart.
- (c) **Notification of compliance status.** You must submit the notification of compliance status required by § 63.9(h) no later than 30 calendar days following the end of the initial compliance period described in § 63.3940, § 63.3950, or § 63.3960 that applies to your affected source. The notification of compliance status must contain the information specified in paragraphs (c)(1) through (11) of this section and in § 63.9(h).
 - (1) Company name and address.
 - (2) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
 - (3) Date of the report and beginning and ending dates of the reporting period. The reporting period is the initial compliance period described in § 63.3940, § 63.3950, or § 63.3960 that applies to your affected source.
 - (4) Identification of the compliance option or options specified in § 63.3891 that you used on each coating operation in the affected source during the initial compliance period.
 - (5) Statement of whether or not the affected source achieved the emission limitations for the initial compliance period.
 - (6) If you had a deviation, include the information in paragraphs (c)(6)(i) and (ii) of this section.
 - (i) A description and statement of the cause of the deviation.

- (ii) If you failed to meet the applicable emission limit in § 63.3890, include all the calculations you used to determine the kg (lb) of organic HAP emitted per liter (gal) coating solids used. You do not need to submit information provided by the materials' suppliers or manufacturers, or test reports.
- (7) For each of the data items listed in paragraphs (c)(7)(i) through (iv) of this section that is required by the compliance option(s) you used to demonstrate compliance with the emission limit, include an example of how you determined the value, including calculations and supporting data. Supporting data may include a copy of the information provided by the supplier or manufacturer of the example coating or material, or a summary of the results of testing conducted according to § 63.3941(a), (b), or (c). You do not need to submit copies of any test reports.
- (i) Mass fraction of organic HAP for one coating, for one thinner and/or other additive, and for one cleaning material.
 - (ii) Volume fraction of coating solids for one coating.
 - (iii) Density for one coating, one thinner and/or other additive, and one leaning material, except that if you use the compliant material option, only the example coating density is required.
 - (iv) The amount of waste materials and the mass of organic HAP contained in the waste materials for which you are claiming an allowance in Equation 1 of § 63.3951.
- (8) The calculation of kg (lb) of organic HAP emitted per liter (gal) coating solids used for the compliance option(s) you used, as specified in paragraphs (c)(8)(i) through (iii) of this section.
- (i) For the compliant material option, provide an example calculation of the organic HAP content for one coating, using Equation 2 of § 63.3941.
 - (ii) For the emission rate without add-on controls option, provide the calculation of the total mass of organic HAP emissions for each month; the calculation of the total volume of coating solids used each month; and the calculation of the 12-month organic HAP emission rate using Equations 1 and 1A through 1C, 2, and 3, respectively, of § 63.3951.
 - (iii) For the emission rate with add-on controls option, provide the calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month, using Equations 1 and 1A through 1C of § 63.3951; the calculation of the total volume of coating solids used each month using Equation 2 of § 63.3951; the mass of organic HAP emission reduction each month by emission capture systems and add-on control devices using Equations 1 and 1A through 1D of § 63.3961 and Equations 2, 3, and 3A through 3C of § 63.3961 as applicable; the calculation of the total mass of organic HAP emissions each month using Equation 4 of § 63.3961; and the calculation of the 12-month organic HAP emission rate using Equation 5 of § 63.3961.
- (9) For the emission rate with add-on controls option, you must include the information specified in paragraphs (c)(9)(i) through (iv) of this section, except that the requirements in paragraphs (c)(9)(i) through (iii) of this section do not apply to solvent recovery systems for which you conduct liquid-liquid material balances according to § 63.3961(j).
- (i) For each emission capture system, a summary of the data and copies of the calculations supporting the determination that the emission capture system is a permanent total enclosure (PTE) or a measurement of the emission capture system efficiency. Include a description of the protocol followed for measuring capture efficiency, summaries of any capture efficiency tests

conducted, and any calculations supporting the capture efficiency determination. If you use the data quality objective (DQO) or lower confidence limit (LCL) approach, you must also include the statistical calculations to show you meet the DQO or LCL criteria in appendix A to subpart KK of this part. You do not need to submit complete test reports.

- (ii) A summary of the results of each add-on control device performance test. You do not need to submit complete test reports.
 - (iii) A list of each emission capture system's and add-on control device's operating limits and a summary of the data used to calculate those limits.
 - (iv) A statement of whether or not you developed and implemented the work practice plan required by § 63.3893.
- (10) If you are complying with a single emission limit representing the predominant activity under § 63.3890(c)(1), include the calculations and supporting information used to demonstrate that this emission limit represents the predominant activity as specified in § 63.3890(c)(1).
- (11) If you are complying with a facility-specific emission limit under § 63.3890(c)(2), include the calculation of the facility-specific emission limit and any supporting information as specified in § 63.3890(c)(2).

[69 FR 157, Jan. 2, 2004, as amended at 69 FR 22660, Apr. 26, 2004; 85 FR 73906, Nov. 19, 2020]

§ 63.3920 What reports must I submit?

- (a) **Semiannual compliance reports.** You must submit semiannual compliance reports for each affected source according to the requirements of paragraphs (a)(1) through (7) of this section. The semiannual compliance reporting requirements may be satisfied by reports required under other parts of the Clean Air Act (CAA), as specified in paragraph (a)(2) of this section.
- (1) **Dates.** Unless the Administrator has approved or agreed to a different schedule for submission of reports under § 63.10(a), you must prepare and submit each semiannual compliance report according to the dates specified in paragraphs (a)(1)(i) through (iv) of this section. Note that the information reported for each of the months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation.
- (i) The first semiannual compliance report must cover the first semiannual reporting period which begins the day after the end of the initial compliance period described in § 63.3940, § 63.3950, or § 63.3960 that applies to your affected source and ends on June 30 or December 31, whichever date is the first date following the end of the initial compliance period.
 - (ii) Each subsequent semiannual compliance report must cover the subsequent semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.
 - (iii) Each semiannual compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

- (iv) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the date specified in paragraph (a)(1)(iii) of this section.
- (2) **Inclusion with title V report.** Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 40 CFR part 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a semiannual compliance report pursuant to this section along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the semiannual compliance report includes all required information concerning deviations from any emission limitation in this subpart, its submission will be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a semiannual compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permitting authority.
- (3) **General requirements.** The semiannual compliance report must contain the information specified in paragraphs (a)(3)(i) through (vii) of this section, and the information specified in paragraphs (a)(4) through (7) and (c)(1) of this section that is applicable to your affected source.
 - (i) Company name and address.
 - (ii) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
 - (iii) Date of report and beginning and ending dates of the reporting period. The reporting period is the 6-month period ending on June 30 or December 31. Note that the information reported for each of the 6 months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation.
 - (iv) Identification of the compliance option or options specified in § 63.3891 that you used on each coating operation during the reporting period. If you switched between compliance options during the reporting period, you must report the beginning and ending dates for each option you used.
 - (v) If you used the emission rate without add-on controls or the emission rate with add-on controls compliance option (§ 63.3891(b) or (c)), the calculation results for each rolling 12-month organic HAP emission rate during the 6-month reporting period.
 - (vi) If you used the predominant activity alternative (§ 63.3890(c)(1)), include the annual determination of predominant activity if it was not included in the previous semi-annual compliance report.
 - (vii) If you used the facility-specific emission limit alternative (§ 63.3890(c)(2)), include the calculation of the facility-specific emission limit for each 12-month compliance period during the 6-month reporting period.
- (4) **No deviations.** If there were no deviations from the emission limitations in §§ 63.3890, 63.3892, and 63.3893 that apply to you, the semiannual compliance report must include a statement that there were no deviations from the emission limitations during the reporting period. If you used the emission rate with add-on controls option and there were no periods during which the continuous

parameter monitoring systems (CPMS) were out-of-control as specified in § 63.8(c)(7), the semiannual compliance report must include a statement that there were no periods during which the CPMS were out-of-control during the reporting period.

- (5) ***Deviations: Compliant material option.*** If you used the compliant material option and there was a deviation from the applicable organic HAP content requirements in § 63.3890, the semiannual compliance report must contain the information in paragraphs (a)(5)(i) through (v) of this section.
- (i) Identification of each coating used that deviated from the applicable emission limit, and each thinner and/or other additive, and cleaning material used that contained organic HAP, and the dates, time and duration each was used.
 - (ii) The calculation of the organic HAP content (using Equation 2 of § 63.3941) for each coating identified in paragraph (a)(5)(i) of this section. You do not need to submit background data supporting this calculation (e.g., information provided by coating suppliers or manufacturers, or test reports).
 - (iii) The determination of mass fraction of organic HAP for each thinner and/or other additive, and cleaning material identified in paragraph (a)(5)(i) of this section. You do not need to submit background data supporting this calculation (e.g., information provided by material suppliers or manufacturers, or test reports).
 - (iv) Before January 5, 2021, a statement of the cause of each deviation. On and after January 5, 2021, a statement of the cause of each deviation (including unknown cause, if applicable).
 - (v) On and after January 5, 2021, the number of deviations and, for each deviation, a list of the affected source or equipment, an estimate of the quantity of each regulated pollutant emitted over any applicable emission limit in § 63.3890, a description of the method used to estimate the emissions, and the actions you took to minimize emissions in accordance with § 63.3900(b).
- (6) ***Deviations: Emission rate without add-on controls option.*** If you used the emission rate without add-on controls option and there was a deviation from the applicable emission limit in § 63.3890, the semiannual compliance report must contain the information in paragraphs (a)(6)(i) through (iv) of this section.
- (i) The beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the applicable emission limit in § 63.3890.
 - (ii) The calculations used to determine the 12-month organic HAP emission rate for the compliance period in which the deviation occurred. You must submit the calculations for Equations 1, 1A through 1C, 2, and 3 of § 63.3951; and if applicable, the calculation used to determine mass of organic HAP in waste materials according to § 63.3951(e)(4). You do not need to submit background data supporting these calculations (e.g., information provided by materials suppliers or manufacturers, or test reports).
 - (iii) Before January 5, 2021, a statement of the cause of each deviation. On and after January 5, 2021, a statement of the cause of each deviation (including unknown cause, if applicable).

- (iv) On and after January 5, 2021, the number of deviations and, for each deviation, the date, time, duration, a list of the affected source or equipment, an estimate of the quantity of each regulated pollutant emitted over any applicable emission limit in § 63.3890, a description of the method used to estimate the emissions, and the actions you took to minimize emissions in accordance with § 63.3900(b).
- (7) **Deviations: Emission rate with add-on controls option.** If you used the emission rate with add-on controls option and there was a deviation from the applicable emission limit in § 63.3890 or the applicable operating limit(s) in table 1 to this subpart (including any periods when emissions bypassed the add-on control device and were diverted to the atmosphere), before January 5, 2021, the semiannual compliance report must contain the information in paragraphs (a)(7)(i) through (xiv) of this section. This includes periods of SSM during which deviations occurred. On and after January 5, 2021, the semiannual compliance report must contain the information in paragraphs (a)(7)(i) through (xii), (xiv), and (xv) of this section. If you use the emission rate with add-on controls option and there was a deviation from the applicable work practice standards in § 63.3893(b), the semiannual compliance report must contain the information in paragraph (a)(7)(xiii) of this section.
 - (i) The beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the applicable emission limit in § 63.3890.
 - (ii) The calculations used to determine the 12-month organic HAP emission rate for each compliance period in which a deviation occurred. You must provide the calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month using Equations 1 and 1A through 1C of § 63.3951; and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to § 63.3951(e)(4); the calculation of the total volume of coating solids used each month using Equation 2 of § 63.3951; the calculation of the mass of organic HAP emission reduction each month by emission capture systems and add-on control devices using Equations 1 and 1A through 1D of § 63.3961, and Equations 2, 3, and 3A through 3C of § 63.3961, as applicable; the calculation of the total mass of organic HAP emissions each month using Equation 4 of § 63.3961; and the calculation of the 12-month organic HAP emission rate using Equation 5 of § 63.3961. You do not need to submit the background data supporting these calculations (e.g., information provided by materials suppliers or manufacturers, or test reports).
 - (iii) The date and time that each malfunction of the capture system or add-on control devices started and stopped.
 - (iv) A brief description of the CPMS.
 - (v) The date of the latest CPMS certification or audit.
 - (vi) Before January 5, 2021, the date and time that each CPMS was inoperative, except for zero (low-level) and high-level checks. On and after January 5, 2021, the number of instances that the CPMS was inoperative, and for each instance, except for zero (low-level) and high-level checks, the date, time, and duration that the CPMS was inoperative; the cause (including unknown cause) for the CPMS being inoperative; and the actions you took to minimize emissions in accordance with § 63.3900(b).

- (vii) Before January 5, 2021, the date, time, and duration that each CPMS was out-of-control, including the information in § 63.8(c)(8). On and after January 5, 2021, the number of instances that the CPMS was out of control as specified in § 63.8(c)(7) and, for each instance, the date, time, and duration that the CPMS was out-of-control; the cause (including unknown cause) for the CPMS being out-of-control; and descriptions of corrective actions taken.
- (viii) Before January 5, 2021, the date and time period of each deviation from an operating limit in table 1 to this subpart; date and time period of any bypass of the add-on control device; and whether each deviation occurred during a period of SSM or during another period. On and after January 5, 2021, the number of deviations from an operating limit in table 1 to this subpart and, for each deviation, the date, time, and duration of each deviation; and the date, time, and duration of any bypass of the add-on control device.
- (ix) A summary of the total duration of each deviation from an operating limit in Table 1 to this subpart and each bypass of the add-on control device during the semiannual reporting period, and the total duration as a percent of the total source operating time during that semiannual reporting period.
- (x) Before January 5, 2021, a breakdown of the total duration of the deviations from the operating limits in table 1 of this subpart and bypasses of the add-on control device during the semiannual reporting period into those that were due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes. On and after January 5, 2021, a breakdown of the total duration of the deviations from the operating limits in Table 1 to this subpart and bypasses of the add-on control device during the semiannual reporting period into those that were due to control equipment problems, process problems, other known causes, and other unknown causes.
- (xi) A summary of the total duration of CPMS downtime during the semiannual reporting period and the total duration of CPMS downtime as a percent of the total source operating time during that semiannual reporting period.
- (xii) A description of any changes in the CPMS, coating operation, emission capture system, or add-on control device since the last semiannual reporting period.
- (xiii) Before January 5, 2021, for each deviation from the work practice standards, a description of the deviation, the date and time period of the deviation, and the actions you took to correct the deviation. On and after January 5, 2021, for deviations from the work practice standards, the number of deviations, and, for each deviation, the information in paragraphs (a)(7)(xiii)(A) and (B) of this section:
 - (A) A description of the deviation; the date, time, and duration of the deviation; and the actions you took to minimize emissions in accordance with § 63.3900(b).
 - (B) The description required in paragraph (a)(7)(xiii)(A) of this section must include a list of the affected sources or equipment for which a deviation occurred and the cause of the deviation (including unknown cause, if applicable).
- (xiv) Before January 5, 2021, statement of the cause of each deviation. On and after January 5, 2021, for deviations from an emission limit in § 63.3890 or an operating limit in table 1 to this subpart, a statement of the cause of each deviation (including unknown cause, if applicable) and the actions you took to minimize emissions in accordance with § 63.3900(b).

- (xv) On and after January 5, 2021, for each deviation from an emission limit in § 63.3890 or operating limit in table 1 to this subpart, a list of the affected sources or equipment for which a deviation occurred, an estimate of the quantity of each regulated pollutant emitted over any emission limit in § 63.3890 or operating limit in table 1 to this subpart, and a description of the method used to estimate the emissions.
- (b) **Performance test reports.** If you use the emission rate with add-on controls option, you must submit reports of performance test results for emission capture systems and add-on control devices no later than 60 days after completing the tests as specified in § 63.10(d)(2).
- (c) **SSM reports.** Before January 5, 2021, if you used the emission rate with add-on controls option and you had a SSM during the semiannual reporting period, you must submit the reports specified in paragraphs (c)(1) and (2) of this section. On and after January 5, 2021, the reports specified in paragraphs (c)(1) and (2) of this section are not required.
 - (1) If your actions were consistent with your startup, shutdown, and malfunction plan, you must include the information specified in § 63.10(d) in the semiannual compliance report required by paragraph (a) of this section.
 - (2) If your actions were not consistent with your startup, shutdown, and malfunction plan, you must submit an immediate startup, shutdown, and malfunction report as described in paragraphs (c)(2)(i) and (ii) of this section.
 - (i) You must describe the actions taken during the event in a report delivered by facsimile, telephone, or other means to the Administrator within 2 working days after starting actions that are inconsistent with the plan.
 - (ii) You must submit a letter to the Administrator within 7 working days after the end of the event, unless you have made alternative arrangements with the Administrator as specified in § 63.10(d)(5)(ii). The letter must contain the information specified in § 63.10(d)(5)(ii).
- (d) **Performance test reports.** On and after January 5, 2021, you must submit the results of the performance test required in §§ 63.3940 and 63.3950 following the procedure specified in paragraphs (d)(1) through (3) of this section.
 - (1) For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (<https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert>) at the time of the test, you must submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). The CEDRI interface can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>). Performance test data must be submitted in a file format generated through the use of the EPA's ERT or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT website.
 - (2) For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test, you must submit the results of the performance test to the Administrator at the appropriate address listed in § 63.13, unless the Administrator agrees to or specifies an alternate reporting method.
 - (3) If you claim that some of the performance test information being submitted under paragraph (d)(1) of this section is Confidential Business Information (CBI), you must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema

listed on the EPA's ERT website, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage medium to the EPA. The electronic medium must be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described in paragraph (d)(1) of this section.

- (e) **Initial notification reports.** On and after January 5, 2021, the owner or operator shall submit the initial notifications required in § 63.9(b) and the notification of compliance status required in §§ 63.9(h) and 63.3910(c) to the EPA via the CEDRI. The CEDRI interface can be accessed through the EPA's CDX (<https://cdx.epa.gov/>). The owner or operator must upload to CEDRI an electronic copy of each applicable notification in portable document format (PDF). The applicable notification must be submitted by the deadline specified in this subpart, regardless of the method in which the reports are submitted. Owners or operators who claim that some of the information required to be submitted via CEDRI is CBI shall submit a complete report generated using the appropriate form in CEDRI or an alternate electronic file consistent with the XML schema listed on the EPA's CEDRI website, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage medium to the EPA. The electronic medium shall be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted shall be submitted to the EPA via the EPA's CDX as described earlier in this paragraph.
- (f) **Semiannual compliance reports.** On and after January 5, 2021, or once the reporting template has been available on the CEDRI website for 1 year, whichever date is later, the owner or operator shall submit the semiannual compliance report required in paragraph (a) of this section to the EPA via the CEDRI. The CEDRI interface can be accessed through the EPA's CDX (<https://cdx.epa.gov/>). The owner or operator must use the appropriate electronic template on the CEDRI website for this subpart or an alternate electronic file format consistent with the XML schema listed on the CEDRI website (<https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri>). The date report templates become available will be listed on the CEDRI website. If the reporting form for the semiannual compliance report specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate addresses listed in § 63.13. Once the form has been available in CEDRI for 1 year, you must begin submitting all subsequent reports via CEDRI. The reports must be submitted by the deadlines specified in this subpart, regardless of the method in which the reports are submitted. Owners or operators who claim that some of the information required to be submitted via CEDRI is CBI shall submit a complete report generated using the appropriate form in CEDRI or an alternate electronic file consistent with the XML schema listed on the EPA's CEDRI website, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage medium to the EPA. The electronic medium shall be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted shall be submitted to the EPA via the EPA's CDX as described earlier in this paragraph.
- (g) **Reporting during EPA system outages.** If you are required to electronically submit a report through the CEDRI in the EPA's CDX, and due to a planned or actual outage of either the EPA's CEDRI or CDX systems within the period of time beginning 5 business days prior to the date that the submission is due, you will be or are precluded from accessing CEDRI or CDX and submitting a required report within the time prescribed, you may assert a claim of the EPA system outage for failure to timely comply with the reporting requirement. You must submit notification to the Administrator in writing as soon as possible

following the date you first knew, or through due diligence should have known, that the event may cause or caused a delay in reporting. You must provide to the Administrator a written description identifying the date, time, and length of the outage; a rationale for attributing the delay in reporting beyond the regulatory deadline to the EPA system outage; describe the measures taken or to be taken to minimize the delay in reporting; and identify a date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported. In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved. The decision to accept the claim of the EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

- (h) **Reporting during force majeure events.** If you are required to electronically submit a report through CEDRI in the EPA's CDX and a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning 5 business days prior to the date the submission is due, the owner or operator may assert a claim of force majeure for failure to timely comply with the reporting requirement. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents you from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (e.g., hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (e.g., large scale power outage). If you intend to assert a claim of force majeure, you must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or caused a delay in reporting. You must provide to the Administrator a written description of the force majeure event and a rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event; describe the measures taken or to be taken to minimize the delay in reporting; and identify a date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported. In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs. The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

[69 FR 157, Jan. 2, 2004, as amended at 85 FR 41138, July 8, 2020]

§ 63.3930 What records must I keep?

You must collect and keep records of the data and information specified in this section. Failure to collect and keep these records is a deviation from the applicable standard.

- (a) A copy of each notification and report that you submitted to comply with this subpart, and the documentation supporting each notification and report. If you are using the predominant activity alternative under § 63.3890(c), you must keep records of the data and calculations used to determine the predominant activity. If you are using the facility-specific emission limit alternative under § 63.3890(c), you must keep records of the data used to calculate the facility-specific emission limit for the initial compliance demonstration. You must also keep records of any data used in each annual predominant activity determination and in the calculation of the facility-specific emission limit for each 12-month compliance period included in the semi-annual compliance reports.

- (b) A current copy of information provided by materials suppliers or manufacturers, such as manufacturer's formulation data, or test data used to determine the mass fraction of organic HAP and density for each coating, thinner and/or other additive, and cleaning material, and the volume fraction of coating solids for each coating. If you conducted testing to determine mass fraction of organic HAP, density, or volume fraction of coating solids, you must keep a copy of the complete test report. If you use information provided to you by the manufacturer or supplier of the material that was based on testing, you must keep the summary sheet of results provided to you by the manufacturer or supplier. You are not required to obtain the test report or other supporting documentation from the manufacturer or supplier.
- (c) For each compliance period, the records specified in paragraphs (c)(1) through (4) of this section.
 - (1) A record of the coating operations on which you used each compliance option and the time periods (beginning and ending dates and times) for each option you used.
 - (2) For the compliant material option, a record of the calculation of the organic HAP content for each coating, using Equation 2 of § 63.3941.
 - (3) For the emission rate without add-on controls option, a record of the calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month using Equations 1, 1A through 1C, and 2 of § 63.3951; and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to § 63.3951(e)(4); the calculation of the total volume of coating solids used each month using Equation 2 of § 63.3951; and the calculation of each 12-month organic HAP emission rate using Equation 3 of § 63.3951.
 - (4) For the emission rate with add-on controls option, records of the calculations specified in paragraphs (c)(4)(i) through (v) of this section.
 - (i) The calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month using Equations 1 and 1A through 1C of § 63.3951 and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to § 63.3951(e)(4);
 - (ii) The calculation of the total volume of coating solids used each month using Equation 2 of § 63.3951;
 - (iii) The calculation of the mass of organic HAP emission reduction by emission capture systems and add-on control devices using Equations 1 and 1A through 1D of § 63.3961 and Equations 2, 3, and 3A through 3C of § 63.3961, as applicable;
 - (iv) The calculation of each month's organic HAP emission rate using Equation 4 of § 63.3961; and
 - (v) The calculation of each 12-month organic HAP emission rate using Equation 5 of § 63.3961.
- (d) A record of the name and volume of each coating, thinner and/or other additive, and cleaning material used during each compliance period. If you are using the compliant material option for all coatings at the source, you may maintain purchase records for each material used rather than a record of the volume used.
- (e) A record of the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during each compliance period unless the material is tracked by weight.
- (f) A record of the volume fraction of coating solids for each coating used during each compliance period.

- (g) If you use either the emission rate without add-on controls or the emission rate with add-on controls compliance option, the density for each coating, thinner and/or other additive, and cleaning material used during each compliance period.
- (h) If you use an allowance in Equation 1 of § 63.3951 for organic HAP contained in waste materials sent to or designated for shipment to a treatment, storage, and disposal facility (TSDF) according to § 63.3951(e)(4), you must keep records of the information specified in paragraphs (h)(1) through (3) of this section.
 - (1) The name and address of each TSDF to which you sent waste materials for which you use an allowance in Equation 1 of § 63.3951; a statement of which subparts under 40 CFR parts 262, 264, 265, and 266 apply to the facility; and the date of each shipment.
 - (2) Identification of the coating operations producing waste materials included in each shipment and the month or months in which you used the allowance for these materials in Equation 1 of § 63.3951.
 - (3) The methodology used in accordance with § 63.3951(e)(4) to determine the total amount of waste materials sent to or the amount collected, stored, and designated for transport to a TSDF each month; and the methodology to determine the mass of organic HAP contained in these waste materials. This must include the sources for all data used in the determination, methods used to generate the data, frequency of testing or monitoring, and supporting calculations and documentation, including the waste manifest for each shipment.
- (i) [Reserved]
- (j) Before January 5, 2021, you must keep records of the date, time, and duration of each deviation. On and after January 5, 2021, for each deviation from an emission limitation reported under § 63.3920(a)(5) through (7), a record of the information specified in paragraphs (j)(1) through (4) of this section, as applicable.
 - (1) The date, time, and duration of the deviation, as reported under § 63.3920(a)(5) through (7).
 - (2) A list of the affected sources or equipment for which the deviation occurred and the cause of the deviation, as reported under § 63.3920(a)(5) through (7).
 - (3) An estimate of the quantity of each regulated pollutant emitted over any applicable emission limit in § 63.3890 or any applicable operating limit in table 1 to this subpart, and a description of the method used to calculate the estimate, as reported under § 63.3920(a)(5) through (7).
 - (4) A record of actions taken to minimize emissions in accordance with § 63.3900(b) and any corrective actions taken to return the affected unit to its normal or usual manner of operation.
- (k) If you use the emission rate with add-on controls option, you must also keep the records specified in paragraphs (k)(1) through (8) of this section.
 - (1) Before January 5, 2021, for each deviation, a record of whether the deviation occurred during a period of SSM. On and after January 5, 2021, a record of whether the deviation occurred during a period of SSM is not required.
 - (2) Before January 5, 2021, the records in § 63.6(e)(3)(iii) through (v) related to SSM. On and after January 5, 2021, the records in § 63.6(e)(3)(iii) through (v) related to SSM are not required.
 - (3) The records required to show continuous compliance with each operating limit specified in Table 1 to this subpart that applies to you.

- (4) For each capture system that is a PTE, the data and documentation you used to support a determination that the capture system meets the criteria in Method 204 of appendix M to 40 CFR part 51 for a PTE and has a capture efficiency of 100 percent, as specified in § 63.3965(a).
- (5) For each capture system that is not a PTE, the data and documentation you used to determine capture efficiency according to the requirements specified in §§ 63.3964 and 63.3965(b) through (e), including the records specified in paragraphs (k)(5)(i) through (iii) of this section that apply to you.
 - (i) **Records for a liquid-to-uncaptured gas protocol using a temporary total enclosure or building enclosure.** Records of the mass of total volatile hydrocarbon (TVH) as measured by Method 204A or 204F of appendix M to 40 CFR part 51 for each material used in the coating operation, and the total TVH for all materials used during each capture efficiency test run, including a copy of the test report. Records of the mass of TVH emissions not captured by the capture system that exited the temporary total enclosure or building enclosure during each capture efficiency test run, as measured by Method 204D or 204E of appendix M to 40 CFR part 51, including a copy of the test report. Records documenting that the enclosure used for the capture efficiency test met the criteria in Method 204 of appendix M to 40 CFR part 51 for either a temporary total enclosure or a building enclosure.
 - (ii) **Records for a gas-to-gas protocol using a temporary total enclosure or a building enclosure.** Records of the mass of TVH emissions captured by the emission capture system as measured by Method 204B or 204C of appendix M to 40 CFR part 51 at the inlet to the add-on control device, including a copy of the test report. Records of the mass of TVH emissions not captured by the capture system that exited the temporary total enclosure or building enclosure during each capture efficiency test run as measured by Method 204D or 204E of appendix M to 40 CFR part 51, including a copy of the test report. Records documenting that the enclosure used for the capture efficiency test met the criteria in Method 204 of appendix M to 40 CFR part 51 for either a temporary total enclosure or a building enclosure.
 - (iii) **Records for an alternative protocol.** Records needed to document a capture efficiency determination using an alternative method or protocol as specified in § 63.3965(e), if applicable.
- (6) The records specified in paragraphs (k)(6)(i) and (ii) of this section for each add-on control device organic HAP destruction or removal efficiency determination as specified in § 63.3966.
 - (i) Records of each add-on control device performance test conducted according to §§ 63.3964 and 63.3966.
 - (ii) Records of the coating operation conditions during the add-on control device performance test showing that the performance test was conducted under representative operating conditions.
- (7) Records of the data and calculations you used to establish the emission capture and add-on control device operating limits as specified in § 63.3967 and to document compliance with the operating limits as specified in Table 1 to this subpart.
- (8) A record of the work practice plan required by § 63.3893 and documentation that you are implementing the plan on a continuous basis.

[69 FR 157, Jan. 2, 2004, as amended at 85 FR 41141, July 8, 2020]

§ 63.3931 In what form and for how long must I keep my records?

- (a) Your records must be in a form suitable and readily available for expeditious review, according to § 63.10(b)(1). Where appropriate, the records may be maintained as electronic spreadsheets or as a database. On and after January 5, 2021, any records required to be maintained by this subpart that are in reports that were submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation.
- (b) As specified in § 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- (c) You must keep each record on-site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to § 63.10(b)(1). You may keep the records off-site for the remaining 3 years.

[69 FR 157, Jan. 2, 2004, as amended at 85 FR 41141, July 8, 2020]

COMPLIANCE REQUIREMENTS FOR THE COMPLIANT MATERIAL OPTION

§ 63.3940 By what date must I conduct the initial compliance demonstration?

You must complete the initial compliance demonstration for the initial compliance period according to the requirements in § 63.3941. The initial compliance period begins on the applicable compliance date specified in § 63.3883 and ends on the last day of the 12th month following the compliance date. If the compliance date occurs on any day other than the first day of a month, then the initial compliance period extends through that month plus the next 12 months. The initial compliance demonstration includes the calculations according to § 63.3941 and supporting documentation showing that during the initial compliance period, you used no coating with an organic HAP content that exceeded the applicable emission limit in § 63.3890, and that you used no thinners and/or other additives, or cleaning materials that contained organic HAP as determined according to § 63.3941(a).

§ 63.3941 How do I demonstrate initial compliance with the emission limitations?

You may use the compliant material option for any individual coating operation, for any group of coating operations in the affected source, or for all the coating operations in the affected source. You must use either the emission rate without add-on controls option or the emission rate with add-on controls option for any coating operation in the affected source for which you do not use this option. To demonstrate initial compliance using the compliant material option, the coating operation or group of coating operations must use no coating with an organic HAP content that exceeds the applicable emission limits in § 63.3890 and must use no thinner and/or other additive, or cleaning material that contains organic HAP as determined according to this section. Any coating operation for which you use the compliant material option is not required to meet the operating limits or work practice standards required in §§ 63.3892 and 63.3893, respectively. You must conduct a separate initial compliance demonstration for each general use, high performance, magnet wire, rubber-to-metal, and extreme performance fluoropolymer coating operation unless you are demonstrating compliance with a predominant activity or facility-specific emission limit as provided in § 63.3890(c). If you are demonstrating compliance with a predominant activity or facility-specific emission limit as provided in § 63.3890(c), you must demonstrate that all coating operations included in the predominant activity determination or calculation of the facility-specific emission limit comply with that limit. You must meet all the requirements of this section. Use the procedures in this section on each coating, thinner and/

or other additive, and cleaning material in the condition it is in when it is received from its manufacturer or supplier and prior to any alteration. You do not need to redetermine the organic HAP content of coatings, thinners and/or other additives, and cleaning materials that are reclaimed on-site (or reclaimed off-site if you have documentation showing that you received back the exact same materials that were sent off-site) and reused in the coating operation for which you use the compliant material option, provided these materials in their condition as received were demonstrated to comply with the compliant material option.

- (a) **Determine the mass fraction of organic HAP for each material used.** You must determine the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during the compliance period by using one of the options in paragraphs (a)(1) through (5) of this section.
- (1) **Method 311 (appendix A to 40 CFR part 63).** You may use Method 311 for determining the mass fraction of organic HAP. Use the procedures specified in paragraphs (a)(1)(i) and (ii) of this section when performing a Method 311 test.
- (i) Count each organic HAP in table 5 to this subpart that is measured to be present at 0.1 percent by mass or more and at 1.0 percent by mass or more for other compounds. For example, if toluene (not listed in table 5 to this subpart) is measured to be 0.5 percent of the material by mass, you do not have to count it. Express the mass fraction of each organic HAP you count as a value truncated to four places after the decimal point (e.g., 0.3791).
- (ii) Calculate the total mass fraction of organic HAP in the test material by adding up the individual organic HAP mass fractions and truncating the result to three places after the decimal point (e.g., 0.763).
- (2) **Method 24 (appendix A to 40 CFR part 60).** For coatings, you may use Method 24 to determine the mass fraction of nonaqueous volatile matter and use that value as a substitute for mass fraction of organic HAP. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, you may use the alternative method contained in appendix A to subpart PPPP of this part, rather than Method 24. You may use the volatile fraction that is emitted, as measured by the alternative method in appendix A to subpart PPPP of this part, as a substitute for the mass fraction of organic HAP.
- (3) **Alternative method.** You may use an alternative test method for determining the mass fraction of organic HAP once the Administrator has approved it. You must follow the procedure in § 63.7(f) to submit an alternative test method for approval.
- (4) **Information from the supplier or manufacturer of the material.** You may rely on information other than that generated by the test methods specified in paragraphs (a)(1) through (3) of this section, such as manufacturer's formulation data, if it represents each organic HAP in table 5 to this subpart that is present at 0.1 percent by mass or more and at 1.0 percent by mass or more for other compounds. For example, if toluene (not listed in table 5 to this subpart) is 0.5 percent of the material by mass, you do not have to count it. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, you may rely on manufacturer's data that expressly states the organic HAP or volatile matter mass fraction emitted. If there is a disagreement between such information and results of a test conducted according to paragraphs (a)(1) through (3) of this section, then the test method results will take precedence unless, after consultation, you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

(5) **Solvent blends.** Solvent blends may be listed as single components for some materials in data provided by manufacturers or suppliers. Solvent blends may contain organic HAP which must be counted toward the total organic HAP mass fraction of the materials. When test data and manufacturer's data for solvent blends are not available, you may use the default values for the mass fraction of organic HAP in these solvent blends listed in Table 3 or 4 to this subpart. If you use the tables, you must use the values in Table 3 for all solvent blends that match Table 3 entries according to the instructions for Table 3, and you may use Table 4 only if the solvent blends in the materials you use do not match any of the solvent blends in Table 3 and you know only whether the blend is aliphatic or aromatic. However, if the results of a Method 311 (appendix A to 40 CFR part 63) test indicate higher values than those listed on Table 3 or 4 to this subpart, the Method 311 results will take precedence unless, after consultation, you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

(b) **Determine the volume fraction of coating solids for each coating.** You must determine the volume fraction of coating solids (liters (gal) of coating solids per liter (gal) of coating) for each coating used during the compliance period by a test, by information provided by the supplier or the manufacturer of the material, or by calculation, as specified in paragraphs (b)(1) through (4) of this section. If test results obtained according to paragraph (b)(1) of this section do not agree with the information obtained under paragraph (b)(3) or (4) of this section, the test results will take precedence unless, after consultation, you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

(1) **ASTM Method D2697-03 (Reapproved 2014) or D6093-97 (Reapproved 2016).** You may use ASTM D2697-03 (Reapproved 2014) (incorporated by reference, see § 63.14), or D6093-97 (Reapproved 2016) (incorporated by reference, see § 63.14), to determine the volume fraction of coating solids for each coating. Divide the nonvolatile volume percent obtained with the methods by 100 to calculate volume fraction of coating solids.

(2) **Alternative method.** You may use an alternative test method for determining the solids content of each coating once the Administrator has approved it. You must follow the procedure in § 63.7(f) to submit an alternative test method for approval.

(3) **Information from the supplier or manufacturer of the material.** You may obtain the volume fraction of coating solids for each coating from the supplier or manufacturer.

(4) **Calculation of volume fraction of coating solids.** You may determine the volume fraction of coating solids using Equation 1 of this section:

$$V_s = 1 - \frac{m_{\text{volatiles}}}{D_{\text{avg}}} \quad (\text{Eq. 1})$$

Where:

V_s = Volume fraction of coating solids, liters (gal) coating solids per liter (gal) coating.

$m_{\text{volatiles}}$ = Total volatile matter content of the coating, including HAP, volatile organic compounds (VOC), water, and exempt compounds, determined according to Method 24 in appendix A of 40 CFR part 60, grams volatile matter per liter coating.

D_{avg} = Average density of volatile matter in the coating, grams volatile matter per liter volatile matter, determined from test results using ASTM D1475-13 (incorporated by reference, see § 63.14), information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If there is disagreement between ASTM D1475-13 test results and other information sources, the test results will take precedence unless, after consultation you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

- (c) **Determine the density of each coating.** Determine the density of each coating used during the compliance period from test results using ASTM D1475-13 (incorporated by reference, see § 63.14), information from the supplier or manufacturer of the material, or specific gravity data for pure chemicals. If there is disagreement between ASTM D1475-13 test results and the supplier's or manufacturer's information, the test results will take precedence unless, after consultation you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.
- (d) **Determine the organic HAP content of each coating.** Calculate the organic HAP content, kg (lb) of organic HAP emitted per liter (gal) coating solids used, of each coating used during the compliance period using Equation 2 of this section:

$$H_c = \frac{(D_c)(W_c)}{V_s} \quad (\text{Eq. 2})$$

Where:

H_c = Organic HAP content of the coating, kg organic HAP emitted per liter (gal) coating solids used.

D_c = Density of coating, kg coating per liter (gal) coating, determined according to paragraph (c) of this section.

W_c = Mass fraction of organic HAP in the coating, kg organic HAP per kg coating, determined according to paragraph (a) of this section.

V_s = Volume fraction of coating solids, liter (gal) coating solids per liter (gal) coating, determined according to paragraph (b) of this section.

- (e) **Compliance demonstration.** The calculated organic HAP content for each coating used during the initial compliance period must be less than or equal to the applicable emission limit in § 63.3890; and each thinner and/or other additive, and cleaning material used during the initial compliance period must contain no organic HAP, determined according to paragraph (a) of this section. You must keep all records required by §§ 63.3930 and 63.3931. As part of the notification of compliance status required in § 63.3910, you must identify the coating operation(s) for which you used the compliant material option and submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the initial compliance period because you used no coatings for which the organic HAP content exceeded the applicable emission limit in § 63.3890, and you used no thinners and/or other additives, or cleaning materials that contained organic HAP, determined according to the procedures in paragraph (a) of this section.

[69 FR 157, Jan. 2, 2004, as amended at 85 FR 41141, July 8, 2020]

§ 63.3942 How do I demonstrate continuous compliance with the emission limitations?

- (a) For each compliance period to demonstrate continuous compliance, you must use no coating for which the organic HAP content (determined using Equation 2 of § 63.3941) exceeds the applicable emission limit in § 63.3890, and use no thinner and/or other additive, or cleaning material that contains organic HAP, determined according to § 63.3941(a). A compliance period consists of 12 months. Each month, after the end of the initial compliance period described in § 63.3940, is the end of a compliance period consisting of that month and the preceding 11 months. If you are complying with a facility-specific emission limit under § 63.3890(c), you must also perform the calculation using Equation 1 in § 63.3890(c)(2) on a monthly basis using the data from the previous 12 months of operation.
- (b) If you choose to comply with the emission limitations by using the compliant material option, the use of any coating, thinner and/or other additive, or cleaning material that does not meet the criteria specified in paragraph (a) of this section is a deviation from the emission limitations that must be reported as specified in §§ 63.3910(c)(6) and 63.3920(a)(5).
- (c) As part of each semiannual compliance report required by § 63.3920, you must identify the coating operation(s) for which you used the compliant material option. If there were no deviations from the applicable emission limit in § 63.3890, submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the reporting period because you used no coatings for which the organic HAP content exceeded the applicable emission limit in § 63.3890, and you used no thinner and/or other additive, or cleaning material that contained organic HAP, determined according to § 63.3941(a).
- (d) You must maintain records as specified in §§ 63.3930 and 63.3931.

COMPLIANCE REQUIREMENTS FOR THE EMISSION RATE WITHOUT ADD-ON CONTROLS OPTION

§ 63.3950 By what date must I conduct the initial compliance demonstration?

You must complete the initial compliance demonstration for the initial compliance period according to the requirements of § 63.3951. The initial compliance period begins on the applicable compliance date specified in § 63.3883 and ends on the last day of the 12th month following the compliance date. If the compliance date occurs on any day other than the first day of a month, then the initial compliance period extends through the end of that month plus the next 12 months. You must determine the mass of organic HAP emissions and volume of coating solids used each month and then calculate an organic HAP emission rate at the end of the initial compliance period. The initial compliance demonstration includes the calculations according to § 63.3951 and supporting documentation showing that during the initial compliance period the organic HAP emission rate was equal to or less than the applicable emission limit in § 63.3890.

§ 63.3951 How do I demonstrate initial compliance with the emission limitations?

You may use the emission rate without add-on controls option for any individual coating operation, for any group of coating operations in the affected source, or for all the coating operations in the affected source. You must use either the compliant material option or the emission rate with add-on controls option for any coating operation in the affected source for which you do not use this option. To demonstrate initial compliance using the emission rate without add-on controls option, the coating operation or group of coating operations must meet the applicable emission limit in § 63.3890, but is not required to meet the operating limits or work practice standards in §§ 63.3892 and 63.3893, respectively. You must conduct a separate initial compliance demonstration for each general use, magnet wire, rubber-to-metal, and extreme performance fluoropolymer coating operation unless you are

demonstrating compliance with a predominant activity or facility-specific emission limit as provided in § 63.3890(c). If you are demonstrating compliance with a predominant activity or facility-specific emission limit as provided in § 63.3890(c), you must demonstrate that all coating operations included in the predominant activity determination or calculation of the facility-specific emission limit comply with that limit. You must meet all the requirements of this section. When calculating the organic HAP emission rate according to this section, do not include any coatings, thinners and/or other additives, or cleaning materials used on coating operations for which you use the compliant material option or the emission rate with add-on controls option. You do not need to redetermine the mass of organic HAP in coatings, thinners and/or other additives, or cleaning materials that have been reclaimed on-site (or reclaimed off-site if you have documentation showing that you received back the exact same materials that were sent off-site) and reused in the coating operation for which you use the emission rate without add-on controls option. If you use coatings, thinners and/or other additives, or cleaning materials that have been reclaimed on-site, the amount of each used in a month may be reduced by the amount of each that is reclaimed. That is, the amount used may be calculated as the amount consumed to account for materials that are reclaimed.

- (a) **Determine the mass fraction of organic HAP for each material.** Determine the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during each month according to the requirements in § 63.3941(a).
- (b) **Determine the volume fraction of coating solids.** Determine the volume fraction of coating solids (liter (gal) of coating solids per liter (gal) of coating) for each coating used during each month according to the requirements in § 63.3941(b).
- (c) **Determine the density of each material.** Determine the density of each liquid coating, thinner and/or other additive, and cleaning material used during each month from test results using ASTM D1475-13 or ASTM D2111-10 (Reapproved 2015) (both incorporated by reference, see § 63.14), information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If you are including powder coatings in the compliance determination, determine the density of powder coatings, using ASTM D5965-02 (Reapproved 2013) (incorporated by reference, see § 63.14), or information from the supplier. If there is disagreement between ASTM D1475-13 or ASTM D2111-10 (Reapproved 2015) test results and other such information sources, the test results will take precedence unless, after consultation you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct. If you purchase materials or monitor consumption by weight instead of volume, you do not need to determine material density. Instead, you may use the material weight in place of the combined terms for density and volume in Equations 1A, 1B, 1C, and 2 of this section.
- (d) **Determine the volume of each material used.** Determine the volume (liters) of each coating, thinner and/or other additive, and cleaning material used during each month by measurement or usage records. If you purchase materials or monitor consumption by weight instead of volume, you do not need to determine the volume of each material used. Instead, you may use the material weight in place of the combined terms for density and volume in Equations 1A, 1B, and 1C of this section.
- (e) **Calculate the mass of organic HAP emissions.** The mass of organic HAP emissions is the combined mass of organic HAP contained in all coatings, thinners and/or other additives, and cleaning materials used during each month minus the organic HAP in certain waste materials. Calculate the mass of organic HAP emissions using Equation 1 of this section.

$$H_e = A + B + C - R_w \quad (\text{Eq. 1})$$

Where:

H_e = Total mass of organic HAP emissions during the month, kg.

A = Total mass of organic HAP in the coatings used during the month, kg, as calculated in Equation 1A of this section.

B = Total mass of organic HAP in the thinners and/or other additives used during the month, kg, as calculated in Equation 1B of this section.

C = Total mass of organic HAP in the cleaning materials used during the month, kg, as calculated in Equation 1C of this section.

R_w = Total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste TSDF for treatment or disposal during the month, kg, determined according to paragraph (e)(4) of this section. (You may assign a value of zero to R_w if you do not wish to use this allowance.)

- (1) Calculate the kg organic HAP in the coatings used during the month using Equation 1A of this section:

$$A = \sum_{i=1}^m (Vol_{c,i}) (D_{c,i}) (W_{c,i}) \quad (\text{Eq. 1A})$$

Where:

A = Total mass of organic HAP in the coatings used during the month, kg.

$Vol_{c,i}$ = Total volume of coating, i , used during the month, liters.

$D_{c,i}$ = Density of coating, i , kg coating per liter coating.

$W_{c,i}$ = Mass fraction of organic HAP in coating, i , kg organic HAP per kg coating. For reactive adhesives as defined in § 63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to subpart PPPP of this part.

m = Number of different coatings used during the month.

- (2) Calculate the kg of organic HAP in the thinners and/or other additives used during the month using Equation 1B of this section:

$$B = \sum_{j=1}^n (Vol_{t,j}) (D_{t,j}) (W_{t,j}) \quad (\text{Eq. 1B})$$

Where:

B = Total mass of organic HAP in the thinners and/or other additives used during the month, kg.

$Vol_{t,j}$ = Total volume of thinner and/or other additive, j , used during the month, liters.

$D_{t,j}$ = Density of thinner and/or other additive, j, kg per liter.

$W_{t,j}$ = Mass fraction of organic HAP in thinner and/or other additive, j, kg organic HAP per kg thinner and/or other additive. For reactive adhesives as defined in § 63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to subpart PPPP of this part.

n = Number of different thinners and/or other additives used during the month.

- (3) Calculate the kg organic HAP in the cleaning materials used during the month using Equation 1C of this section:

$$C = \sum_{k=1}^p (Vol_{s,k})(D_{s,k})(W_{s,k}) \quad (Eq. 1C)$$

Where:

C = Total mass of organic HAP in the cleaning materials used during the month, kg.

$Vol_{s,k}$ = Total volume of cleaning material, k, used during the month, liters.

$D_{s,k}$ = Density of cleaning material, k, kg per liter.

$W_{s,k}$ = Mass fraction of organic HAP in cleaning material, k, kg organic HAP per kg material.

p = Number of different cleaning materials used during the month.

- (4) If you choose to account for the mass of organic HAP contained in waste materials sent or designated for shipment to a hazardous waste TSDF in Equation 1 of this section, then you must determine the mass according to paragraphs (e)(4)(i) through (iv) of this section.
- (i) You may only include waste materials in the determination that are generated by coating operations in the affected source for which you use Equation 1 of this section and that will be treated or disposed of by a facility that is regulated as a TSDF under 40 CFR part 262, 264, 265, or 266. The TSDF may be either off-site or on-site. You may not include organic HAP contained in wastewater.
 - (ii) You must determine either the amount of the waste materials sent to a TSDF during the month or the amount collected and stored during the month and designated for future transport to a TSDF. Do not include in your determination any waste materials sent to a TSDF during a month if you have already included them in the amount collected and stored during that month or a previous month.
 - (iii) Determine the total mass of organic HAP contained in the waste materials specified in paragraph (e)(4)(ii) of this section.
 - (iv) You must document the methodology you use to determine the amount of waste materials and the total mass of organic HAP they contain, as required in § 63.3930(h). If waste manifests include this information, they may be used as part of the documentation of the amount of waste materials and mass of organic HAP contained in them.

- (f) **Calculate the total volume of coating solids used.** Determine the total volume of coating solids used, liters, which is the combined volume of coating solids for all the coatings used during each month, using Equation 2 of this section:

$$V_{st} = \sum_{i=1}^m (Vol_{c,i})(V_{s,i}) \quad (\text{Eq. 2})$$

Where:

V_{st} = Total volume of coating solids used during the month, liters.

$Vol_{c,i}$ = Total volume of coating, i, used during the month, liters.

$V_{s,i}$ = Volume fraction of coating solids for coating, i, liter solids per liter coating, determined according to § 63.3941(b).

m = Number of coatings used during the month.

- (g) **Calculate the organic HAP emission rate.** Calculate the organic HAP emission rate for the compliance period, kg (lb) organic HAP emitted per liter (gal) coating solids used, using Equation 3 of this section:

$$H_{yr} = \frac{\sum_{y=1}^n H_e}{\sum_{y=1}^n V_{st}} \quad (\text{Eq. 3})$$

Where:

H_{yr} = Average organic HAP emission rate for the compliance period, kg organic HAP emitted per liter coating solids used.

H_e = Total mass of organic HAP emissions from all materials used during month, y, kg, as calculated by Equation 1 of this section.

V_{st} = Total volume of coating solids used during month, y, liters, as calculated by Equation 2 of this section.

y = Identifier for months.

n = Number of full or partial months in the compliance period (for the initial compliance period, n equals 12 if the compliance date falls on the first day of a month; otherwise n equals 13; for all following compliance periods, n equals 12).

- (h) **Compliance demonstration.** The organic HAP emission rate for the initial compliance period calculated using Equation 3 of this section must be less than or equal to the applicable emission limit for each subcategory in § 63.3890 or the predominant activity or facility-specific emission limit allowed in §

63.3890(c). You must keep all records as required by §§ 63.3930 and 63.3931. As part of the notification of compliance status required by § 63.3910, you must identify the coating operation(s) for which you used the emission rate without add-on controls option and submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the initial compliance period because the organic HAP emission rate was less than or equal to the applicable emission limit in § 63.3890, determined according to the procedures in this section.

[69 FR 157, Jan. 2, 2004, as amended at 85 FR 41141, July 8, 2020]

§ 63.3952 How do I demonstrate continuous compliance with the emission limitations?

- (a) To demonstrate continuous compliance, the organic HAP emission rate for each compliance period, determined according to § 63.3951(a) through (g), must be less than or equal to the applicable emission limit in § 63.3890. A compliance period consists of 12 months. Each month after the end of the initial compliance period described in § 63.3950 is the end of a compliance period consisting of that month and the preceding 11 months. You must perform the calculations in § 63.3951(a) through (g) on a monthly basis using data from the previous 12 months of operation. If you are complying with a facility-specific emission limit under § 63.3890(c), you must also perform the calculation using Equation 1 in § 63.3890(c)(2) on a monthly basis using the data from the previous 12 months of operation.
- (b) If the organic HAP emission rate for any 12-month compliance period exceeded the applicable emission limit in § 63.3890, this is a deviation from the emission limitation for that compliance period and must be reported as specified in §§ 63.3910(c)(6) and 63.3920(a)(6).
- (c) As part of each semiannual compliance report required by § 63.3920, you must identify the coating operation(s) for which you used the emission rate without add-on controls option. If there were no deviations from the emission limitations, you must submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the reporting period because the organic HAP emission rate for each compliance period was less than or equal to the applicable emission limit in § 63.3890, determined according to § 63.3951(a) through (g).
- (d) You must maintain records as specified in §§ 63.3930 and 63.3931.

COMPLIANCE REQUIREMENTS FOR THE EMISSION RATE WITH ADD-ON CONTROLS OPTION

§ 63.3960 By what date must I conduct performance tests and other initial compliance demonstrations?

- (a) **New and reconstructed affected sources.** For a new or reconstructed affected source, you must meet the requirements of paragraphs (a)(1) through (4) of this section.
 - (1) All emission capture systems, add-on control devices, and CPMS must be installed and operating no later than the applicable compliance date specified in § 63.3883. Except for solvent recovery systems for which you conduct liquid-liquid material balances according to § 63.3961(j), you must conduct according to the schedule in paragraphs (a)(1)(i) and (ii) of this section initial and periodic performance tests of each capture system and add-on control device according to the procedures in §§ 63.3964, 63.3965, and 63.3966 and establish the operating limits required by § 63.3892. For a solvent recovery system for which you conduct liquid-liquid material balances according to § 63.3961(j), you must initiate the first material balance no later than the applicable compliance date

specified in § 63.3883. For magnet wire coating operations, you may, with approval, conduct a performance test of one representative magnet wire coating machine for each group of identical or very similar magnet wire coating machines.

- (i) You must conduct the initial performance test and establish the operating limits required by § 63.3892 no later than 180 days after the applicable compliance date specified in § 63.3883.
 - (ii) You must conduct periodic performance tests and establish the operating limits required by § 63.3892 within 5 years following the previous performance test. You must conduct the first periodic performance test before July 8, 2023, unless you are already required to complete periodic performance tests as a requirement of renewing your facility's operating permit under 40 CFR part 70 or 40 CFR part 71 and have conducted a performance test on or after July 8, 2018. Thereafter you must conduct a performance test no later than 5 years following the previous performance test. Operating limits must be confirmed or reestablished during each performance test. For any control device for which you are using the catalytic oxidizer control option at § 63.3967(b) and following the catalyst maintenance procedures in § 63.3967(b)(4), you are not required to conduct periodic testing control device performance testing as specified by this paragraph. For any control device for which instruments are used to continuously measure organic compound emissions, you are not required to conduct periodic control device performance testing as specified by this paragraph.
- (2) You must develop and begin implementing the work practice plan required by § 63.3893 no later than the compliance date specified in § 63.3883.
 - (3) You must complete the initial compliance demonstration for the initial compliance period according to the requirements of § 63.3961. The initial compliance period begins on the applicable compliance date specified in § 63.3883 and ends on the last day of the 12th month following the compliance date. If the compliance date occurs on any day other than the first day of a month, then the initial compliance period extends through the end of that month plus the next 12 months. You must determine the mass of organic HAP emissions and volume of coatings solids used each month and then calculate an organic HAP emission rate at the end of the initial compliance period. The initial compliance demonstration includes the results of emission capture system and add-on control device performance tests conducted according to §§ 63.3964, 63.3965, and 63.3966; results of liquid-liquid material balances conducted according to § 63.3961(j); calculations according to § 63.3961 and supporting documentation showing that during the initial compliance period the organic HAP emission rate was equal to or less than the applicable emission limit in § 63.3890; the operating limits established during the performance tests and the results of the continuous parameter monitoring required by § 63.3968; and documentation of whether you developed and implemented the work practice plan required by § 63.3893.
 - (4) For the initial compliance demonstration, you do not need to comply with the operating limits for the emission capture system and add-on control device required by § 63.3892 until after you have completed the initial performance tests specified in paragraph (a)(1) of this section. Instead, you must maintain a log detailing the operation and maintenance of the emission capture system, add-on control device, and continuous parameter monitors during the period between the compliance date and the performance test. You must begin complying with the operating limits established based on the initial performance tests specified in paragraph (a)(1) of this section for your affected source on the date you complete the performance tests. For magnet wire coating operations, you must begin complying with the operating limits for all identical or very similar magnet wire coating

machines on the date you complete the performance test of a representative magnet wire coating machine. The requirements in this paragraph (a)(4) do not apply to solvent recovery systems for which you conduct liquid-liquid material balances according to the requirements in § 63.3961(j).

- (b) **Existing affected sources.** For an existing affected source, you must meet the requirements of paragraphs (b)(1) through (3) of this section.
- (1) All emission capture systems, add-on control devices, and CPMS must be installed and operating no later than the applicable compliance date specified in § 63.3883. Except for magnet wire coating operations and solvent recovery systems for which you conduct liquid-liquid material balances according to § 63.3961(j), you must conduct according to the schedule in paragraphs (b)(1)(i) and (ii) of this section initial and periodic performance tests of each capture system and add-on control device according to the procedures in §§ 63.3964, 63.3965, and 63.3966 and establish the operating limits required by § 63.3892. For magnet wire coating operations, you may, with approval, conduct a performance test of a single magnet wire coating machine that represents identical or very similar magnet wire coating machines. For a solvent recovery system for which you conduct liquid-liquid material balances according to § 63.3961(j), you must initiate the first material balance no later than the compliance date specified in § 63.3883.
- (i) You must conduct the initial performance test and establish the operating limits required by § 63.3892 no later than 180 days after the applicable compliance date specified in § 63.3883.
- (ii) You must conduct periodic performance tests and establish the operating limits required by § 63.3892 within 5 years following the previous performance test. You must conduct the first periodic performance test before July 8, 2020, unless you are already required to complete periodic performance tests as a requirement of renewing your facility's operating permit under 40 CFR part 70 or 40 CFR part 71 and have conducted a performance test on or after July 8, 2018. Thereafter you must conduct a performance test no later than 5 years following the previous performance test. Operating limits must be confirmed or reestablished during each performance test. For any control device for which you are using the catalytic oxidizer control option at § 63.3967(b) and following the catalyst maintenance procedures in § 63.3967(b)(4), you are not required to conduct periodic testing control device performance testing as specified by this paragraph. For any control device for which instruments are used to continuously measure organic compound emissions, you are not required to conduct periodic control device performance testing as specified by this paragraph.
- (2) You must develop and begin implementing the work practice plan required by § 63.3893 no later than the compliance date specified in § 63.3883.
- (3) You must complete the initial compliance demonstration for the initial compliance period according to the requirements of § 63.3961. The initial compliance period begins on the applicable compliance date specified in § 63.3883 and ends on the last day of the 12th month following the compliance date. If the compliance date occurs on any day other than the first day of a month, then the initial compliance period extends through the end of that month plus the next 12 months. You must determine the mass of organic HAP emissions and volume of coatings solids used each month and then calculate an organic HAP emission rate at the end of the initial compliance period. The initial compliance demonstration includes the results of emission capture system and add-on control device performance tests conducted according to §§ 63.3964, 63.3965, and 63.3966; results of liquid-liquid material balances conducted according to § 63.3961(j); calculations according to § 63.3961 and supporting documentation showing that during the initial compliance period the organic HAP emission rate was equal to or less than the applicable emission limit in § 63.3890; the

operating limits established during the performance tests and the results of the continuous parameter monitoring required by § 63.3968; and documentation of whether you developed and implemented the work practice plan required by § 63.3893.

- (c) You are not required to conduct an initial performance test to determine capture efficiency or destruction efficiency of a capture system or control device if you receive approval to use the results of a performance test that has been previously conducted on that capture system or control device. Any such previous tests must meet the conditions described in paragraphs (c)(1) through (3) of this section. You are still required to conduct a periodic performance test according to the applicable requirements of paragraphs (a)(1)(ii) and (b)(2)(ii) of this section.
- (1) The previous test must have been conducted using the methods and conditions specified in this subpart.
 - (2) Either no process or equipment changes have been made since the previous test was performed or the owner or operator must be able to demonstrate that the results of the performance test, reliably demonstrate compliance despite process or equipment changes.
 - (3) Either the required operating parameters were established in the previous test or sufficient data were collected in the previous test to establish the required operating parameters.

[69 FR 157, Jan. 2, 2004, as amended at 85 FR 41142, July 8, 2020]

§ 63.3961 How do I demonstrate initial compliance?

- (a) You may use the emission rate with add-on controls option for any coating operation, for any group of coating operations in the affected source, or for all of the coating operations in the affected source. You may include both controlled and uncontrolled coating operations in a group for which you use this option. You must use either the compliant material option or the emission rate without add-on controls option for any coating operation in the affected source for which you do not use the emission rate with add-on controls option. To demonstrate initial compliance, the coating operation(s) for which you use the emission rate with add-on controls option must meet the applicable emission limitations in §§ 63.3890, 63.3892, and 63.3893. You must conduct a separate initial compliance demonstration for each general use, magnet wire, rubber-to-metal, and extreme performance fluoropolymer coating operation, unless you are demonstrating compliance with a predominant activity or facility-specific emission limit as provided in § 63.3890(c). If you are demonstrating compliance with a predominant activity or facility-specific emission limit as provided in § 63.4490(c), you must demonstrate that all coating operations included in the predominant activity determination or calculation of the facility-specific emission limit comply with that limit. You must meet all the requirements of this section. When calculating the organic HAP emission rate according to this section, do not include any coatings, thinners and/or other additives, or cleaning materials used on coating operations for which you use the compliant material option or the emission rate without add-on controls option. You do not need to redetermine the mass of organic HAP in coatings, thinners and/or other additives, or cleaning materials that have been reclaimed onsite (or reclaimed off-site if you have documentation showing that you received back the exact same materials that were sent off-site) and reused in the coatings operation(s) for which you use the emission rate with add-on controls option. If you use coatings, thinners and/or other additives, or cleaning materials that have been reclaimed on-site, the amount of each used in a month may be reduced by the amount of each that is reclaimed. That is, the amount used may be calculated as the amount consumed to account for materials that are reclaimed.

- (b) **Compliance with operating limits.** Except as provided in § 63.3960(a)(4), and except for solvent recovery systems for which you conduct liquid-liquid material balances according to the requirements of paragraph (j) of this section, you must establish and demonstrate continuous compliance during the initial compliance period with the operating limits required by § 63.3892, using the procedures specified in §§ 63.3967 and 63.3968.
- (c) **Compliance with work practice requirements.** You must develop, implement, and document your implementation of the work practice plan required by § 63.3893 during the initial compliance period, as specified in § 63.3930.
- (d) **Compliance with emission limits.** You must follow the procedures in paragraphs (e) through (n) of this section to demonstrate compliance with the applicable emission limit in § 63.3890 for each affected source in each subcategory.
- (e) **Determine the mass fraction of organic HAP, density, volume used, and volume fraction of coating solids.** Follow the procedures specified in § 63.3951(a) through (d) to determine the mass fraction of organic HAP, density, and volume of each coating, thinner and/or other additive, and cleaning material used during each month; and the volume fraction of coating solids for each coating used during each month.
- (f) **Calculate the total mass of organic HAP emissions before add-on controls.** Using Equation 1 of § 63.3951, calculate the total mass of organic HAP emissions before add-on controls from all coatings, thinners and/or other additives, and cleaning materials used during each month in the coating operation or group of coating operations for which you use the emission rate with add-on controls option.
- (g) **Calculate the organic HAP emission reduction for each controlled coating operation.** Determine the mass of organic HAP emissions reduced for each controlled coating operation during each month. The emission reduction determination quantifies the total organic HAP emissions that pass through the emission capture system and are destroyed or removed by the add-on control device. Use the procedures in paragraph (h) of this section to calculate the mass of organic HAP emission reduction for each controlled coating operation using an emission capture system and add-on control device other than a solvent recovery system for which you conduct liquid-liquid material balances. For each controlled coating operation using a solvent recovery system for which you conduct a liquid-liquid material balance, use the procedures in paragraph (j) of this section to calculate the organic HAP emission reduction.
- (h) **Calculate the organic HAP emission reduction for each controlled coating operation not using liquid-liquid material balance.** Use Equation 1 of this section to calculate the organic HAP emission reduction for each controlled coating operation using an emission capture system and add-on control device other than a solvent recovery system for which you conduct liquid-liquid material balances. The calculation applies the emission capture system efficiency and add-on control device efficiency to the mass of organic HAP contained in the coatings, thinners and/or other additives, and cleaning materials that are used in the coating operation served by the emission capture system and add-on control device during each month. You must assume zero efficiency for the emission capture system and add-on control device for any period of time a deviation specified in § 63.3963(c) or (d) occurs in the controlled coating operation, including a deviation during a period of startup, shutdown, or malfunction, unless you have other data indicating the actual efficiency of the emission capture system and add-on control device and the use of these data is approved by the Administrator. Equation 1 of this section treats the materials used during such a deviation as if they were used on an uncontrolled coating operation for the time period of the deviation.

$$H_C = (A_C + B_C + C_C - R_W - H_{UNC}) \left(\frac{CE}{100} \times \frac{DRE}{100} \right) \quad (\text{Eq. 1})$$

Where:

H_C = Mass of organic HAP emission reduction for the controlled coating operation during the month, kg.

A_C = Total mass of organic HAP in the coatings used in the controlled coating operation during the month, kg, as calculated in Equation 1A of this section.

B_C = Total mass of organic HAP in the thinners and/or other additives used in the controlled coating operation during the month, kg, as calculated in Equation 1B of this section.

C_C = Total mass of organic HAP in the cleaning materials used in the controlled coating operation during the month, kg, as calculated in Equation 1C of this section.

R_W = Total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste TSDF for treatment or disposal during the compliance period, kg, determined according to § 63.3951(e)(4). (You may assign a value of zero to R_W if you do not wish to use this allowance.)

H_{UNC} = Total mass of organic HAP in the coatings, thinners and/or other additives, and cleaning materials used during all deviations specified in § 63.3963(c) and (d) that occurred during the month in the controlled coating operation, kg, as calculated in Equation 1D of this section.

CE = Capture efficiency of the emission capture system vented to the add-on control device, percent. Use the test methods and procedures specified in §§ 63.3964 and 63.3965 to measure and record capture efficiency.

DRE = Organic HAP destruction or removal efficiency of the add-on control device, percent. Use the test methods and procedures in §§ 63.3964 and 63.3966 to measure and record the organic HAP destruction or removal efficiency.

- (1) Calculate the mass of organic HAP in the coatings used in the controlled coating operation, kg (lb), using Equation 1A of this section:

$$A_C = \sum_{i=1}^m (Vol_{c,i}) (D_{c,i}) (W_{c,i}) \quad (\text{Eq. 1A})$$

Where:

A_C = Total mass of organic HAP in the coatings used in the controlled coating operation during the month, kg.

$Vol_{c,i}$ = Total volume of coating, i, used during the month, liters.

$D_{c,i}$ = Density of coating, i, kg per liter.

$W_{c,i}$ = Mass fraction of organic HAP in coating, i, kg per kg. For reactive adhesives as defined in § 63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to subpart PPPP of this part.

m = Number of different coatings used.

- (2) Calculate the mass of organic HAP in the thinners and/or other additives used in the controlled coating operation, kg (lb), using Equation 1B of this section:

$$B_C = \sum_{i=1}^n \{Vol_{t,i}\} \{D_{t,i}\} \{W_{t,i}\} \quad (\text{Eq. 1B})$$

Where:

B_C = Total mass of organic HAP in the thinners and/or other additives used in the controlled coating operation during the month, kg.

$Vol_{t,j}$ = Total volume of thinner and/or other additive, j, used during the month, liters.

$D_{t,j}$ = Density of thinner and/or other additive, j, kg per liter.

$W_{t,j}$ = Mass fraction of organic HAP in thinner and/or other additive, j, kg per kg. For reactive adhesives as defined in § 63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to subpart PPPP of this part.

n = Number of different thinners and/or other additives used.

- (3) Calculate the mass of organic HAP in the cleaning materials used in the controlled coating operation during the month, kg (lb), using Equation 1C of this section:

$$C_C = \sum_{k=1}^p \{Vol_{s,k}\} \{D_{s,k}\} \{W_{s,k}\} \quad (\text{Eq. 1C})$$

Where:

C_C = Total mass of organic HAP in the cleaning materials used in the controlled coating operation during the month, kg.

$Vol_{s,k}$ = Total volume of cleaning material, k, used during the month, liters.

$D_{s,k}$ = Density of cleaning material, k, kg per liter.

$W_{s,k}$ = Mass fraction of organic HAP in cleaning material, k, kg per kg.

p = Number of different cleaning materials used.

- (4) Calculate the mass of organic HAP in the coatings, thinners and/or other additives, and cleaning materials used in the controlled coating operation during deviations specified in § 63.3963(c) and (d), using Equation 1D of this section:

$$H_{UNC} = \sum_{h=1}^q (Vol_h)(D_h)(W_h) \quad (\text{Eq. 1D})$$

Where:

H_{UNC} = Total mass of organic HAP in the coatings, thinners and/or other additives, and cleaning materials used during all deviations specified in § 63.3963(c) and (d) that occurred during the month in the controlled coating operation, kg.

Vol_h = Total volume of coating, thinner and/or other additive, or cleaning material, h, used in the controlled coating operation during deviations, liters.

D_h = Density of coating, thinner and/or other additives, or cleaning material, h, kg per liter.

W_h = Mass fraction of organic HAP in coating, thinner and/or other additives, or cleaning material, h, kg organic HAP per kg coating. For reactive adhesives as defined in § 63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to subpart PPPP of this part.

q = Number of different coatings, thinners and/or other additives, and cleaning materials used.

(i) [Reserved]

(j) **Calculate the organic HAP emission reduction for each controlled coating operation using liquid-liquid material balances.** For each controlled coating operation using a solvent recovery system for which you conduct liquid-liquid material balances, calculate the organic HAP emission reduction by applying the volatile organic matter collection and recovery efficiency to the mass of organic HAP contained in the coatings, thinners and/or other additives, and cleaning materials that are used in the coating operation controlled by the solvent recovery system during each month. Perform a liquid-liquid material balance for each month as specified in paragraphs (j)(1) through (6) of this section. Calculate the mass of organic HAP emission reduction by the solvent recovery system as specified in paragraph (j)(7) of this section.

- (1) For each solvent recovery system, install, calibrate, maintain, and operate according to the manufacturer's specifications, a device that indicates the cumulative amount of volatile organic matter recovered by the solvent recovery system each month. The device must be initially certified by the manufacturer to be accurate to within ± 2.0 percent of the mass of volatile organic matter recovered.
- (2) For each solvent recovery system, determine the mass of volatile organic matter recovered for the month, based on measurement with the device required in paragraph (j)(1) of this section.
- (3) Determine the mass fraction of volatile organic matter for each coating, thinner and/or other additive, and cleaning material used in the coating operation controlled by the solvent recovery system during the month, kg volatile organic matter per kg coating. You may determine the volatile organic matter mass fraction using EPA Method 24 of 40 CFR part 60, appendix A-7, ASTM D2369-10 (Reapproved 2015)^e (incorporated by reference, see § 63.14), or an EPA approved

alternative method, or you may use information provided by the manufacturer or supplier of the coating. In the event of any inconsistency between information provided by the manufacturer or supplier and the results of EPA Method 24 of 40 CFR part 60, appendix A-7, ASTM D2369-10 (Reapproved 2015)^e, or an approved alternative method, the test method results will take precedence unless, after consultation you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

- (4) Determine the density of each coating, thinner and/or other additive, and cleaning material used in the coating operation controlled by the solvent recovery system during the month, kg per liter, according to § 63.3951(c).
- (5) Measure the volume of each coating, thinner and/or other additive, and cleaning material used in the coating operation controlled by the solvent recovery system during the month, liters.
- (6) Each month, calculate the solvent recovery system's volatile organic matter collection and recovery efficiency, using Equation 2 of this section:

$$R_V = 100 \frac{M_{VR}}{\sum_{i=1}^m Vol_i D_i WV_{c,i} + \sum_{j=1}^n Vol_j D_j WV_{t,j} + \sum_{k=1}^p Vol_k D_k WV_{s,k}} \quad (\text{Eq. 2})$$

Where:

R_V = Volatile organic matter collection and recovery efficiency of the solvent recovery system during the month, percent.

M_{VR} = Mass of volatile organic matter recovered by the solvent recovery system during the month, kg.

Vol_i = Volume of coating, i, used in the coating operation controlled by the solvent recovery system during the month, liters.

D_i = Density of coating, i, kg per liter.

$WV_{c,i}$ = Mass fraction of volatile organic matter for coating, i, kg volatile organic matter per kg coating. For reactive adhesives as defined in § 63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to subpart P of this part.

Vol_j = Volume of thinner and/or other additive, j, used in the coating operation controlled by the solvent recovery system during the month, liters.

D_j = Density of thinner and/or other additive, j, kg per liter.

$WV_{t,j}$ = Mass fraction of volatile organic matter for thinner and/or other additive, j, kg volatile organic matter per kg thinner and/or other additive. For reactive adhesives as defined in § 63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to subpart P of this part.

Vol_k = Volume of cleaning material, k, used in the coating operation controlled by the solvent recovery system during the month, liters.

D_k = Density of cleaning material, k, kg per liter.

$WV_{s,k}$ = Mass fraction of volatile organic matter for cleaning material, k, kg volatile organic matter per kg cleaning material.

m = Number of different coatings used in the coating operation controlled by the solvent recovery system during the month.

n = Number of different thinners and/or other additives used in the coating operation controlled by the solvent recovery system during the month.

p = Number of different cleaning materials used in the coating operation controlled by the solvent recovery system during the month.

- (7) Calculate the mass of organic HAP emission reduction for the coating operation controlled by the solvent recovery system during the month, using Equation 3 of this section and according to paragraphs (j)(7)(i) through (iii) of this section:

$$H_{CSR} = (A_{CSR} + B_{CSR} + C_{CSR}) \left(\frac{R_V}{100} \right) \quad (\text{Eq. 3})$$

Where:

H_{CSR} = Mass of organic HAP emission reduction for the coating operation controlled by the solvent recovery system using a liquid-liquid material balance during the month, kg.

A_{CSR} = Total mass of organic HAP in the coatings used in the coating operation controlled by the solvent recovery system, kg, calculated using Equation 3A of this section.

B_{CSR} = Total mass of organic HAP in the thinners and/or other additives used in the coating operation controlled by the solvent recovery system, kg, calculated using Equation 3B of this section.

C_{CSR} = Total mass of organic HAP in the cleaning materials used in the coating operation controlled by the solvent recovery system, kg, calculated using Equation 3C of this section.

R_V = Volatile organic matter collection and recovery efficiency of the solvent recovery system, percent, from Equation 2 of this section.

- (i) Calculate the mass of organic HAP in the coatings used in the coating operation controlled by the solvent recovery system, kg, using Equation 3A of this section.

$$A_{CSR} = \sum_{i=1}^m (Vol_{c,i}) (D_{c,i}) (W_{c,i}) \quad (\text{Eq. 3A})$$

Where:

A_{CSR} = Total mass of organic HAP in the coatings used in the coating operation controlled by the solvent recovery system during the month, kg.

$Vol_{c,i}$ = Total volume of coating, i, used during the month in the coating operation controlled by the solvent recovery system, liters.

$D_{c,i}$ = Density of coating, i, kg per liter.

$W_{c,i}$ = Mass fraction of organic HAP in coating, i, kg organic HAP per kg coating. For reactive adhesives as defined in § 63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to subpart PPPP of this part.

m = Number of different coatings used.

- (ii) Calculate the mass of organic HAP in the thinners and/or other additives used in the coating operation controlled by the solvent recovery system, kg, using Equation 3B of this section:

$$B_{CSR} = \sum_{i=1}^n \{Vol_{t,i}\} \{D_{t,i}\} \{W_{t,i}\} \quad (\text{Eq. 3B})$$

Where:

B_{CSR} = Total mass of organic HAP in the thinners and/or other additives used in the coating operation controlled by the solvent recovery system during the month, kg.

$Vol_{t,j}$ = Total volume of thinner and/or other additive, j, used during the month in the coating operation controlled by the solvent recovery system, liters.

$D_{t,j}$ = Density of thinner and/or other additive, j, kg per liter.

$W_{t,j}$ = Mass fraction of organic HAP in thinner and/or other additive, j, kg lb organic HAP per kg thinner and/or other additive. For reactive adhesives as defined in § 63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to subpart PPPP of this part.

n = Number of different thinners and/or other additives used.

- (iii) Calculate the mass of organic HAP in the cleaning materials used in the coating operation controlled by the solvent recovery system during the month, kg, using Equation 3C of this section:

$$C_{CSR} = \sum_{k=1}^p \{Vol_{c,k}\} \{D_{c,k}\} \{W_{c,k}\} \quad (\text{Eq. 3C})$$

Where:

C_{CSR} = Total mass of organic HAP in the cleaning materials used in the coating operation controlled by the solvent recovery system during the month, kg.

$Vol_{s,k}$ = Total volume of cleaning material, k, used during the month in the coating operation controlled by the solvent recovery system, liters.

$D_{s,k}$ = Density of cleaning material, k, kg per liter.

$W_{s,k}$ = Mass fraction of organic HAP in cleaning material, k, kg organic HAP per kg cleaning material.

p = Number of different cleaning materials used.

(k) **Calculate the total volume of coating solids used.** Determine the total volume of coating solids used, liters, which is the combined volume of coating solids for all the coatings used during each month in the coating operation or group of coating operations for which you use the emission rate with add-on controls option, using Equation 2 of § 63.3951.

(l) **Calculate the mass of organic HAP emissions for each month.** Determine the mass of organic HAP emissions, kg, during each month, using Equation 4 of this section:

$$H_{HAP} = H_e - \sum_{i=1}^q (H_{c,i}) - \sum_{j=1}^r (H_{CSR,j}) \quad (\text{Eq. 4})$$

where:

H_{HAP} = Total mass of organic HAP emissions for the month, kg.

H_e = Total mass of organic HAP emissions before add-on controls from all the coatings, thinners and/or other additives, and cleaning materials used during the month, kg, determined according to paragraph (f) of this section.

$H_{c,i}$ = Total mass of organic HAP emission reduction for controlled coating operation, i, not using a liquid-liquid material balance, during the month, kg, from Equation 1 of this section.

$H_{CSR,j}$ = Total mass of organic HAP emission reduction for coating operation, j, controlled by a solvent recovery system using a liquid-liquid material balance, during the month, kg, from Equation 3 of this section.

q = Number of controlled coating operations not controlled by a solvent recovery system using a liquid-liquid material balance.

r = Number of coating operations controlled by a solvent recovery system using a liquid-liquid material balance.

(m) **Calculate the organic HAP emission rate for the compliance period.** Determine the organic HAP emission rate for the compliance period, kg (lb) of organic HAP emitted per liter (gal) coating solids used, using Equation 5 of this section:

$$H_{\text{annual}} = \frac{\sum_{y=1}^n H_{\text{HAP},y}}{\sum_{y=1}^n V_{\text{st},y}} \quad (\text{Eq. 5})$$

Where:

H_{annual} = Organic HAP emission rate for the compliance period, kg organic HAP emitted per liter coating solids used.

$H_{\text{HAP},y}$ = Organic HAP emissions for month, y , kg, determined according to Equation 4 of this section.

$V_{\text{st},y}$ = Total volume of coating solids used during month, y , liters, from Equation 2 of § 63.3951.

y = Identifier for months.

n = Number of full or partial months in the compliance period (for the initial compliance period, n equals 12 if the compliance date falls on the first day of a month; otherwise n equals 13; for all following compliance periods, n equals 12).

(n) **Compliance demonstration.** The organic HAP emission rate for the initial compliance period, calculated using Equation 5 of this section, must be less than or equal to the applicable emission limit for each subcategory in § 63.3890 or the predominant activity or facility-specific emission limit allowed in § 63.3890(c). You must keep all records as required by §§ 63.3930 and 63.3931. As part of the notification of compliance status required by § 63.3910, you must identify the coating operation(s) for which you used the emission rate with add-on controls option and submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the initial compliance period because the organic HAP emission rate was less than or equal to the applicable emission limit in § 63.3890, and you achieved the operating limits required by § 63.3892 and the work practice standards required by § 63.3893.

[69 FR 157, Jan. 2, 2004, as amended at 85 FR 41143, July 8, 2020]

§ 63.3962 [Reserved]

§ 63.3963 How do I demonstrate continuous compliance with the emission limitations?

(a) To demonstrate continuous compliance with the applicable emission limit in § 63.3890, the organic HAP emission rate for each compliance period, determined according to the procedures in § 63.3961, must be equal to or less than the applicable emission limit in § 63.3890. A compliance period consists of 12 months. Each month after the end of the initial compliance period described in § 63.3960 is the end of a compliance period consisting of that month and the preceding 11 months. You must perform the calculations in § 63.3961 on a monthly basis using data from the previous 12 months of operation. If you

are complying with a facility-specific emission limit under § 63.3890(c), you must also perform the calculation using Equation 1 in § 63.3890(c)(2) on a monthly basis using the data from the previous 12 months of operation.

- (b) If the organic HAP emission rate for any 12-month compliance period exceeded the applicable emission limit in § 63.3890, this is a deviation from the emission limitation for that compliance period that must be reported as specified in §§ 63.3910(c)(6) and 63.3920(a)(7).
- (c) You must demonstrate continuous compliance with each operating limit required by § 63.3892 that applies to you, as specified in Table 1 to this subpart, when the coating line is in operation.
 - (1) If an operating parameter is out of the allowed range specified in Table 1 to this subpart, this is a deviation from the operating limit that must be reported as specified in §§ 63.3910(c)(6) and 63.3920(a)(7).
 - (2) If an operating parameter deviates from the operating limit specified in Table 1 to this subpart, then you must assume that the emission capture system and add-on control device were achieving zero efficiency during the time period of the deviation, unless you have other data indicating the actual efficiency of the emission capture system and add-on control device and the use of these data is approved by the Administrator.
- (d) You must meet the requirements for bypass lines in § 63.3968(b) for controlled coating operations for which you do not conduct liquid-liquid material balances. If any bypass line is opened and emissions are diverted to the atmosphere when the coating operation is running, this is a deviation that must be reported as specified in §§ 63.3910(c)(6) and 63.3920(a)(7). For the purposes of completing the compliance calculations specified in §§ 63.3961(h), you must treat the materials used during a deviation on a controlled coating operation as if they were used on an uncontrolled coating operation for the time period of the deviation as indicated in Equation 1 of § 63.3961.
- (e) You must demonstrate continuous compliance with the work practice standards in § 63.3893. If you did not develop a work practice plan, or you did not implement the plan, or you did not keep the records required by § 63.3930(k)(8), this is a deviation from the work practice standards that must be reported as specified in §§ 63.3910(c)(6) and 63.3920(a)(7).
- (f) As part of each semiannual compliance report required in § 63.3920, you must identify the coating operation(s) for which you used the emission rate with add-on controls option. If there were no deviations from the emission limits in § 63.3890, the operating limits in § 63.3892, and the work practice standards in § 63.3893, submit a statement that you were in compliance with the emission limitations during the reporting period because the organic HAP emission rate for each compliance period was less than or equal to the applicable emission limit in § 63.3890, and you achieved the operating limits required by § 63.3892 and the work practice standards required by § 63.3893 during each compliance period.
- (g)-(h) [Reserved]
- (i) On and after January 5, 2021, deviations that occur due to malfunction of the emission capture system, add-on control device, or coating operation that may affect emission capture or control device efficiency are required to operate in accordance with § 63.3900(b). The Administrator will determine whether the deviations are violations according to the provisions in § 63.3900(b).
- (j) You must maintain records as specified in §§ 63.3930 and 63.3931.

[69 FR 157, Jan. 2, 2004, as amended at 71 FR 20465, Apr. 20, 2006; 85 FR 41143, July 8, 2020]

§ 63.3964 What are the general requirements for performance tests?

- (a) Before January 5, 2021, you must conduct each performance test required by § 63.3960 according to the requirements in § 63.7(e)(1) and under the conditions in this section, unless you obtain a waiver of the performance test according to the provisions in § 63.7(h). On and after January 5, 2021, you must conduct each performance test required by § 63.3960 according to the requirements in this section unless you obtain a waiver of the performance test according to the provisions in § 63.7(h).
 - (1) **Representative coating operation operating conditions.** You must conduct the performance test under representative operating conditions for the coating operation. Operations during periods of startup, shutdown, or periods of nonoperation do not constitute representative conditions for purposes of conducting a performance test. The owner or operator may not conduct performance tests during periods of malfunction. You must record the process information that is necessary to document operating conditions during the test and explain why the conditions represent normal operation. Upon request, you must make available to the Administrator such records as may be necessary to determine the conditions of performance tests.
 - (2) **Representative emission capture system and add-on control device operating conditions.** You must conduct the performance test when the emission capture system and add-on control device are operating at a representative flow rate, and the add-on control device is operating at a representative inlet concentration. You must record information that is necessary to document emission capture system and add-on control device operating conditions during the test and explain why the conditions represent normal operation.
- (b) You must conduct each performance test of an emission capture system according to the requirements in § 63.3965. You must conduct each performance test of an add-on control device according to the requirements in § 63.3966.

[69 FR 157, Jan. 2, 2004, as amended at 85 FR 41143, July 8, 2020]

§ 63.3965 How do I determine the emission capture system efficiency?

You must use the procedures and test methods in this section to determine capture efficiency as part of each performance test required by § 63.3960.

- (a) **Assuming 100 percent capture efficiency.** You may assume the capture system efficiency is 100 percent if both of the conditions in paragraphs (a)(1) and (2) of this section are met:
 - (1) The capture system meets the criteria in Method 204 of appendix M to 40 CFR part 51 for a PTE and directs all the exhaust gases from the enclosure to an add-on control device.
 - (2) All coatings, thinners and/or other additives, and cleaning materials used in the coating operation are applied within the capture system; coating solvent flash-off, curing, and drying occurs within the capture system; and the removal or evaporation of cleaning materials from the surfaces they are applied to occurs within the capture system. For example, this criterion is not met if parts enter the open shop environment when being moved between a spray booth and a curing oven.
- (b) **Measuring capture efficiency.** If the capture system does not meet both of the criteria in paragraphs (a)(1) and (2) of this section, then you must use one of the three protocols described in paragraphs (c), (d), and (e) of this section to measure capture efficiency. The capture efficiency measurements use TVH capture efficiency as a surrogate for organic HAP capture efficiency. For the protocols in paragraphs (c) and (d) of

this section, the capture efficiency measurement must consist of three test runs. Each test run must be at least 3 hours duration or the length of a production run, whichever is longer, up to 8 hours. For the purposes of this test, a production run means the time required for a single part to go from the beginning to the end of the production, which includes surface preparation activities and drying and curing time.

- (c) **Liquid-to-uncaptured-gas protocol using a temporary total enclosure or building enclosure.** The liquid-to-uncaptured-gas protocol compares the mass of liquid TVH in materials used in the coating operation to the mass of TVH emissions not captured by the emission capture system. Use a temporary total enclosure or a building enclosure and the procedures in paragraphs (c)(1) through (6) of this section to measure emission capture system efficiency using the liquid-to-uncaptured-gas protocol.
- (1) Either use a building enclosure or construct an enclosure around the coating operation where coatings, thinners and/or other additives, and cleaning materials are applied, and all areas where emissions from these applied coatings and materials subsequently occur, such as flash-off, curing, and drying areas. The areas of the coating operation where capture devices collect emissions for routing to an add-on control device, such as the entrance and exit areas of an oven or spray booth, must also be inside the enclosure. The enclosure must meet the applicable definition of a temporary total enclosure or building enclosure in Method 204 of appendix M to 40 CFR part 51.
 - (2) Use Method 204A or 204F of appendix M to 40 CFR part 51 to determine the mass fraction of TVH liquid input from each coating, thinner and/or other additive, and cleaning material used in the coating operation during each capture efficiency test run. To make the determination, substitute TVH for each occurrence of the term VOC in the methods.
 - (3) Use Equation 1 of this section to calculate the total mass of TVH liquid input from all the coatings, thinners and/or other additives, and cleaning materials used in the coating operation during each capture efficiency test run:

$$TVH_{used} = \sum_{i=1}^n (TVH_i)(Vol_i)(D_i) \quad (Eq. 1)$$

Where:

TVH_{used} = Mass of liquid TVH in materials used in the coating operation during the capture efficiency test run, kg.

TVH_i = Mass fraction of TVH in coating, thinner and/or other additive, or cleaning material, i, that is used in the coating operation during the capture efficiency test run, kg TVH per kg material.

Vol_i = Total volume of coating, thinner and/or other additive, or cleaning material, i, used in the coating operation during the capture efficiency test run, liters.

D_i = Density of coating, thinner and/or other additive, or cleaning material, i, kg material per liter material.

n = Number of different coatings, thinners and/or other additives, and cleaning materials used in the coating operation during the capture efficiency test run.

- (4) Use Method 204D or 204E of appendix M to 40 CFR part 51 to measure the total mass, kg, of TVH emissions that are not captured by the emission capture system. They are measured as they exit the temporary total enclosure or building enclosure during each capture efficiency test run. To make the measurement, substitute TVH for each occurrence of the term VOC in the methods.
 - (i) Use Method 204D of appendix M to 40 CFR part 51 if the enclosure is a temporary total enclosure.
 - (ii) Use Method 204E of appendix M to 40 CFR 51 if the enclosure is a building enclosure. During the capture efficiency measurement, all organic compound emitting operations inside the building enclosure, other than the coating operation for which capture efficiency is being determined, must be shut down, but all fans and blowers must be operating normally.
- (5) For each capture efficiency test run, determine the percent capture efficiency of the emission capture system using Equation 2 of this section:

$$CE = \frac{(TVH_{used} - TVH_{uncaptured})}{TVH_{used}} \times 100 \quad (\text{Eq. 2})$$

Where:

CE = Capture efficiency of the emission capture system vented to the add-on control device, percent.

TVH_{used} = Total mass of TVH liquid input used in the coating operation during the capture efficiency test run, kg.

TVH_{uncaptured} = Total mass of TVH that is not captured by the emission capture system and that exits from the temporary total enclosure or building enclosure during the capture efficiency test run, kg.

- (6) Determine the capture efficiency of the emission capture system as the average of the capture efficiencies measured in the three test runs.
- (d) **Gas-to-gas protocol using a temporary total enclosure or a building enclosure.** The gas-to-gas protocol compares the mass of TVH emissions captured by the emission capture system to the mass of TVH emissions not captured. Use a temporary total enclosure or a building enclosure and the procedures in paragraphs (d)(1) through (5) of this section to measure emission capture system efficiency using the gas-to-gas protocol.
 - (1) Either use a building enclosure or construct an enclosure around the coating operation where coatings, thinners and/or other additives, and cleaning materials are applied, and all areas where emissions from these applied coatings and materials subsequently occur, such as flash-off, curing, and drying areas. The areas of the coating operation where capture devices collect emissions generated by the coating operation for routing to an add-on control device, such as the entrance and exit areas of an oven or a spray booth, must also be inside the enclosure. The enclosure must meet the applicable definition of a temporary total enclosure or building enclosure in Method 204 of appendix M to 40 CFR part 51.

- (2) Use Method 204B or 204C of appendix M to 40 CFR part 51 to measure the total mass, kg, of TVH emissions captured by the emission capture system during each capture efficiency test run as measured at the inlet to the add-on control device. To make the measurement, substitute TVH for each occurrence of the term VOC in the methods.
 - (i) The sampling points for the Method 204B or 204C measurement must be upstream from the add-on control device and must represent total emissions routed from the capture system and entering the add-on control device.
 - (ii) If multiple emission streams from the capture system enter the add-on control device without a single common duct, then the emissions entering the add-on control device must be simultaneously measured in each duct and the total emissions entering the add-on control device must be determined.
- (3) Use Method 204D or 204E of appendix M to 40 CFR part 51 to measure the total mass, kg, of TVH emissions that are not captured by the emission capture system; they are measured as they exit the temporary total enclosure or building enclosure during each capture efficiency test run. To make the measurement, substitute TVH for each occurrence of the term VOC in the methods.
 - (i) Use Method 204D of appendix M to 40 CFR part 51 if the enclosure is a temporary total enclosure.
 - (ii) Use Method 204E of appendix M to 40 CFR part 51 if the enclosure is a building enclosure. During the capture efficiency measurement, all organic compound emitting operations inside the building enclosure, other than the coating operation for which capture efficiency is being determined, must be shut down, but all fans and blowers must be operating normally.
- (4) For each capture efficiency test run, determine the percent capture efficiency of the emission capture system using Equation 3 of this section:

$$CE = \frac{TVH_{\text{captured}}}{[TVH_{\text{captured}} + TVH_{\text{uncaptured}}]} \times 100 \quad (\text{Eq. 3})$$

Where:

CE = Capture efficiency of the emission capture system vented to the add-on control device, percent.

TVH_{captured} = Total mass of TVH captured by the emission capture system as measured at the inlet to the add-on control device during the emission capture efficiency test run, kg.

$TVH_{\text{uncaptured}}$ = Total mass of TVH that is not captured by the emission capture system and that exits from the temporary total enclosure or building enclosure during the capture efficiency test run, kg.

- (5) Determine the capture efficiency of the emission capture system as the average of the capture efficiencies measured in the three test runs.
- (e) **Alternative capture efficiency protocol.** As an alternative to the procedures specified in paragraphs (c) and (d) of this section and subject to the approval of the Administrator, you may determine capture efficiency using any other capture efficiency protocol and test methods that satisfy the criteria of either the DQO or LCL approach as described in appendix A to subpart KK of this part.

[69 FR 157, Jan. 2, 2004, as amended at 85 FR 41143, July 8, 2020]

§ 63.3966 How do I determine the add-on control device emission destruction or removal efficiency?

You must use the procedures and test methods in this section to determine the add-on control device emission destruction or removal efficiency as part of the performance test required by § 63.3960. For each performance test, you must conduct three test runs as specified in § 63.7(e)(3) and each test run must last at least 1 hour. If the source is a magnet wire coating machine, you may use the procedures in section 3.0 of appendix A to this subpart as an alternative.

- (a) For all types of add-on control devices, use the test methods specified in paragraphs (a)(1) through (5) of this section.
 - (1) Use Method 1 or 1A of appendix A to 40 CFR part 60, as appropriate, to select sampling sites and velocity traverse points.
 - (2) Use Method 2, 2A, 2C, 2D, 2F, or 2G of appendix A to 40 CFR part 60, as appropriate, to measure gas volumetric flow rate.
 - (3) Use Method 3, 3A, or 3B of appendix A to 40 CFR part 60, as appropriate, for gas analysis to determine dry molecular weight.
 - (4) Use Method 4 of appendix A to 40 CFR part 60, to determine stack gas moisture.
 - (5) Methods for determining gas volumetric flow rate, dry molecular weight, and stack gas moisture must be performed, as applicable, during each test run.
- (b) Measure total gaseous organic mass emissions as carbon at the inlet and outlet of the add-on control device simultaneously, using either EPA Method 25 or 25A of appendix A-7 to 40 CFR part 60.
 - (1) Use EPA Method 25 of appendix A-7 to 40 CFR part 60 if the add-on control device is an oxidizer and you expect the total gaseous organic concentration as carbon to be more than 50 parts per million (ppm) at the control device outlet.
 - (2) Use EPA Method 25A of appendix A-7 to 40 CFR part 60 if the add-on control device is an oxidizer and you expect the total gaseous organic concentration as carbon to be 50 ppm or less at the control device outlet.
 - (3) Use EPA Method 25A of appendix A-7 to 40 CFR part 60 if the add-on control device is not an oxidizer.
 - (4) You may use EPA Method 18 of appendix A-6 to 40 CFR part 60 to subtract methane emissions from measured total gaseous organic mass emissions as carbon.
- (c) If two or more add-on control devices are used for the same emission stream, then you must measure emissions at the outlet to the atmosphere of each device. For example, if one add-on control device is a concentrator with an outlet to the atmosphere for the high-volume dilute stream that has been treated by the concentrator, and a second add-on control device is an oxidizer with an outlet to the atmosphere for the low-volume concentrated stream that is treated with the oxidizer, you must measure emissions at the outlet of the oxidizer and the high volume dilute stream outlet of the concentrator.

- (d) For each test run, determine the total gaseous organic emissions mass flow rates for the inlet and the outlet of the add-on control device, using Equation 1 of this section. If there is more than one inlet or outlet to the add-on control device, you must calculate the total gaseous organic mass flow rate using Equation 1 of this section for each inlet and each outlet and then total all of the inlet emissions and total all of the outlet emissions:

$$M_f = Q_{sd} C_c (12) (0.0416) (10^{-6}) \quad (\text{Eq. 1})$$

Where:

M_f = Total gaseous organic emissions mass flow rate, kg per hour (h).

C_c = Concentration of organic compounds as carbon in the vent gas, as determined by Method 25 or Method 25A, parts per million by volume (ppmv), dry basis.

Q_{sd} = Volumetric flow rate of gases entering or exiting the add-on control device, as determined by Method 2, 2A, 2C, 2D, 2F, or 2G, dry standard cubic meters/hour (dscm/h).

0.0416 = Conversion factor for molar volume, kg-moles per cubic meter (mol/m^3) (@ 293 Kelvin (K) and 760 millimeters of mercury (mmHg).

- (e) For each test run, determine the add-on control device organic emissions destruction or removal efficiency, using Equation 2 of this section:

$$\text{DRE} = \frac{M_{fi} - M_{fo}}{M_{fi}} \times 100 \quad (\text{Eq. 2})$$

Where:

DRE = Organic emissions destruction or removal efficiency of the add-on control device, percent.

M_{fi} = Total gaseous organic emissions mass flow rate at the inlet(s) to the add-on control device, using Equation 1 of this section, kg/h.

M_{fo} = Total gaseous organic emissions mass flow rate at the outlet(s) of the add-on control device, using Equation 1 of this section, kg/h.

- (f) Determine the emission destruction or removal efficiency of the add-on control device as the average of the efficiencies determined in the three test runs and calculated in Equation 2 of this section.

[69 FR 157, Jan. 2, 2004, as amended at 85 FR 41143, July 8, 2020]

§ 63.3967 How do I establish the emission capture system and add-on control device operating limits during the performance test?

During the performance test required by § 63.3960 and described in §§ 63.3964, 63.3965, and 63.3966, you must establish the operating limits required by § 63.3892 according to this section, unless you have received approval for alternative monitoring and operating limits under § 63.8(f) as specified in § 63.3892.

- (a) **Thermal oxidizers.** If your add-on control device is a thermal oxidizer, establish the operating limits according to paragraphs (a)(1) and (2) of this section.
- (1) During performance tests, you must monitor and record the combustion temperature at least once every 15 minutes during each of the three test runs. You must monitor the temperature in the firebox of the thermal oxidizer or immediately downstream of the firebox before any substantial heat exchange occurs.
 - (2) For each performance test, use the data collected during the performance test to calculate and record the average combustion temperature maintained during the performance test. This average combustion temperature is the minimum operating limit for your thermal oxidizer.
- (b) **Catalytic oxidizers.** If your add-on control device is a catalytic oxidizer, establish the operating limits according to either paragraphs (b)(1) and (2) or paragraphs (b)(3) and (4) of this section. If the source is a magnet wire coating machine, you may use the procedures in section 3.0 of appendix A to this subpart as an alternative.
- (1) During performance tests, you must monitor and record the temperature just before the catalyst bed and the temperature difference across the catalyst bed at least once every 15 minutes during each of the three test runs.
 - (2) For each performance test, use the data collected during the performance test to calculate and record the average temperature just before the catalyst bed and the average temperature difference across the catalyst bed maintained during the performance test. These are the minimum operating limits for your catalytic oxidizer.
 - (3) You must monitor the temperature at the inlet to the catalyst bed and implement a site-specific inspection and maintenance plan for your catalytic oxidizer as specified in paragraph (b)(4) of this section. During the performance test, you must monitor and record the temperature just before the catalyst bed at least once every 15 minutes during each of the three test runs. For each performance test, use the data collected during the performance test to calculate and record the average temperature just before the catalyst bed during the performance test. This is the minimum operating limit for your catalytic oxidizer.
 - (4) You must develop and implement an inspection and maintenance plan for your catalytic oxidizer(s) for which you elect to monitor according to paragraph (b)(3) of this section. The plan must address, at a minimum, the elements specified in paragraphs (b)(4)(i) through (iii) of this section.
 - (i) Annual sampling and analysis of the catalyst activity (*i.e.*, conversion efficiency) following the manufacturer's or catalyst supplier's recommended procedures. If problems are found during the catalyst activity test, you must replace the catalyst bed or take other corrective action consistent with the manufacturer's recommendations.
 - (ii) Monthly external inspection of the catalytic oxidizer system, including the burner assembly and fuel supply lines for problems and, as necessary, adjust the equipment to assure proper air-to-fuel mixtures.
 - (iii) Annual internal inspection of the catalyst bed to check for channeling, abrasion, and settling. If problems are found during the annual internal inspection of the catalyst, you must replace the catalyst bed or take other corrective action consistent with the manufacturer's recommendations. If the catalyst bed is replaced and is not of like or better kind and quality as the old catalyst then you must conduct a new performance test to determine destruction

efficiency according to § 63.3966. If a catalyst bed is replaced and the replacement catalyst is of like or better kind and quality as the old catalyst, then a new performance test to determine destruction efficiency is not required and you may continue to use the previously established operating limits for that catalytic oxidizer.

(c) **Regenerative carbon adsorbers.** If your add-on control device is a regenerative carbon adsorber, establish the operating limits according to paragraphs (c)(1) and (2) of this section.

(1) You must monitor and record the total regeneration desorbing gas (e.g., steam or nitrogen) mass flow for each regeneration cycle, and the carbon bed temperature after each carbon bed regeneration and cooling cycle for the regeneration cycle either immediately preceding or immediately following the performance test.

(2) The operating limits for your regenerative carbon adsorber are the minimum total desorbing gas mass flow recorded during the regeneration cycle and the maximum carbon bed temperature recorded after the cooling cycle.

(d) **Condensers.** If your add-on control device is a condenser, establish the operating limits according to paragraphs (d)(1) and (2) of this section.

(1) During performance tests, you must monitor and record the condenser outlet (product side) gas temperature at least once every 15 minutes during each of the three test runs.

(2) For each performance test, use the data collected during the performance test to calculate and record the average condenser outlet (product side) gas temperature maintained during the performance test. This average condenser outlet gas temperature is the maximum operating limit for your condenser.

(e) **Concentrators.** If your add-on control device includes a concentrator, you must establish operating limits for the concentrator according to paragraphs (e)(1) through (4) of this section.

(1) During performance tests, you must monitor and record the desorption concentrate stream gas temperature at least once every 15 minutes during each of the three runs of the performance test.

(2) For each performance test, use the data collected during the performance test to calculate and record the average temperature. This is the minimum operating limit for the desorption concentrate gas stream temperature.

(3) During performance tests, you must monitor and record the pressure drop of the dilute stream across the concentrator at least once every 15 minutes during each of the three runs of the performance test.

(4) For each performance test, use the data collected during the performance test to calculate and record the average pressure drop. This is the minimum operating limit for the dilute stream across the concentrator.

(f) **Emission capture systems.** For each capture device that is not part of a PTE that meets the criteria of § 63.3965(a), establish an operating limit for either the gas volumetric flow rate or duct static pressure, as specified in paragraphs (f)(1) and (2) of this section. The operating limit for a PTE is specified in Table 1 to this subpart. If the source is a magnet wire coating machine, you may use the procedures in section 2.0 of appendix A to this subpart as an alternative.

- (1) During the capture efficiency determination required by § 63.3960 and described in §§ 63.3964 and 63.3965, you must monitor and record either the gas volumetric flow rate or the duct static pressure for each separate capture device in your emission capture system at least once every 15 minutes during each of the three test runs at a point in the duct between the capture device and the add-on control device inlet.
- (2) Calculate and record the average gas volumetric flow rate or duct static pressure for the three test runs for each capture device. This average gas volumetric flow rate or duct static pressure is the minimum operating limit for that specific capture device.

[69 FR 157, Jan. 2, 2004, as amended at 85 FR 41144, July 8, 2020]

§ 63.3968 What are the requirements for continuous parameter monitoring system installation, operation, and maintenance?

- (a) **General.** You must install, operate, and maintain each CPMS specified in paragraphs (c), (e), (f), and (g) of this section according to paragraphs (a)(1) through (6) of this section. You must install, operate, and maintain each CPMS specified in paragraphs (b) and (d) of this section according to paragraphs (a)(3) through (5) of this section.
 - (1) The CPMS must complete a minimum of one cycle of operation for each successive 15-minute period. You must have a minimum of four equally spaced successive cycles of CPMS operation in 1 hour.
 - (2) You must determine the average of all recorded readings for each successive 3-hour period of the emission capture system and add-on control device operation.
 - (3) You must record the results of each inspection, calibration, and validation check of the CPMS.
 - (4) Before January 5, 2021, you must maintain the CPMS at all times and have available necessary parts for routine repairs of the monitoring equipment. On and after January 5, 2021, you must maintain the CPMS at all times in accordance with § 63.3900(b) and keep necessary parts readily available for routine repairs of the monitoring equipment.
 - (5) Before January 5, 2021, you must operate the CPMS and collect emission capture system and add-on control device parameter data at all times that a controlled coating operation is operating, except during monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, if applicable, calibration checks and required zero and span adjustments). On and after January 5, 2021, you must operate the CPMS and collect emission capture system and add-on control device parameter data at all times in accordance with § 63.3900(b).
 - (6) You must not use emission capture system or add-on control device parameter data recorded during monitoring malfunctions, associated repairs, out-of-control periods, or required quality assurance or control activities when calculating data averages. You must use all the data collected during all other periods in calculating the data averages for determining compliance with the emission capture system and add-on control device operating limits.
 - (7) A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the CPMS to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Before January 5, 2021, any period for which the monitoring system is out-of-control and data are not available for required calculations is a deviation from the monitoring requirements. On and after January 5, 2021, except for periods of required quality

assurance or control activities, any period for which the CPMS fails to operate and record data continuously as required by paragraph (a)(5) of this section, or generates data that cannot be included in calculating averages as specified in (a)(6) of this section constitutes a deviation from the monitoring requirements.

- (b) **Capture system bypass line.** You must meet the requirements of paragraphs (b)(1) and (2) of this section for each emission capture system that contains bypass lines that could divert emissions away from the add-on control device to the atmosphere.
- (1) You must monitor or secure the valve or closure mechanism controlling the bypass line in a nondiverting position in such a way that the valve or closure mechanism cannot be opened without creating a record that the valve was opened. The method used to monitor or secure the valve or closure mechanism must meet one of the requirements specified in paragraphs (b)(1)(i) through (v) of this section.
- (i) **Flow control position indicator.** Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow control position indicator that takes a reading at least once every 15 minutes and provides a record indicating whether the emissions are directed to the add-on control device or diverted from the add-on control device. The time of occurrence and flow control position must be recorded, as well as every time the flow direction is changed. The flow control position indicator must be installed at the entrance to any bypass line that could divert the emissions away from the add-on control device to the atmosphere.
- (ii) **Car-seal or lock-and-key valve closures.** Secure any bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. You must visually inspect the seal or closure mechanism at least once every month to ensure that the valve is maintained in the closed position, and the emissions are not diverted away from the add-on control device to the atmosphere.
- (iii) **Valve closure monitoring.** Ensure that any bypass line valve is in the closed (nondiverting) position through monitoring of valve position at least once every 15 minutes. You must inspect the monitoring system at least once every month to verify that the monitor will indicate valve position.
- (iv) **Automatic shutdown system.** Use an automatic shutdown system in which the coating operation is stopped when flow is diverted by the bypass line away from the add-on control device to the atmosphere when the coating operation is running. You must inspect the automatic shutdown system at least once every month to verify that it will detect diversions of flow and shut down the coating operation.
- (v) **Flow direction indicator.** Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow direction indicator that takes a reading at least once every 15 minutes and provides a record indicating whether the emissions are directed to the add-on control device or diverted from the add-on control device. Each time the flow direction changes, the next reading of the time of occurrence and flow direction must be recorded. The flow direction indicator must be installed in each bypass line or air makeup supply line that could divert the emissions away from the add-on control device to the atmosphere.
- (2) If any bypass line is opened, you must include a description of why the bypass line was opened and the length of time it remained open in the semiannual compliance reports required in § 63.3920.

- (c) **Thermal oxidizers and catalytic oxidizers.** If you are using a thermal oxidizer or catalytic oxidizer as an add-on control device (including those used with concentrators or with carbon adsorbers to treat desorbed concentrate streams), you must comply with the requirements in paragraphs (c)(1) through (3) of this section:
- (1) For a thermal oxidizer, install a gas temperature monitor in the firebox of the thermal oxidizer or in the duct immediately downstream of the firebox before any substantial heat exchange occurs.
 - (2) For a catalytic oxidizer, install gas temperature monitors upstream and/or downstream of the catalyst bed as required in § 63.3967(b).
 - (3) For all thermal oxidizers and catalytic oxidizers, you must meet the requirements in paragraphs (a) and (c)(3)(i) through (v) of this section for each gas temperature monitoring device. For the purposes of this paragraph (c)(3), a thermocouple is part of the temperature sensor.
 - (i) Locate the temperature sensor in a position that provides a representative temperature.
 - (ii) Use a temperature sensor with a measurement sensitivity of 5 degrees Fahrenheit or 1.0 percent of the temperature value, whichever is larger.
 - (iii) Before using the sensor for the first time or when relocating or replacing the sensor, perform a validation check by comparing the sensor output to a calibrated temperature measurement device or by comparing the sensor output to a simulated temperature.
 - (iv) Conduct an accuracy audit every quarter and after every deviation. Accuracy audit methods include comparisons of sensor output to redundant temperature sensors, to calibrated temperature measurement devices, or to temperature simulation devices.
 - (v) Conduct a visual inspection of each sensor every quarter if redundant temperature sensors are not used.
- (d) **Regenerative carbon adsorbers.** If you are using a regenerative carbon adsorber as an add-on control device, you must monitor the total regeneration desorbing gas (e.g., steam or nitrogen) mass flow for each regeneration cycle, the carbon bed temperature after each regeneration and cooling cycle, and comply with paragraphs (a)(3) through (5) and (d)(1) through (3) of this section.
- (1) The regeneration desorbing gas mass flow monitor must be an integrating device having a measurement sensitivity of plus or minus 10 percent capable of recording the total regeneration desorbing gas mass flow for each regeneration cycle.
 - (2) The carbon bed temperature monitor must be capable of recording the temperature within 15 minutes of completing any carbon bed cooling cycle.
 - (3) For all regenerative carbon adsorbers, you must meet the requirements in paragraphs (c)(3)(i) through (v) of this section for each temperature monitoring device.
- (e) **Condensers.** If you are using a condenser, you must monitor the condenser outlet (product side) gas temperature and comply with paragraphs (a) and (e)(1) and (2) of this section.
- (1) The temperature monitor must provide a gas temperature record at least once every 15 minutes.
 - (2) For all condensers, you must meet the requirements in paragraphs (c)(3)(i) through (v) of this section for each temperature monitoring device.

- (f) **Concentrators.** If you are using a concentrator, such as a zeolite wheel or rotary carbon bed concentrator, you must comply with the requirements in paragraphs (f)(1) and (2) of this section.
- (1) You must install a temperature monitor in the desorption gas stream. The temperature monitor must meet the requirements in paragraphs (a) and (c)(3) of this section.
- (2) You must install a device to monitor pressure drop across the zeolite wheel or rotary carbon bed. The pressure monitoring device must meet the requirements in paragraphs (a) and (g)(2) of this section.
- (g) **Emission capture systems.** The capture system monitoring system must comply with the applicable requirements in paragraphs (g)(1) and (2) of this section. If the source is a magnet wire coating machine, you may use the procedures in section 2.0 of appendix A to this subpart as an alternative.
- (1) For each flow measurement device, you must meet the requirements in paragraphs (a) and (g)(1)(i) through (vii) of this section.
- (i) Locate a flow sensor in a position that provides a representative flow measurement in the duct from each capture device in the emission capture system to the add-on control device.
- (ii) Use a flow sensor with an accuracy of at least 10 percent of the flow.
- (iii) Perform an initial sensor calibration in accordance with the manufacturer's requirements.
- (iv) Perform a validation check before initial use or upon relocation or replacement of a sensor. Validation checks include comparison of sensor values with electronic signal simulations or via relative accuracy testing.
- (v) Conduct an accuracy audit every quarter and after every deviation. Accuracy audit methods include comparisons of sensor values with electronic signal simulations or via relative accuracy testing.
- (vi) Perform leak checks monthly.
- (vii) Perform visual inspections of the sensor system quarterly if there is no redundant sensor.
- (2) For each pressure drop measurement device, you must comply with the requirements in paragraphs (a) and (g)(2)(i) through (vi) of this section.
- (i) Locate the pressure sensor(s) in or as close to a position that provides a representative measurement of the pressure drop across each opening you are monitoring.
- (ii) Use a pressure sensor with an accuracy of at least 0.5 inches of water column or 5 percent of the measured value, whichever is larger.
- (iii) Perform an initial calibration of the sensor according to the manufacturer's requirements.
- (iv) Conduct a validation check before initial operation or upon relocation or replacement of a sensor. Validation checks include comparison of sensor values to calibrated pressure measurement devices or to pressure simulation using calibrated pressure sources.
- (v) Conduct accuracy audits every quarter and after every deviation. Accuracy audits include comparison of sensor values to calibrated pressure measurement devices or to pressure simulation using calibrated pressure sources.
- (vi) Perform monthly leak checks on pressure connections. A pressure of at least 1.0 inches of water column to the connection must yield a stable sensor result for at least 15 seconds.

- (vii) Perform a visual inspection of the sensor at least monthly if there is no redundant sensor.

[69 FR 157, Jan. 2, 2004, as amended at 85 FR 41144, July 8, 2020]

OTHER REQUIREMENTS AND INFORMATION

§ 63.3980 Who implements and enforces this subpart?

- (a) This subpart can be implemented and enforced by us, the U.S. Environmental Protection Agency (EPA), or a delegated authority such as your State, local, or tribal agency. If the Administrator has delegated authority to your State, local, or tribal agency, then that agency (as well as the EPA) has the authority to implement and enforce this subpart. You should contact your EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to your State, local, or tribal agency.
- (b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator and are not transferred to the State, local, or tribal agency.
- (c) The authorities that will not be delegated to State, local, or tribal agencies are listed in paragraphs (c)(1) through (4) of this section:
- (1) Approval of alternatives to the requirements in §§ 63.3881 through 3883 and 63.3890 through 3893.
 - (2) Approval of major alternatives to test methods under § 63.7(e)(2)(ii) and (f) and as defined in § 63.90.
 - (3) Approval of major alternatives to monitoring under § 63.8(f) and as defined in § 63.90.
 - (4) Approval of major alternatives to recordkeeping and reporting under § 63.10(f) and as defined in § 63.90.

§ 63.3981 What definitions apply to this subpart?

Terms used in this subpart are defined in the CAA, in 40 CFR 63.2, and in this section as follows:

Additive means a material that is added to a coating after purchase from a supplier (e.g., catalysts, activators, accelerators).

Add-on control means an air pollution control device, such as a thermal oxidizer or carbon adsorber, that reduces pollution in an air stream by destruction or removal before discharge to the atmosphere.

Adhesive, adhesive coating means any chemical substance that is applied for the purpose of bonding two surfaces together. Products used on humans and animals, adhesive tape, contact paper, or any other product with an adhesive incorporated onto or in an inert substrate shall not be considered adhesives under this subpart.

Assembled on-road vehicle coating means any coating operation in which coating is applied to the surface of some component or surface of a fully assembled motor vehicle or trailer intended for on-road use including, but not limited to, components or surfaces on automobiles and light-duty trucks that have been repaired after a collision or otherwise repainted, fleet delivery trucks, and motor homes and other recreational vehicles (including camping trailers and fifth wheels). Assembled on-road vehicle coating includes the concurrent coating of parts of the assembled on-road vehicle that are painted off-vehicle to protect systems, equipment, or to allow full coverage. Assembled on-road vehicle coating does not

include surface coating operations that meet the applicability criteria of the automobiles and light-duty trucks NESHAP. Assembled on-road vehicle coating also does not include the use of adhesives, sealants, and caulks used in assembling on-road vehicles.

Capture device means a hood, enclosure, room, floor sweep, or other means of containing or collecting emissions and directing those emissions into an add-on air pollution control device.

Capture efficiency or capture system efficiency means the portion (expressed as a percentage) of the pollutants from an emission source that is delivered to an add-on control device.

Capture system means one or more capture devices intended to collect emissions generated by a coating operation in the use of coatings or cleaning materials, both at the point of application and at subsequent points where emissions from the coatings and cleaning materials occur, such as flashoff, drying, or curing. As used in this subpart, multiple capture devices that collect emissions generated by a coating operation are considered a single capture system.

Cleaning material means a solvent used to remove contaminants and other materials, such as dirt, grease, oil, and dried or wet coating (e.g., depainting or paint stripping), from a substrate before or after coating application or from equipment associated with a coating operation, such as spray booths, spray guns, racks, tanks, and hangers. Thus, it includes any cleaning material used on substrates or equipment or both.

Coating means a material applied to a substrate for decorative, protective, or functional purposes. Such materials include, but are not limited to, paints, sealants, liquid plastic coatings, caulks, inks, adhesives, and maskants. Decorative, protective, or functional materials that consist only of protective oils for metal, acids, bases, or any combination of these substances, or paper film or plastic film which may be pre-coated with an adhesive by the film manufacturer, are not considered coatings for the purposes of this subpart. A liquid plastic coating means a coating made from fine particle-size polyvinyl chloride (PVC) in solution (also referred to as a plastisol).

Coating operation means equipment used to apply cleaning materials to a substrate to prepare it for coating application (surface preparation) or to remove dried coating; to apply coating to a substrate (coating application) and to dry or cure the coating after application; or to clean coating operation equipment (equipment cleaning). A single coating operation may include any combination of these types of equipment, but always includes at least the point at which a given quantity of coating or cleaning material is applied to a given part and all subsequent points in the affected source where organic HAP are emitted from the specific quantity of coating or cleaning material on the specific part. There may be multiple coating operations in an affected source. Coating application with handheld, non-refillable aerosol containers, touch-up markers, or marking pens is not a coating operation for the purposes of this subpart.

Coatings solids means the nonvolatile portion of the coating that makes up the dry film.

Continuous parameter monitoring system (CPMS) means the total equipment that may be required to meet the data acquisition and availability requirements of this subpart, used to sample, condition (if applicable), analyze, and provide a record of coating operation, or capture system, or add-on control device parameters.

Controlled coating operation means a coating operation from which some or all of the organic HAP emissions are routed through an emission capture system and add-on control device.

Deviation means:

- (1) Before January 5, 2021, any instance in which an affected source subject to this subpart, or an owner or operator of such a source:
 - (i) Fails to meet any requirement or obligation established by this subpart including but not limited to, any emission limit or operating limit or work practice standard;
 - (ii) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or
 - (iii) Fails to meet any emission limit, or operating limit, or work practice standard in this subpart during SSM, regardless of whether or not such failure is permitted by this subpart; and
- (2) On and after January 5, 2021, any instance in which an affected source subject to this subpart or an owner or operator of such a source:
 - (i) Fails to meet any requirement or obligation established by this subpart including but not limited to any emission limit, operating limit, or work practice standard; or
 - (ii) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit.

Emission limitation means the aggregate of all requirements associated with a compliance option including emission limit, operating limit, work practice standard, etc.

Enclosure means a structure that surrounds a source of emissions and captures and directs the emissions to an add-on control device.

Exempt compound means a specific compound that is not considered a VOC due to negligible photochemical reactivity. The exempt compounds are listed in 40 CFR 51.100(s).

Extreme performance fluoropolymer coating means coatings that are formulated systems based on fluoropolymer resins which often contain bonding matrix polymers dissolved in non-aqueous solvents as well as other ingredients. Extreme performance fluoropolymer coatings are typically used when one or more critical performance criteria are required including, but not limited to a nonstick low-energy surface, dry film lubrication, high resistance to chemical attack, extremely wide operating temperature, high electrical insulating properties, or that the surface comply with government (e.g., USDA, FDA) or third party specifications for health, safety, reliability, or performance. Once applied to a substrate, extreme performance fluoropolymer coatings undergo a curing process that typically requires high temperatures, a chemical reaction, or other specialized technology.

Facility maintenance means the routine repair or renovation (including the surface coating) of the tools, equipment, machinery, and structures that comprise the infrastructure of the affected facility and that are necessary for the facility to function in its intended capacity.

General use coating means any material that meets the definition of coating but does not meet the definition of high performance coating, rubber-to-metal coating, magnet wire coating, or extreme performance fluoropolymer coating as defined in this section.

High performance architectural coating means any coating applied to architectural subsections which is required to meet the specifications of Architectural Aluminum Manufacturer's Association's publication number AAMA 605.2-2000.

High performance coating means any coating that meets the definition of high performance architectural coating or high temperature coating in this section.

High temperature coating means any coating applied to a substrate which during normal use must withstand temperatures of at least 538 degrees Celsius (1000 degrees Fahrenheit).

Hobby shop means any surface coating operation, located at an affected source, that is used exclusively for personal, noncommercial purposes by the affected source's employees or assigned personnel.

Magnet wire coatings, commonly referred to as magnet wire enamels, are applied to a continuous strand of wire which will be used to make turns (windings) in electrical devices such as coils, transformers, or motors. Magnet wire coatings provide high dielectric strength and turn-to-turn conductor insulation. This allows the turns of an electrical device to be placed in close proximity to one another which leads to increased coil effectiveness and electrical efficiency.

Magnet wire coating machine means equipment which applies and cures magnet wire coatings.

Manufacturer's formulation data means data on a material (such as a coating) that are supplied by the material manufacturer based on knowledge of the ingredients used to manufacture that material, rather than based on testing of the material with the test methods specified in § 63.3941. Manufacturer's formulation data may include, but are not limited to, information on density, organic HAP content, volatile organic matter content, and coating solids content.

Mass fraction of organic HAP means the ratio of the mass of organic HAP to the mass of a material in which it is contained, expressed as kg of organic HAP per kg of material.

Month means a calendar month or a pre-specified period of 28 days to 35 days to allow for flexibility in recordkeeping when data are based on a business accounting period.

Non-HAP coating means, for the purposes of this subpart, a coating that contains no more than 0.1 percent by mass of any individual organic HAP that is listed in Table 5 to this subpart and no more than 1.0 percent by mass for any other individual HAP.

Organic HAP content means the mass of organic HAP emitted per volume of coating solids used for a coating calculated using Equation 2 of § 63.3941. The organic HAP content is determined for the coating in the condition it is in when received from its manufacturer or supplier and does not account for any alteration after receipt. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, organic HAP content is the mass of organic HAP that is emitted, rather than the organic HAP content of the coating as it is received.

Permanent total enclosure (PTE) means a permanently installed enclosure that meets the criteria of Method 204 of appendix M, 40 CFR part 51, for a PTE and that directs all the exhaust gases from the enclosure to an add-on control device.

Personal watercraft means a vessel (boat) which uses an inboard motor powering a water jet pump as its primary source of motive power and which is designed to be operated by a person or persons sitting, standing, or kneeling on the vessel, rather than in the conventional manner of sitting or standing inside the vessel.

Protective oil means an organic material that is applied to metal for the purpose of providing lubrication or protection from corrosion without forming a solid film. This definition of protective oil includes, but is not limited to, lubricating oils, evaporative oils (including those that evaporate completely), and extrusion oils.

Protective oils used on miscellaneous metal parts and products include magnet wire lubricants and soft temporary protective coatings that are removed prior to installation or further assembly of a part or component.

Reactive adhesive means adhesive systems composed, in part, of volatile monomers that react during the adhesive curing reaction, and, as a result, do not evolve from the film during use. These volatile components instead become integral parts of the adhesive through chemical reaction. At least 70 percent of the liquid components of the system, excluding water, react during the process.

Research or laboratory facility means a facility whose primary purpose is for research and development of new processes and products, that is conducted under the close supervision of technically trained personnel, and is not engaged in the manufacture of final or intermediate products for commercial purposes, except in a *de minimis* manner.

Responsible official means responsible official as defined in 40 CFR 70.2.

Rubber-to-metal coatings are coatings that contain heat-activated polymer systems in either solvent or water that, when applied to metal substrates, dry to a non-tacky surface and react chemically with the rubber and metal during a vulcanization process.

Startup, initial means the first time equipment is brought online in a facility.

Surface preparation means use of a cleaning material on a portion of or all of a substrate. This includes use of a cleaning material to remove dried coating, which is sometimes called depainting.

Temporary total enclosure means an enclosure constructed for the purpose of measuring the capture efficiency of pollutants emitted from a given source as defined in Method 204 of appendix M, 40 CFR part 51.

Thinner means an organic solvent that is added to a coating after the coating is received from the supplier.

Total volatile hydrocarbon (TVH) means the total amount of nonaqueous volatile organic matter determined according to Methods 204 and 204A through 204F of appendix M to 40 CFR part 51 and substituting the term TVH each place in the methods where the term VOC is used. The TVH includes both VOC and non-VOC.

Uncontrolled coating operation means a coating operation from which none of the organic HAP emissions are routed through an emission capture system and add-on control device.

Volatile organic compound (VOC) means any compound defined as VOC in 40 CFR 51.100(s).

Volume fraction of coating solids means the ratio of the volume of coating solids (also known as the volume of nonvolatiles) to the volume of a coating in which it is contained; liters (gal) of coating solids per liter (gal) of coating.

Wastewater means water that is generated in a coating operation and is collected, stored, or treated prior to being discarded or discharged.

[69 FR 157, Jan. 2, 2004, as amended at 85 FR 41144, July 8, 2020]

Table 1 to Subpart M of Part 63—Operating Limits if Using the Emission Rate With Add-On Controls Option

If you are required to comply with operating limits by § 63.392(c), you must comply with the applicable operating limits in the following table:

For the following device . . .	You must meet the following operating limit . . .	And you must demonstrate continuous compliance with the operating limit by . . .
1. Thermal oxidizer	a. The average combustion temperature in any 3-hour period must not fall below the combustion temperature limit established according to § 63.3967(a)	i. Collecting the combustion temperature data according to § 63.3968(c); ii. Reducing the data to 3-hour block averages; and iii. Maintaining the 3-hour average combustion temperature at or above the temperature limit.
2. Catalytic oxidizer	a. The average temperature measured just before the catalyst bed in any 3-hour period must not fall below the limit established according to § 63.3967(b) (for magnet wire coating machines, temperature can be monitored before or after the catalyst bed); and either b. Ensure that the average temperature difference across the catalyst bed in any 3-hour period does not fall below the temperature difference limit established according to § 63.3967(b) (2); or c. Develop and implement an inspection and maintenance plan according to § 63.3967(b)(4) or for magnet wire coating machines according to section 3.0 of appendix A to this subpart	i. Collecting the temperature data according to § 63.3968(c); ii. Reducing the data to 3-hour block averages; and iii. Maintaining the 3-hour average temperature before (or for magnet wire coating machines after) the catalyst bed at or above the temperature limit. i. Collecting the temperature data according to § 63.3968(c); ii. Reducing the data to 3-hour block averages; and iii. Maintaining the 3-hour average temperature difference at or above the temperature difference limit. i. Maintaining and up-to-date inspection and maintenance plan, records of annual catalyst activity checks, records of monthly inspections of the oxidizer system, and records of the annual internal inspections of the catalyst bed. If a problem is discovered during a monthly or annual inspection required by § 63.3967(b)(4) or for magnet wire coating machines by section 3.0 of appendix A to this subpart, you must take corrective action as soon as practicable consistent with the manufacturer's recommendations.
3.	a. The total regeneration	i. Measuring the total regeneration desorbing gas

For the following device . . .	You must meet the following operating limit . . .	And you must demonstrate continuous compliance with the operating limit by . . .
Regenerative carbon adsorber	desorbing gas (e.g., steam or nitrogen) mass flow for each carbon bed regeneration cycle must not fall below the total regeneration desorbing gas mass flow limit established according to § 63.3967(c); and b. The temperature of the carbon bed, after completing each regeneration and any cooling cycle, must not exceed the carbon bed temperature limit established according to § 63.3967(c)	(e.g., steam or nitrogen) mass flow for each regeneration cycle according to § 63.3968(d); and ii. Maintaining the total regeneration desorbing gas mass flow at or above the mass flow limit.
4. Condenser	a. The average condenser outlet (product side) gas temperature in any 3-hour period must not exceed the temperature limit established according to § 63.3967(d)	i. Measuring the temperature of the carbon bed after completing each regeneration and any cooling cycle according to § 63.3968(d); and ii. Operating the carbon beds such that each carbon bed is not returned to service until completing each regeneration and any cooling cycle until the recorded temperature of the carbon bed is at or below the temperature limit.
5. Concentrators, including zeolite wheels and rotary carbon adsorbers	a. The average gas temperature of the desorption concentrate stream in any 3-hour period must not fall below the limit established according to § 63.3967(e); and b. The average pressure drop of the dilute stream across the concentrator in any 3-hour period must not fall below the limit established according to § 63.3967(e)	i. Collecting the condenser outlet (product side) gas temperature according to § 63.3968(e); ii. Reducing the data to 3-hour block averages; and iii. Maintaining the 3-hour average gas temperature at the outlet at or below the temperature limit.
6. Emission capture system that is a PTE according to § 63.3965(a)	a. The average gas temperature of the desorption concentrate stream in any 3-hour period must not fall below the limit established according to § 63.3967(e); and b. The average pressure drop of the dilute stream across the concentrator in any 3-hour period must not fall below the limit established according to § 63.3967(e)	i. Collecting the temperature data according to 63.3968(f); ii. Reducing the data to 3-hour block averages; and iii. Maintaining the 3-hour average temperature at or above the temperature limit.
	a. The direction of the air flow at all times must be into the enclosure; and either	i. Collecting the pressure drop data according to 63.3968(f); ii. Reducing the pressure drop data to 3-hour block averages; and iii. Maintaining the 3-hour average pressure drop at or above the pressure drop limit.
		i. Collecting the direction of air flow, and either the facial velocity of air through all natural draft openings according to § 63.3968(b)(1) or the pressure drop across the enclosure according to § 63.3968(g)(2); and ii. Maintaining the facial velocity of air flow through

For the following device . . .	You must meet the following operating limit . . .	And you must demonstrate continuous compliance with the operating limit by . . .
7. Emission capture system that is not a PTE according to § 63.3965(a)	b. The average facial velocity of air through all natural draft openings in the enclosure must be at least 200 feet per minutes; or c. The pressure drop across the enclosure must be at least 0.007 inch H₂O, as established in Method 204 of appendix M to 40 CFR part 51 a. The average gas volumetric flow rate or duct static pressure in each duct between a capture device and add-on control device inlet in any 3-hour period must not fall below the average volumetric flow rate or duct static pressure limit established for that capture device according to § 63.3967(f)	all natural draft openings or the pressure drop at or above the facial velocity limit or pressure drop limit, and maintaining the direction of air flow into the enclosure at all times. i. See items 6.a.i and 6.a.ii. i. See items 6.a.i and 6.a.ii. i. Collecting the gas volumetric flow rate or duct static pressure for each capture device according to § 63.3968(g); ii. Reducing the data to 3-hour block averages; and iii. Maintaining the 3-hour average gas volumetric flow rate or duct static pressure for each capture device at or above the gas volumetric flow rate or duct static pressure limited.

Table 2 to Subpart MMMM of Part 63—Applicability of General Provisions to Subpart MMMM of Part 63

You must comply with the applicable General Provisions requirements according to the following table:

Citation	Subject	Applicable to subpart MMMM	Explanation
§ 63.1(a)(1)-(14)	General Applicability	Yes	

Citation	Subject	Applicable to subpart M	Explanation
§ 63.1(b)(1)-(3)	Initial Applicability Determination	Yes	Applicability to subpart M is also specified in § 63.3881.
§ 63.1(c)(1)	Applicability After Standard Established	Yes	
§ 63.1(c)(2)-(3)	Applicability of Permit Program for Area Sources	No	
§ 63.1(c)(4)-(5)	Extensions and Notifications	Yes	
§ 63.1(c)(6)	Reclassification	Yes	
§ 63.1(e)	Applicability of Permit Program Before Relevant Standard is Set	Yes	
§ 63.2	Definitions	Yes	Additional definitions are specified in § 63.3981.
§ 63.1(a)-(c)	Units and Abbreviations	Yes	
§ 63.4(a)(1)-(5)	Prohibited Activities	Yes	
§ 63.4(b)-(c)	Circumvention/Severability	Yes	
§ 63.5(a)	Construction/ Reconstruction	Yes	
§ 63.5(b)(1)-(6)	Requirements for Existing Newly Constructed, and Reconstructed Sources	Yes	
§ 63.5(d)	Application for Approval of Construction/ Reconstruction	Yes	
§ 63.5(e)	Approval of Construction/ Reconstruction	Yes	
§ 63.5(f)	Approval of Construction/ Reconstruction Based on Prior State Review	Yes	
§ 63.6(a)	Compliance With Standards and Maintenance Requirements—Applicability	Yes	
§ 63.6(b)(1)-(7)	Compliance Dates for New and Reconstructed Sources	Yes	
§ 63.6(c)(1)-(5)	Compliance Dates for Existing Sources	Yes	
§ 63.6(e)(1)-(2)	Operation and Maintenance	Yes before January 5, 2021. No	See § 63.3900(b) for general duty requirement.

Citation	Subject	Applicable to subpart M	Explanation
§ 63.6(e)(3)	SSMP	on and after January 5, 2021 Yes before January 5, 2021. No on and after January 5, 2021	Subpart M does not establish opacity standards and does not require continuous opacity monitoring systems (COMS).
§ 63.6(f)(1)	Compliance Except During SSM	Yes before January 5, 2021. No on and after January 5, 2021	
§ 63.6(f)(2)-(3)	Methods for Determining Compliance.	Yes	
§ 63.6(g)(1)-(3)	Use of an Alternative Standard	Yes	
§ 63.6(h)	Compliance With Opacity/Visible Emission Standards	No	
§ 63.6(i)(1)-(16)	Extension of Compliance	Yes	Applies to all affected sources. Additional requirements for performance testing are specified in §§ 63.3964, 63.3965, and 63.3966.
§ 63.6(j)	Presidential Compliance Exemption	Yes	
§ 63.7(a)(1)	Performance Test Requirements—Applicability	Yes	
§ 63.7(a)(2)	Performance Test Requirements—Dates	Yes	

Citation	Subject	Applicable to subpart M	Explanation
§ 63.7(a)(3)-(4)	Performance Tests Required By the Administrator, Force Majeure	Yes	63.7(a)(2).
§ 63.7(b)-(d)	Performance Test Requirements—Notification, Quality Assurance, Facilities Necessary for Safe Testing, Conditions During Test	Yes	Applies only to performance tests for capture system and add-on control device efficiency at sources using these to comply with the standard.
§ 63.7(e)(1)	Conduct of Performance Tests	Yes before January 5, 2021. No on and after January 5, 2021	See §§ 63.3964.
§ 63.7(e)(2)-(4)	Conduct of Performance Tests	Yes	
§ 63.7(f)	Performance Test Requirements—Use of Alternative Test Method	Yes	Applies to all test methods except those used to determine capture system efficiency.
§ 63.7(g)-(h)	Performance Test Requirements—Data Analysis, Recordkeeping, Reporting, Waiver of Test	Yes	Applies only to performance tests for capture system and add-on control device efficiency at sources using these to comply with the standard.
§ 63.8(a)(1)-(3)	Monitoring Requirements—Applicability	Yes	Applies only to monitoring of capture system and add-on control device efficiency at sources using these to comply with the standard. Additional requirements for monitoring are specified in § 63.3968.
§ 63.8(a)(4)	Additional Monitoring Requirements	No	Subpart M does not have monitoring requirements for flares.
§ 63.8(b)	Conduct of Monitoring	Yes	
§ 63.8(c)(1)	Continuous Monitoring System (CMS) Operation and Maintenance	Yes before January 5, 2021. No on and after	Section 63.3968 specifies the requirements for the operation of CMS for capture systems and add-on control devices at sources using these to comply.

Citation	Subject	Applicable to subpart M	Explanation
		January 5, 2021	
§ 63.8(c)(2)-(3)	CMS Operation and Maintenance	Yes	Applies only to monitoring of capture system and add-on control device efficiency at sources using these to comply with the standard. Additional requirements for CMS operations and maintenance are specified in § 63.3968.
§ 63.8(c)(4)	CMS	No	§ 63.3968 specifies the requirements for the operation of CMS for capture systems and add-on control devices at sources using these to comply.
§ 63.8(c)(5)	COMS	No	Subpart M does not have opacity or visible emission standards.
§ 63.8(c)(6)	CMS Requirements	No	Section 63.3968 specifies the requirements for monitoring systems for capture systems and add-on control devices at sources using these to comply.
§ 63.8(c)(7)	CMS Out-of-Control Periods	Yes	
§ 63.8(c)(8)	CMS Out-of-Control Periods and Reporting	No	§ 63.3920 requires reporting of CMS out-of-control periods.
§ 63.8(d)-(e)	Quality Control Program and CMS Performance Evaluation	No	Subpart M does not require the use of continuous emissions monitoring systems.
§ 63.8(f)(1)-(5)	Use of an Alternative Monitoring Method	Yes	
§ 63.8(f)(6)	Alternative to Relative Accuracy Test	No	Subpart M does not require the use of continuous emissions monitoring systems.
§ 63.8(g)(1)-(5)	Data Reduction	No	Sections 63.3967 and 63.3968 specify monitoring data reduction.
§ 63.9(a)-(d)	Notification Requirements	Yes	
§ 63.9(e)	Notification of Performance Test	Yes	Applies only to capture system and add-on control device performance tests at sources using these to comply with the standard.
§ 63.9(f)	Notification of Visible Emissions/Opacity Test	No	Subpart M does not have opacity or visible emissions standards.
§ 63.9(g)(1)-(3)	Additional Notifications	No	Subpart M does not require the

Citation	Subject	Applicable to subpart M	Explanation
	When Using CMS		use of continuous emissions monitoring systems.
§ 63.9(h)	Notification of Compliance Status	Yes	Section 63.3910 specifies the dates for submitting the notification of compliance status.
§ 63.9(i)	Adjustment of Submittal Deadlines	Yes	
§ 63.9(j)	Change in Previous Information	Yes	
§ 63.9(k)	Electronic reporting procedures	Yes	Only as specified in § 63.9(j).
§ 63.10(a)	Recordkeeping/Reporting—Applicability and General Information	Yes	
§ 63.10(b)(1)	General Recordkeeping Requirements	Yes	Additional requirements are specified in §§ 63.3930 and 63.3931.
§ 63.10(b)(2)(i)-(ii)	Recordkeeping of Occurrence and Duration of Startups and Shutdowns and of Failures to Meet Standards	Yes before January 5, 2021. No on and after January 5, 2021	See § 63.3930(j).
§ 63.10(b)(2)(iii)	Recordkeeping Relevant to Maintenance of Air Pollution Control and Monitoring Equipment	Yes	§ 63.10(b)(2)(iii).
§ 63.10(b)(2)(iv)-(v)	Actions Taken to Minimize Emissions During SSM	Yes before January 5, 2021. No on and after January 5, 2021	See § 63.3930(j) for a record of actions taken to minimize emissions duration a deviation from the standard.
§ 63.10(b)(2)(vi)	Recordkeeping for CMS Malfunctions	Yes before January 5, 2021. No on and after January 5, 2021	See § 63.3930(j) for records of periods of deviation from the standard, including instances where a CMS is inoperative or out- of-control.

Citation	Subject	Applicable to subpart M	Explanation
§ 63.10(b)(2)(xii)	Records	Yes	Subpart M does not require the use of continuous emissions monitoring systems.
§ 63.10(b)(2)(xiii)		No	
§ 63.10(b)(2)(xiv)		Yes	
§ 63.10(b)(3)	Recordkeeping Requirements for Applicability Determinations	Yes	
§ 63.10(c)(1)-(6)	Additional Recordkeeping Requirements for Sources with CMS	Yes	See § 63.3930(j) for records of periods of deviation from the standard, including instances where a CMS is inoperative or out-of-control.
§ 63.10(c)(7)-(8)	Additional Recordkeeping Requirements for Sources with CMS	No	
§ 63.10(c)(10)-(14)	Additional Recordkeeping Requirements for Sources with CMS	Yes	
§ 63.10(c)(15)	Records Regarding the SSMP	Yes before January 5, 2021. No on and after January 5, 2021	
§ 63.10(d)(1)	General Reporting Requirements	Yes	Additional requirements are specified in § 63.3920.
§ 63.10(d)(2)	Report of Performance Test Results	Yes	Additional requirements are specified in § 63.3920(b) and (d).
§ 63.10(d)(3)	Reporting Opacity or Visible Emissions Observations	No	Subpart M does not require opacity or visible emissions observations.
§ 63.10(d)(4)	Progress Reports for Sources With Compliance Extensions	Yes	
§ 63.10(d)(5)	SSM Reports	Yes before January 5, 2021. No	See § 63.3920 (a)(7) and (c).

Citation	Subject	Applicable to subpart M	Explanation
		on and after January 5, 2021	
§ 63.10(e)(1)-(2)	Additional CMS Reports	No	Subpart M does not require the use of continuous emissions monitoring systems.
§ 63.10(e)(3)	Excess Emissions/CMS Performance Reports	No	Section 63.3920(b) specifies the contents of periodic compliance reports.
§ 63.10(e)(4)	COMS Data Reports	No	Subpart M does not specify requirements for opacity or COMS.
§ 63.10(f)	Recordkeeping/Reporting Waiver	Yes	
§ 63.11	Control Device Requirements/Flares	No	Subpart M does not specify use of flares for compliance.
§ 63.12	State Authority and Delegations	Yes	
§ 63.13	Addresses	Yes	
§ 63.14	IBR	Yes	
§ 63.15	Availability of Information/Confidentiality	Yes	

[85 FR 41145, July 8, 2020, as amended at 85 FR 73906, Nov. 19, 2020]

Table 3 to Subpart M of Part 63—Default Organic HAP Mass Fraction for Solvents and Solvent Blends

You may use the mass fraction values in the following table for solvent blends for which you do not have test data or manufacturer's formulation data and which match either the solvent blend name or the chemical abstract series (CAS) number. If a solvent blend matches both the name and CAS number for an entry, that entry's organic HAP

mass fraction must be used for that solvent blend. Otherwise, use the organic HAP mass fraction for the entry matching either the solvent blend name or CAS number, or use the organic HAP mass fraction from table 4 to this subpart if neither the name or CAS number match.

Solvent/solvent blend	CAS. No.	Average organic HAP mass fraction	Typical organic HAP, percent by mass
1. Toluene	108-88-3	1.0	Toluene.
2. Xylene(s)	1330-20-7	1.0	Xylenes, ethylbenzene.
3. Hexane	110-54-3	0.5	n-hexane.
4. n-Hexane	110-54-3	1.0	n-hexane.
5. Ethylbenzene	100-41-4	1.0	Ethylbenzene.
6. Aliphatic 140		0	None.
7. Aromatic 100		0.02	1% xylene, 1% cumene.
8. Aromatic 150		0.09	Naphthalene.
9. Aromatic naphtha	64742-95-6	0.02	1% xylene, 1% cumene.
10. Aromatic solvent	64742-94-5	0.1	Naphthalene.
11. Exempt mineral spirits	8032-32-4	0	None.
12. Ligroines (VM & P)	8032-32-4	0	None.
13. Lactol spirits	64742-89-6	0.15	Toluene.
14. Low aromatic white spirit	64742-82-1	0	None.
15. Mineral spirits	64742-88-7	0.01	Xylenes.
16. Hydrotreated naphtha	64742-48-9	0	None.
17. Hydrotreated light distillate	64742-47-8	0.001	Toluene.
18. Stoddard solvent	8052-41-3	0.01	Xylenes.
19. Super high-flash naphtha	64742-95-6	0.05	Xylenes.
20. Varsol ® solvent	8052-49-3	0.01	0.5% xylenes, 0.5% ethylbenzene.
21. VM & P naphtha	64742-89-8	0.06	3% toluene, 3% xylene.
22. Petroleum distillate mixture	68477-31-6	0.08	4% naphthalene, 4% biphenyl.

Table 4 to Subpart MMMM of Part 63—Default Organic HAP Mass Fraction for Petroleum Solvent Groups^a

You may use the mass fraction values in the following table for solvent blends for which you do not have test data or manufacturer's formulation data.

Solvent type	Average organic HAP mass fraction	Typical organic HAP, percent by mass
Aliphatic ^b	0.03	1% Xylene, 1% Toluene, and 1% Ethylbenzene.
Aromatic ^c	0.06	4% Xylene, 1% Toluene, and 1% Ethylbenzene.

^a Use this table only if the solvent blend does not match any of the solvent blends in Table 3 to this subpart by either solvent blend name or CAS number and you only know whether the blend is aliphatic or aromatic.

^b Mineral Spirits 135, Mineral Spirits 150 EC, Naphtha, Mixed Hydrocarbon, Aliphatic Hydrocarbon, Aliphatic Naphtha, Naphthol Spirits, Petroleum Spirits, Petroleum Oil, Petroleum Naphtha, Solvent Naphtha, Solvent Blend.

^c Medium-flash Naphtha, High-flash Naphtha, Aromatic Naphtha, Light Aromatic Naphtha, Light Aromatic Hydrocarbons, Aromatic Hydrocarbons, Light Aromatic Solvent.

Table 5 to Subpart MMMM of Part 63—List of HAP That Must Be Counted Toward Total Organic HAP Content If Present at 0.1 Percent or More by Mass

Chemical Name	CAS No.
1,1,2,2-Tetrachloroethane	79-34-5
1,1,2-Trichloroethane	79-00-5
1,1-Dimethylhydrazine	57-14-7
1,2-Dibromo-3-chloropropane	96-12-8
1,2-Diphenylhydrazine	122-66-7
1,3-Butadiene	106-99-0
1,3-Dichloropropene	542-75-6
1,4-Dioxane	123-91-1
2,4,6-Trichlorophenol	88-06-2
2,4/2,6-Dinitrotoluene (mixture)	25321-14-6
2,4-Dinitrotoluene	121-14-2
2,4-Toluene diamine	95-80-7
2-Nitropropane	79-46-9
3,3'-Dichlorobenzidine	91-94-1
3,3'-Dimethoxybenzidine	119-90-4
3,3'-Dimethylbenzidine	119-93-7
4,4'-Methylene bis(2-chloroaniline)	101-14-4

Chemical Name	CAS No.
Acetaldehyde	75-07-0
Acrylamide	79-06-1
Acrylonitrile	107-13-1
Allyl chloride	107-05-1
alpha-Hexachlorocyclohexane (a-HCH)	319-84-6
Aniline	62-53-3
Benzene	71-43-2
Benidine	92-87-5
Benzotrifluoride	98-07-7
Benzyl chloride	100-44-7
beta-Hexachlorocyclohexane (b-HCH)	319-85-7
Bis(2-ethylhexyl)phthalate	117-81-7
Bis(chloromethyl)ether	542-88-1
Bromoform	75-25-2
Captan	133-06-2
Carbon tetrachloride	56-23-5
Chlordane	57-74-9
Chlorobenzilate	510-15-6
Chloroform	67-66-3
Chloroprene	126-99-8
Cresols (mixed)	1319-77-3
DDE	3547-04-4
Dichloroethyl ether	111-44-4
Dichlorvos	62-73-7
Epichlorohydrin	106-89-8
Ethyl acrylate	140-88-5
Ethylene dibromide	106-93-4
Ethylene dichloride	107-06-2
Ethylene oxide	75-21-8
Ethylene thiourea	96-45-7
Ethylidene dichloride (1,1-Dichloroethane)	75-34-3
Formaldehyde	50-00-0
Heptachlor	76-44-8
Hexachlorobenzene	118-74-1
Hexachlorobutadiene	87-68-3
Hexachloroethane	67-72-1
Hydrazine	302-01-2
Isophorone	78-59-1
Lindane (hexachlorocyclohexane, all isomers)	58-89-9

Chemical Name	CAS No.
m-Cresol	108-39-4
Methylene chloride	75-09-2
Naphthalene	91-20-3
Nitrobenzene	98-95-3
Nitrosodimethylamine	62-75-9
o-Cresol	95-48-7
o-Toluidine	95-53-4
Parathion	56-38-2
p-Cresol	106-44-5
p-Dichlorobenzene	106-46-7
Pentachloronitrobenzene	82-68-8
Pentachlorophenol	87-86-5
Propoxur	114-26-1
Propylene dichloride	78-87-5
Propylene oxide	75-56-9
Quinoline	91-22-5
Tetrachloroethene	127-18-4
Toxaphene	8001-35-2
Trichloroethylene	79-01-6
Trifluralin	1582-09-8
Vinyl bromide	593-60-2
Vinyl chloride	75-01-4
Vinylidene chloride	75-35-4

[85 FR 41148, July 8, 2020]

Appendix A to Subpart M of Part 63—Alternative Capture Efficiency and Destruction Efficiency Measurement and Monitoring Procedures for Magnet Wire Coating Operations

1.0 Introduction.

- 1.1 These alternative procedures for capture efficiency and destruction efficiency measurement and monitoring are intended principally for newer magnet wire coating machines where the control device is internal and integral to the oven so that it is difficult or infeasible to make gas measurements at the inlet to the control device.
- 1.2 In newer gas fired magnet wire ovens with thermal control (no catalyst), the burner tube serves as the control device (thermal oxidizer) for the process. The combustion of solvents in the burner tube is the principal source of heat for the oven.
- 1.3 In newer magnet wire ovens with a catalyst there is either a burner tube (gas fired ovens) or a tube filled with electric heating elements (electric heated oven) before the catalyst. A large portion of the solvent is often oxidized before reaching the catalyst. The combustion of solvents in the tube and

across the catalyst is the principal source of heat for the oven. The internal catalyst in these ovens cannot be accessed without disassembly of the oven. This disassembly includes removal of the oven insulation. Oven reassembly often requires the installation of new oven insulation.

- 1.4 Some older magnet wire ovens have external afterburners. A significant portion of the solvent is oxidized within these ovens as well.
- 1.5 The alternative procedure for destruction efficiency determines the organic carbon content of the volatiles entering the control device based on the quantity of coating used, the carbon content of the volatile portion of the coating and the efficiency of the capture system. The organic carbon content of the control device outlet (oven exhaust for ovens without an external afterburner) is determined using Method 25 or 25A.
- 1.6 When it is difficult or infeasible to make gas measurements at the inlet to the control device, measuring capture efficiency with a gas-to-gas protocol (see § 63.3965(d)) which relies on direct measurement of the captured gas stream will also be difficult or infeasible. In these situations, capture efficiency measurement is more appropriately done with a procedure which does not rely on direct measurement of the captured gas stream.
- 1.7 Magnet wire ovens are relatively small compared to many other coating ovens. The exhaust rate from an oven is low and varies as the coating use rate and solvent loading rate change from job to job. The air balance in magnet wire ovens is critical to product quality. Magnet wire ovens must be operated under negative pressure to avoid smoke and odor in the workplace, and the exhaust rate must be sufficient to prevent over heating within the oven.
- 1.8 The liquid and gas measurements needed to determine capture efficiency and control device efficiency using these alternative procedures may be made simultaneously.
- 1.9 Magnet wire facilities may have many (e.g., 20 to 70 or more) individual coating lines each with its own capture and control system. With approval, representative capture efficiency and control device efficiency testing of one magnet wire coating machine out of a group of identical or very similar magnet wire coating machines may be performed rather than testing every individual magnet wire coating machine. The operating parameters must be established for each tested magnet wire coating machine during each capture efficiency test and each control device efficiency test. The operating parameters established for each tested magnet wire coating machine also serve as the operating parameters for untested or very similar magnet wire coating machines represented by a tested magnet wire coating machine.

2.0 Capture Efficiency.

- 2.1 If the capture system is a permanent total enclosure as described in § 63.3965(a), then its capture efficiency may be assumed to be 100 percent.
- 2.2 If the capture system is not a permanent total enclosure, then capture efficiency must be determined using the liquid-to-uncaptured-gas protocol using a temporary total enclosure or building enclosure in § 63.3965(c), or an alternative capture efficiency protocol (see § 63.3965(e)) which does not rely on direct measurement of the captured gas stream.
- 2.3 As an alternative to establishing and monitoring the capture efficiency operating parameters in § 63.3967(f), the monitoring described in either section 2.4 or 2.5, and the monitoring described in sections 2.6 and 2.7 may be used for magnet wire coating machines.

- 2.4 Each magnet wire oven must be equipped with an interlock mechanism which will stop or prohibit the application of coating either when any exhaust fan for that oven is not operating or when the oven experiences an over limit temperature condition.
- 2.5 Each magnet wire oven must be equipped with an alarm which will be activated either when any oven exhaust fan is not operating or when the oven experiences an over limit temperature condition.
- 2.6 If the interlock in 2.4 or the alarm in 2.5 is monitoring for over limit temperature conditions, then the temperature(s) that will trigger the interlock or the alarm must be included in the start-up, shutdown and malfunction plan and the interlock or alarm must be set to be activated when the oven reaches that temperature.
- 2.7 Once every 6 months, each magnet wire oven must be checked using a smoke stick or equivalent approach to confirm that the oven is operating at negative pressure compared to the surrounding atmosphere.

3.0 Control Device Efficiency.

- 3.1 Determine the weight fraction carbon content of the volatile portion of each coating, thinner, additive, or cleaning material used during each test run using either the procedure in section 3.2 or 3.3.
- 3.2 Following the procedures in Method 204F, distill a sample of each coating, thinner, additive, or cleaning material used during each test run to separate the volatile portion. Determine the weight fraction carbon content of each distillate using ASTM Method D5291-02, "Standard Test Methods for Instrumental Determination of Carbon, Hydrogen, and Nitrogen in Petroleum Products and Lubricants" (incorporated by reference, see § 63.14).
- 3.3 Analyze each coating, thinner, additive or cleaning material used during each test run using Method 311. For each volatile compound detected in the gas chromatographic analysis of each coating, thinner, additive, or cleaning material calculate the weight fraction of that whole compound in the coating, thinner, additive, or cleaning material. For each volatile compound detected in the gas chromatographic analysis of each coating, thinner, additive, or cleaning material calculate the weight fraction of the carbon in that compound in the coating, thinner, additive, or cleaning material. Calculate the weight fraction carbon content of each coating, thinner, additive, or cleaning material as the ratio of the sum of the carbon weight fractions divided by the sum of the whole compound weight fractions.
- 3.4 Determine the mass fraction of total volatile hydrocarbon (TVH_i) in each coating, thinner, additive, or cleaning material, i, used during each test run using Method 24. The mass fraction of total volatile hydrocarbon equals the weight fraction volatile matter (W_v in Method 24) minus the weight fraction water (W_w in Method 24), if any, present in the coating. The ASTM Method D6053-00, "Standard Test Method for Determination of Volatile Organic Compound (VOC) Content of Electrical Insulating Varnishes" (incorporated by reference, see § 63.14), may be used as an alternative to Method 24 for magnet wire enamels. The specimen size for testing magnet wire enamels with ASTM Method D6053-00 must be 2.0 ±0.1 grams.
- 3.5 Determine the volume (VOL_i) or mass (MASS_i) of each coating, thinner, additive, or cleaning material, i, used during each test run.
- 3.6 Calculate the total volatile hydrocarbon input (TVHC_{inlet}) to the control device during each test run, as carbon, using Equation 1:

$$TVHC_{inlet} = \sum_{i=1}^n (TVH_i \times VOL_i \times D_i \times CD_i) \quad (Eq. 1)$$

where:

TVH_i = Mass fraction of TVH in coating, thinner, additive, or cleaning material, i, used in the coating operation during the test run.

VOL_i = Volume of coating, thinner, additive, or cleaning material, i, used in the coating operation during the test run, liters.

D_i = Density of coating, thinner, additive, or cleaning material, i, used in the coating operation during the test run, kg per liter.

CD_i = Weight fraction carbon content of the distillate from coating, thinner, additive, or cleaning material, i, used in the coating operation during the test run, percent.

n = Number of coating, thinner, additive, and cleaning materials used in the coating operation during the test run.

3.7 If the mass, MASS_i, of each coating, solvent, additive, or cleaning material, i, used during the test run is measured directly then MASS_i can be substituted for VOL_i × D_i in Equation 1 in section 3.6.

3.8 Determine the TVHC output (TVHC_{outlet}) from the control device, as carbon, during each test run using the methods in § 63.3966(a) and the procedure for determining M_{fo} in § 63.3966(d). TVHC_{outlet} equals M_{fo} times the length of the test run in hours.

3.9 Determine the control device efficiency (DRE) for each test run using Equation 2:

$$DRE = \frac{TVHC_{inlet} - TVHC_{outlet}}{TVHC_{inlet}} \times 100 \quad (Eq. 2)$$

3.10 The efficiency of the control device is the average of the three individual test run values determined in section 3.9.

3.11 As an alternative to establishing and monitoring the destruction efficiency operating parameters for catalytic oxidizers in § 63.3967(b), the monitoring described in sections 3.12 and 3.13 may be used for magnet wire coating machines equipped with catalytic oxidizers.

3.12 During the performance test, you must monitor and record the temperature either just before or just after the catalyst bed at least once every 15 minutes during each of the three test runs. Use the data collected during the performance test to calculate and record the average temperature either just before or just after the catalyst bed during the performance test. This is the minimum operating limit for your catalytic oxidizer and for the catalytic oxidizers in identical or very similar magnet wire coating machines represented by the tested magnet wire coating machine.

3.13 You must develop and implement an inspection and maintenance plan for your catalytic oxidizer(s). The plan must address, at a minimum, the elements specified in sections 3.14 and 3.15, and the elements specified in either

(a) section 3.16 or

(b) sections 3.17 and 3.18.

- 3.14 You must conduct a monthly external inspection of each catalytic oxidizer system, including the burner assembly and fuel supply lines for problems and, as necessary, adjust the equipment to assure proper air-to-fuel mixtures.
- 3.15 You must conduct an annual internal inspection of each accessible catalyst bed to check for channeling, abrasion, and settling. If problems are found, you must replace the catalyst bed or take corrective action consistent with the manufacturer's recommendations. This provision does not apply to internal catalysts which cannot be accessed without disassembling the magnet wire oven.
- 3.16 You must take a sample of each catalyst bed and perform an analysis of the catalyst activity (*i.e.*, conversion efficiency) following the manufacturer's or catalyst supplier's recommended procedures. This sampling and analysis must be done within the time period shown in Table 1 below of the most recent of the last catalyst activity test or the last catalyst replacement. For example, if the warranty for the catalyst is 3 years and the catalyst was more recently replaced then the sampling and analysis must be done within the earlier of 26,280 operating hours or 5 calendar years of the last catalyst replacement. If the warranty for the catalyst is 3 years and the catalyst was more recently tested then the sampling and analysis must be done within the earlier of 13,140 operating hours or 3 calendar years of the last catalyst activity test. If problems are found during the catalyst activity test, you must replace the catalyst bed or take corrective action consistent with the manufacturer's recommendations.

TABLE 1—CATALYST MONITORING REQUIREMENTS

If the catalyst was last (more recently) replaced and the warranty period is . . .	Then the time between catalyst replacement and the next catalyst activity test cannot exceed the earlier of . . .	And the catalyst was more recently tested, then the time between catalyst activity tests cannot exceed the earlier of . . .
1 year	8,760 operating hours or 5 calendar years	8,760 operating hours or 3 calendar years.
2 years	15,520 operating hours or 5 calendar years	8,760 operating hours or 3 calendar years.
3 years	26,280 operating hours or 5 calendar years	13,100 operating hours or 3 calendar years.
4 years	35,040 operating hours or 5 calendar years	17,520 operating hours or 3 calendar years.
5 or more years	43,800 operating hours or 5 calendar years	21,900 operating hours or 3 calendar years.

- 3.17 During the performance test, you must determine the average concentration of organic compounds as carbon in the magnet wire oven exhaust stack gases (C_c in Equation 1 in § 63.3966(d)) and the destruction efficiency of the catalytic oxidizer, and calculate the operating limit for oven exhaust stack gas concentration as follows. You must identify the highest organic HAP content coating used on this magnet wire coating machine or any identical or very similar magnet wire coating machines

to which the same destruction efficiency test results will be applied. Calculate the percent emission reduction necessary to meet the magnet wire coating emission limit when using this coating. Calculate the average concentration of organic compounds as carbon in the magnet wire oven exhaust stack gases that would be equivalent to exactly meeting the magnet wire coating emissions limit when using the highest organic HAP content coating. The maximum operating limit for oven exhaust stack gas concentration equals 90 percent of this calculated concentration.

- 3.18 For each magnet wire coating machine equipped with a catalytic oxidizer you must perform an annual 10 minute test of the oven exhaust stack gases using EPA Method 25A. This test must be performed under steady state operating conditions similar to those at which the last destruction efficiency test for equipment of that type (either the specific magnet wire coating machine or an identical or very similar magnet wire coating machine) was conducted. If the average exhaust stack gas concentration during the annual test of a magnet wire coating machine equipped with a catalytic oxidizer is greater than the operating limit established in section 3.17 then that is a deviation from the operating limit for that catalytic oxidizer. If problems are found during the annual 10-minute test of the oven exhaust stack gases, you must replace the catalyst bed or take other corrective action consistent with the manufacturer's recommendations.
- 3.19 If a catalyst bed is replaced and the replacement catalyst is not of like or better kind and quality as the old catalyst, then you must conduct a new performance test to determine destruction efficiency according to § 63.3966 and establish new operating limits for that catalytic oxidizer unless destruction efficiency test results and operating limits for an identical or very similar unit (including consideration of the replacement catalyst) are available and approved for use for the catalytic oxidizer with the replacement catalyst.
- 3.20 If a catalyst bed is replaced and the replacement catalyst is of like or better kind and quality as the old catalyst, then a new performance test to determine destruction efficiency is not required and you may continue to use the previously established operating limits for that catalytic oxidizer.

Appendix B

40 C.F.R. Part 64 – Compliance Assurance Monitoring

COMPLIANCE ASSURANCE MONITORING

Upon renewal of a Title V permit, a facility must include a Compliance Assurance Modeling (CAM) Plan for certain pollutant-specific emissions units. The following criteria determine the applicability of the CAM Rule (found in 40 CFR Part 64) to emissions units:

- ▶ A pollutant-specific emissions unit must be located at a Title V permitted major source.
- ▶ The unit must be subject to an emission limitation or standard for the applicable regulated air pollutant.
- ▶ The unit uses a control device to achieve compliance with any such emission limitation or standard.
- ▶ The unit has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100% of the major source threshold.

The intent of the CAM Rule is to ensure that facilities maintain control equipment at levels that ensure compliance with emission limitations. CAM Plans are the program by which these control devices will be maintained. The elements of a CAM Plan must include a description of the indicators to be monitored, the indicator ranges or the process to set indicator ranges, and the performance criteria for the monitoring. These criteria include specifications for obtaining representative data, verification procedures to confirm the operational status of the chosen monitoring, quality assurance and control procedures, monitoring frequency, and the data averaging period. In addition, the plan must contain a justification for the use of parameters/indicators chosen for monitoring, the ranges developed and the monitoring approach. Finally, an implementation plan for installing, testing, and operating the monitoring must be included.

A summary of emissions units with control devices and CAM applicability is provided in the following table.

Table 2. CAM Applicability

Emissions Unit	Unit ID	Controls	Controlled Pollutant	CAM Applies?
Dust Collection System #1	SN-01	Fabric Filter	PM ₁₀	Yes
Dust Collection System #2	SN-02	Fabric Filter	PM ₁₀	Yes
Dust Collection System #3	SN-03	Fabric Filter	PM ₁₀	Yes
Dust Collection System #4	SN-04	Fabric Filter	PM ₁₀	Yes
Dust Collection System #5	SN-05	Fabric Filter	PM ₁₀	Yes
Dust Collection System #6	SN-12	Fabric Filter	PM ₁₀	Yes
Dust Collection System #7	SN-13	Fabric Filter	PM ₁₀	Yes
Plasma Burn Table Dust Collection	SN-18	Fabric Filter	PM ₁₀	Yes

Fabric Filters

There are numerous dust collectors that utilize fabric filters as the control device at the facility. Each fabric filter is subject to CAM. The following tables contain the CAM Plan information for the fabric filters.

Table 3. General Criteria for CAM Plan [per §64.3(a)]

Criteria	Description
Emissions Sources	Dust Collectors – SN-01, SN-02, SN-03, SN-04, SN-05, SN-12, SN-13, and SN-18
Pollutants	PM ₁₀
Applicable Permit Requirements	Opacity and PM ₁₀ Limits
Control Technology	Fabric Filter
Control Efficiency	99+% (estimated)
General Monitoring Approach	Daily visible emissions observations to be performed.
Rationale for Monitoring Approach	The low opacity of visible emissions is a reliable indicator of proper control equipment operation and minimal PM ₁₀ emissions. If visible emission greater than 5% in opacity are observed, the facility will commence corrective actions to bring the affected source into compliance.
Indicator Monitored	Opacity
Indicator Range	0-5% opacity

Table 4. Performance Criteria for CAM Plan [per §64.3(b)]

Criteria	Description
Specifications for Obtaining Representative Data	Opacity observations will be performed while the control device and underlying process equipment is in operation.
Verification Procedures to Confirm Operational Status	Plant personnel will verify that the filters are in operation prior to operation of underlying process equipment generating dust emissions.
QA/QC Practices to Ensure Continuing Validity of Monitoring Data	Trained plant personnel will perform the daily opacity observations.
Monitoring Frequency	Visible emission readings will be performed daily at each exhaust. Only one reading per day is required, since post-control emissions for each source are less than 100 tpy.
Data Collection Procedures	Trained plant personnel will perform the daily opacity observations.
Data Averaging Period	Not applicable.
Recordkeeping	Written records will be kept of all daily visible emission observations.
Special Criteria Concerning Continuous Monitoring Systems	Not applicable.