

# FEB 2 3 2016

Eugene Jamison, Senior, Manager, Environmental & Sustainability Dassault Falcon Jet Corp. 3801 East 10th Street Little Rock, AR 72202

Dear Mr. Jamison:

The enclosed Permit No. 1876-AOP-R10 is your authority to construct, operate, and maintain the equipment and/or control apparatus as set forth in your application initially received on 7/17/2015.

After considering the facts and requirements of A.C.A. §8-4-101 et seq. as referenced by §8-4-304, and implementing regulations, I have determined that Permit No. 1876-AOP-R10 for the construction and operation of equipment at Dassault Falcon Jet Corp. shall be issued and effective on the date specified in the permit, unless a Commission review has been properly requested under Arkansas Department of Pollution Control & Ecology Commission's Administrative Procedures, Regulation 8, within thirty (30) days after service of this decision.

The applicant or permittee and any other person submitting public comments on the record may request an adjudicatory hearing and Commission review of the final permitting decisions as provided under Chapter Six of Regulation No. 8, Administrative Procedures, Arkansas Pollution Control and Ecology Commission. Such a request shall be in the form and manner required by Regulation 8.603, including filing a written Request for Hearing with the APC&E Commission Secretary at 101 E. Capitol Ave., Suite 205, Little Rock, Arkansas 72201. If you have any questions about filing the request, please call the Commission at 501-682-7890.

Sincerely,

Stuart Spencer

Associate Director, Office of Air Quality

Enclosure: Final Permit

# ADEQ OPERATING AIR PERMIT

Pursuant to the Regulations of the Arkansas Operating Air Permit Program, Regulation 26:

Permit No.: 1876-AOP-R10

IS ISSUED TO:

Dassault Falcon Jet Corp. 3801 East 10th Street Little Rock, AR 72202 Pulaski County AFIN: 60-00617

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:

March 26, 2014 AND March 25, 2019

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

Signed:	
	FEB 2 3 2016
Stuart Spencer Associate Director, Office of Air Quality	Date

AFIN: 60-00617

#### **Table of Contents**

SECTION I: FACILITY INFORMATION	4
SECTION II: INTRODUCTION	
Summary of Permit Activity	5
Process Description	5
Regulations	
Emission Summary	
SECTION III: PERMIT HISTORY	
SECTION IV: SPECIFIC CONDITIONS	21
SN- Facility	21
SN-80 and SN-81	
SECTION V: COMPLIANCE PLAN AND SCHEDULE	
SECTION VI: PLANTWIDE CONDITIONS	
Title VI Provisions	47
SECTION VII: INSIGNIFICANT ACTIVITIES	49
SECTION VIII: GENERAL PROVISIONS	50

### Appendix A

40 CFR Part 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

## Appendix B

40 CFR Part 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion

## Appendix C

40 CFR Part 63, Subpart CCCCCC – National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities

#### Appendix D

40 CFR Part 63, Subpart HHHHHH – National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources

#### Appendix E

40 CFR Part 63, Subpart WWWWWW – National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations

AFIN: 60-00617

# List of Acronyms and Abbreviations

Ark. Code Ann. Arkansas Code Annotated

AFIN ADEQ Facility Identification Number

C.F.R. Code of Federal Regulations

CO Carbon Monoxide

HAP Hazardous Air Pollutant

lb/hr Pound Per Hour

MVAC Motor Vehicle Air Conditioner

No. Number

NO<sub>x</sub> Nitrogen Oxide

PM Particulate Matter

PM<sub>10</sub> Particulate Matter Smaller Than Ten Microns

SNAP Significant New Alternatives Program (SNAP)

SO<sub>2</sub> Sulfur Dioxide

SSM Startup, Shutdown, and Malfunction Plan

Tpy Tons Per Year

UTM Universal Transverse Mercator

VOC Volatile Organic Compound

AFIN: 60-00617

# **SECTION I: FACILITY INFORMATION**

PERMITTEE: Dassault Falcon Jet Corp.

AFIN: 60-00617

PERMIT NUMBER: 1876-AOP-R10

FACILITY ADDRESS: 3801 East 10th Street

Little Rock, AR 72202

MAILING ADDRESS: 3801 East 10th Street

Little Rock, AR 72202

COUNTY: Pulaski County

CONTACT NAME: Eugene Jamison, REM

CONTACT POSITION: Senior Manager, Environmental Systems & Sustainability

TELEPHONE NUMBER: (501) 210-0375

REVIEWING ENGINEER: John Mazurkiewicz

UTM North South (Y): Zone 15: 3844105.48 m

UTM East West (X): Zone 15: 570317.17 m

AFIN: 60-00617

#### **SECTION II: INTRODUCTION**

### **Summary of Permit Activity**

Dassault Falcon (AFIN: 60-00617) owns and operates an aerospace manufacturing and rework facility located at 10th & Leonard Streets, Little Rock, Arkansas 72202, and has submitted an application for Minor Modification to the existing permit. The following changes have been requested in this application:

- Convert the existing Plating Shop to the Small Parts Painting Shop;
- Install two spray booths (proposed as sources SN-97 and SN-98);
- Install a paint cure booth (proposed as SN-99);
- Add two vent stacks for the paint mixing room (proposed as SN-100A and SN-100B);
- Remove the Plating Shop Laquer Room (SN-28) from the permit;
- Install vent hoods over the existing alodine tanks, and add the tanks as an individual source in the permit (SN-101A and SN-101B); and,
- Remove the flocking booth (SN-13) from the permit.

Changes to annual emission rates associated with this Modification include an increase of 0.1 tpy PM, and 0.1 tpy  $PM_{10}$ .

#### **Process Description**

New aircraft arrive at the Dassault Falcon facility with temporary instrumentation, crew seating, and a coating to protect the exterior aluminum frame from corrosion while in flight from France. The temporary instrumentation and seating are removed and returned to Dassault Aviation for reuse. The protective coating is washed off with a surfactant and water before completion activities begin. Aircraft are then completed to customer specifications. Completion activities include: painting, installing avionics, and interior fabrication. Previously purchased aircraft (also referred to as customer aircraft) are also brought to the facility for rework, repair, and inspection.

#### Paint Shop

There are three prep bays at Dassault Falcon in which corrosion and sanding primer applications are performed. De-painting can also occur in these prep bays on customer aircraft that are returned to the facility as part of the service/re-work portion of facility operations. There are five paint bays in which topcoat applications are performed. All eight bays are equipped with three stage equivalent dry filtering system to control paint over spray.

Three small parts enclosures, used intermittently to paint or touch up smalls exterior parts of the aircraft, are located within Paint Bays 2 and 3.

#### Cabinet Shop

AFIN: 60-00617

Dassault Falcon fabricates and finishes cabinets for installation in the aircraft. Cabinetry work involves the cutting, adhesive application, sanding and buffing of various light weight Kevlar and aluminum honeycomb materials and veneers, followed by various paint or stain applications and curing. The cabinet shop is equipped with a closed dust collection system which returns conditioned air to the shop area. This process includes drawing particulate laden air from the cutting and sanding operations and capturing it by diffuse particulate filters. Alternatively, particulate may be captured by one of two vacuum filters that filter the air prior to it being exhausted into the atmosphere. Components are glued in Glue Booths Nos. 1, 3, 4, 5, and 6. Stain is applied to the cabinet components in the Stain Room. UV paint is applied and cured in UV spray, flash off, and cure areas.

The cabinet shop is equipped with three Paternosters associated with specific stage in the cabinet component completion process. A Paternoster is a rotating tray holder that rotates slowly (approximately 4 hours for each complete rotation). The Paternoster allows Dassault Falcon to store numerous cabinet parts in various stages of completion in a compact location. Each Paternoster is equipped with a stack that allows for VOC/HAP emissions to be released as components dry.

UV paint is applied automatically at the Bravo Auto Finish system. The Bravo Auto Finish System has 7 stacks associated with its operation. These seven stacks include the Bravo Auto Finish Robot (SN-87), where UV is applied, the Cross Transfer Area (SN-88), where the cabinet components transfer by conveyor to the curing stations, and five curing stations (SN-89, SN-90, SN-93, SN-94, and SN-95) in succession for drying the cabinet components. VOC and HAP emissions from the UV will be released through the 7 stacks.

The UV applied at the cabinet shop is mixed in an area referred to as the Paint Kitchen. In the Paint Kitchen, the viscosity of the UV is checked prior to use. If the UV paint is too thick, a thinner solvent is added until the desired viscosity is achieved.

#### Manufacturing Operations

The Manufacturing building houses a number of diverse metals cutting and shaping operations, vacu-forming, or molding of various fiberglass/resin or related media components, plus subassembly operations. Emission points in the manufacturing area are insignificant and include mold ovens, a gel-coat booth, welding, weld inspection, and two particulate matter filters.

#### **Upholstery Shop**

Dassault Falcon fabricates all aircraft seating in the Upholstery Shop. All interior seats and various surfaces and flooring are upholstered to customer specifications. Two components of the operation produce emissions. One is the hot wire booth where a spray adhesive is applied to the foam (to attach the template) prior to the foam being cut by the hot wire. The second is the adhesive application booth where solvent based glues are applied to the upholstery pieces. Foam is occasionally cut and glued in the adhesive application. Both booths exhaust via a single stack.

AFIN: 60-00617

Depending on customer specifications, certain cabinets/wood pieces may be upholstered. These cabinets/wood pieces are upholstered at the Cabinet Shop in Glue Booth No.5.

#### **Headliner Shop**

Dassault Falcon builds and installs the headliners for each aircraft. Headliners are constructed in the Manufacturing Department and completed in the Headliner Shop. Completion of the headliners requires the use of adhesives and fillers, and conducting light surface sanding. The headliner shop is equipped with particulate filters.

#### Metal Parts Extension

All decorative metal plating is outsourced. Area capabilities include a pickling and rinse tank, one alodine process tank, and a buffing booth for the polishing of small plated parts (plating is outsourced). These operations are conducted intermittently to achieve individual specifications for enhancing the appearance or durability of various plated parts.

# Small Parts Paint Shop

Interior parts of the aircraft are primed and painted in the Small Parts Paint Shop. The shop consists of four paint booths equipped with 3 stage equivalent filter. Only interior small parts are painted in these booths. After the small parts are painted, they are placed in a curing booth for drying. Paint used in the spray booths will be mixed in the mixing room that has two stacks allowing the room to be vented to the atmosphere.

#### Fuel Storage

Dassault Falcon stores fuel on site for aircraft, company vehicles, and equipment. Jet fuel is stored in three underground storage tanks. Dassault Falcon also has an underground storage tank for automotive fuel used to service vehicles and equipment.

#### Service Center

Previously purchased aircraft are brought to the Service Center for rework and inspection. The majority of the work completed by the Service Center includes inspections and mechanical/instrumentation repairs that generate little to no emissions. However, the Service Center may rework the interior of the aircraft to include repair and installation of new cabinets, headliners, upholstery, etc. Emissions from the rework activities are emitted through the associated work area at the Service Center.

#### **Miscellaneous**

Several miscellaneous emission sources are included in this section that do not fit any particular operation. Solvents and other chemicals are used at many locations throughout the facility,

AFIN: 60-00617

including the completion hangers. These facility wide fugitive emissions are emitted to the atmosphere through general building ventilation.

Dassault Falcon also produces decals for aircraft in the screen printing room. Emissions from the screen printing process are emitted to the atmosphere through a single stack in the screen printing room.

The MIS Back-up Generator provides emergency power to the computer system during a power outage to enable backup of data so that no information is lost by the interruption of power.

The Service Center Fire System emergency engines are part of the fire suppression system. In the event of a fire, the engines are activated and meter a constant volume of oxygen depleting foam and water mix for a period of approximately 10 min.

# Regulations

The following table contains the regulations applicable to this permit.

Regulations
Arkansas Air Pollution Control Code, Regulation 18, effective June 18, 2010
Regulations of the Arkansas Plan of Implementation for Air Pollution Control,
Regulation 19, effective September 13, 2014
Regulations of the Arkansas Operating Air Permit Program, Regulation 26, effective
November 18, 2012
40 CFR Part 60, Subpart IIII – Standards of Performance for Stationary Compression
Ignition Internal Combustion
40 CFR Part 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air
Pollutants for Stationary Reciprocating Internal Combustion Engines
40 CFR Part 63, Subpart CCCCCC - National Emission Standards for Hazardous Air
Pollutants for Source Category: Gasoline Dispensing Facilities
40 CFR Part 63, Subpart HHHHHHH – National Emission Standards for Hazardous Air
Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area
Sources
40 CFR Part 63, Subpart WWWWWW – National Emission Standards for Hazardous
Air Pollutants: Area Source Standards for Plating and Polishing Operations

AFIN: 60-00617

# **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			Emissic	n Rates
Number	Description	Pollutant	lb/hr	tpy
		PM	1.7	1.1
		$\mathrm{PM}_{10}$	1.7	1.1
	m - 1 - 11 - 11 - 12 - 13	$SO_2$	1.3	0.4
	Total Allowable Emissions	VOC	751.7	165.9
		CO	10.1	7.4
		$NO_X$	20.0	10.7
	Single HAP*		N/A	9.60
	Combination HAP*		N/A	22.00
	Air Contaminants **	Acetone	N/A	70.00
	TT-1-1-4 Ch A th'	VOC	5.1	
01	Upholstery Shop – Adhesive	Acetone	N/A	-
	Application Room	HAP	N/A	
08A	Cabinet Shop – UV Spray			
08B	Cabinet Shop – UV Cure			
08C	Cabinet Shop – UV Flash Off	VOC	19.8	
08D	Cabinet Shop – UV Spray	HAP	N/A	-
08E	Cabinet Shop – UV Flash Off			
08F	Cabinet Shop – UV Cure			
00		VOC	10.2	
09	Cabinet Shop – Poly Spray & Hold	HAP	N/A	-
		VOC	12.8	
10	Cabinet Shop – Glue Booth #1	Acetone	N/A	-
	-	HAP	N/A	
		VOC	14.4	
12	Cabinet Shop – Glue Booth #3	Acetone	N/A	-
		HAP	N/A	
		VOC	2.2	
17	Headliner Shop Stack -1	Acetone	N/A	-
		HAP	N/A	
		VOC	2.2	
18	Headliner Shop Stack -2	Acetone	N/A	-
		HAP	N/A	
		VOC	2.2	
19	Headliner Shop Stack -3	Acetone	N/A	-
		HAP	N/A	

	EMISSION SUN	MMARY		
Source	Description	Dollatont	Emissio	n Rates
Number	Description	Pollutant	lb/hr	tpy
	M. II. G. D. C.	VOC	59.3	
25	Miscellaneous – Screen Printing	Acetone	N/A	-
	Room	HAP	N/A	
26A	Paint Shop – Spray Booth	VOC	5.0	
		Acetone	N/A	-
26B	Paint Shop – Spray Booth	HAP	N/A	
27	Cabinat Shan Spray Pooth	VOC	1.7	
21	Cabinet Shop – Spray Booth	HAP	N/A	-
		VOC	42.6	
30	Paint Shop – Prep Bay #1 Stack #1	Acetone	N/A	-
		HAP	N/A	
		VOC	42.6	
31	Paint Shop – Prep Bay #1 Stack #2	Acetone	N/A	-
		HAP	N/A	
		VOC	42.6	
32	Paint Shop – Prep Bay #1 Stack #3	Acetone	N/A	-
		HAP	N/A	
33	Fuel Storage – Jet Fuel (20,000 gal)	VOC	0.6	
33	Tuel Storage – Jet Tuel (20,000 gal)	HAP	N/A	_
34	Fuel Storage Let Fuel (20,000 gel)	VOC	0.6	
34	Fuel Storage – Jet Fuel (20,000 gal)	HAP	N/A	_
35	Fuel Storage – Jet Fuel (10,000 gal)	VOC	0.3	
33	ruei Storage – Jet ruei (10,000 gai)	HAP	N/A	_
37	Miscellaneous – Facility Wide	VOC	17.9	
31	Uncontrolled Emissions	HAP	N/A	_
		VOC	64.0	
39	Paint Shop – Prep Bay #2 Stack #1	Acetone	N/A	-
		HAP	N/A	
		VOC	64.0	
40	Paint Shop – Prep Bay #2 Stack #2	Acetone	N/A	-
		HAP	N/A	
		VOC	9.9	
42	Paint Shop – Bay #1 Stack #1	Acetone	N/A	-
		HAP	N/A	
		VOC	9.9	
43	Paint Shop – Bay #1 Stack #2	Acetone	N/A	-
		HAP	N/A	
		VOC	9.9	
45	Paint Shop – Bay #2 Stack #1	Acetone	N/A	-
		HAP	N/A	

	EMISSION SUN	MMARY		
Source	D	D 11	Emissio	n Rates
Number	Description	Pollutant	lb/hr	tpy
		VOC	9.9	
46	Paint Shop – Bay #2 Stack #2	Acetone	N/A	_
		HAP	N/A	
48	Doint Chon Small Dorts Englosure	VOC	1.8	
40	Paint Shop – Small Parts Enclosure	HAP	N/A	_
		VOC	12.3	
49	Cabinet Shop – Glue Booth #4	Acetone	N/A	-
		HAP	N/A	
		VOC	12.8	
50	Cabinet Shop – Glue Booth #5	Acetone	N/A	-
		HAP	N/A	
51	Auto Finish Cabinet Shop – UV	VOC	1.7	
JI	Spray	HAP	N/A	_
52	Auto Finish Cabinet Shop – Clean	VOC	1.7	
32	Room Booth Exhaust	HAP	N/A	_
53	Auto Finish Cabinet Shop – UV Flash	VOC	1.7	
33	Off	HAP	N/A	_
54	Auto Finish Cabinet Shop – UV Flash	VOC	1.7	
J <del>-1</del>	Off	HAP	N/A	_
55	Auto Finish Cabinet Shop – UV Flash	VOC	1.7	
33	Off	HAP	N/A	_
56	Auto Finish Cabinet Shop – UV Flash	VOC	1.7	
30	Off	HAP	N/A	_
57	Auto Finish Cabinet Shop – UV Cure	VOC	1.7	
31	Auto Finish Cabinet Shop – 6 v Cure	HAP	N/A	_
58	Auto Finish Cabinet Shop – Touch-up	VOC	1.7	
50	Booth	HAP	N/A	-
		VOC	9.9	
59	Paint Shop – Bay #3 Stack #1	Acetone	N/A	-
		HAP	N/A	
		VOC	9.9	
60	Paint Shop – Bay #3 Stack #2	Acetone	N/A	-
		HAP	N/A	
		VOC	9.9	
61	Paint Shop – Bay #4 Stack #1	Acetone	N/A	-
		HAP	N/A	
		VOC	9.9	
62	Paint Shop – Bay #4 Stack #2	Acetone	N/A	-
		HAP	N/A	

	EMISSION SUM	IMARY		
Source	Description	D-11-44	Emissio	n Rates
Number	Description	Pollutant	lb/hr	tpy
		VOC	9.9	
63	Paint Shop – Bay #5 Stack #1	Acetone	N/A	-
		HAP	N/A	
		VOC	9.9	
64	Paint Shop – Bay #5 Stack #2	Acetone	N/A	-
		HAP	N/A	
		VOC	42.6	
65	Paint Shop – Prep Bay #3 Stack #1	Acetone	N/A	-
		HAP	N/A	
		VOC	42.6	
66	Paint Shop – Prep Bay #3 Stack #2	Acetone	N/A	-
		HAP	N/A	
67	Paint Shop – Small Parts Enclosure	VOC	1.8	_
07		HAP	N/A	_
68	Paint Shop – Small Parts Enclosure	VOC	1.8	_
00	Famit Shop – Sman Farts Eliciosure	HAP	N/A	-
69	Paint Shop – Primer Work Room	VOC	0.2	
09	(Hangar 3)	HAP	N/A	-
70	Paint Shop – Paint Work Room	VOC	0.2	
70	(Hangar 3)	HAP	N/A	_
71	Service Center – Spray UV	VOC	3.8	_
/ 1	Service Center – Spray 6 v	HAP	N/A	
72	Service Center – Cure UV	VOC	3.8	_
12	Service Center Cure 6 v	HAP	N/A	
73	Service Center – UV Flash-off	VOC	3.8	_
13	Service Center O v 1 lasir-oil	HAP	N/A	_
		VOC	2.9	
74	Service Center – Cabinet Glue Shop	Acetone	N/A	-
		HAP	N/A	
		VOC	6.8	
75	Service Center – Headliner Glue Area	Acetone	N/A	-
		HAP	N/A	
76	Paint Shop – Primer Work Room	VOC	0.2	_
, 0	(Hanger 2)	HAP	N/A	
77	Paint Shop – Paint Work Room	VOC	0.2	_
/ /	(Hanger 2)	HAP	N/A	_

EMISSION SUMMARY				
Source	Description	D-11-44	Emissio	on Rates
Number	Description	Pollutant	lb/hr	tpy
		PM	0.6	0.6
		$PM_{10}$	0.6	0.6
70	Noticeal Con Combined in Sources	$\mathrm{SO}_2$	0.1	0.1
78	Natural Gas Combustion Sources	VOC	0.5	0.5
		CO	6.3	6.3
		$NO_X$	7.5	7.5
		VOC	42.6	
79	Paint Shop – Prep Bay #3 Stack #3	Acetone	N/A	-
		HAP	N/A	
		PM	0.1	0.1
		$PM_{10}$	0.1	0.1
	MICDIC	$SO_2$	0.4	0.1
80	MIS Back-up Generator	VOC	0.4	0.1
	158 hp	CO	1.3	0.4
		$NO_X$	1.1	0.3
		HAP	N/A	1.05E-03
		PM	0.9	0.3
	(2) Service Center Emergency Engines 183 hp, each	PM10	0.9	0.3
		SO2	0.8	0.2
81		VOC	1.0	0.3
		CO	2.5	0.7
		$NO_X$	11.4	2.9
		HAP	N/A	0.33
82	2 500 cellen Automotive Evel Tenk	VOC	11.9	
82	2,500 gallon Automotive Fuel Tank	HAP	N/A	_
024	Cabinet Shop – Stain Booth	VOC		
83A	Paternoster	HAP	1.4	
02D	Cohinet Chen Stein Application	VOC	N/A	_
83B	Cabinet Shop – Stain Application	HAP		
0.4.4	Cabinet Shop – TAS Booth	VOC		
84A	Paternoster	HAP	1.0	
04D	Cohinet Chen TAC Application	VOC	N/A	_
84B	Cabinet Shop – TAS Application	HAP		
05 4	Cabinet Shop – UV Manual Booth	VOC		
85A	#1A	HAP	12.1	
05D	Cabinet Shop – UV Manual Booth	VOC	N/A	-
85B	#1B	HAP		
0.64	Cabinet Shop – UV Manual Booth	VOC		
86A	#2A	HAP	12.1	
0.60	Cabinet Shop – UV Manual Booth	VOC	N/A	-
86B	#2B	HAP		

	EMISSION SUN	MMARY		
Source	Description	Dolls-44	Emissio	n Rates
Number	Description	Pollutant	lb/hr	tpy
87	Cabinet Shop – Bravo Auto Finish	VOC	1.9	
0/	Robot	HAP	N/A	
88	Cabinet Shop – Bravo Auto Finish	VOC	1.9	
00	Cross Transfer	HAP	N/A	-
89	Cabinet Shop – Bravo Auto Finish	VOC	1.9	
89	UV Cure No. 1	HAP	N/A	-
90	Cabinet Shop – Bravo Auto Finish	VOC	1.9	
90	UV Cure No. 2	HAP	N/A	-
91	Cohinet Shop Doint Vitabon	VOC	10.3	
91	Cabinet Shop Paint Kitchen	HAP	N/A	-
92	Cabinet Shop – Glue Booth #6	VOC	12.3	-
93	Cabinet Shop – Bravo Auto Finish	VOC		
93	UV Cure No. 3	HAP		
0.4	Cabinet Shop – Bravo Auto Finish	VOC	5.7	
94	UV Cure No. 4	HAP	N/A	-
05	Cabinet Shop – Bravo Auto Finish	VOC	]	
95	UV Cure No. 5	HAP		
064	T1 A #1	VOC		
96A	Touch-up Area #1	HAP	3.0	
O.C.D.	Touch-up Area #2	VOC		
96B		HAP		
0.60	T 1 A 1/2	VOC		
96C	Touch-up Area #3	HAP	N/A	-
0.60	T 1 A 1/4	VOC		
96D	Touch-up Area #4	HAP		
0.615	T 1 4 4/5	VOC		
96E	Touch-up Area #5	HAP		
07	Small Parts Paint Shop – Spray Booth	VOC	4.9	
97	No.1	HAP	N/A	-
00	Small Parts Paint Shop – Spray Booth	VOC	4.9	
98	No.2	HAP	N/A	-
00	Small Parts Paint Shop – Paint Cure	VOC	1.0	
99	Booth	HAP	N/A	-
100 4	Small Parts Paint Shop – Paint	VOC		
100A	Mixing Room No. 1	HAP	2.0	
1000	Small Parts Paint Shop – Paint	VOC	N/A	-
100B	Mixing Room No. 2	HAP		
		PM	0.2	0.2
101A	Small Parts Paint Shop – Alodine	$PM_{10}$	0.2	0.2
	Process Tank Stack No. 1	HAP	N/A	-

AFIN: 60-00617

	EMISSION SUMMARY				
Source	Description	Emission Rates			
Number	Description	Pollutant	lb/hr	tpy	
	Small Parts Paint Shop – Alodine	PM			
101B	Process Tank Stack No. 2	$PM_{10}$			
	Trocess Talik Stack No. 2	HAP			

<sup>\*</sup>HAPs included in the VOC totals. Other HAPs are not included in any other totals unless specifically stated.

<sup>\*\*</sup>Air Contaminants such as ammonia, acetone, and certain halogenated solvents are not VOCs or HAPs.

AFIN: 60-00617

#### **SECTION III: PERMIT HISTORY**

The first air permit, #1067-AR was issued to Dassault Falcon Jet Corp (DFJC) on August 21, 1990 under Regulation 18, the Arkansas Air Pollution Control Code.

Air Permit #1067-AR-1 was issued to Dassault Falcon Jet Corp. on June 30, 1995 under Regulation 19, Regulations of the Arkansas Plan of Implementation for Air Pollution Control, at the request of Arkansas Department of Pollution Control and Ecology (ADPCE). DFJC identified specific emissions point sources and quantified emissions to obtain permit #1067-AR-1. In addition, DFJC became subject to 40 CFR 63, Subpart N - National Emission Standard for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks.

Air Permit #1067-AR-2 was issued to DFJC on December 20, 1995. The permit included the change of the test method for the decorative chrome plating operation from Method 306 or 306A to Method 306B. This modification allowed DFJC to utilize a test method which is significantly less expensive.

Air Permit #1067-AR-3 was issued to DFJC on August 6, 1996. The permit was issued to authorize the facility to build an additional paint bay and a second adhesive application room for the cabinet shop. This application also reflected the name change from Falcon Jet Corp. to Dassault Falcon Jet Corp. It was also submitted to notify ADPCE that DFJC has become subject to two more NESHAP standards: 40 CFR 63, Subpart GG - National Emission Standard for Aerospace Manufacturing and Rework Facilities and 40 CFR 63, Subpart JJ - National Emission Standards for Wood Furniture Manufacturing Operations.

This facility operated under Air Pollution Prevention Plan #1067-AP3-R0 which was issued on March 27, 1998. Emissions were quantified as 0.9 tons per year (tpy) of PM/PM<sub>10</sub>, 94.0 tpy of Volatile Organic Compounds (VOC), and 23.8 tpy of Hazardous Air Pollutants (HAPs).

Permit 1876-A was issued on February 10, 2000. There were no physical changes made at this facility. This permit was issued to update the permit to permitting regulations introduced with the revisions to Regulations 18 and 19.

Permit 1876-AR-1 was issued on November 8, 2000. This permit was issued to remove Specific Conditions # 6 and # 7. These specific conditions limited the number of aircraft that the facility was allowed to produce and depaint during a consecutive twelve month period. However, the rolling 12-month VOC and HAP record keeping provisions of Specific Conditions #11, #12, #13, #14, and #15 are sufficient to show compliance with permitted emission rates.

Permit 1876-AR-2 was issued on April 26, 2002. This permit was issued to add three new painting bays, each bay having three stacks. One of the new bays is used for the depainting and primer application, while the remaining two new bays are used for topcoat application. There were no changes to the annual permitted limits with this modification.

AFIN: 60-00617

Permit 1876-AR-3 was issued on September 10, 2003. A stack was removed from each of three paint bays (SN-41, SN-44, and SN-47). Total emissions from the paint bays remained the same. A small parts paint booth was installed. No net increase in production resulted from this installation. However, to allow for flexibility in operations, the emission limits for the new paint booth was set equal to that for the existing. A Paint Vault Sample Spray Booth was added to the list of insignificant activities. There were no changes to the annual permitted emission limits.

Permit 1876-AR-4 was issued on June 28, 2005. DFJC requested to install a glue booth (SN-49) at the Cabinet Shop, a completion hanger (part of SN-37), and a second natural gas fired curing oven (Insignificant Activity). DFJC also requested to relocate the Mold Machine Shop curing oven to the new building where the new oven was installed. Both the glue booth and the hanger are sources of VOC emissions. DFJC did not request an increase for the permitted annual VOC emission rate.

Permit 1876-AR-5 was issued on June 13, 2006. Permit 1876-AR-5 allowed the following modifications:

- Expanded the Cabinet Shop and relocate Glue Booth No. 2 (SN-11),
- Relocated Headliner Operations (Remove stacks SN-05, SN-06, and SN-21 and SN-20 and SN-22),
- Relocated Printing Room (SN-25),
- Expanded the Upholstery Shop and relocate glue booth (SN-01),
- Replaced Paint Bays No. 1 and No. 2 waterfall particulate control system with dry filters,
- Constructed a new completion hanger and relocate existing completion operations (SN-37).
- Re-designated SN-08 as SN-08A through SN-08F since emissions are emitted through eight stacks instead of one,
- Removed SN-07 since the stack was never installed and emissions are accounted for in SN-08.
- Installed Glue Booth No. 5 (SN-20) in the Cabinet Shop,
- Constructed an Auto Finish Cabinet Shop (SN-51 through SN-58), and
- Updated Insignificant Activities Table

With the installation of the glue booth and construction of the Auto Finish Cabinet Shop, DFJC did not request an increase in the throughput of coatings and adhesives. Therefore, the annual emission limits were not increased.

Permit 1876-AR-6 was issued on August 14, 2007. This permit allowed the following modifications:

• Converted the existing paint bays (No. 1 and No. 2) into completion areas (SN-14 through SN-19); and

AFIN: 60-00617

• Constructed four new bays for depainting, primer application, and top coat application activities (SN-59 through SN-66), two enclosures for painting small parts (SN-67 and SN-68), a primer work room (SN-69), a paint work room (SN-70), a sanding area enclosure (insignificant activity), and a flightline hanger for storage of completed aircraft.

With the proposed construction, DFJC did not request an increase in the throughput of coatings and adhesives. Therefore, the annual VOC emission limits were not increased.

Permit 1876-AR-7 was issued on December 12, 2007. The modification expanded the Service Center, and added the following sources:

- Service Center Spray UV (SN-71)
- Service Center Cure UV (SN-72)
- Service Center UV Flash-off (SN-73)
- Service Center Cabinet Glue Booth (SN-74), and
- Service Center Headliner Glue (SN-75).

While the potential to emit from the proposed modification exceeded the VOC de minimis threshold, the resulting, combined VOC emissions from the sources listed above was limited to 20.0 tpy in order for the modifications to qualify as a de minimis modification. The plantwide VOC limit of 95.0 tpy did not increase.

Permit 1876-AOP-R0 was issued on March 11, 2009 and was the initial Title V permit issued to the facility. Dassault increased production but did not install new equipment. As a result, permitted VOC emissions increased from 95.0 tpy to 165.0 tpy. The following modifications were made:

- Emissions from existing unpermitted natural gas fired process equipment, now permitted as SN-78, were quantified;
- SN-03 was removed;
- SN-26 was corrected to show there are two booths (SN-26 A and SN-26) with a stack for each;
- SN-69 and SN-70 (Hangar 3 Paint and Primer Work Rooms) were revised to show there are four sources by adding SN-76 and SN-77 (Hangar 2 Paint and Primer Work Rooms);
- SN-52 was renamed to Clean Room Exhaust;
- SN-55 and SN-56 were renamed to UV Flash Off;
- SN-58 was renamed to Touch-Up Booth;
- The plantwide HAP emission limit from sources which do not qualify as insignificant activities was reduced to 22.00 tpy; and
- A plantwide emission limit of 70.00 tpy of acetone was added.

Permit 1876-AOP-R1 was issued on June 10, 2010. The permit was amended to add a clear coat to plated parts at gel coat booths, an electric curing oven to cure the clear coated parts, and the Service Center Dust Collector/Filter to the insignificant activity list.

AFIN: 60-00617

Permit 1876-AOP-R2 was issued on November 12, 2010. The permit was amended to revise the insignificant activities list as follows:

- Revise the heat input capacity of the mold machine shop curing oven to 0.7 MMBtu/hr,
- Add a second waste water evaporator (0.75 MMBtu/hr),
- Remove the service center small parts paint booth,
- Remove the paint vault sample spray booth,
- Remove one of the two listed gel coat booths,
- Rename the "Cabinet Shop Polish, Detail Polish, and Buffing Rooms" to "Cabinet Shop Polish and Buffing Rooms", and
- Remove the Paint Shop Sanding Area Enclosures

Permit 1876-AOP-R3 was issued on September 7, 2011. Two cabinet shop sanding room baghouses were added to the insignificant activity list.

Permit 1876-AOP-R4 was issued on May 3, 2012. A third stack (SN-79) for the Paint Shop Prep Bay 3, a MIS Backup generator (SN-80), two emergency generators (SN-81) at the service center, and the applicable requirements for NSPS IIII and NESHAP ZZZZ for the engines were incorporated. Overall permitted emissions increased by 0.4 tpy PM/PM<sub>10</sub>, 0.3 tpy SO<sub>2</sub>, 0.9 tpy VOC, 1.1 tpy CO, and 3.2 tpy NO<sub>X</sub>.

Permit 1876-AOP-R5 was issued on October 3, 2013. The facility relocated the headliner shop, formerly SN-20 and SN-21 and re-designated the shop SN-17, SN-18, and SN-19. Two sanding booths in Bay 1 of the new headliner shop, one dust collector in the Cabinet Shop, and one dust collector in the Manufacturing Area (each an insignificant activity) were installed. These changes did not require permitted emission limits to be revised.

Permit 1876-AOP-R6 was issued on March 26, 2014. The Title V permit was renewed with modifications. The modifications included relocation of the upholstery shop (SN-01) and construction of a 14-position hangar included in SN-37. A gasoline storage tank (SN-82) was moved from the insignificant activities list. The applicable NESHAP CCCCCC, HHHHHHH, and WWWWWW requirements were added.

Permit 1876-AOP-R7 was issued on August 20, 2014. The modification allowed the cabinet shop to be expanded in order to improve fabrication process flow. SN-83 through SN-91 were added to the permit. The plantwide limit of 165.0 tpy of VOC was not increased.

Permit 1876-AOP-R8 was issued on January 1, 2015. The modification allowed for the installation of a new glue (SN-92) booth in the cabinet shop. Glue Booth No. 2 (SN-11) was requested to be removed from the permit. The potential to emit for each glue booth is 53.9 tpy. Overall, permitted emissions were unchanged.

AFIN: 60-00617

Permit 1876-AOP-R9 was issued on August 10, 2015. The modification increased the number of exhaust stacks to support expansion and improvements in Cabinet Shop operations. The following details changes associated with the permitting action:

- Add a stack to the Stain Booth (SN-83B), where the stain is applied to components prior to placement in the Stain Booth Paternoster (SN-83A);
- Add a stack to the TAS Booth (SN-84B), where the TAS is applied to components prior to placement in the TAS Booth Paternoster (SN-84A);
- Construct an additional stack at UV Manual Booth #I (SN-85B); Construct an additional stack at UV Manual Booth #2 (SN-86B);
- Add three additional "pickup" points (stacks) for UV Cure to the Auto Bravo Robot system (SN-93, SN-94, and SN-95). From a mechanical standpoint, additional exhaust points are necessary to pull the preferred volume of air; and,
- Add five stacks for Touch-up Areas (SN-96A through SN-96E).

No annual Plantwide emission rate changes to the permit are associated with this modification.

AFIN: 60-00617

## SECTION IV: SPECIFIC CONDITIONS

## SN- Facility

#### Source Description

New aircraft arrive at the Dassault Falcon facility with temporary instrumentation, crew seating, and a coating to protect the exterior aluminum frame from corrosion while in flight from France. The temporary instrumentation and seating are removed and returned to Dassault Aviation for reuse. The protective coating is washed off with a surfactant and water before completion activities begin. Aircraft are then completed to customer specifications. Completion activities include: painting, installing avionics, and interior fabrication. Previously purchased aircraft (also referred to as customer aircraft) are also brought to the facility for rework, repair, and inspection.

# **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 for all sources except SN-78 by complying with Specific Condition #4. In order to demonstrate compliance with this condition for SN-78 the permittee shall comply with Specific Conditions #11 and #13. [Regulation 19, §19.501 *et seq.*, and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
01	Upholstery Shop – Adhesive Application Room	VOC	5.1	-
08A	Cabinet Shop – UV Spray			
08B	Cabinet Shop – UV Cure			
08C	Cabinet Shop – UV Flash Off	VOC	19.8	
08D	Cabinet Shop – UV Spray	VOC	19.0	-
08E	Cabinet Shop – UV Flash Off			
08F	Cabinet Shop – UV Cure			
09	Cabinet Shop – Poly Spray & Hold	VOC	10.2	1
10	Cabinet Shop – Glue Booth #1	VOC	12.8	1
12	Cabinet Shop – Glue Booth #3	VOC	14.4	-
25	Miscellaneous – Screen Printing Room	VOC	59.3	1
26A	Paint Shop – Spray Booth	VOC	5.0	
26B	Paint Shop – Spray Booth	VOC	3.0	_
17	Headliner Shop Stack -1	VOC	2.2	-
18	Headliner Shop Stack – 2	VOC	2.2	-
19	Headliner Shop Stack – 3	VOC	2.2	1
27	Cabinet Shop – Spray Booth	VOC	1.7	1
30	Paint Shop – Prep Bay #1 Stack #1	VOC	42.6	-
31	Paint Shop – Prep Bay #1 Stack #2	VOC	42.6	-
32	Paint Shop – Prep Bay #1 Stack #3	VOC	42.6	-
33	Fuel Storage – Jet Fuel (20,000 gal)	VOC	0.6	-

SN	Description	Pollutant	lb/hr	tpy
34	Fuel Storage – Jet Fuel (20,000 gal)	VOC	0.6	-
35	Fuel Storage – Jet Fuel (10,000 gal)	VOC	0.3	-
37	Miscellaneous – Facility Wide Uncontrolled Emissions	VOC	17.9	-
39	Paint Shop – Prep Bay #2 Stack #1	VOC	64.0	_
40	Paint Shop – Prep Bay #2 Stack #2	VOC	64.0	-
42	Paint Shop – Bay #1 Stack #1	VOC	9.9	-
43	Paint Shop – Bay #1 Stack #2	VOC	9.9	-
45	Paint Shop – Bay #2 Stack #1	VOC	9.9	-
46	Paint Shop – Bay #2 Stack #2	VOC	9.9	-
48	Paint Shop – Small Parts Enclosure	VOC	1.8	-
49	Cabinet Shop – Glue Booth #4	VOC	12.3	-
50	Cabinet Shop – Glue Booth #5	VOC	12.8	-
51	Auto Finish Cabinet Shop – UV Spray	VOC	1.7	-
52	Auto Finish Cabinet Shop – Clean Room Booth Exhaust	VOC	1.7	-
53	Auto Finish Cabinet Shop – UV Flash Off	VOC	1.7	_
54	Auto Finish Cabinet Shop – UV Flash Off	VOC	1.7	_
55	Auto Finish Cabinet Shop – UV Flash Off	VOC	1.7	-
56	Auto Finish Cabinet Shop – UV Flash Off	VOC	1.7	-
57	Auto Finish Cabinet Shop – UV Cure	VOC	1.7	-
58	Auto Finish Cabinet Shop – Touch-up Booth	VOC	1.7	-
59	Paint Shop – Bay #3 Stack #1	VOC	9.9	-
60	Paint Shop – Bay #3 Stack #2	VOC	9.9	-
61	Paint Shop – Bay #4 Stack #1	VOC	9.9	-
62	Paint Shop – Bay #4 Stack #2	VOC	9.9	-
63	Paint Shop – Bay #5 Stack #1	VOC	9.9	-
64	Paint Shop – Bay #5 Stack #2	VOC	9.9	-
65	Paint Shop – Prep Bay #3 Stack #1	VOC	42.6	-
66	Paint Shop – Prep Bay #3 Stack #2	VOC	42.6	-
67	Paint Shop – Small Parts Enclosure	VOC	1.8	-
68	Paint Shop – Small Parts Enclosure	VOC	1.8	-
69	Paint Shop – Primer Work Room (Hangar 3)	VOC	0.2	-
70	Paint Shop – Paint Work Room (Hangar 3)	VOC	0.2	-
71	Service Center – Spray UV	VOC	3.8	-
72	Service Center – Cure UV	VOC	3.8	_
73	Service Center – UV Flash-off	VOC	3.8	-
74	Service Center – Cabinet Glue Shop	VOC	2.9	-
75	Service Center – Headliner Glue Area	VOC	6.8	-
76	Paint Shop – Primer Work Room (Hanger 2)	VOC	0.2	-
77	Paint Shop – Paint Work Room (Hanger 2)	VOC	0.2	-
78	Natural Gas Combustion Sources	$PM_{10}$	0.6	0.6

SN	Description	Pollutant	lb/hr	tpy
		$SO_2$	0.1	0.1
		VOC	0.5	0.5
		CO	6.3	6.3
		$NO_X$	7.5	7.5
79	Paint Shop – Prep Bay #3 Stack #3	VOC	42.6	-
82	2,500 gallon Automotive Fuel Tank	VOC	11.9	
83A	Cabinet Shop – Stain Booth Paternoster	VOC	1.4	
83B	Cabinet Shop – Stain Application	VOC	1.4	-
84A	Cabinet Shop – TAS Booth Paternoster	VOC	1.0	
84B	Cabinet Shop – TAS Application	VOC	1.0	-
85A	Cabinet Shop – UV Manual Booth #1A	VOC	12.1	
85B	Cabinet Shop – UV Manual Booth #1B	VOC	12.1	-
86A	Cabinet Shop – UV Manual Booth #2A	VOC	10.1	
86B	Cabinet Shop – UV Manual Booth #2B	VOC	12.1	-
87	Cabinet Shop – Bravo Auto Finish Robot	VOC	1.9	-
88	Cabinet Shop – Bravo Auto Finish Cross Transfer	VOC	1.9	-
89	Cabinet Shop – Bravo Auto Finish UV Cure No. 1	VOC	1.9	-
90	Cabinet Shop – Bravo Auto Finish UV Cure No. 2	VOC	1.9	-
91	Cabinet Shop Paint Kitchen	VOC	10.3	-
92	Cabinet Shop – Glue Booth #6	VOC	12.3	-
93	Cabinet Shop – Bravo Auto Finish UV Cure No. 3	VOC		
94	Cabinet Shop – Bravo Auto Finish UV Cure No. 4	VOC	5.7	-
95	Cabinet Shop – Bravo Auto Finish UV Cure No. 5	VOC		
96A	Touch-up Area #1	VOC		
96B	Touch-up Area #2	VOC		
96C	Touch-up Area #3	VOC	3.0	-
96D	Touch-up Area #4	VOC		
96E	Touch-up Area #5	VOC		
97	Small Parts Paint Shop – Spray Booth No.1	VOC	4.9	-
98	Small Parts Paint Shop – Spray Booth No.2	VOC	4.9	-
99	Small Parts Paint Shop – Paint Cure Booth	VOC	1.0	-
100A	Small Parts Paint Shop – Paint Mixing Room No. 1	VOC	2.0	
100B	Small Parts Paint Shop – Paint Mixing Room No. 2	VOC	2.0	-

AFIN: 60-00617

SN	SN Description		lb/hr	tpy
101A	Small Parts Paint Shop – Alodine Process Tank Stack No. 1	$PM_{10}$	0.2	0.2
101B	Small Parts Paint Shop – Alodine Process Tank Stack No. 2	$PM_{10}$	0.2	0.2
	Total SN-Facility Limit	VOC		165.0

2. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Condition #4. In order to demonstrate compliance with this condition for SN-78 the permittee shall comply with Specific Conditions #11 and #13. [Regulation 18, §18.801, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
01	Unhalatomy Chan Adhasiya Annliastica Dasar	HAP	N/A	
01	Upholstery Shop – Adhesive Application Room	Acetone	N/A	-
08A	Cabinet Shop – UV Spray, Flash Off, & Cure	HAP		
08B	Cabinet Shop – UV Cure	HAP		
08C	Cabinet Shop – UV Flash Off	HAP	NT/A	
08D	Cabinet Shop – UV Spray	HAP	N/A	-
08E	Cabinet Shop – UV Flash Off	HAP		
08F	Cabinet Shop – UV Cure	HAP		
09	Cabinet Shop – Poly Spray & Hold	HAP	N/A	-
10		HAP	N/A	
10	Cabinet Shop – Glue Booth #1	Acetone	N/A	-
10	2 Cabinet Shop – Glue Booth #3	HAP	N/A	
12		Acetone	N/A	-
17	7 Handlings Char Stock 1	HAP	N/A	-
1 /	Headliner Shop Stack -1	Acetone	N/A	-
18	0	HAP	N/A	-
10	Headliner Shop Stack – 2	Acetone	N/A	-
19	Handlings Chan Stools 2	HAP	N/A	-
19	Headliner Shop Stack – 3	Acetone	N/A	-
25	Miscellaneous – Screen Printing Room	HAP	N/A	-
23	Wiscentaneous – Screen Finning Room	Acetone	N/A	-
26A	Paint Shop – Spray Booth	HAP	N/A	-
26B	Paint Shop – Spray Booth	Acetone	N/A	-
27	Cabinet Shop – Spray Booth	HAP	N/A	-
30		HAP	N/A	
30	Paint Shop – Prep Bay #1 Stack #1	Acetone	N/A	_
31	Daint Shan Dran Pay #1 Stack #2	HAP	N/A	
	Paint Shop – Prep Bay #1 Stack #2	Acetone	N/A	_

SN	Description	Pollutant	lb/hr	tpy
22	Doint Chan Duay Des #1 Ct - 1- #2	HAP	N/A	
32	Paint Shop – Prep Bay #1 Stack #3	Acetone	N/A	-
33	Fuel Storage – Jet Fuel (20,000 gal)	HAP	N/A	-
34	Fuel Storage – Jet Fuel (20,000 gal)	HAP	N/A	-
35	Fuel Storage – Jet Fuel (10,000 gal)	HAP	N/A	-
37	Miscellaneous – Facility Wide Uncontrolled Emissions	HAP	N/A	-
39	Paint Shop – Prep Bay #2 Stack #1	HAP	N/A	
3)	Taint Shop – Hep Bay #2 Stack #1	Acetone	N/A	_
40	Paint Shop – Prep Bay #2 Stack #2	HAP	N/A	_
40	Taint Shop – Hep Bay #2 Stack #2	Acetone	N/A	_
42	Paint Shop – Bay #1 Stack #1	HAP	N/A	
42	1 aint shop – Bay #1 Stack #1	Acetone	N/A	-
43	Doint Chan Day #1 Stock #2	HAP	N/A	
43	Paint Shop – Bay #1 Stack #2	Acetone	N/A	_
15	Doint Chan Day #2 Stook #1	HAP	N/A	
45	Paint Shop – Bay #2 Stack #1	Acetone	N/A	_
1.0	D.: 4 Cl D #2 Ct 1. #2	HAP	N/A	
46	Paint Shop – Bay #2 Stack #2	Acetone	N/A	-
48	Paint Shop – Small Parts Enclosure	HAP	N/A	-
40	*	HAP	N/A	
49	Cabinet Shop – Glue Booth #4	Acetone	N/A	-
50		HAP	N/A	
50	Cabinet Shop – Glue Booth #5	Acetone	N/A	-
51	Auto Finish Cabinet Shop – UV Spray	HAP	N/A	-
52	Auto Finish Cabinet Shop – Clean Room Booth Exhaust	HAP	N/A	-
53	Auto Finish Cabinet Shop – UV Flash Off	HAP	N/A	-
54	Auto Finish Cabinet Shop – UV Flash Off	HAP	N/A	-
55	Auto Finish Cabinet Shop – UV Flash Off	HAP	N/A	-
56	Auto Finish Cabinet Shop – UV Flash Off	HAP	N/A	-
57	Auto Finish Cabinet Shop – UV Cure	HAP	N/A	-
58	Auto Finish Cabinet Shop – UV Touch-up Booth	HAP	N/A	_
59	•	HAP	N/A	
	Paint Shop – Bay #3 Stack #1	Acetone	N/A	-
60	D 1 . 01 D . 112 G . 1 112	HAP	N/A	
	Paint Shop – Bay #3 Stack #2	Acetone	N/A	-
		HAP	N/A	
61	Paint Shop – Bay #4 Stack #1	Acetone	N/A	-
		HAP		N/A N/A
62	Paint Shop – Bay #4 Stack #2	Acetone		

63	SN	Description	Pollutant	lb/hr	tpy
Acetone   N/A   N/A   Acetone   N/A   Aceton	63	Daint Chan Day #5 Stook #1	HAP	N/A	
Paint Shop - Bay #3 Stack #2	03	Faint 5110p – Bay #3 Stack #1	Acetone	N/A	_
Acetone	64	Paint Shop Ray #5 Stack #2	HAP	N/A	
So	04	1 ann 5110p – Day #3 Stack #2	Acetone	N/A	-
Acetone	65	Paint Shon - Pren Ray #3 Stack #1	HAP	N/A	_
66         Paint Shop – Frep Bay #3 Stack #2         Acetone         N/A         -           67         Paint Shop – Small Parts Enclosure         HAP         N/A         -           68         Paint Shop – Small Parts Enclosure         HAP         N/A         -           69         Paint Shop – Paint Work Room (Hangar 3)         HAP         N/A         -           70         Paint Shop – Paint Work Room (Hangar 3)         HAP         N/A         -           71         Service Center – Spray UV         HAP         N/A         -           72         Service Center – Cure UV         HAP         N/A         -           73         Service Center – Cabinet Glue Shop         HAP         N/A         -           74         Service Center – Headliner Glue Area         HAP         N/A         -           75         Service Center – Headliner Glue Area         HAP         N/A         -           76         Paint Shop – Primer Work Room (Hangar 2)         HAP         N/A         -           77         Paint Shop – Paint Work Room (Hangar 2)         HAP         N/A         -           79         Paint Shop – Prep Bay #3 Stack #3         HAP         N/A         -           82         2,500 gallon Automo	0.5	Tame Shop Trep Bay #3 Stack #1	Acetone	N/A	_
Acetone   N/A   -	66	Paint Shon – Pren Ray #3 Stack #2	HAP	N/A	_
68         Paint Shop – Small Parts Enclosure         HAP         N/A         -           69         Paint Shop – Primer Work Room (Hangar 3)         HAP         N/A         -           70         Paint Shop – Paint Work Room (Hangar 3)         HAP         N/A         -           71         Service Center – Spray UV         HAP         N/A         -           72         Service Center – Cure UV         HAP         N/A         -           73         Service Center – UV Flash-off         HAP         N/A         -           74         Service Center – Cabinet Glue Shop         HAP         N/A         -           75         Service Center – Headliner Glue Area         HAP         N/A         -           76         Paint Shop – Primer Work Room (Hangar 2)         HAP         N/A         -           76         Paint Shop – Primer Work Room (Hangar 2)         HAP         N/A         -           78         Natural Gas Combustion Sources         PM         0.6         0.6           79         Paint Shop – Prep Bay #3 Stack #3         HAP         N/A         -           82         2,500 gallon Automotive Fuel Tank         HAP         N/A         -           83B         Cabinet Shop – Stain Booth Pat		1 1			_
69         Paint Shop – Primer Work Room (Hangar 3)         HAP         N/A         -           70         Paint Shop – Paint Work Room (Hangar 3)         HAP         N/A         -           71         Service Center – Spray UV         HAP         N/A         -           72         Service Center – Cure UV         HAP         N/A         -           73         Service Center – UV Flash-off         HAP         N/A         -           74         Service Center – Cabinet Glue Shop         HAP         N/A         -           74         Service Center – Headliner Glue Area         HAP         N/A         -           75         Service Center – Headliner Glue Area         HAP         N/A         -           76         Paint Shop – Primer Work Room (Hangar 2)         HAP         N/A         -           77         Paint Shop – Paint Work Room (Hangar 2)         HAP         N/A         -           78         Natural Gas Combustion Sources         PM         0.6         0.6           79         Paint Shop – Prep Bay #3 Stack #3         HAP         N/A         -           82         2,500 gallon Automotive Fuel Tank         HAP         N/A         -           83B         Cabinet Shop – Stain Applicat	67	Paint Shop – Small Parts Enclosure	HAP	N/A	-
70         Paint Shop – Paint Work Room (Hangar 3)         HAP         N/A         -           71         Service Center – Spray UV         HAP         N/A         -           72         Service Center – Cure UV         HAP         N/A         -           73         Service Center – UV Flash-off         HAP         N/A         -           74         Service Center – Cabinet Glue Shop         HAP         N/A         -           74         Service Center – Headliner Glue Area         HAP         N/A         -           75         Service Center – Headliner Glue Area         HAP         N/A         -           76         Paint Shop – Primer Work Room (Hangar 2)         HAP         N/A         -           77         Paint Shop – Paint Work Room (Hangar 2)         HAP         N/A         -           78         Natural Gas Combustion Sources         PM         0.6         0.6           79         Paint Shop – Prep Bay #3 Stack #3         HAP         N/A         -           82         2,500 gallon Automotive Fuel Tank         HAP         N/A         -           83A         Cabinet Shop – Stain Application         HAP         N/A         -           83B         Cabinet Shop – TAS Booth Paternoster	68	Paint Shop – Small Parts Enclosure	HAP	N/A	-
71         Service Center - Spray UV         HAP         N/A         -           72         Service Center - Cure UV         HAP         N/A         -           73         Service Center - UV Flash-off         HAP         N/A         -           74         Service Center - Cabinet Glue Shop         HAP         N/A         -           75         Service Center - Headliner Glue Area         HAP         N/A         -           76         Paint Shop - Primer Work Room (Hangar 2)         HAP         N/A         -           77         Paint Shop - Paint Work Room (Hangar 2)         HAP         N/A         -           78         Natural Gas Combustion Sources         PM         0.6         0.6           79         Paint Shop - Prep Bay #3 Stack #3         HAP         N/A         -           82         2,500 gallon Automotive Fuel Tank         HAP         N/A         -           83B         Cabinet Shop - Stain Booth Paternoster         HAP         N/A         -           83B         Cabinet Shop - TAS Booth Paternoster         HAP         N/A         -           83B         Cabinet Shop - TAS Application         HAP         N/A         -           85A         Cabinet Shop - UV Manual Booth #1A <td>69</td> <td>Paint Shop – Primer Work Room (Hangar 3)</td> <td>HAP</td> <td>N/A</td> <td>-</td>	69	Paint Shop – Primer Work Room (Hangar 3)	HAP	N/A	-
72         Service Center – Cure UV         HAP         N/A         -           73         Service Center – UV Flash-off         HAP         N/A         -           74         Service Center – Cabinet Glue Shop         HAP         N/A         -           75         Service Center – Headliner Glue Area         HAP         N/A         -           76         Paint Shop – Primer Work Room (Hangar 2)         HAP         N/A         -           77         Paint Shop – Paint Work Room (Hangar 2)         HAP         N/A         -           78         Natural Gas Combustion Sources         PM         0.6         0.6           79         Paint Shop – Prep Bay #3 Stack #3         HAP         N/A         -           82         2,500 gallon Automotive Fuel Tank         HAP         N/A         -           83A         Cabinet Shop – Stain Booth Paternoster         HAP         N/A         -           83B         Cabinet Shop – Stain Application         HAP         N/A         -           84A         Cabinet Shop – TAS Application         HAP         N/A         -           85A         Cabinet Shop – UV Manual Booth #1A         HAP         N/A         -           85B         Cabinet Shop – UV Manual Booth	70	Paint Shop – Paint Work Room (Hangar 3)	HAP	N/A	-
73         Service Center – UV Flash-off         HAP         N/A         -           74         Service Center – Cabinet Glue Shop         HAP Acetone         N/A         -           75         Service Center – Headliner Glue Area         HAP N/A Acetone         N/A         -           76         Paint Shop – Primer Work Room (Hangar 2)         HAP N/A         -           77         Paint Shop – Paint Work Room (Hangar 2)         HAP N/A         -           78         Natural Gas Combustion Sources         PM 0.6         0.6           79         Paint Shop – Prep Bay #3 Stack #3         HAP N/A -         -           82         2,500 gallon Automotive Fuel Tank         HAP N/A -         -           83A         Cabinet Shop – Stain Booth Paternoster         HAP N/A -         -           83B         Cabinet Shop – Stain Application         HAP N/A -         -           84A         Cabinet Shop – TAS Booth Paternoster         HAP N/A -         -           83B         Cabinet Shop – TAS Application         HAP N/A -         -           85A         Cabinet Shop – UV Manual Booth #1A HAP N/A -         N/A -         -           85B         Cabinet Shop – UV Manual Booth #2A HAP N/A -         -           86B         Cabinet Shop – Bravo Auto F	71	Service Center – Spray UV	HAP	N/A	-
74         Service Center – Cabinet Glue Shop         HAP Acetone         N/A         -           75         Service Center – Headliner Glue Area         HAP Acetone         N/A         -           76         Paint Shop – Primer Work Room (Hangar 2)         HAP N/A         -           77         Paint Shop – Paint Work Room (Hangar 2)         HAP N/A         -           78         Natural Gas Combustion Sources         PM 0.6         0.6           79         Paint Shop – Prep Bay #3 Stack #3 Acetone         N/A N/A Acetone         N/A -           82         2,500 gallon Automotive Fuel Tank         HAP N/A -         N/A -           83A         Cabinet Shop – Stain Booth Paternoster         HAP N/A -         N/A -           83B         Cabinet Shop – Stain Application         HAP N/A -         N/A -           84A         Cabinet Shop – TAS Application         HAP N/A -         N/A -           85A         Cabinet Shop – UV Manual Booth #1A HAP N/A -         N/A -         N/A -           85B         Cabinet Shop – UV Manual Booth #2A HAP N/A -         N/A -         N/A -           86B         Cabinet Shop – Bravo Auto Finish Robot HAP N/A -         HAP N/A -         N/A -           88         Cabinet Shop – Bravo Auto Finish Cross Transfer         HAP N/A -         N/A -<	72	Service Center – Cure UV	HAP	N/A	-
74         Service Center – Cabinet Glue Shop         Acetone         N/A         -           75         Service Center – Headliner Glue Area         HAP Acetone         N/A         -           76         Paint Shop – Primer Work Room (Hangar 2)         HAP N/A         -           77         Paint Shop – Paint Work Room (Hangar 2)         HAP N/A         -           78         Natural Gas Combustion Sources         PM 0.6 0.6         0.6           79         Paint Shop – Prep Bay #3 Stack #3         HAP N/A Acetone         N/A N/A         -           82         2,500 gallon Automotive Fuel Tank         HAP N/A N/A         -           83A         Cabinet Shop – Stain Booth Paternoster         HAP N/A N/A         -           83B         Cabinet Shop – Stain Application         HAP N/A N/A         -           84A         Cabinet Shop – TAS Application         HAP N/A N/A N/A         -           85A         Cabinet Shop – UV Manual Booth #1A HAP N/A HAP N/A N/A N/A         -           85B         Cabinet Shop – UV Manual Booth #1B HAP N/A	73	Service Center – UV Flash-off	HAP	N/A	-
Acetone	7.4	Camica Contan Cabinat Clue Chan	HAP	N/A	
N/A   Paint Shop - Primer Work Room (Hangar 2)   HAP   N/A   -	/4	Service Center – Cabinet Glue Snop	Acetone	N/A	-
Acetone	7.5	Comica Contan Haalinaa Clas Assa	HAP 1	N/A	
77         Paint Shop – Paint Work Room (Hangar 2)         HAP         N/A         -           78         Natural Gas Combustion Sources         PM         0.6         0.6           79         Paint Shop – Prep Bay #3 Stack #3         HAP N/A Acetone         N/A         -           82         2,500 gallon Automotive Fuel Tank         HAP N/A         -           83A         Cabinet Shop – Stain Booth Paternoster         HAP N/A         -           83B         Cabinet Shop – Stain Application         HAP N/A         -           84A         Cabinet Shop – TAS Booth Paternoster         HAP N/A         -           83B         Cabinet Shop – TAS Application         HAP N/A         -           85A         Cabinet Shop – UV Manual Booth #1A HAP N/A         HAP N/A         -           85B         Cabinet Shop – UV Manual Booth #2A HAP N/A         N/A         -           86B         Cabinet Shop – Bravo Auto Finish Robot HAP N/A         -         N/A         -           87         Cabinet Shop – Bravo Auto Finish Cross Transfer         HAP N/A         -         N/A         -           89         Cabinet Shop – Bravo Auto Finish UV Cure No. 1         HAP N/A         -         -           90         Cabinet Shop – Bravo Auto Finish UV Cure No. 2	/5	Service Center – Headiner Glue Area	Acetone	N/A	-
78         Natural Gas Combustion Sources         PM         0.6         0.6           79         Paint Shop – Prep Bay #3 Stack #3         HAP Acetone         N/A         -           82         2,500 gallon Automotive Fuel Tank         HAP         N/A         -           83A         Cabinet Shop – Stain Booth Paternoster         HAP         N/A         -           83B         Cabinet Shop – Stain Application         HAP         N/A         -           84A         Cabinet Shop – TAS Booth Paternoster         HAP         N/A         -           83B         Cabinet Shop – TAS Application         HAP         N/A         -           85A         Cabinet Shop – UV Manual Booth #1A         HAP         N/A         -           85B         Cabinet Shop – UV Manual Booth #2A         HAP         N/A         -           86A         Cabinet Shop – Bravo Auto Finish Robot         HAP         N/A         -           87         Cabinet Shop – Bravo Auto Finish Cross Transfer         HAP         N/A         -           89         Cabinet Shop – Bravo Auto Finish UV Cure No. 1         HAP         N/A         -           90         Cabinet Shop – Bravo Auto Finish UV Cure No. 2         HAP         N/A         -	76	Paint Shop – Primer Work Room (Hangar 2)	HAP	N/A	-
78         Natural Gas Combustion Sources         PM         0.6         0.6           79         Paint Shop – Prep Bay #3 Stack #3         HAP Acetone         N/A         -           82         2,500 gallon Automotive Fuel Tank         HAP         N/A         -           83A         Cabinet Shop – Stain Booth Paternoster         HAP         N/A         -           83B         Cabinet Shop – Stain Application         HAP         N/A         -           84A         Cabinet Shop – TAS Booth Paternoster         HAP         N/A         -           83B         Cabinet Shop – TAS Application         HAP         N/A         -           85A         Cabinet Shop – UV Manual Booth #1A         HAP         N/A         -           85B         Cabinet Shop – UV Manual Booth #2A         HAP         N/A         -           86A         Cabinet Shop – Bravo Auto Finish Robot         HAP         N/A         -           87         Cabinet Shop – Bravo Auto Finish Cross Transfer         HAP         N/A         -           89         Cabinet Shop – Bravo Auto Finish UV Cure No. 1         HAP         N/A         -           90         Cabinet Shop – Bravo Auto Finish UV Cure No. 2         HAP         N/A         -	77	Paint Shop – Paint Work Room (Hangar 2)	HAP	N/A	-
Paint Shop - Prep Bay #3 Stack #3   Acetone   N/A   -	78		PM	0.6	0.6
82 2,500 gallon Automotive Fuel Tank HAP N/A -  83A Cabinet Shop – Stain Booth Paternoster HAP N/A -  83B Cabinet Shop – Stain Application HAP N/A -  84A Cabinet Shop – TAS Booth Paternoster HAP N/A -  83B Cabinet Shop – TAS Application HAP N/A -  85A Cabinet Shop – UV Manual Booth #1A HAP N/A -  85B Cabinet Shop – UV Manual Booth #1B HAP N/A -  86A Cabinet Shop – UV Manual Booth #2A HAP N/A -  86B Cabinet Shop – UV Manual Booth #2B HAP N/A -  87 Cabinet Shop – Bravo Auto Finish Robot HAP N/A -  88 Cabinet Shop – Bravo Auto Finish Cross Transfer HAP N/A -  89 Cabinet Shop – Bravo Auto Finish Cross HAP N/A -  Cabinet Shop – Bravo Auto Finish Cross HAP N/A -  Cabinet Shop – Bravo Auto Finish Cross HAP N/A -  Cabinet Shop – Bravo Auto Finish HAP N/A -  Cabinet Shop – Bravo Auto Finish HAP N/A -  Cabinet Shop – Bravo Auto Finish HAP N/A -  Cabinet Shop – Bravo Auto Finish HAP N/A -  Cabinet Shop – Bravo Auto Finish HAP N/A -  Cabinet Shop – Bravo Auto Finish HAP N/A -	70	D : (01 D D   2 0, 1   2	HAP	N/A	
83ACabinet Shop – Stain Booth PaternosterHAPN/A83BCabinet Shop – Stain ApplicationHAP84ACabinet Shop – TAS Booth PaternosterHAP83BCabinet Shop – TAS ApplicationHAP85ACabinet Shop – UV Manual Booth #1AHAP85BCabinet Shop – UV Manual Booth #1BHAP86ACabinet Shop – UV Manual Booth #2AHAP87Cabinet Shop – UV Manual Booth #2BHAP87Cabinet Shop – Bravo Auto Finish RobotHAPN/A88Cabinet Shop – Bravo Auto Finish Cross TransferHAPN/A89Cabinet Shop – Bravo Auto Finish UV Cure No. 1HAPN/A90Cabinet Shop – Bravo Auto Finish UV Cure No. 2HAPN/A	/9	Paint Snop – Prep Bay #3 Stack #3	Acetone	N/A	-
R3B Cabinet Shop – Stain Application  84A Cabinet Shop – TAS Booth Paternoster  83B Cabinet Shop – TAS Booth Paternoster  83B Cabinet Shop – TAS Application  85A Cabinet Shop – UV Manual Booth #1A  85B Cabinet Shop – UV Manual Booth #1B  86A Cabinet Shop – UV Manual Booth #2A  86B Cabinet Shop – UV Manual Booth #2B  87 Cabinet Shop – UV Manual Booth #2B  88 Cabinet Shop – Bravo Auto Finish Robot  89 Cabinet Shop – Bravo Auto Finish Cross Transfer  89 Cabinet Shop – Bravo Auto Finish UV Cure No. 1  90 Cabinet Shop – Bravo Auto Finish UV Cure No. 2  HAP  N/A  -  HAP  N/A	82	2,500 gallon Automotive Fuel Tank	HAP	N/A	_
R3B Cabinet Shop – Stain Application  84A Cabinet Shop – TAS Booth Paternoster  83B Cabinet Shop – TAS Booth Paternoster  83B Cabinet Shop – TAS Application  85A Cabinet Shop – UV Manual Booth #1A  85B Cabinet Shop – UV Manual Booth #1B  86A Cabinet Shop – UV Manual Booth #2A  86B Cabinet Shop – UV Manual Booth #2B  87 Cabinet Shop – UV Manual Booth #2B  88 Cabinet Shop – Bravo Auto Finish Robot  89 Cabinet Shop – Bravo Auto Finish Cross Transfer  89 Cabinet Shop – Bravo Auto Finish UV Cure No. 1  90 Cabinet Shop – Bravo Auto Finish UV Cure No. 2  HAP  N/A  -  HAP  N/A	83A	Cabinet Shop – Stain Booth Paternoster	HAP	DT / A	
84ACabinet Shop – TAS Booth PaternosterHAPN/A-83BCabinet Shop – TAS ApplicationHAPN/A-85ACabinet Shop – UV Manual Booth #1AHAPN/A-85BCabinet Shop – UV Manual Booth #1BHAPN/A-86ACabinet Shop – UV Manual Booth #2AHAPN/A-87Cabinet Shop – Bravo Auto Finish RobotHAPN/A-88Cabinet Shop – Bravo Auto Finish Cross TransferHAPN/A-89Cabinet Shop – Bravo Auto Finish UV Cure No. 1HAPN/A-90Cabinet Shop – Bravo Auto Finish UV Cure No. 2HAPN/A-	83B		HAP	N/A	-
Sabinet Shop - TAS Application   HAP   N/A   - Sabinet Shop - UV Manual Booth #1A   HAP   N/A   - Sabinet Shop - UV Manual Booth #1B   HAP   N/A   - Sabinet Shop - UV Manual Booth #2A   HAP   N/A   - Sabinet Shop - UV Manual Booth #2B   HAP   N/A   - Sabinet Shop - Bravo Auto Finish Robot   HAP   N/A   - Sabinet Shop - Bravo Auto Finish Cross   HAP   N/A   - Sabinet Shop - Bravo Auto Finish Cross   HAP   N/A   - Sabinet Shop - Bravo Auto Finish   HAP   N/A   - Sabinet Sho	84A	1 11	HAP	DT/A	
85A Cabinet Shop – UV Manual Booth #1A HAP  85B Cabinet Shop – UV Manual Booth #1B HAP  86A Cabinet Shop – UV Manual Booth #2A HAP  86B Cabinet Shop – UV Manual Booth #2B HAP  87 Cabinet Shop – Bravo Auto Finish Robot HAP  88 Cabinet Shop – Bravo Auto Finish Cross Transfer  89 Cabinet Shop – Bravo Auto Finish UV Cure No. 1  Cabinet Shop – Bravo Auto Finish UV Cure No. 2  HAP  N/A  -  Cabinet Shop – Bravo Auto Finish HAP  N/A  -  Cabinet Shop – Bravo Auto Finish HAP  N/A  -  Cabinet Shop – Bravo Auto Finish HAP  N/A  -  Cabinet Shop – Bravo Auto Finish UV Cure No. 2	83B	•		N/A	-
S5B   Cabinet Shop – UV Manual Booth #1B   HAP   1N/A   -	85A		HAP		
86A Cabinet Shop – UV Manual Booth #2A HAP  86B Cabinet Shop – UV Manual Booth #2B HAP  87 Cabinet Shop – Bravo Auto Finish Robot HAP  88 Cabinet Shop – Bravo Auto Finish Cross Transfer  89 Cabinet Shop – Bravo Auto Finish UV Cure No. 1  Cabinet Shop – Bravo Auto Finish UV Cure No. 2  HAP  N/A  -  HAP  N/A  -  HAP  N/A  -  HAP  N/A  -  UV Cure No. 2	85B		HAP	- N/A -	
86B Cabinet Shop – UV Manual Booth #2B HAP  87 Cabinet Shop – Bravo Auto Finish Robot HAP  88 Cabinet Shop – Bravo Auto Finish Cross Transfer  89 Cabinet Shop – Bravo Auto Finish UV Cure No. 1  90 Cabinet Shop – Bravo Auto Finish UV Cure No. 2  HAP N/A		1	+	DT / A	
87 Cabinet Shop – Bravo Auto Finish Robot HAP N/A -  88 Cabinet Shop – Bravo Auto Finish Cross Transfer  89 Cabinet Shop – Bravo Auto Finish UV Cure No. 1  90 Cabinet Shop – Bravo Auto Finish UV Cure No. 2  HAP N/A -  HAP N/A -	-	*	+	N/A	-
Cabinet Shop – Bravo Auto Finish Cross Transfer  R9 Cabinet Shop – Bravo Auto Finish UV Cure No. 1  Cabinet Shop – Bravo Auto Finish UV Cure No. 2  HAP N/A  -  HAP N/A -	_	<b>*</b>		N/A	_
Transfer  89 Cabinet Shop – Bravo Auto Finish UV Cure No. 1  Cabinet Shop – Bravo Auto Finish UV Cure No. 2  HAP N/A  -  HAP N/A -  HAP N/A -					
Cabinet Shop – Bravo Auto Finish UV Cure No. 1  Cabinet Shop – Bravo Auto Finish UV Cure No. 2  HAP N/A  -  W/A  -	88	•	HAP	N/A	-
UV Cure No. 1  Cabinet Shop – Bravo Auto Finish UV Cure No. 2  HAP  N/A  -	00		IIAD	<b>NT/A</b>	
90 Cabinet Shop – Bravo Auto Finish UV Cure No. 2 HAP N/A -	89		HAP	N/A	-
UV Cure No. 2 HAP N/A -	0.0			27/1	
	90	•	HAP	AP N/A	
	91		HAP	N/A	_

AFIN: 60-00617

SN	Description	Pollutant	lb/hr	tpy
92	Cabinet Shop – Glue Booth #6	HAP Acetone	N/A N/A	-
93	Cabinet Shop – Bravo Auto Finish UV Cure No. 3	HAP		
94	Cabinet Shop – Bravo Auto Finish UV Cure No. 4	HAP	N/A	-
95	Cabinet Shop – Bravo Auto Finish UV Cure No. 5	HAP		
96A	Touch-up Area #1	HAP		
96B	Touch-up Area #2	HAP		
96C	Touch-up Area #3	HAP	N/A	-
96D	Touch-up Area #4	HAP	1	
96E	Touch-up Area #5	HAP		
97	Small Parts Paint Shop – Spray Booth No.1	HAP	N/A	-
98	Small Parts Paint Shop – Spray Booth No.2	HAP	N/A	-
99	Small Parts Paint Shop – Paint Cure Booth	HAP	N/A	-
100A	Small Parts Paint Shop – Paint Mixing Room No. 1	НАР	N/A	
100B	Small Parts Paint Shop – Paint Mixing Room No. 2	НАР	IN/A	-
101A	Small Parts Paint Shop – Alodine Process Tank	PM		
101A	Stack No. 1	HAP	0.2	0.2
101B	Small Parts Paint Shop – Alodine Process Tank	PM	N/A	-
1010	Stack No. 2	HAP		
Total SN-Facility Limits		Total		
		Combined	N/A	22.00
		HAP		
		Any Single HAP	N/A	9.60
		Acetone	N/A	70.00

3. 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 is demonstrated by combusting only natural gas. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Limit	Regulatory Citation
All Sources*	5%	§18.501

<sup>\*</sup> Excludes SN-80 and SN-81

4. The permittee will not emit in excess of 165.0 tons of VOC at the facility per consecutive 12 month period. Compliance with this condition will be demonstrated by compliance

AFIN: 60-00617

with Specific Condition #5. [§19.501 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

- 5. The permittee will maintain monthly records which track VOC usage and calculate total VOC emissions from all sources. The permittee will update the records by the fifteenth day of the month following the month to which the records pertain. A twelve month rolling total and each individual month's data shall be maintained on-site, made available to Department personnel upon request and submitted in accordance with General Provision 7. [§19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- 6. The permittee will maintain records of the amount of VOC containing materials issued for use at the facility and their respective VOC contents. All VOCs contained in these materials will count as air emissions. Any VOCs that are properly shipped off-site according to the terms of Specific Condition #9 may be subtracted from the total emissions as a credit. A twelve month rolling total of materials issued for use and emissions will also be calculated. These records will be maintained in a spreadsheet, database, or other well-organized format. These records will be updated monthly, kept on-site, and shall be made available to Department personnel upon request. [§19.705 of Regulation 19 and 40 CFR Part 52, Subpart E]
- 7. The permittee will maintain monthly records of the HAP emissions from the facility in order to demonstrate compliance with tons per year emission limits. All HAPs that are capable of being emitted as air emissions and are contained in materials issued for use at the facility shall be considered to be emitted. HAP emission credits may be subtracted from the total emissions provided they meet all of the requirements of Specific Condition #9. A 12-month rolling total and each individual month's data will be maintained on a facility-wide basis. These records will be maintained on site and will be made available to Department personnel upon request. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- 8. The permittee will demonstrate that the degree of accuracy of the calculations used to determine HAP emissions is sufficient to prove that neither limit of 10.00 tpy of single HAP nor 25.00 tpy combination HAP major source thresholds have been exceeded. The permittee shall account for all HAP emitted from the facility including activities which are considered insignificant. [§19.405(B) of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- 9. The permittee may use all scrap VOCs and HAPs that are drummed and shipped offsite to a proper disposal site as a credit towards the facility's VOC and HAP emissions. Only the VOC and HAP portion of the shipment may be taken as a credit. Before a credit can be given the following conditions must be met. [§19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

AFIN: 60-00617

- a. Testing will be performed quarterly in order to establish representative concentrations of VOCs and HAPs for the waste streams. This testing will be performed by an independent laboratory. Representative samples will be taken from 10% of the drums containing VOCs and HAPs. The samples will be tested for percentage of VOC and HAP content by weight and reported as such. The average of the samples will be applied to all the VOC and HAP containing drums disposed of for the next 3 month period.
- b. The ADEQ Air Division District Field Inspector will be notified no later than seven days prior to the date the samples are taken. The Air Division inspector will have the option of attending the sampling and selecting the drums to be sampled.
- c. The sampling reports will be maintained on site with the VOC and HAP emissions records required by this permit. These records will be made available to Department personnel upon request.
- d. The permittee will maintain a spreadsheet which will reflect the waste streams and the respective weight fractions of VOC and HAP shipped on a monthly basis. This spreadsheet will also contain monthly calculations for VOC and HAP emissions reductions. A copy of this spreadsheet will be made available to Department personnel upon request.
- 10. The VOC and HAP portions of unused materials that have either exceeded their shelf life or cannot be used for any reason may also be taken as an emission credit provided that these materials were first issued for use at the facility. These credits will be calculated based on the VOC and HAP concentrations reported on the MSDS sheet for each particular material. Monthly records will be maintained to demonstrate any credits claimed under this condition. [§19.705 of Regulation 19 and 40 CFR Part 52, Subpart E]
- 11. The permittee shall not combust more than 150 million standard cubic (MMscf) of natural gas per consecutive twelve (12) month period from all natural gas fired process equipment at the facility. In order to demonstrate compliance with this condition, the permittee shall install natural gas flow meters on each piece of natural gas fired equipment or at common location for equipment connected by manifold. [§19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]
  - a. In lieu of installing natural gas flow meters, the permittee may assume the amount natural gas combusted by process equipment is the total amount shown on the monthly statement that is provided by the natural gas supplier. The permittee may determine compliance by multiplying the twelve month rolling total by the ratio of heat input capacity from process equipment to the total heat input capacity of the facility. [§19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]

AFIN: 60-00617

12. The permittee shall retain maintain monthly records to demonstrate compliance with Specific Condition #11. The permittee shall update these records by the fifteenth day of the month following the month to which the records pertain. A twelve month rolling total and each individual month's data shall be maintained on-site, made available to Department personnel upon request. [§19.705 of Regulation 19 and 40 CFR Part 52, Subpart E]

13. The permittee shall record the location, maximum hourly heat input, and whether or not each source is used solely for comfort heating. The permittee shall sum the maximum hourly heat input for all equipment which is not solely used for comfort heating. The permittee shall then demonstrate compliance with the hourly limits by multiplying the maximum hourly heat input by the emission factors in the table below and dividing by a heating value of 1000 BTU/scf. [§19.705 of Regulation 19 and 40 CFR Part 52, Subpart E]

Pollutant	Emission Factor (lb/MMscf)
PM/PM <sub>10</sub>	7.6
$\mathrm{SO}_2$	0.6
VOC	5.5
CO	84
$NO_X$	100

NESHAP Subpart CCCCC Requirements for SN-82

- 14. SN-82 is an existing affected source of 40 CFR Part 63, Subpart CCCCCC *National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities*. The permittee shall be in compliance with all applicable provisions of the subpart beginning January 10, 2011. The applicable provisions include, but are not limited to, the following: [Regulation 19 §19.304 and 40 CFR Part 63, Subpart CCCCCC]
  - a. Beginning January 10, 2008, the permittee keep monthly records that demonstrate monthly throughput does not exceed 10,000 gallons of gasoline. Each record shall be maintained for a period of 5 years. [Regulation 19 §19.304 and 40 CFR Part §63.11111 (e)]
  - b. If the source's monthly throughput ever exceeds the 10,000 gallons (or 100,000 gallon) threshold, the source will remain subject to the requirements for sources above the threshold, even if the throughput later falls below the applicable threshold. [Regulation 19 §19.304 and 40 CFR Part §63.11111 (i)]
  - c. The permittee shall not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be

AFIN: 60-00617

taken include, but are not limited to, the following: [Regulation 19 §19.304 and 40 CFR Part §63.11116 (a)]

- i. Minimize gasoline spills;
- ii. Clean up spills as expeditiously as practicable;
- iii. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;
- iv. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators
- d. The permittee shall have records available within 24 hours of a request to document the permittee's gasoline throughput. [Regulation 19 §19.304 and 40 CFR Part §63.11116 (b)]

### **NESHAP Subpart HHHHHH Requirements**

- 15. The permittee is an affected source of 40 CFR Part 63, Subpart HHHHHH *National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources*. The permittee shall be in compliance with all applicable provisions of the subpart. The applicable provisions include, but are not limited to, the following: [Regulation 19 §19.304 and 40 CFR Part 63, Subpart HHHHHHH]
  - a. The permittee must implement management practices to minimize the evaporative emissions of methylene chloride (MeCl) for each paint stripping operation. The management practices shall at a minimum address the following practices, as applicable, for the permittee's operation: [Regulation 19 §19.304 and 40 CFR Part §63.11173 (a)]
    - i. Evaluate each application to ensure there is a need for paint stripping (*e.g.*, evaluate whether it is possible to re-coat the piece without removing the existing coating).
    - ii. Evaluate each application where a paint stripper containing MeCl is used to ensure that there is no alternative paint stripping technology that can be used
    - iii. Reduce exposure of all paint strippers containing MeCl to the air.
    - iv. Optimize application conditions when using paint strippers containing MeCl to reduce MeCl evaporation (e.g., if the stripper must be heated,

AFIN: 60-00617

make sure that the temperature is kept as low as possible to reduce evaporation).

- v. Practice proper storage and disposal of paint strippers containing MeCl (e.g., store stripper in closed, air-tight containers).
- b. Each paint stripping operation must maintain copies of annual usage of paint strippers containing MeCl on site at all times. [Regulation 19 §19.304 and 40 CFR Part §63.11173 (c)]
- c. For each surface coating operation, all painters must be certified that they have completed training in the proper spray application of surface coatings and the proper setup and maintenance of spray equipment. The spray application of surface coatings is prohibited by persons who are not certified as having completed the training described in Specific Condition #15.g. [Regulation 19 §19.304 and 40 CFR Part §63.11173 (e)(1)]
- d. All spray booths, preparation stations, and mobile enclosures must be fitted with a type of filter technology that is demonstrated to achieve at least 98-percent capture of paint overspray. [Regulation 19 §19.304 and 40 CFR Part §63.11173 (e)(2)(i)]
- e. All spray-applied coatings must be applied with a high volume, low pressure (HVLP) spray gun, electrostatic application, airless spray gun, air-assisted airless spray gun, or an equivalent technology that is demonstrated by the spray gun manufacturer to achieve transfer efficiency comparable to one of the spray gun technologies listed above for a comparable operation, and for which written approval has been obtained from the Administrator. [Regulation 19 §19.304 and 40 CFR Part §63.11173 (e)(3)]
- f. All paint spray gun cleaning must be done so that an atomized mist or spray of gun cleaning solvent and paint residue is not created outside of a container that collects used gun cleaning solvent. [Regulation 19 §19.304 and 40 CFR Part §63.11173 (e)(4)]
- g. The permittee must ensure and certify that all new and existing personnel, including contract personnel, who spray apply surface coatings are trained in the proper application of surface coatings. The training program must include, at a minimum, the following: [Regulation 19 §19.304 and 40 CFR Part §63.11173 (f)]
  - i. A list of all current personnel by name and job description who are required to be trained; [Regulation 19 §19.304 and 40 CFR Part §63.11173 (f)(1)]

AFIN: 60-00617

ii. Hands-on and classroom instruction that addresses, at a minimum, initial and refresher training in the following topics: [Regulation 19 §19.304 and 40 CFR Part §63.11173 (f)(2)]

- 1. Spray gun equipment selection, set up, and operation, including measuring coating viscosity, selecting the proper fluid tip or nozzle, and achieving the proper spray pattern, air pressure and volume, and fluid delivery rate. [Regulation 19 §19.304 and 40 CFR Part §63.11173 (f)(2)(i)]
- 2. Spray technique for different types of coatings to improve transfer efficiency and minimize coating usage and overspray, including maintaining the correct spray gun distance and angle to the part, using proper banding and overlap, and reducing lead and lag spraying at the beginning and end of each stroke. [Regulation 19 §19.304 and 40 CFR Part §63.11173 (f)(2)(ii)]
- 3. Routine spray booth and filter maintenance, including filter selection and installation. [Regulation 19 §19.304 and 40 CFR Part §63.11173 (f)(2)(iii)]
- 4. Environmental compliance with the requirements of this subpart. [Regulation 19 §19.304 and 40 CFR Part §63.11173 (f)(2)(iv)]
- iii. A description of the methods to be used at the completion of initial or refresher training to demonstrate, document, and provide certification of successful completion of the required training. If the permittee can show by documentation or certification that a painter's work experience and/or training has resulted in equivalent training, then the permittee is not required to provide the initial training required by that paragraph to these painters. [Regulation 19 §19.304 and 40 CFR Part §63.11173 (f)(3)]
- h. All personnel must be trained and certified no later than 180 days after hiring or no later than January 10, 2011, whichever is later. Painter training that was completed within five years prior to the date training is required, and that meets the requirements in Specific Condition #15.g. satisfies this requirement and is valid for a period not to exceed five years after the date the training is completed. [Regulation 19 §19.304 and 40 CFR Part §63.11173 (g)(2)]
- i. Training and certification will be valid for a period not to exceed five years after the date the training is completed, and all personnel must receive refresher training that meets the requirements of this section and be re-certified every five years. [Regulation 19 §19.304 and 40 CFR Part §63.11173 (g)(3)]

AFIN: 60-00617

- j. Annual Notification of Changes Report. The permittee shall submit a report in each calendar year in which information previously submitted in either the initial notification, Notification of Compliance, or a previous annual notification of changes report submitted under this paragraph, has changed. Deviations from the relevant requirements in §63.11173(a) through (d) or §63.11173(e) through (g) on the date of the report will be deemed to be a change. This includes notification when paint stripping affected sources that have not developed and implemented a written MeCl minimization plan in accordance with §63.11173(b) used more than one ton of MeCl in the previous calendar year. The annual notification of changes report must be submitted prior to March 1 of each calendar year when reportable changes have occurred and must include the information specified in §63.11176 (a)(1) through (2). [Regulation 19 §19.304 and 40 CFR Part §63.11176 (a)]
- k. The permittee shall submit a report for any calendar year in which more than one ton of MeCl was used. This report must be submitted no later than March 1 of the following calendar year. The permittee shall also develop and implement a written MeCl minimization plan in accordance with §63.11173(b) no later than December 31. The permittee shall then submit a Notification of Compliance Status report containing the information specified in §63.11175(b) by March 1 of the following year and comply with the requirements for paint stripping operations that annually use more than one ton of MeCl. [Regulation 19 §19.304 and 40 CFR Part §63.11176 (b)]
- 1. The permittee shall keep the following records for a period of at least five years after the date of each record: [Regulation 19 §19.304 and 40 CFR Part §63.11177 and §63.11178]
  - i. Certification that each painter has completed the specified training with the date the initial training and the most recent refresher training was completed. [Regulation 19 §19.304 and 40 CFR Part §63.11177 (a)]
  - ii. Documentation of the filter efficiency of any spray booth exhaust filter material, according to the procedure in \$63.11173(e)(3)(i). [Regulation 19 \$19.304 and 40 CFR Part \$63.11177 (b)]
  - iii. Documentation from the spray gun manufacturer that each spray gun with a cup capacity equal to or greater than 3.0 fluid ounces (89 cc) that does not meet the definition of an HVLP spray gun, electrostatic application, airless spray gun, or air assisted airless spray gun, has been determined by the Administrator to achieve a transfer efficiency equivalent to that of an HVLP spray gun, according to the procedure in §63.11173(e)(4). [Regulation 19 §19.304 and 40 CFR Part §63.11177 (c)]
  - iv. Copies of any notification and report submitted as required by the subpart. [Regulation 19 §19.304 and 40 CFR Part §63.11177 (d)]

AFIN: 60-00617

- v. Records of paint strippers containing MeCl used for paint stripping operations, including the MeCl content of the paint stripper used. Documentation needs to be sufficient to verify annual usage of paint strippers containing MeCl (e.g., material safety data sheets or other documentation provided by the manufacturer or supplier of the paint stripper, purchase receipts, records of paint stripper usage, engineering calculations). [Regulation 19 §19.304 and 40 CFR Part §63.11177 (e)]
- vi. Records of any deviation from the requirements, Subpart A general provisions, notifications, or reporting. These records must include the date and time period of the deviation, and a description of the nature of the deviation and the actions taken to correct the deviation. [Regulation 19 §19.304 and 40 CFR Part §63.11177 (g)]
- vii. Records of any assessments of source compliance performed in support of the initial notification, notification of compliance status, or annual notification of changes report. [Regulation 19 §19.304 and 40 CFR Part §63.11177 (h)]

# **NESHAP Subpart WWWWWW Requirements**

- 16. The permittee is an existing affected source of 40 CFR Part 63, Subpart WWWWWW—

  National Emission Standards for Hazardous Air Pollutants: Area Source Standards for 
  Plating and Polishing Operations. The permittee shall be in compliance with all 
  applicable provisions of the subpart beginning July 1, 2010. The applicable provisions 
  include, but are not limited to, the following: [Regulation 19 §19.304 and 40 CFR Part 63, Subpart WWWWW]
  - a. For each dry mechanical polishing machine that emits one or more of the plating and polishing metal HAP, the permittee shall operate a capture system that captures particulate matter, emissions from the dry mechanical polishing process and transports the emissions to a cartridge, fabric, or high efficiency particulate air (HEPA) filter. [Regulation 19 §19.304 and 40 CFR Part §63.11507 (e)]
  - b. The permittee shall demonstrate continuous compliance with Specific Condition #16.a through the following: [Regulation 19 §19.304 and 40 CFR Part §63.11508 (d)(4)]
    - i. The permittee shall operate all capture and control devices according to the manufacturer's specifications and operating instructions. [Regulation 19 §19.304 and 40 CFR Part §63.11508 (d)(4)(i)]
    - ii. Following any malfunction or failure of the capture or control devices to operate properly, the permittee shall take immediate corrective action to

AFIN: 60-00617

return the equipment to normal operation according to the manufacturer's specifications and operating instructions. [Regulation 19 §19.304 and 40 CFR Part §63.11508 (d)(4)(ii)]

- iii. The permittee state in your annual certification that you have operated and maintained the control system according to the manufacturer's specifications and instructions. [Regulation 19 §19.304 and 40 CFR Part §63.11508 (d)(4)(iii)]
- iv. The permittee shall record the results of all control system inspections, deviations from proper operation, and any corrective action taken. [Regulation 19 §19.304 and 40 CFR Part §63.11508 (d)(4)(iv)]
- v. The permittee shall keep at all times the manufacturer's specifications and operating instructions where they can be easily accessed by the operators. [Regulation 19 §19.304 and 40 CFR Part §63.11508 (d)(4)(v)]
- c. The permittee shall implement the following management practices: [Regulation 19 §19.304 and 40 CFR Part §63.11507 (g)]
  - i. Minimize bath agitation when removing any parts processed in the tank, as practicable except when necessary to meet part quality requirements. [Regulation 19 §19.304 and 40 CFR Part §63.11507 (g)(1)]
  - ii. Maximize the draining of bath solution back into the tank, as practicable, by extending drip time when removing parts from the tank; using drain boards (also known as drip shields); or withdrawing parts slowly from the tank, as practicable. [Regulation 19 §19.304 and 40 CFR Part §63.11507 (g)(2)]
  - iii. Optimize the design of barrels, racks, and parts to minimize dragout of bath solution (such as by using slotted barrels and tilted racks, or by designing parts with flow-through holes to allow the tank solution to drip back into the tank), as practicable. [Regulation 19 §19.304 and 40 CFR Part §63.11507 (g)(3)
  - iv. Use tank covers, if already owned and available at the facility, whenever practicable. [Regulation 19 §19.304 and 40 CFR Part §63.11507 (g)(4)]
  - v. Minimize or reduce heating of process tanks, as practicable (e.g., when doing so would not interrupt production or adversely affect part quality). [Regulation 19 §19.304 and 40 CFR Part §63.11507 (g)(5)]

AFIN: 60-00617

- vi. Perform regular repair, maintenance, and preventive maintenance of racks, barrels, and other equipment associated with affected sources, as practicable. [Regulation 19 §19.304 and 40 CFR Part §63.11507 (g)(6)]
- vii. Minimize bath contamination, such as through the prevention or quick recovery of dropped parts, use of distilled/de-ionized water, water filtration, pre-cleaning of parts to be plated, and thorough rinsing of pretreated parts to be plated, as practicable. [Regulation 19 §19.304 and 40 CFR Part §63.11507 (g)(7)]
- viii. Maintain quality control of chemicals, and chemical and other bath ingredient concentrations in the tanks, as practicable. [Regulation 19 §19.304 and 40 CFR Part §63.11507 (g)(8)]
- ix. Perform general good housekeeping, such as regular sweeping or vacuuming, if needed, and periodic washdowns, as practicable. [Regulation 19 §19.304 and 40 CFR Part §63.11507 (g)(9)]
- x. Minimize spills and overflow of tanks, as practicable. [Regulation 19 §19.304 and 40 CFR Part §63.11507 (g)(10)]
- xi. Use squeegee rolls in continuous or reel-to-reel plating tanks, as practicable. [Regulation 19 §19.304 and 40 CFR Part §63.11507 (g)(11)]
- xii. Perform regular inspections to identify leaks and other opportunities for pollution prevention. [Regulation 19 §19.304 and 40 CFR Part §63.11507 (g)(12)]
- d. The permittee shall prepare an annual compliance certification report. The permittee shall prepare the report no later than January 31 of the year immediately following the reporting period and kept in a readily-accessible location for inspector review. If a deviation has occurred during the year, each annual compliance report must be submitted along with the deviation report, and postmarked or delivered no later than January 31 of the year immediately following the reporting period. The report shall provide statements regarding the following: [Regulation 19 §19.304 and 40 CFR Part §63.11509 (c)]
  - i. The control systems for the dry mechanical polishing operation were operated and maintained.
  - ii. Affected tanks were operated with the cover in place at least 95 percent of the electrolytic process time.
  - iii. Applicable management practices were implemented for affected tanks and other affected plating and polishing process.

AFIN: 60-00617

e. The permittee shall report any deviations, along with any corrective action taken. [Regulation 19 §19.304 and 40 CFR Part §63.11509 (d)]

f. The permittee shall keep each record for a minimum of 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [Regulation 19 §19.304 and 40 CFR Part §63.11509 (f)]

AFIN: 60-00617

### SN-80 and SN-81 MIS Back-up Generator and Service Center Emergency Engines

### Source Description

The MIS Back-up Generator is powered by a 158 hp diesel engine (SN-80). It was manufactured on March 10, 2007 and installed on April 6, 2009. There are two 183 hp Service Center emergency engines (SN-81). The engines at SN-81 were installed on September 12, 2006 and manufactured on March 1, 2006.

### **Specific Conditions**

17. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Condition #19 for the annual emission limit, and compliance with the hourly limits is based on the maximum capacity of the equipment. [Regulation 19 §19.501 *et seq.* and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
80	MIS Back-up Generator 158 hp	$PM_{10}$	0.1	0.1
		$\mathrm{SO}_2$	0.4	0.1
		VOC	0.4	0.1
		CO	1.3	0.4
		$NO_x$	1.1	0.3
81	(2) Service Center Emergency Engines 183 hp, each	$PM_{10}$	0.9	0.3
		$\mathrm{SO}_2$	0.8	0.2
		VOC	1.0	0.3
		CO	2.5	0.7
		$NO_x$	11.4	2.9

18. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by complying with Specific Condition #19 for the annual emission limit, and compliance with the hourly limits is based on the maximum capacity of the equipment. [Regulation 18 §18.801 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
80	MIS Back-up Generator 158 hp	PM HAP	0.1 N/A	0.1 1.05E-03
81	(2) Service Center Emergency Engines 183 hp, each	PM HAP	0.9 N/A	0.3 0.33

AFIN: 60-00617

19. The permittee shall not operate SN-80 and SN-81 for more than 500 hours per engine per consecutive 12-month period. [Regulation 19 §19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR 70.6]

- 20. The permittee will maintain records which track the hours of operation of SN-80 and SN-81. The permittee will update the records by the fifteenth day of the month following the month to which the records pertain. A twelve month rolling total and each individual month's data shall be maintained on-site, made available to Department personnel upon request and submitted in accordance with General Provision 7. [§19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- 21. SN-80 is an affected source of 40 CFR Part 63, Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines and 40 CFR Part 60, Subpart IIII Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. Pursuant to §63.6590 (c) of Subpart ZZZZ compliance with that subpart shall be demonstrated through compliance with NSPS Subpart IIII. The applicable requirements include, but are not limited to the following: [Regulation No. 19 §19.304 and 40 CFR §60.4200]
  - There is no time limit on the use of emergency stationary ICE in emergency a. situations. Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. Emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for nonemergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity. For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this condition, is prohibited. [Regulation 19 §19.304 and 40 CFR Part §60.4211 (f)]
  - b. The permittee shall not discharge to the atmosphere any gases from SN-80 that contains the following pollutants in excess of the specified limits. Compliance with this condition shall be demonstrated by installing an engine certified to 40 CFR §60.4205 (b). [Regulation No. 19 §19.304 and 40 CFR §60.4205 (a)]

AFIN: 60-00617

Pollutant	Emission Limit g/KW-hr
NMHC+NO <sub>X</sub>	4.0
CO	5.0
PM	0.30

- c. The permittee shall only combust diesel fuel with a maximum sulfur content of 15 ppm (0.0015%) by weight and either a minimum cetane index of 40 or a maximum aromatic content of 35% by volume. [Regulation No. 19 §19.304 and 40 CFR §60.4207 (b)]
- d. The permittee shall install a non-resettable hour meter prior to start-up of SN-80. [Regulation No. 19 §19.304 and 40 CFR §60.4209 (a)]
- e. The permittee shall operate and maintain the stationary IC internal combustion engine and any control devices according to the manufacturer's written instructions or procedures developed by the permittee that are approved by the engine manufacturer. In addition, the permittee may only change those settings that are permitted by the manufacturer. [Regulation No. 19 §19.304 and 40 CFR §60.4211 (a)]
- f. The permittee shall record the time of operation of SN-80 and the reason source was in operation during that time. [Regulation No. 19 §19.304 and 40 CFR §60.4214 (b)]
- 22. SN-81 is an affected source of 40 CFR Part 63, Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. It is not subject to 40 CFR Part 60, Subpart IIII Standards of Performance for Stationary Compression Ignition Internal Combustion Engines due to date of manufacture. The applicable requirements include, but are not limited to the following: [Regulation No. 19 §19.304 and 40 CFR §63.6585]
  - a. There is no time limit on the use of emergency stationary RICE in emergency situations. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described later, is prohibited. The permittee may operate emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The permittee emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a

AFIN: 60-00617

financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this condition, as long as the power provided by the financial arrangement is limited to emergency power. [Regulation 19 §19.304 and 40 CFR Parts §63.6675 and §63.6640]

- b. The permittee shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [Regulation 19 §19.304 and 40 CFR Part §63.6625 (h)]
- c. For each engine, the permittee shall change the oil and filter and inspect all hoses and belts every 500 hours of operation or annually, whichever comes first. [Regulation 19 §19.304 and 40 CFR Part §63.6625 (h)]
- d. For each engine, the permittee shall inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first. [Regulation 19 §19.304 and 40 CFR Part §63.6625 (h)]
- e. The permittee shall maintain records in form suitable and readily available for expeditious review for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [Regulation 19 §19.304 and 40 CFR Part §63.6660]
- 23. The permittee shall maintain records in a form suitable and readily available for expeditious review for 5 years that includes the information necessary to demonstrate the engine was operated as an emergency engine in accordance with paragraph (a) of Specific Condition #21 or Specific Condition #22. These records shall be kept on site and made available to Department personnel upon request. [Regulation 19 §19.705 and 40 CFR Part 52, Subpart E]
- 24. The permittee shall maintain a copy of the bills of lading, vendor fuel analysis, or other equivalent documentation for each shipment of fuel received for use at SN-80. Any document used to demonstrate compliance with this condition shall clearly indicate the

AFIN: 60-00617

maximum sulfur content and either the minimum cetane or the maximum aromatic content as specified in Specific Condition #21.c. These records shall be kept on site and made available to Department personnel upon request. [Regulation 19 §19.705 and 40 CFR Part 52, Subpart E]

- 25. The permittee shall maintain records of the maintenance performed pursuant to the manufacture's written instructions and records of any changes to setting in order to demonstrate compliance with Specific Condition #21.e. These records shall be kept on site and made available to Department personnel upon request. [Regulation 19 §19.705 and 40 CFR Part 52, Subpart E]
- 26. 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 is demonstrated by complying with Specific Condition #27. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Limit	Regulatory Citation
80 and 81	20%	§19.503 (B)

- 27. The permittee shall conduct annual visible emissions observations as a method of compliance verification for the opacity limits assigned for SN-80 and SN-81. Observations shall be conducted by someone trained in EPA Reference Method 9. Whenever an event requires a source to be in operation for more than 24 consecutive hours, the permittee shall conduct daily visible emissions observations as a method of compliance verification for the opacity limit until that particular event has ended. The permittee shall maintain records related to all visible emission observations and Method 9 readings. These records shall be updated on an as-performed basis. These records shall be kept on site and made available to Department personnel upon request. These records shall contain:
  - a. The time and date of each observation/reading,
  - b. Any observance of visible emissions appearing to be above permitted limits or any Method 9 reading which indicates exceedance,
  - c. The cause of any observed exceedance of opacity limits, corrective actions taken, and results of the reassessment, and
  - d. The name of the person conducting the observation/reading
  - e. If during the observations, visible emissions are detected which appear to be in excess of the permitted opacity limit, the permittee shall:
    - i. Take immediate action to identify the cause of the visible emissions,

AFIN: 60-00617

ii. Implement corrective action and document that visible emissions do not exceed the opacity limit, and

- iii. If excessive visible emissions are still detected, an opacity reading shall be conducted in accordance with EPA Reference Method 9 for point sources and in accordance with EPA Method 22 for non-point sources. This reading shall be conducted by a person trained and certified in the reference method. If the opacity reading exceeds the permitted limit, further corrective measures shall be taken.
- f. If no excessive visible emissions are detected, the observation shall be noted in the records.

AFIN: 60-00617

### SECTION V: COMPLIANCE PLAN AND SCHEDULE

Dassault Falcon Jet Corp. will continue to operate in compliance with those identified regulatory provisions. The facility will examine and analyze future regulations that may apply and determine their applicability with any necessary action taken on a timely basis.

AFIN: 60-00617

### **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. [Regulation 19 §19.704, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §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. [Regulation 19 §19.410(B) and 40 CFR Part 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 Department or within 180 days of permit issuance if no date is specified. The permittee must notify the Department 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 Department within thirty (30) calendar days after completing the testing. [Regulation 19 §19.702 and/or Regulation 18 §18.1002 and A.C.A. §8-4-203 as referenced by §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.

[Regulation 19 \$19.702 and/or Regulation 18 \$18.1002 and A.C.A. \$8-4-203 as referenced by \$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. [Regulation 19 §19.303 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- 6. This permit subsumes and incorporates all previously issued air permits for this facility. [Regulation 26 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

AFIN: 60-00617

#### Title VI Provisions

- 7. The permittee must comply with the standards for labeling of products using ozone-depleting substances. [40 CFR Part 82, Subpart E]
  - a. All containers containing a class I or class II substance stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced to interstate commerce pursuant to §82.106.
  - b. The placement of the required warning statement must comply with the requirements pursuant to §82.108.
  - c. The form of the label bearing the required warning must comply with the requirements pursuant to §82.110.
  - d. No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
- 8. The permittee must comply with the standards for recycling and emissions reduction, except as provided for MVACs in Subpart B. [40 CFR Part 82, Subpart F]
  - a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
  - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
  - c. Persons performing maintenance, service repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
  - d. Persons disposing of small appliances, MVACs, and MVAC like appliances must comply with record keeping requirements pursuant to §82.166. ("MVAC like appliance" as defined at §82.152)
  - e. Persons owning commercial or industrial process refrigeration equipment must comply with leak repair requirements pursuant to §82.156.
  - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
- 9. If the permittee manufactures, transforms, destroys, imports, or exports a class I or class II substance, the permittee is subject to all requirements as specified in 40 CFR Part 82, Subpart A, Production and Consumption Controls.
- 10. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

AFIN: 60-00617

The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air tight sealed refrigeration system used as refrigerated cargo, or the system used on passenger buses using HCFC 22 refrigerant.

11. The permittee can switch from any ozone depleting substance to any alternative listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G.

AFIN: 60-00617

### SECTION VII: INSIGNIFICANT ACTIVITIES

The following sources are insignificant activities. Any activity that has a state or federal applicable requirement shall be considered a significant activity even if this activity meets the criteria of §26.304 of Regulation 26 or listed in the table below. Insignificant activity determinations rely upon the information submitted by the permittee in an application dated August 27, 2014.

Description	Category
Mold Machine Shop Curing Oven –0.7 MMBTU/hr	A-1
Mold Machine Shop Curing Oven – 1.2 MMBTU/hr	A-1
Machine Shop Oven − <1 MMBTU/hr	A-1
Wastewater Evaporator – 1.5 MMBTU/hr	A-1
Wastewater Evaporator – 0.75 MMBTU/hr	A-1
Natural Gas Fired Pressure Washers (2)	A-1
FAA Burn Test Room	A-13
Cabinet Shop Vacuum Filter No. 1(Formerly SN-29)	A-13
Cabinet Shop Vacuum Filter No. 2 (Formerly SN-38)	A-13
Production Warehouse Vacuum Filter	A-13
Machine Shop Drilling and Cutting	A-13
Gel-Coat Booth	A-13
Cabinet Shop – Polish and Buffing Rooms	A-13
Weld Inspection Booth	A-13
Wastewater Aeration	A-13
Machine Shop Welding	A-13
Cabinet Shop – 6 Diffuse Particle Filters	A-13
Plating Shop – Diffuse Particulate Filter	A-13
Service Center – Dust Collector/Filter	A-13
Two (2) Cabinet Shop Sanding Room Baghouses	A-13
Cabinet Shop Dust Collector	A-13
Manufacturing Area Dust Collector	A-13
Two (2) Headliner Shop Sanding Booths	A-13

AFIN: 60-00617

### SECTION VIII: GENERAL PROVISIONS

- 1. Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 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 Regulation 18 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 Regulation 18 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 Reg.26.701(B)]
- 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 Department takes final action on the renewal application. The Department will not necessarily notify the permittee when the permit renewal application is due. [Reg.26.406]
- 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 Reg.26.701(A)(2)]
- 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 Reg.26.701(C)(2)]

AFIN: 60-00617

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 Reg.26.701(C)(2)(b)]

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 Reg.26.2 must certify all required reports. The permittee will send the reports to the address below:

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

[40 C.F.R. § 70.6(a)(3)(iii)(A) and Reg.26.701(C)(3)(a)]

- 8. The permittee shall report to the Department all deviations from permit requirements, including those attributable to upset conditions as defined in the permit.
  - a. For all upset conditions (as defined in Reg.19.601), the permittee will make an initial report to the Department 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

AFIN: 60-00617

ix. The name of the person submitting the report.

The permittee shall make a full report in writing to the Department 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.

[Reg.19.601, Reg.19.602, Reg.26.701(C)(3)(b), 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 Regulation are declared to be separable and severable. [40 C.F.R. § 70.6(a)(5), Reg.26.701(E), 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 Regulation 26 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 Reg.26.701(F)(1)]
- 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 Reg.26.701(F)(2)]
- 12. The Department 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 Reg.26.701(F)(3)]
- 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 Reg.26.701(F)(4)]

AFIN: 60-00617

- 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 Department 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 Reg.26.701(F)(5)]
- 15. The permittee must pay all permit fees in accordance with the procedures established in Regulation 9. [40 C.F.R. § 70.6(a)(7) and Reg.26.701(G)]
- 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 Reg.26.701(H)]
- 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 Reg.26.701(I)(1)]
- 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 Department 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 Reg.26.702(A) and (B)]
- 19. Any document (including reports) required by this permit must contain a certification by a responsible official as defined in Reg.26.2. [40 C.F.R. § 70.6(c)(1) and Reg.26.703(A)]
- 20. The permittee must allow an authorized representative of the Department, upon presentation of credentials, to perform the following: [40 C.F.R. § 70.6(c)(2) and Reg.26.703(B)]
  - 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.

AFIN: 60-00617

- 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 Department. All compliance certifications required by this permit must include the following: [40 C.F.R. § 70.6(c)(5) and Reg.26.703(E)(3)]
  - 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 Department 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: [Reg.26.704(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 Department approval. The Department 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.

AFIN: 60-00617

[Reg.18.314(A), Reg.19.416(A), Reg.26.1013(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 Department approval. Any such emissions shall be included in the facility's total emissions and reported as such. The Department 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 Department 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.

[Reg.18.314(B), Reg.19.416(B), Reg.26.1013(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 Department approval. The Department 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.

[Reg.18.314(C), Reg.19.416(C), Reg.26.1013(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]

### Appendix A:

40 CFR Part 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

### **ELECTRONIC CODE OF FEDERAL REGULATIONS**

View past updates to the e-CFR. Click here to learn more.

### e-CFR data is current as of April 30, 2015

<u>Title 40</u>  $\rightarrow$  <u>Chapter I</u>  $\rightarrow$  <u>Subchapter C</u>  $\rightarrow$  <u>Part 63</u>  $\rightarrow$  Subpart ZZZZ

#### **Browse Next**

Title 40: Protection of Environment

<u>PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS</u> FOR SOURCE CATEGORIES (CONTINUED)

### Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

#### **Contents**

### WHAT THIS SUBPART COVERS

§63.6580 What is the purpose of subpart ZZZZ?

§63.6585 Am I subject to this subpart?

§63.6590 What parts of my plant does this subpart cover?

§63.6595 When do I have to comply with this subpart?

EMISSION AND OPERATING LIMITATIONS

§63.6600 What emission limitations and operating limitations must I meet if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?

<u>§63.6601</u> What emission limitations must I meet if I own or operate a new or reconstructed <u>4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP and less than or equal to 500 brake HP located at a major source of HAP emissions?</u>

§63.6602 What emission limitations and other requirements must I meet if I own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions?

§63.6603 What emission limitations, operating limitations, and other requirements must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?
§63.6604 What fuel requirements must I meet if I own or operate a stationary CI RICE?
GENERAL COMPLIANCE REQUIREMENTS

§63.6605 What are my general requirements for complying with this subpart? Testing and Initial Compliance Requirements

§63.6610 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?

§63.6611 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a new or reconstructed 4SLB SI stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions?

§63.6612 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary

RICE located at an area source of HAP emissions?

§63.6615 When must I conduct subsequent performance tests?

§63.6620 What performance tests and other procedures must I use?

§63.6625 What are my monitoring, installation, collection, operation, and maintenance requirements?

§63.6630 How do I demonstrate initial compliance with the emission limitations, operating limitations, and other requirements?

CONTINUOUS COMPLIANCE REQUIREMENTS

§63.6635 How do I monitor and collect data to demonstrate continuous compliance?

§63.6640 How do I demonstrate continuous compliance with the emission limitations,

operating limitations, and other requirements?

NOTIFICATIONS, REPORTS, AND RECORDS

§63.6645 What notifications must I submit and when?

§63.6650 What reports must I submit and when?

§63.6655 What records must I keep?

§63.6660 In what form and how long must I keep my records?

OTHER REQUIREMENTS AND INFORMATION

§63.6665 What parts of the General Provisions apply to me?

§63.6670 Who implements and enforces this subpart?

§63.6675 What definitions apply to this subpart?

Table 1a to Subpart ZZZZ of Part 63—Emission Limitations for Existing, New, and

Reconstructed Spark Ignition, 4SRB Stationary RICE >500 HP Located at a Major Source of HAP Emissions

Table 1b to Subpart ZZZZ of Part 63—Operating Limitations for Existing, New, and

Reconstructed SI 4SRB Stationary RICE >500 HP Located at a Major Source of HAP Emissions

Table 2a to Subpart ZZZZ of Part 63—Emission Limitations for New and Reconstructed 2SLB

and Compression Ignition Stationary RICE >500 HP and New and Reconstructed 4SLB

Stationary RICE ≥250 HP Located at a Major Source of HAP Emissions

Table 2b to Subpart ZZZZ of Part 63—Operating Limitations for New and Reconstructed 2SLB

and CI Stationary RICE >500 HP Located at a Major Source of HAP Emissions, New and

Reconstructed 4SLB Stationary RICE ≥250 HP Located at a Major Source of HAP Emissions,

Existing CI Stationary RICE > 500 HP

Table 2c to Subpart ZZZZ of Part 63—Requirements for Existing Compression Ignition

Stationary RICE Located at a Major Source of HAP Emissions and Existing Spark Ignition

Stationary RICE ≤500 HP Located at a Major Source of HAP Emissions

<u>Table 2d to Subpart ZZZZ of Part 63—Requirements for Existing Stationary RICE Located at</u> Area Sources of HAP Emissions

Table 3 to Subpart ZZZZ of Part 63—Subsequent Performance Tests

Table 4 to Subpart ZZZZ of Part 63—Requirements for Performance Tests

<u>Table 5 to Subpart ZZZZ of Part 63—Initial Compliance With Emission Limitations, Operating Limitations, and Other Requirements</u>

<u>Table 6 to Subpart ZZZZ of Part 63—Continuous Compliance With Emission Limitations, and Other Requirements</u>

Table 7 to Subpart ZZZZ of Part 63—Requirements for Reports

<u>Table 8 to Subpart ZZZZ of Part 63—Applicability of General Provisions to Subpart ZZZZ.</u>
<u>Appendix A to Subpart ZZZZ of Part 63—Protocol for Using an Electrochemical Analyzer to Determine Oxygen and Carbon Monoxide Concentrations From Certain Engines</u>

Source: 69 FR 33506, June 15, 2004, unless otherwise noted.

**≜** Back to Top

### WHAT THIS SUBPART COVERS

### §63.6580 What is the purpose of subpart ZZZZ?

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

[73 FR 3603, Jan. 18, 2008]

**≜** Back to Top

### §63.6585 Am I subject to this subpart?

You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.

- (a) A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.
- (b) A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source

of HAP emissions is determined for each surface site.

- (c) An area source of HAP emissions is a source that is not a major source.
- (d) If you are an owner or operator of an area source subject to this subpart, your status as an entity subject to a standard or other requirements under this subpart does not subject you to the obligation to obtain a permit under 40 CFR part 70 or 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart as applicable.
- (e) If you are an owner or operator of a stationary RICE used for national security purposes, you may be eligible to request an exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C.
- (f) The emergency stationary RICE listed in paragraphs (f)(1) through (3) of this section are not subject to this subpart. The stationary RICE must meet the definition of an emergency stationary RICE in §63.6675, which includes operating according to the provisions specified in §63.6640(f).
- (1) Existing residential emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in §63.6640(f)(4)(ii).
- (2) Existing commercial emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in §63.6640(f)(4)(ii).
- (3) Existing institutional emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in §63.6640(f)(4)(ii).

[69 FR 33506, June 15, 2004, as amended at 73 FR 3603, Jan. 18, 2008; 78 FR 6700, Jan. 30, 2013]

### **≜** Back to Top

### §63.6590 What parts of my plant does this subpart cover?

This subpart applies to each affected source.

- (a) Affected source. An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.
  - (1) Existing stationary RICE.
- (i) For stationary RICE with a site rating of more than 500 brake horsepower (HP) located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before December 19, 2002.

- (ii) For stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.
- (iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.
- (iv) A change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE.
- (2) New stationary RICE. (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after December 19, 2002.
- (ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.
- (iii) A stationary RICE located at an area source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.
- (3) Reconstructed stationary RICE. (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after December 19, 2002.
- (ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.
- (iii) A stationary RICE located at an area source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.
- (b) Stationary RICE subject to limited requirements. (1) An affected source which meets either of the criteria in paragraphs (b)(1)(i) through (ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.6645(f).
- (i) The stationary RICE is a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii).
- (ii) The stationary RICE is a new or reconstructed limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.
- (2) A new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis must meet the initial notification requirements of §63.6645(f) and the requirements of §63.6625(c), 63.6650(g), and 63.6655(c). These stationary RICE do not have to meet the emission limitations and operating limitations of this subpart.
- (3) The following stationary RICE do not have to meet the requirements of this subpart and of subpart A of this part, including initial notification requirements:

- (i) Existing spark ignition 2 stroke lean burn (2SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;
- (ii) Existing spark ignition 4 stroke lean burn (4SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;
- (iii) Existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii).
- (iv) Existing limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;
- (v) Existing stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;
- (c) Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.
  - (1) A new or reconstructed stationary RICE located at an area source;
- (2) A new or reconstructed 2SLB stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;
- (3) A new or reconstructed 4SLB stationary RICE with a site rating of less than 250 brake HP located at a major source of HAP emissions;
- (4) A new or reconstructed spark ignition 4 stroke rich burn (4SRB) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;
- (5) A new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;
- (6) A new or reconstructed emergency or limited use stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;
- (7) A new or reconstructed compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3604, Jan. 18, 2008; 75 FR 9674, Mar. 3, 2010; 75 FR 37733, June 30, 2010; 75 FR 51588, Aug. 20, 2010; 78 FR 6700, Jan. 30, 2013]

**≜** Back to Top

§63.6595 When do I have to comply with this subpart?

- (a) Affected sources. (1) If you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations, operating limitations and other requirements no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than October 19, 2013.
- (2) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart no later than August 16, 2004.
- (3) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions after August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.
- (4) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.
- (5) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.
- (6) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.
- (7) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.
- (b) Area sources that become major sources. If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, the compliance dates in paragraphs (b)(1) and (2) of this section apply to you.
- (1) Any stationary RICE for which construction or reconstruction is commenced after the date when your area source becomes a major source of HAP must be in compliance with this subpart upon startup of your affected source.
- (2) Any stationary RICE for which construction or reconstruction is commenced before your area source becomes a major source of HAP must be in compliance with the provisions of this subpart that are applicable to RICE located at major sources within 3 years after your area source becomes a major source of HAP.

(c) If you own or operate an affected source, you must meet the applicable notification requirements in §63.6645 and in 40 CFR part 63, subpart A.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3604, Jan. 18, 2008; 75 FR 9675, Mar. 3, 2010; 75 FR 51589, Aug. 20, 2010; 78 FR 6701, Jan. 30, 2013]

**≜** Back to Top

### **EMISSION AND OPERATING LIMITATIONS**

**≜** Back to Top

## §63.6600 What emission limitations and operating limitations must I meet if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.

- (a) If you own or operate an existing, new, or reconstructed spark ignition 4SRB stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 1a to this subpart and the operating limitations in Table 1b to this subpart which apply to you.
- (b) If you own or operate a new or reconstructed 2SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, a new or reconstructed 4SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, or a new or reconstructed CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2a to this subpart and the operating limitations in Table 2b to this subpart which apply to you.
- (c) If you own or operate any of the following stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the emission limitations in Tables 1a, 2a, 2c, and 2d to this subpart or operating limitations in Tables 1b and 2b to this subpart: an existing 2SLB stationary RICE; an existing 4SLB stationary RICE; a stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis; an emergency stationary RICE; or a limited use stationary RICE.
- (d) If you own or operate an existing non-emergency stationary CI RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2c to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

[73 FR 3605, Jan. 18, 2008, as amended at 75 FR 9675, Mar. 3, 2010]

**≜** Back to Top

§63.6601 What emission limitations must I meet if I own or operate a

## new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP and less than or equal to 500 brake HP located at a major source of HAP emissions?

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart. If you own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at major source of HAP emissions manufactured on or after January 1, 2008, you must comply with the emission limitations in Table 2a to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

[73 FR 3605, Jan. 18, 2008, as amended at 75 FR 9675, Mar. 3, 2010; 75 FR 51589, Aug. 20, 2010]

### **≜** Back to Top

# §63.6602 What emission limitations and other requirements must I meet if I own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions?

If you own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations and other requirements in Table 2c to this subpart which apply to you. Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.

[78 FR 6701, Jan. 30, 2013]

### **≜** Back to Top

## §63.6603 What emission limitations, operating limitations, and other requirements must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.

- (a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 2b to this subpart that apply to you.
- (b) If you own or operate an existing stationary non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP that meets either paragraph (b)(1) or (2) of this section, you do not have to meet the numerical CO emission limitations specified in Table 2d of this subpart. Existing stationary non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP that meet either paragraph (b)(1) or (2) of this section must meet the management

practices that are shown for stationary non-emergency CI RICE with a site rating of less than or equal to 300 HP in Table 2d of this subpart.

- (1) The area source is located in an area of Alaska that is not accessible by the Federal Aid Highway System (FAHS).
- (2) The stationary RICE is located at an area source that meets paragraphs (b)(2)(i), (ii), and (iii) of this section.
- (i) The only connection to the FAHS is through the Alaska Marine Highway System (AMHS), or the stationary RICE operation is within an isolated grid in Alaska that is not connected to the statewide electrical grid referred to as the Alaska Railbelt Grid.
- (ii) At least 10 percent of the power generated by the stationary RICE on an annual basis is used for residential purposes.
- (iii) The generating capacity of the area source is less than 12 megawatts, or the stationary RICE is used exclusively for backup power for renewable energy.
- (c) If you own or operate an existing stationary non-emergency CI RICE with a site rating of more than 300 HP located on an offshore vessel that is an area source of HAP and is a nonroad vehicle that is an Outer Continental Shelf (OCS) source as defined in 40 CFR 55.2, you do not have to meet the numerical CO emission limitations specified in Table 2d of this subpart. You must meet all of the following management practices:
- (1) Change oil every 1,000 hours of operation or annually, whichever comes first. Sources have the option to utilize an oil analysis program as described in §63.6625(i) in order to extend the specified oil change requirement.
- (2) Inspect and clean air filters every 750 hours of operation or annually, whichever comes first, and replace as necessary.
- (3) Inspect fuel filters and belts, if installed, every 750 hours of operation or annually, whichever comes first, and replace as necessary.
- (4) Inspect all flexible hoses every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.
- (d) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 1 or Tier 2 emission standards in Table 1 of 40 CFR 89.112 and that is subject to an enforceable state or local standard that requires the engine to be replaced no later than June 1, 2018, you may until January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018, choose to comply with the management practices that are shown for stationary non-emergency CI RICE with a site rating of less than or equal to 300 HP in Table 2d of this subpart instead of the applicable emission limitations in Table 2d, operating limitations in Table 2b, and crankcase ventilation system requirements in §63.6625(g). You must comply with the emission limitations in Table 2d and operating limitations in Table 2b that apply for non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions by January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018. You must also comply with the crankcase ventilation system requirements in §63.6625(g) by January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018.

- (e) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 3 (Tier 2 for engines above 560 kilowatt (kW)) emission standards in Table 1 of 40 CFR 89.112, you may comply with the requirements under this part by meeting the requirements for Tier 3 engines (Tier 2 for engines above 560 kW) in 40 CFR part 60 subpart IIII instead of the emission limitations and other requirements that would otherwise apply under this part for existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions.
- (f) An existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP must meet the definition of remote stationary RICE in §63.6675 on the initial compliance date for the engine, October 19, 2013, in order to be considered a remote stationary RICE under this subpart. Owners and operators of existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that meet the definition of remote stationary RICE in §63.6675 of this subpart as of October 19, 2013 must evaluate the status of their stationary RICE every 12 months. Owners and operators must keep records of the initial and annual evaluation of the status of the engine. If the evaluation indicates that the stationary RICE no longer meets the definition of remote stationary RICE in §63.6675 of this subpart, the owner or operator must comply with all of the requirements for existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that are not remote stationary RICE within 1 year of the evaluation.

[75 FR 9675, Mar. 3, 2010, as amended at 75 FR 51589, Aug. 20, 2010; 76 FR 12866, Mar. 9, 2011; 78 FR 6701, Jan. 30, 2013]

### ≜ Back to Top

### §63.6604 What fuel requirements must I meet if I own or operate a stationary CI RICE?

- (a) If you own or operate an existing non-emergency, non-black start CI stationary RICE with a site rating of more than 300 brake HP with a displacement of less than 30 liters per cylinder that uses diesel fuel, you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel.
- (b) Beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in §63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.
- (c) Beginning January 1, 2015, if you own or operate a new emergency CI stationary RICE with a site rating of more than 500 brake HP and a displacement of less than 30 liters per cylinder located at a major source of HAP that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.
- (d) Existing CI stationary RICE located in Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, at area sources in areas of Alaska that meet either §63.6603(b)(1) or §63.6603(b)(2), or are on offshore vessels that meet §63.6603(c) are exempt from the requirements of

this section.

[78 FR 6702, Jan. 30, 2013]

**≜** Back to Top

### GENERAL COMPLIANCE REQUIREMENTS

**≜** Back to Top

### §63.6605 What are my general requirements for complying with this subpart?

- (a) You must be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply to you at all times.
- (b) At all times you 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 you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which 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 source.

[75 FR 9675, Mar. 3, 2010, as amended at 78 FR 6702, Jan. 30, 2013]

**≜** Back to Top

### TESTING AND INITIAL COMPLIANCE REQUIREMENTS

**≜** Back to Top

# §63.6610 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?

If you own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions you are subject to the requirements of this section.

- (a) You must conduct the initial performance test or other initial compliance demonstrations in Table 4 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions in §63.7(a)(2).
- (b) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004 and own or operate stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must demonstrate initial compliance with either the proposed emission

limitations or the promulgated emission limitations no later than February 10, 2005 or no later than 180 days after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

- (c) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004 and own or operate stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, and you chose to comply with the proposed emission limitations when demonstrating initial compliance, you must conduct a second performance test to demonstrate compliance with the promulgated emission limitations by December 13, 2007 or after startup of the source, whichever is later, according to §63.7(a)(2)(ix).
- (d) An owner or operator is not required to conduct an initial performance test on units for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (d)(1) through (5) of this section.
- (1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.
  - (2) The test must not be older than 2 years.
  - (3) The test must be reviewed and accepted by the Administrator.
- (4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.
- (5) The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3605, Jan. 18, 2008]

### **≜** Back to Top

§63.6611 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a new or reconstructed 4SLB SI stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions?

If you own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must conduct an initial performance test within 240 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions specified in Table 4 to this subpart, as appropriate.

[73 FR 3605, Jan. 18, 2008, as amended at 75 FR 51589, Aug. 20, 2010]

**≜** Back to Top

§63.6612 By what date must I conduct the initial performance tests

# or other initial compliance demonstrations if I own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions?

If you own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions you are subject to the requirements of this section.

- (a) You must conduct any initial performance test or other initial compliance demonstration according to Tables 4 and 5 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions in §63.7(a)(2).
- (b) An owner or operator is not required to conduct an initial performance test on a unit for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (b)(1) through (4) of this section.
- (1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.
  - (2) The test must not be older than 2 years.
  - (3) The test must be reviewed and accepted by the Administrator.
- (4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

[75 FR 9676, Mar. 3, 2010, as amended at 75 FR 51589, Aug. 20, 2010]

**≜** Back to Top

### §63.6615 When must I conduct subsequent performance tests?

If you must comply with the emission limitations and operating limitations, you must conduct subsequent performance tests as specified in Table 3 of this subpart.

**≜** Back to Top

### §63.6620 What performance tests and other procedures must I use?

- (a) You must conduct each performance test in Tables 3 and 4 of this subpart that applies to you.
- (b) Each performance test must be conducted according to the requirements that this subpart specifies in Table 4 to this subpart. If you own or operate a non-operational stationary RICE that is subject to performance testing, you do not need to start up the engine solely to conduct the performance test. Owners and operators of a non-operational engine can conduct the performance test when the engine is started up again. The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load for the stationary RICE listed in paragraphs (b)(1) through (4) of this section.

- (1) Non-emergency 4SRB stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.
- (2) New non-emergency 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP located at a major source of HAP emissions.
- (3) New non-emergency 2SLB stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.
- (4) New non-emergency CI stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.
  - (c) [Reserved]
- (d) You must conduct three separate test runs for each performance test required in this section, as specified in §63.7(e)(3). Each test run must last at least 1 hour, unless otherwise specified in this subpart.
- (e)(1) You must use Equation 1 of this section to determine compliance with the percent reduction requirement:

$$\frac{C_i - C_o}{C_i} \times 100 = R$$
 (Eq. 1)

### View or download PDF

Where:

C<sub>i</sub> = concentration of carbon monoxide (CO), total hydrocarbons (THC), or formaldehyde at the control device inlet,

C<sub>o</sub> = concentration of CO, THC, or formaldehyde at the control device outlet, and

R = percent reduction of CO, THC, or formaldehyde emissions.

- (2) You must normalize the CO, THC, or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO<sub>2</sub>). If pollutant concentrations are to be corrected to 15 percent oxygen and CO<sub>2</sub> concentration is measured in lieu of oxygen concentration measurement, a CO<sub>2</sub> correction factor is needed. Calculate the CO<sub>2</sub> correction factor as described in paragraphs (e)(2)(i) through (iii) of this section.
- (i) Calculate the fuel-specific F<sub>o</sub> value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:

$$F_O = \frac{0.209 \ F_d}{F_C} \ (Eq. 2)$$

### View or download PDF

Where:

 $F_o$  = Fuel factor based on the ratio of oxygen volume to the ultimate  $CO_2$  volume produced by the fuel at zero percent excess air.

0.209 = Fraction of air that is oxygen, percent/100.

- F<sub>d</sub> = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm³/J (dscf/10° Btu).
- $F_c$  = Ratio of the volume of  $CO_2$  produced to the gross calorific value of the fuel from Method 19, dsm<sup>3</sup>/J (dscf/10<sup>e</sup> Btu)
  - (ii) Calculate the CO<sub>2</sub> correction factor for correcting measurement data to 15 percent O<sub>2</sub>, as follows:

$$X_{CO2} = \frac{5.9}{F_O}$$
 (Eq. 3)

#### View or download PDF

Where:

 $X_{co2} = CO_2$  correction factor, percent.

5.9 = 20.9 percent  $O_2$ —15 percent  $O_2$ , the defined  $O_2$  correction value, percent.

(iii) Calculate the CO, THC, and formaldehyde gas concentrations adjusted to 15 percent O<sub>2</sub> using CO<sub>2</sub> as follows:

$$C_{adj} = C_d \frac{X_{CO2}}{\& CO_2}$$
 (Eq. 4)

#### View or download PDF

Where:

C<sub>ad</sub> = Calculated concentration of CO, THC, or formaldehyde adjusted to 15 percent O<sub>2</sub>.

 $C_{\scriptscriptstyle d}$  = Measured concentration of CO, THC, or formaldehyde, uncorrected.

 $X_{co2} = CO_2$  correction factor, percent.

%CO<sub>2</sub> = Measured CO<sub>2</sub> concentration measured, dry basis, percent.

- (f) If you comply with the emission limitation to reduce CO and you are not using an oxidation catalyst, if you comply with the emission limitation to reduce formaldehyde and you are not using NSCR, or if you comply with the emission limitation to limit the concentration of formaldehyde in the stationary RICE exhaust and you are not using an oxidation catalyst or NSCR, you must petition the Administrator for operating limitations to be established during the initial performance test and continuously monitored thereafter; or for approval of no operating limitations. You must not conduct the initial performance test until after the petition has been approved by the Administrator.
- (g) If you petition the Administrator for approval of operating limitations, your petition must include the information described in paragraphs (g)(1) through (5) of this section.
  - (1) Identification of the specific parameters you propose to use as operating limitations;
- (2) A discussion of the relationship between these parameters and HAP emissions, identifying how HAP emissions change with changes in these parameters, and how limitations on these parameters will serve to limit HAP emissions:

- (3) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;
- (4) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and
- (5) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.
- (h) If you petition the Administrator for approval of no operating limitations, your petition must include the information described in paragraphs (h)(1) through (7) of this section.
- (1) Identification of the parameters associated with operation of the stationary RICE and any emission control device which could change intentionally (*e.g.*, operator adjustment, automatic controller adjustment, etc.) or unintentionally (*e.g.*, wear and tear, error, etc.) on a routine basis or over time;
- (2) A discussion of the relationship, if any, between changes in the parameters and changes in HAP emissions;
- (3) For the parameters which could change in such a way as to increase HAP emissions, a discussion of whether establishing limitations on the parameters would serve to limit HAP emissions;
- (4) For the parameters which could change in such a way as to increase HAP emissions, a discussion of how you could establish upper and/or lower values for the parameters which would establish limits on the parameters in operating limitations;
- (5) For the parameters, a discussion identifying the methods you could use to measure them and the instruments you could use to monitor them, as well as the relative accuracy and precision of the methods and instruments:
- (6) For the parameters, a discussion identifying the frequency and methods for recalibrating the instruments you could use to monitor them; and
- (7) A discussion of why, from your point of view, it is infeasible or unreasonable to adopt the parameters as operating limitations.
- (i) The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9676, Mar. 3, 2010; 78 FR 6702, Jan. 30, 2013]

### §63.6625 What are my monitoring, installation, collection, operation, and maintenance requirements?

- (a) If you elect to install a CEMS as specified in Table 5 of this subpart, you must install, operate, and maintain a CEMS to monitor CO and either O<sub>2</sub> or CO<sub>2</sub> according to the requirements in paragraphs (a)(1) through (4) of this section. If you are meeting a requirement to reduce CO emissions, the CEMS must be installed at both the inlet and outlet of the control device. If you are meeting a requirement to limit the concentration of CO, the CEMS must be installed at the outlet of the control device.
- (1) Each CEMS must be installed, operated, and maintained according to the applicable performance specifications of 40 CFR part 60, appendix B.
- (2) You must conduct an initial performance evaluation and an annual relative accuracy test audit (RATA) of each CEMS according to the requirements in §63.8 and according to the applicable performance specifications of 40 CFR part 60, appendix B as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.
- (3) As specified in §63.8(c)(4)(ii), each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. You must have at least two data points, with each representing a different 15-minute period, to have a valid hour of data.
- (4) The CEMS data must be reduced as specified in §63.8(g)(2) and recorded in parts per million or parts per billion (as appropriate for the applicable limitation) at 15 percent oxygen or the equivalent CO<sub>2</sub> concentration.
- (b) If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of this subpart, you must install, operate, and maintain each CPMS according to the requirements in paragraphs (b)(1) through (6) of this section. For an affected source that is complying with the emission limitations and operating limitations on March 9, 2011, the requirements in paragraph (b) of this section are applicable September 6, 2011.
- (1) You must prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in paragraphs (b)(1)(i) through (v) of this section and in §63.8(d). As specified in §63.8(f)(4), you may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in paragraphs (b)(1) through (5) of this section in your site-specific monitoring plan.
- (i) The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;
- (ii) Sampling interface (e.g., thermocouple) location such that the monitoring system will provide representative measurements;
  - (iii) Equipment performance evaluations, system accuracy audits, or other audit procedures;
- (iv) Ongoing operation and maintenance procedures in accordance with provisions in §63.8(c)(1)(ii) and (c)(3); and
- (v) Ongoing reporting and recordkeeping procedures in accordance with provisions in §63.10(c), (e)(1), and (e)(2)(i).

- (2) You must install, operate, and maintain each CPMS in continuous operation according to the procedures in your site-specific monitoring plan.
  - (3) The CPMS must collect data at least once every 15 minutes (see also §63.6635).
- (4) For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger.
- (5) You must conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in your site-specific monitoring plan at least annually.
- (6) You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.
- (c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must monitor and record your fuel usage daily with separate fuel meters to measure the volumetric flow rate of each fuel. In addition, you must operate your stationary RICE in a manner which reasonably minimizes HAP emissions.
- (d) If you are operating a new or reconstructed emergency 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must install a non-resettable hour meter prior to the startup of the engine.
- (e) If you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:
- (1) An existing stationary RICE with a site rating of less than 100 HP located at a major source of HAP emissions:
- (2) An existing emergency or black start stationary RICE with a site rating of less than or equal to 500 HP located at a major source of HAP emissions;
- (3) An existing emergency or black start stationary RICE located at an area source of HAP emissions:
- (4) An existing non-emergency, non-black start stationary CI RICE with a site rating less than or equal to 300 HP located at an area source of HAP emissions;
- (5) An existing non-emergency, non-black start 2SLB stationary RICE located at an area source of HAP emissions:
- (6) An existing non-emergency, non-black start stationary RICE located at an area source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis.
- (7) An existing non-emergency, non-black start 4SLB stationary RICE with a site rating less than or equal to 500 HP located at an area source of HAP emissions;

- (8) An existing non-emergency, non-black start 4SRB stationary RICE with a site rating less than or equal to 500 HP located at an area source of HAP emissions;
- (9) An existing, non-emergency, non-black start 4SLB stationary RICE with a site rating greater than 500 HP located at an area source of HAP emissions that is operated 24 hours or less per calendar year; and
- (10) An existing, non-emergency, non-black start 4SRB stationary RICE with a site rating greater than 500 HP located at an area source of HAP emissions that is operated 24 hours or less per calendar year.
- (f) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.
- (g) If you own or operate an existing non-emergency, non-black start CI engine greater than or equal to 300 HP that is not equipped with a closed crankcase ventilation system, you must comply with either paragraph (g)(1) or paragraph (2) of this section. Owners and operators must follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filters, or can request the Administrator to approve different maintenance requirements that are as protective as manufacturer requirements. Existing CI engines located at area sources in areas of Alaska that meet either §63.6603(b)(1) or §63.6603(b)(2) do not have to meet the requirements of this paragraph (g). Existing CI engines located on offshore vessels that meet §63.6603(c) do not have to meet the requirements of this paragraph (g).
- (1) Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or
- (2) Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates and metals.
- (h) If you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply.
- (i) If you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to this subpart or in items 1 or 4 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation. whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

(i) If you own or operate a stationary SI engine that is subject to the work, operation or management practices in items 6, 7, or 8 of Table 2c to this subpart or in items 5, 6, 7, 9, or 11 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010; 75 FR 51589, Aug. 20, 2010; 76 FR 12866, Mar. 9, 2011; 78 FR 6703, Jan. 30, 2013]

#### **≜** Back to Top

## §63.6630 How do I demonstrate initial compliance with the emission limitations, operating limitations, and other requirements?

- (a) You must demonstrate initial compliance with each emission limitation, operating limitation, and other requirement that applies to you according to Table 5 of this subpart.
- (b) During the initial performance test, you must establish each operating limitation in Tables 1b and 2b of this subpart that applies to you.
- (c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.6645.
- (d) Non-emergency 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more can demonstrate initial compliance with the formaldehyde emission limit by testing for THC instead of formaldehyde. The testing must be conducted according to the requirements in Table 4 of this subpart. The average reduction of emissions of THC determined from the performance test must be equal to or greater than 30 percent.
- (e) The initial compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to the following requirements:
  - (1) The compliance demonstration must consist of at least three test runs.
- (2) Each test run must be of at least 15 minute duration, except that each test conducted using the method in appendix A to this subpart must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.

- (3) If you are demonstrating compliance with the CO concentration or CO percent reduction requirement, you must measure CO emissions using one of the CO measurement methods specified in Table 4 of this subpart, or using appendix A to this subpart.
- (4) If you are demonstrating compliance with the THC percent reduction requirement, you must measure THC emissions using Method 25A, reported as propane, of 40 CFR part 60, appendix A.
- (5) You must measure  $O_2$  using one of the  $O_2$  measurement methods specified in Table 4 of this subpart. Measurements to determine  $O_2$  concentration must be made at the same time as the measurements for CO or THC concentration.
- (6) If you are demonstrating compliance with the CO or THC percent reduction requirement, you must measure CO or THC emissions and  $O_2$  emissions simultaneously at the inlet and outlet of the control device.

[69 FR 33506, June 15, 2004, as amended at 78 FR 6704, Jan. 30, 2013]

**≜** Back to Top

#### **CONTINUOUS COMPLIANCE REQUIREMENTS**

**≜** Back to Top

## §63.6635 How do I monitor and collect data to demonstrate continuous compliance?

- (a) If you must comply with emission and operating limitations, you must monitor and collect data according to this section.
- (b) Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, you must monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
- (c) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods.

[69 FR 33506, June 15, 2004, as amended at 76 FR 12867, Mar. 9, 2011]

**≜** Back to Top

## §63.6640 How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?

(a) You must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart.

- (b) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.
- (c) The annual compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to the following requirements:
  - (1) The compliance demonstration must consist of at least one test run.
- (2) Each test run must be of at least 15 minute duration, except that each test conducted using the method in appendix A to this subpart must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.
- (3) If you are demonstrating compliance with the CO concentration or CO percent reduction requirement, you must measure CO emissions using one of the CO measurement methods specified in Table 4 of this subpart, or using appendix A to this subpart.
- (4) If you are demonstrating compliance with the THC percent reduction requirement, you must measure THC emissions using Method 25A, reported as propane, of 40 CFR part 60, appendix A.
- (5) You must measure  $O_2$  using one of the  $O_2$  measurement methods specified in Table 4 of this subpart. Measurements to determine  $O_2$  concentration must be made at the same time as the measurements for CO or THC concentration.
- (6) If you are demonstrating compliance with the CO or THC percent reduction requirement, you must measure CO or THC emissions and  $O_2$  emissions simultaneously at the inlet and outlet of the control device.
- (7) If the results of the annual compliance demonstration show that the emissions exceed the levels specified in Table 6 of this subpart, the stationary RICE must be shut down as soon as safely possible, and appropriate corrective action must be taken (e.g., repairs, catalyst cleaning, catalyst replacement). The stationary RICE must be retested within 7 days of being restarted and the emissions must meet the levels specified in Table 6 of this subpart. If the retest shows that the emissions continue to exceed the specified levels, the stationary RICE must again be shut down as soon as safely possible, and the stationary RICE may not operate, except for purposes of startup and testing, until the owner/operator demonstrates through testing that the emissions do not exceed the levels specified in Table 6 of this subpart.
- (d) For new, reconstructed, and rebuilt stationary RICE, deviations from the emission or operating limitations that occur during the first 200 hours of operation from engine startup (engine burn-in period) are not violations. Rebuilt stationary RICE means a stationary RICE that has been rebuilt as that term is defined in 40 CFR 94.11(a).
- (e) You must also report each instance in which you did not meet the requirements in Table 8 to this subpart that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new

or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.

- (f) If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1) through (4) of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (4) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (4) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.
  - (1) There is no time limit on the use of emergency stationary RICE in emergency situations.
- (2) You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).
- (i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.
- (ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.
- (iii) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.
- (3) Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

- (4) Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraphs (f)(4)(i) and (ii) of this section, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
- (i) Prior to May 3, 2014, the 50 hours per year for non-emergency situations can be used for peak shaving or non-emergency demand response to generate income for a facility, or to otherwise supply power as part of a financial arrangement with another entity if the engine is operated as part of a peak shaving (load management program) with the local distribution system operator and the power is provided only to the facility itself or to support the local distribution system.
- (ii) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
- (A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.
- (B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
- (C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
- (D) The power is provided only to the facility itself or to support the local transmission and distribution system.
- (E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010; 75 FR 51591, Aug. 20, 2010; 78 FR 6704, Jan. 30, 2013]

**≜** Back to Top

#### NOTIFICATIONS, REPORTS, AND RECORDS

**≜** Back to Top

#### §63.6645 What notifications must I submit and when?

- (a) You must submit all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;
  - (1) An existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a

major source of HAP emissions.

- (2) An existing stationary RICE located at an area source of HAP emissions.
- (3) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.
- (4) A new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 HP located at a major source of HAP emissions.
- (5) This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards.
- (b) As specified in §63.9(b)(2), if you start up your stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart, you must submit an Initial Notification not later than December 13, 2004.
- (c) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions on or after August 16, 2004, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.
- (d) As specified in §63.9(b)(2), if you start up your stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart and you are required to submit an initial notification, you must submit an Initial Notification not later than July 16, 2008.
- (e) If you start up your new or reconstructed stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions on or after March 18, 2008 and you are required to submit an initial notification, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.
- (f) If you are required to submit an Initial Notification but are otherwise not affected by the requirements of this subpart, in accordance with §63.6590(b), your notification should include the information in §63.9(b)(2)(i) through (v), and a statement that your stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions).
- (g) If you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in §63.7(b)(1).
- (h) If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to this subpart, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii).
- (1) For each initial compliance demonstration required in Table 5 to this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.
  - (2) For each initial compliance demonstration required in Table 5 to this subpart that includes a

performance test conducted according to the requirements in Table 3 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to §63.10(d)(2).

(i) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 1 or Tier 2 emission standards in Table 1 of 40 CFR 89.112 and subject to an enforceable state or local standard requiring engine replacement and you intend to meet management practices rather than emission limits, as specified in §63.6603(d), you must submit a notification by March 3, 2013, stating that you intend to use the provision in §63.6603(d) and identifying the state or local regulation that the engine is subject to.

[73 FR 3606, Jan. 18, 2008, as amended at 75 FR 9677, Mar. 3, 2010; 75 FR 51591, Aug. 20, 2010; 78 FR 6705, Jan. 30, 2013]

#### **≜** Back to Top

#### §63.6650 What reports must I submit and when?

- (a) You must submit each report in Table 7 of this subpart that applies to you.
- (b) Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date in Table 7 of this subpart and according to the requirements in paragraphs (b)(1) through (b)(9) of this section.
- (1) For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in §63.6595.
- (2) For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in §63.6595.
- (3) For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.
- (4) For semiannual Compliance reports, each subsequent 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.
- (5) For each stationary RICE that is subject to permitting regulations pursuant to 40 CFR part 70 or 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 dates in paragraphs (b)(1) through (b)(4) of this section.
- (6) For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on December 31.
  - (7) For annual Compliance reports, the first Compliance report must be postmarked or delivered no

later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in §63.6595.

- (8) For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.
- (9) For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.
- (c) The Compliance report must contain the information in paragraphs (c)(1) through (6) of this section.
  - (1) Company name and address.
- (2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.
  - (3) Date of report and beginning and ending dates of the reporting period.
- (4) If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.6605(b), including actions taken to correct a malfunction.
- (5) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.
- (6) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.
- (d) For each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CMS to comply with the emission or operating limitations in this subpart, the Compliance report must contain the information in paragraphs (c)(1) through (4) of this section and the information in paragraphs (d)(1) and (2) of this section.
- (1) The total operating time of the stationary RICE at which the deviation occurred during the reporting period.
- (2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.
- (e) For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission and operating limitations in this subpart, you must include information in paragraphs (c)(1) through (4) and (e)(1) through (12) of this section.
  - (1) The date and time that each malfunction started and stopped.

- (2) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.
- (3) The date, time, and duration that each CMS was out-of-control, including the information in §63.8(c)(8).
- (4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.
- (5) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.
- (6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.
- (7) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.
- (8) An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.
  - (9) A brief description of the stationary RICE.
  - (10) A brief description of the CMS.
  - (11) The date of the latest CMS certification or audit.
  - (12) A description of any changes in CMS, processes, or controls since the last reporting period.
- (f) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 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 Compliance report pursuant to Table 7 of this subpart 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 Compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.
- (g) If you are operating as a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must submit an annual report according to Table 7 of this subpart by the date specified unless the Administrator has approved a different schedule, according to the information described in paragraphs (b)(1) through (b)(5) of this section. You must report the data specified in (g)(1) through (g)(3) of this section.
- (1) Fuel flow rate of each fuel and the heating values that were used in your calculations. You must also demonstrate that the percentage of heat input provided by landfill gas or digester gas is equivalent to 10 percent or more of the total fuel consumption on an annual basis.
  - (2) The operating limits provided in your federally enforceable permit, and any deviations from these

limits.

- (3) Any problems or errors suspected with the meters.
- (h) If you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in §63.6640(f)(4)(ii), you must submit an annual report according to the requirements in paragraphs (h)(1) through (3) of this section.
  - (1) The report must contain the following information:
  - (i) Company name and address where the engine is located.
  - (ii) Date of the report and beginning and ending dates of the reporting period.
  - (iii) Engine site rating and model year.
  - (iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.
- (v) Hours operated for the purposes specified in §63.6640(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in §63.6640(f)(2)(ii) and (iii).
- (vi) Number of hours the engine is contractually obligated to be available for the purposes specified in §63.6640(f)(2)(ii) and (iii).
- (vii) Hours spent for operation for the purpose specified in §63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in §63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.
- (viii) If there were no deviations from the fuel requirements in §63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.
- (ix) If there were deviations from the fuel requirements in §63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.
- (2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.
- (3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in §63.13.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9677, Mar. 3, 2010; 78 FR 6705, Jan. 30, 2013]

#### §63.6655 What records must I keep?

- (a) If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (b)(1) through (b)(3) and (c) of this section.
- (1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in §63.10(b)(2)(xiv).
- (2) Records of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment.
  - (3) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).
- (4) Records of all required maintenance performed on the air pollution control and monitoring equipment.
- (5) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
- (b) For each CEMS or CPMS, you must keep the records listed in paragraphs (b)(1) through (3) of this section.
  - (1) Records described in §63.10(b)(2)(vi) through (xi).
- (2) Previous (*i.e.*, superseded) versions of the performance evaluation plan as required in §63.8(d)(3).
- (3) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in §63.8(f)(6)(i), if applicable.
- (c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must keep the records of your daily fuel usage monitors.
- (d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.
- (e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE;
- (1) An existing stationary RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions.
  - (2) An existing stationary emergency RICE.
- (3) An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.

- (f) If you own or operate any of the stationary RICE in paragraphs (f)(1) through (2) of this section, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in §63.6640(f)(2)(ii) or (iii) or §63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.
- (1) An existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions that does not meet the standards applicable to non-emergency engines.
- (2) An existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9678, Mar. 3, 2010; 75 FR 51592, Aug. 20, 2010; 78 FR 6706, Jan. 30, 2013]

**≜** Back to Top

#### §63.6660 In what form and 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).
- (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 readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1).

[69 FR 33506, June 15, 2004, as amended at 75 FR 9678, Mar. 3, 2010]

**≜** Back to Top

#### OTHER REQUIREMENTS AND INFORMATION

Back to Top

#### §63.6665 What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with any of the requirements of the General Provisions specified in Table 8: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing stationary RICE that combusts landfill or digester

gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in the General Provisions specified in Table 8 except for the initial notification requirements: A new stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new emergency stationary RICE, or a new limited use stationary RICE.

[75 FR 9678, Mar. 3, 2010]

#### **≜** Back to Top

#### §63.6670 Who implements and enforces this subpart?

- (a) This subpart is implemented and enforced by the U.S. EPA, or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency (as well as the U.S. EPA) has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out whether 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 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA 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:
- (1) Approval of alternatives to the non-opacity emission limitations and operating limitations in §63.6600 under §63.6(g).
- (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.
- (5) Approval of a performance test which was conducted prior to the effective date of the rule, as specified in §63.6610(b).

#### **≜** Back to Top

#### §63.6675 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act (CAA); in 40 CFR 63.2, the General Provisions of this part; and in this section as follows:

Alaska Railbelt Grid means the service areas of the six regulated public utilities that extend from Fairbanks to Anchorage and the Kenai Peninsula. These utilities are Golden Valley Electric Association; Chugach Electric Association; Matanuska Electric Association; Homer Electric Association; Anchorage

Municipal Light & Power; and the City of Seward Electric System.

Area source means any stationary source of HAP that is not a major source as defined in part 63.

Associated equipment as used in this subpart and as referred to in section 112(n)(4) of the CAA, means equipment associated with an oil or natural gas exploration or production well, and includes all equipment from the well bore to the point of custody transfer, except glycol dehydration units, storage vessels with potential for flash emissions, combustion turbines, and stationary RICE.

Backup power for renewable energy means an engine that provides backup power to a facility that generates electricity from renewable energy resources, as that term is defined in Alaska Statute 42.45.045(I)(5) (incorporated by reference, see §63.14).

Black start engine means an engine whose only purpose is to start up a combustion turbine.

CAA means the Clean Air Act (42 U.S.C. 7401 et seq., as amended by Public Law 101-549, 104 Stat. 2399).

Commercial emergency stationary RICE means an emergency stationary RICE used in commercial establishments such as office buildings, hotels, stores, telecommunications facilities, restaurants, financial institutions such as banks, doctor's offices, and sports and performing arts facilities.

Compression ignition means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

Custody transfer means the transfer of hydrocarbon liquids or natural gas: After processing and/or treatment in the producing operations, or from storage vessels or automatic transfer facilities or other such equipment, including product loading racks, to pipelines or any other forms of transportation. For the purposes of this subpart, the point at which such liquids or natural gas enters a natural gas processing plant is a point of custody transfer.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

- (1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation or operating limitation;
- (2) 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
- (3) Fails to meet any emission limitation or operating limitation in this subpart during malfunction, regardless or whether or not such failure is permitted by this subpart.
  - (4) Fails to satisfy the general duty to minimize emissions established by §63.6(e)(1)(i).

Diesel engine means any stationary RICE in which a high boiling point liquid fuel injected into the combustion chamber ignites when the air charge has been compressed to a temperature sufficiently high for auto-ignition. This process is also known as compression ignition.

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of

approximately 150 to 360 degrees Celsius. One commonly used form is fuel oil number 2. Diesel fuel also includes any non-distillate fuel with comparable physical and chemical properties (e.g. biodiesel) that is suitable for use in compression ignition engines.

Digester gas means any gaseous by-product of wastewater treatment typically formed through the anaerobic decomposition of organic waste materials and composed principally of methane and CO<sub>2</sub>.

Dual-fuel engine means any stationary RICE in which a liquid fuel (typically diesel fuel) is used for compression ignition and gaseous fuel (typically natural gas) is used as the primary fuel.

Emergency stationary RICE means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary RICE must comply with the requirements specified in §63.6640(f) in order to be considered emergency stationary RICE. If the engine does not comply with the requirements specified in §63.6640(f), then it is not considered to be an emergency stationary RICE under this subpart.

- (1) The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc.
- (2) The stationary RICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in §63.6640(f).
- (3) The stationary RICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in §63.6640(f)(2)(ii) or (iii) and §63.6640(f)(4)(i) or (ii).

Engine startup means the time from initial start until applied load and engine and associated equipment reaches steady state or normal operation. For stationary engine with catalytic controls, engine startup means the time from initial start until applied load and engine and associated equipment, including the catalyst, reaches steady state or normal operation.

Four-stroke engine means any type of engine which completes the power cycle in two crankshaft revolutions, with intake and compression strokes in the first revolution and power and exhaust strokes in the second revolution.

Gaseous fuel means a material used for combustion which is in the gaseous state at standard atmospheric temperature and pressure conditions.

Gasoline means any fuel sold in any State for use in motor vehicles and motor vehicle engines, or nonroad or stationary engines, and commonly or commercially known or sold as gasoline.

Glycol dehydration unit means a device in which a liquid glycol (including, but not limited to, ethylene glycol, diethylene glycol, or triethylene glycol) absorbent directly contacts a natural gas stream and absorbs water in a contact tower or absorption column (absorber). The glycol contacts and absorbs water vapor and other gas stream constituents from the natural gas and becomes "rich" glycol. This glycol is then regenerated in the glycol dehydration unit reboiler. The "lean" glycol is then recycled.

Hazardous air pollutants (HAP) means any air pollutants listed in or pursuant to section 112(b) of the CAA.

Institutional emergency stationary RICE means an emergency stationary RICE used in institutional establishments such as medical centers, nursing homes, research centers, institutions of higher education, correctional facilities, elementary and secondary schools, libraries, religious establishments, police stations, and fire stations.

ISO standard day conditions means 288 degrees Kelvin (15 degrees Celsius), 60 percent relative humidity and 101.3 kilopascals pressure.

Landfill gas means a gaseous by-product of the land application of municipal refuse typically formed through the anaerobic decomposition of waste materials and composed principally of methane and CO<sub>2</sub>.

Lean burn engine means any two-stroke or four-stroke spark ignited engine that does not meet the definition of a rich burn engine.

Limited use stationary RICE means any stationary RICE that operates less than 100 hours per year.

Liquefied petroleum gas means any liquefied hydrocarbon gas obtained as a by-product in petroleum refining of natural gas production.

Liquid fuel means any fuel in liquid form at standard temperature and pressure, including but not limited to diesel, residual/crude oil, kerosene/naphtha (jet fuel), and gasoline.

Major Source, as used in this subpart, shall have the same meaning as in §63.2, except that:

- (1) Emissions from any oil or gas exploration or production well (with its associated equipment (as defined in this section)) and emissions from any pipeline compressor station or pump station shall not be aggregated with emissions from other similar units, to determine whether such emission points or stations are major sources, even when emission points are in a contiguous area or under common control;
- (2) For oil and gas production facilities, emissions from processes, operations, or equipment that are not part of the same oil and gas production facility, as defined in §63.1271 of subpart HHH of this part, shall not be aggregated;
- (3) For production field facilities, only HAP emissions from glycol dehydration units, storage vessel with the potential for flash emissions, combustion turbines and reciprocating internal combustion engines shall be aggregated for a major source determination; and
- (4) Emissions from processes, operations, and equipment that are not part of the same natural gas transmission and storage facility, as defined in §63.1271 of subpart HHH of this part, shall not be aggregated.

*Malfunction* means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Natural gas means a naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in geologic formations beneath the Earth's surface, of which the principal constituent is methane. Natural gas may be field or pipeline quality.

Non-selective catalytic reduction (NSCR) means an add-on catalytic nitrogen oxides (NO<sub>x</sub>) control device for rich burn engines that, in a two-step reaction, promotes the conversion of excess oxygen, NO<sub>x</sub>,

CO, and volatile organic compounds (VOC) into CO<sub>2</sub>, nitrogen, and water.

Oil and gas production facility as used in this subpart means any grouping of equipment where hydrocarbon liquids are processed, upgraded (*i.e.*, remove impurities or other constituents to meet contract specifications), or stored prior to the point of custody transfer; or where natural gas is processed, upgraded, or stored prior to entering the natural gas transmission and storage source category. For purposes of a major source determination, facility (including a building, structure, or installation) means oil and natural gas production and processing equipment that is located within the boundaries of an individual surface site as defined in this section. Equipment that is part of a facility will typically be located within close proximity to other equipment located at the same facility. Pieces of production equipment or groupings of equipment located on different oil and gas leases, mineral fee tracts, lease tracts, subsurface or surface unit areas, surface fee tracts, surface lease tracts, or separate surface sites, whether or not connected by a road, waterway, power line or pipeline, shall not be considered part of the same facility. Examples of facilities in the oil and natural gas production source category include, but are not limited to, well sites, satellite tank batteries, central tank batteries, a compressor station that transports natural gas to a natural gas processing plant, and natural gas processing plants.

Oxidation catalyst means an add-on catalytic control device that controls CO and VOC by oxidation.

Peaking unit or engine means any standby engine intended for use during periods of high demand that are not emergencies.

Percent load means the fractional power of an engine compared to its maximum manufacturer's design capacity at engine site conditions. Percent load may range between 0 percent to above 100 percent.

Potential to emit means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. For oil and natural gas production facilities subject to subpart HH of this part, the potential to emit provisions in §63.760(a) may be used. For natural gas transmission and storage facilities subject to subpart HHH of this part, the maximum annual facility gas throughput for storage facilities may be determined according to §63.1270(a)(1) and the maximum annual throughput for transmission facilities may be determined according to §63.1270(a)(2).

*Production field facility* means those oil and gas production facilities located prior to the point of custody transfer.

*Production well* means any hole drilled in the earth from which crude oil, condensate, or field natural gas is extracted.

*Propane* means a colorless gas derived from petroleum and natural gas, with the molecular structure  $C_3H_8$ .

Remote stationary RICE means stationary RICE meeting any of the following criteria:

(1) Stationary RICE located in an offshore area that is beyond the line of ordinary low water along that portion of the coast of the United States that is in direct contact with the open seas and beyond the line marking the seaward limit of inland waters.

- (2) Stationary RICE located on a pipeline segment that meets both of the criteria in paragraphs (2)(i) and (ii) of this definition.
- (i) A pipeline segment with 10 or fewer buildings intended for human occupancy and no buildings with four or more stories within 220 yards (200 meters) on either side of the centerline of any continuous 1-mile (1.6 kilometers) length of pipeline. Each separate dwelling unit in a multiple dwelling unit building is counted as a separate building intended for human occupancy.
- (ii) The pipeline segment does not lie within 100 yards (91 meters) of either a building or a small, well-defined outside area (such as a playground, recreation area, outdoor theater, or other place of public assembly) that is occupied by 20 or more persons on at least 5 days a week for 10 weeks in any 12-month period. The days and weeks need not be consecutive. The building or area is considered occupied for a full day if it is occupied for any portion of the day.
- (iii) For purposes of this paragraph (2), the term pipeline segment means all parts of those physical facilities through which gas moves in transportation, including but not limited to pipe, valves, and other appurtenance attached to pipe, compressor units, metering stations, regulator stations, delivery stations, holders, and fabricated assemblies. Stationary RICE located within 50 yards (46 meters) of the pipeline segment providing power for equipment on a pipeline segment are part of the pipeline segment. Transportation of gas means the gathering, transmission, or distribution of gas by pipeline, or the storage of gas. A building is intended for human occupancy if its primary use is for a purpose involving the presence of humans.
- (3) Stationary RICE that are not located on gas pipelines and that have 5 or fewer buildings intended for human occupancy and no buildings with four or more stories within a 0.25 mile radius around the engine. A building is intended for human occupancy if its primary use is for a purpose involving the presence of humans.

Residential emergency stationary RICE means an emergency stationary RICE used in residential establishments such as homes or apartment buildings.

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

Rich burn engine means any four-stroke spark ignited engine where the manufacturer's recommended operating air/fuel ratio divided by the stoichiometric air/fuel ratio at full load conditions is less than or equal to 1.1. Engines originally manufactured as rich burn engines, but modified prior to December 19, 2002 with passive emission control technology for  $NO_x$  (such as pre-combustion chambers) will be considered lean burn engines. Also, existing engines where there are no manufacturer's recommendations regarding air/fuel ratio will be considered a rich burn engine if the excess oxygen content of the exhaust at full load conditions is less than or equal to 2 percent.

Site-rated HP means the maximum manufacturer's design capacity at engine site conditions.

Spark ignition means relating to either: A gasoline-fueled engine; or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for CI and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

Stationary reciprocating internal combustion engine (RICE) means any reciprocating internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and

which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

Stationary RICE test cell/stand means an engine test cell/stand, as defined in subpart PPPP of this part, that tests stationary RICE.

Stoichiometric means the theoretical air-to-fuel ratio required for complete combustion.

Storage vessel with the potential for flash emissions means any storage vessel that contains a hydrocarbon liquid with a stock tank gas-to-oil ratio equal to or greater than 0.31 cubic meters per liter and an American Petroleum Institute gravity equal to or greater than 40 degrees and an actual annual average hydrocarbon liquid throughput equal to or greater than 79,500 liters per day. Flash emissions occur when dissolved hydrocarbons in the fluid evolve from solution when the fluid pressure is reduced.

Subpart means 40 CFR part 63, subpart ZZZZ.

*Surface site* means any combination of one or more graded pad sites, gravel pad sites, foundations, platforms, or the immediate physical location upon which equipment is physically affixed.

Two-stroke engine means a type of engine which completes the power cycle in single crankshaft revolution by combining the intake and compression operations into one stroke and the power and exhaust operations into a second stroke. This system requires auxiliary scavenging and inherently runs lean of stoichiometric.

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3607, Jan. 18, 2008; 75 FR 9679, Mar. 3, 2010; 75 FR 51592, Aug. 20, 2010; 76 FR 12867, Mar. 9, 2011; 78 FR 6706, Jan. 30, 2013]

#### **≜** Back to Top

## Table 1a to Subpart ZZZZ of Part 63—Emission Limitations for Existing, New, and Reconstructed Spark Ignition, 4SRB Stationary RICE >500 HP Located at a Major Source of HAP Emissions

As stated in §§63.6600 and 63.6640, you must comply with the following emission limitations at 100 percent load plus or minus 10 percent for existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions:

For each	You must meet the following emission limitation, except during periods of startup	During periods of startup you must
1. 4SRB stationary RICE	a. Reduce formaldehyde emissions by 76 percent or more. If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may reduce formaldehyde emissions by 75 percent or more until June 15, 2007 or	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. <sup>1</sup>
	b. Limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or	

#### less at 15 percent O<sub>2</sub>

[75 FR 9679, Mar. 3, 2010, as amended at 75 FR 51592, Aug. 20, 2010]

#### **≜** Back to Top

## Table 1b to Subpart ZZZZ of Part 63—Operating Limitations for Existing, New, and Reconstructed SI 4SRB Stationary RICE >500 HP Located at a Major Source of HAP Emissions

As stated in §§63.6600, 63.6603, 63.6630 and 63.6640, you must comply with the following operating limitations for existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions:

For each	You must meet the following operating limitation, except during periods of startup
1. existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and using NSCR; or existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O <sub>2</sub> and using NSCR;	a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst measured during the initial performance test; and b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 750 °F and less than or equal to 1250 °F.
2. existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and not using NSCR; or	Comply with any operating limitations approved by the Administrator.
existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O <sub>2</sub> and not using NSCR.	

<sup>&</sup>lt;sup>1</sup>Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.8(f) for a different temperature range.

<sup>&</sup>lt;sup>1</sup> Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

#### **≜** Back to Top

# Table 2a to Subpart ZZZZ of Part 63—Emission Limitations for New and Reconstructed 2SLB and Compression Ignition Stationary RICE >500 HP and New and Reconstructed 4SLB Stationary RICE ≥250 HP Located at a Major Source of HAP Emissions

As stated in §§63.6600 and 63.6640, you must comply with the following emission limitations for new and reconstructed lean burn and new and reconstructed compression ignition stationary RICE at 100 percent load plus or minus 10 percent:

For each	You must meet the following emission limitation, except during periods of startup	During periods of startup you must
1. 2SLB stationary RICE	a. Reduce CO emissions by 58 percent or more; or b. Limit concentration of formaldehyde in the stationary RICE exhaust to 12 ppmvd or less at 15 percent O <sub>2</sub> . If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may limit concentration of formaldehyde to 17 ppmvd or less at 15 percent O <sub>2</sub> until June 15, 2007	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. <sup>1</sup>
2. 4SLB stationary RICE	a. Reduce CO emissions by 93 percent or more; or	
	b. Limit concentration of formaldehyde in the stationary RICE exhaust to 14 ppmvd or less at 15 percent O <sub>2</sub>	
3. CI stationary RICE	a. Reduce CO emissions by 70 percent or more; or	
	b. Limit concentration of formaldehyde in the stationary RICE exhaust to 580 ppbvd or less at 15 percent O <sub>2</sub>	

<sup>&</sup>lt;sup>1</sup>Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[75 FR 9680, Mar. 3, 2010]

#### **≜** Back to Top

Table 2b to Subpart ZZZZ of Part 63—Operating Limitations for New and Reconstructed 2SLB and Cl Stationary RICE >500 HP Located at a Major Source of HAP Emissions, New and Reconstructed 4SLB Stationary RICE ≥250 HP Located at a Major Source of HAP

#### Emissions, Existing CI Stationary RICE >500 HP

As stated in §§63.6600, 63.6601, 63.6603, 63.6630, and 63.6640, you must comply with the following operating limitations for new and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions; new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions; and existing CI stationary RICE >500 HP:

For each	You must meet the following operating limitation, except during periods of startup
1. New and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to reduce CO emissions and using an oxidation catalyst; and New and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and using an oxidation catalyst.	a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test; and b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F.
2. Existing CI stationary RICE >500 HP complying with the requirement to limit or reduce the concentration of CO in the stationary RICE exhaust and using an oxidation catalyst	a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water from the pressure drop across the catalyst that was measured during the initial performance test; and
	b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F.
3. New and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to reduce CO emissions and not using an oxidation catalyst; and	Comply with any operating limitations approved by the Administrator.
New and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and not using an oxidation catalyst; and	
existing CI stationary RICE >500 HP complying with the requirement to limit or reduce the concentration of CO in the stationary RICE exhaust and not using an oxidation catalyst.	

<sup>1</sup>Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.8(f) for a different temperature range.

[78 FR 6707, Jan. 30, 2013]

#### **≜** Back to Top

# Table 2c to Subpart ZZZZ of Part 63—Requirements for Existing Compression Ignition Stationary RICE Located at a Major Source of HAP Emissions and Existing Spark Ignition Stationary RICE ≤500 HP Located at a Major Source of HAP Emissions

As stated in §§63.6600, 63.6602, and 63.6640, you must comply with the following requirements for existing compression ignition stationary RICE located at a major source of HAP emissions and existing spark ignition stationary RICE ≤500 HP located at a major source of HAP emissions:

For each	You must meet the following requirement, except during periods of startup	During periods of startup you must
1. Emergency stationary CI RICE and black start stationary CI RICE <sup>1</sup>		Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. <sup>3</sup>
2. Non-Emergency, non-black start stationary CI RICE <100 HP	a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first. b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	

	T	
3. Non-Emergency, non-black start CI stationary RICE 100≤HP≤300 HP	Limit concentration of CO in the stationary RICE exhaust to 230 ppmvd or less at 15 percent O <sub>2</sub> .	
4. Non-Emergency, non-black start CI stationary RICE 300 <hp≤500< td=""><td>a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd or less at 15 percent O<sub>2</sub>; or b. Reduce CO emissions by 70 percent or more.</td><td></td></hp≤500<>	a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd or less at 15 percent O <sub>2</sub> ; or b. Reduce CO emissions by 70 percent or more.	
5. Non-Emergency, non-black start stationary CI RICE >500 HP	a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd or less at 15 percent O <sub>2</sub> ; or b. Reduce CO emissions by 70 percent or more.	
6. Emergency stationary SI RICE and black start stationary SI RICE. <sup>1</sup>	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. <sup>3</sup>	
7. Non-Emergency, non-black start stationary SI RICE <100 HP that are not 2SLB stationary RICE		
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary. <sup>3</sup>	
8. Non-Emergency, non-black start 2SLB stationary SI RICE <100 HP	a. Change oil and filter every 4,320 hours of operation or annually, whichever comes first; <sup>2</sup> b. Inspect spark plugs every 4,320 hours of	

	operation or annually, whichever comes first, and replace as necessary;	
	c. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary. <sup>3</sup>	
9. Non-emergency, non-black start 2SLB stationary RICE 100≤HP≤500	Limit concentration of CO in the stationary RICE exhaust to 225 ppmvd or less at 15 percent O <sub>2</sub> .	
10. Non-emergency, non-black start 4SLB stationary RICE 100≤HP≤500	Limit concentration of CO in the stationary RICE exhaust to 47 ppmvd or less at 15 percent O <sub>2</sub> .	
11. Non-emergency, non-black start 4SRB stationary RICE 100≤HP≤500	Limit concentration of formaldehyde in the stationary RICE exhaust to 10.3 ppmvd or less at 15 percent O <sub>2</sub> .	
12. Non-emergency, non-black start stationary RICE 100≤HP≤500 which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis		

<sup>1</sup>If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Table 2c of this subpart, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

[78 FR 6708, Jan. 30, 2013, as amended at 78 FR 14457, Mar. 6, 2013]

**≜** Back to Top

Table 2d to Subpart ZZZZ of Part 63—Requirements for Existing

<sup>&</sup>lt;sup>2</sup>Sources have the option to utilize an oil analysis program as described in §63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2c of this subpart.

<sup>&</sup>lt;sup>3</sup>Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

#### Stationary RICE Located at Area Sources of HAP Emissions

As stated in §§63.6603 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

For each	You must meet the following requirement, except during periods of startup	During periods of startup you must
1. Non-Emergency, non-black start CI stationary RICE ≤300 HP	a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first; b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.
2. Non-Emergency, non-black start Cl stationary RICE 300 <hp≤500< td=""><td>a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd at 15 percent O<sub>2</sub>; or</td><td></td></hp≤500<>	a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd at 15 percent O <sub>2</sub> ; or	
	b. Reduce CO emissions by 70 percent or more.	
3. Non-Emergency, non-black start CI stationary RICE >500 HP	a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd at 15 percent O <sub>2</sub> ; or	
	b. Reduce CO emissions by 70 percent or more.	
4. Emergency stationary CI RICE and black start stationary CI RICE. <sup>2</sup>	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; <sup>1</sup>	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and	

	T	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	
5. Emergency stationary SI RICE; black start stationary SI RICE; non-emergency, non-black start 4SLB stationary RICE >500 HP that operate 24 hours or less per calendar year; non-emergency, non-black start 4SRB stationary RICE >500 HP that operate 24 hours or less per calendar year. <sup>2</sup>	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; 1; b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	
6. Non-emergency, non-black start 2SLB stationary RICE	a. Change oil and filter every 4,320 hours of operation or annually, whichever comes first; <sup>1</sup>	
	b. Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary.	
7. Non-emergency, non-black start 4SLB stationary RICE ≤500 HP	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; <sup>1</sup>	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and	

	T.	
	belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	
8. Non-emergency, non-black start 4SLB remote stationary RICE >500 HP	a. Change oil and filter every 2,160 hours of operation or annually, whichever comes first; <sup>1</sup>	
	b. Inspect spark plugs every 2,160 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 2,160 hours of operation or annually, whichever comes first, and replace as necessary.	
9. Non-emergency, non-black start 4SLB stationary RICE >500 HP that are not remote stationary RICE and that operate more than 24 hours per calendar year	Install an oxidation catalyst to reduce HAP emissions from the stationary RICE.	
10. Non-emergency, non-black start 4SRB stationary RICE ≤500 HP	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; <sup>1</sup>	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	
11. Non-emergency, non-black start 4SRB remote stationary RICE >500 HP	a. Change oil and filter every 2,160 hours of operation or annually, whichever comes first; <sup>1</sup>	
	b. Inspect spark plugs every 2,160 hours of operation or annually,	

	1	
	whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 2,160 hours of operation or annually, whichever comes first, and replace as necessary.	
12. Non-emergency, non-black start 4SRB stationary RICE >500 HP that are not remote stationary RICE and that operate more than 24 hours per calendar year	Install NSCR to reduce HAP emissions from the stationary RICE.	
13. Non-emergency, non-black start stationary RICE which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; 1b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	

<sup>&</sup>lt;sup>1</sup>Sources have the option to utilize an oil analysis program as described in §63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of this subpart.

[78 FR 6709, Jan. 30, 2013]

**≜** Back to Top

Table 3 to Subpart ZZZZ of Part 63—Subsequent Performance Tests

<sup>&</sup>lt;sup>2</sup>If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

As stated in §§63.6615 and 63.6620, you must comply with the following subsequent performance test requirements:

For each	Complying with the requirement to	You must
1. New or reconstructed 2SLB stationary RICE >500 HP located at major sources; new or reconstructed 4SLB stationary RICE ≥250 HP located at major sources; and new or reconstructed CI stationary RICE >500 HP located at major sources	Reduce CO emissions and not using a CEMS	Conduct subsequent performance tests semiannually. <sup>1</sup>
2. 4SRB stationary RICE ≥5,000 HP located at major sources	Reduce formaldehyde emissions	Conduct subsequent performance tests semiannually.1
3. Stationary RICE >500 HP located at major sources and new or reconstructed 4SLB stationary RICE 250≤HP≤500 located at major sources	Limit the concentration of formaldehyde in the stationary RICE exhaust	Conduct subsequent performance tests semiannually. <sup>1</sup>
4. Existing non-emergency, non-black start CI stationary RICE >500 HP that are not limited use stationary RICE	Limit or reduce CO emissions and not using a CEMS	Conduct subsequent performance tests every 8,760 hours or 3 years, whichever comes first.
5. Existing non-emergency, non-black start CI stationary RICE >500 HP that are limited use stationary RICE	Limit or reduce CO emissions and not using a CEMS	Conduct subsequent performance tests every 8,760 hours or 5 years, whichever comes first.

<sup>&</sup>lt;sup>1</sup>After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

[78 FR 6711, Jan. 30, 2013]

#### **≜** Back to Top

### Table 4 to Subpart ZZZZ of Part 63—Requirements for Performance Tests

As stated in §§63.6610, 63.6611, 63.6620, and 63.6640, you must comply with the following requirements for performance tests for stationary RICE:

	Complying with the requirement to	You must	According to the following requirements
1. 2SLB,	a. reduce CO	i. Select the sampling	(a) For CO and O₂

4SLB, and CI stationary	emissions	port location and the number/location of traverse points at the		measurement, ducts ≤6 inches in diameter may be sampled at a single point
RICE		inlet and outlet of the control device; and		located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line (`3-point long line'). If the duct is >12 inches in diameter <i>and</i> the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A-1, the duct may be sampled at `3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A-4.
		the inlet and outlet of	3B of 40 CFR part 60, appendix A-2, or	(b) Measurements to determine O₂ must be made at the same time as the measurements for CO concentration.
		iii. Measure the CO at the inlet and the outlet of the control device		(c) The CO concentration must be at 15 percent O <sub>2</sub> , dry basis.
2. 4SRB stationary RICE	a. reduce formaldehyde emissions	i. Select the sampling port location and the number/location of traverse points at the inlet and outlet of the control device; and		(a) For formaldehyde, O₂, and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line (`3-point long line'). If the duct is >12 inches in diameter and the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60,

	T	1	1	<u>'</u>
				appendix A, the duct may be sampled at `3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A.
		ii. Measure O <sub>2</sub> at the inlet and outlet of the control device; and	3B of 40 CFR part 60, appendix A-2, or ASTM Method D6522-	(a) Measurements to determine O <sub>2</sub> concentration must be made at the same time as the measurements for formaldehyde or THC concentration.
		iii. Measure moisture content at the inlet and outlet of the control device; and	(1) Method 4 of 40 CFR part 60, appendix A-3, or Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 <sup>a</sup>	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde or THC concentration.
		iv. If demonstrating compliance with the formaldehyde percent reduction requirement, measure formalde-hyde at the inlet and the outlet of the control device	(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348-03 <sup>a</sup> , provided in ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130	(a) Formaldehyde concentration must be at 15 percent O <sub>2</sub> , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
		v. If demonstrating compliance with the THC percent reduction requirement, measure THC at the inlet and the outlet of the control device	of 40 CFR part 60, appendix A-7	(a) THC concentration must be at 15 percent O <sub>2</sub> , dry basis. Results of this test consist of the average of the three 1- hour or longer runs.
3. Stationary RICE	a. limit the concentra-tion of formalde-hyde or CO in the stationary RICE exhaust	i. Select the sampling port location and the number/location of traverse points at the exhaust of the stationary RICE; and		(a) For formaldehyde, CO, O₂, and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line ('3-point long line'). If the

		T	1
			duct is >12 inches in diameter and the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A, the duct may be sampled at `3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A. If using a control device, the sampling site must be located at the outlet of the control device.
	ii. Determine the O <sub>2</sub> concentration of the stationary RICE exhaust at the sampling port location; and	appendix A-2, or ASTM Method D6522- 00 (Reapproved 2005) <sup>a</sup> (heated probe	(a) Measurements to determine O <sub>2</sub> concentration must be made at the same time and location as the measurements for formaldehyde or CO concentration.
		CFR part 60, appendix A-3, or Method 320 of 40 CFR part 63, appendix A, or ASTM	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde or CO concentration.
	hyde at the exhaust of	appendix A; or ASTM D6348-03 <sup>a</sup> , provided in ASTM D6348-03	(a) Formaldehyde concentration must be at 15 percent O <sub>2</sub> , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
	v. measure CO at the exhaust of the station- ary RICE	CFR part 60, appendix A-4, ASTM Method D6522-00	(a) CO concentration must be at 15 percent O <sub>2</sub> , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

<sup>&</sup>lt;sup>a</sup>You may also use Methods 3A and 10 as options to ASTM-D6522-00 (2005). You may obtain a

copy of ASTM-D6522-00 (2005) from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

<sup>b</sup>You may obtain a copy of ASTM-D6348-03 from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

[79 FR 11290, Feb. 27, 2014]

#### **≜** Back to Top

# Table 5 to Subpart ZZZZ of Part 63—Initial Compliance With Emission Limitations, Operating Limitations, and Other Requirements

As stated in §§63.6612, 63.6625 and 63.6630, you must initially comply with the emission and operating limitations as required by the following:

For each		You have demonstrated initial compliance if
1. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Reduce CO emissions and using oxidation catalyst, and using a CPMS	i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
2. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Limit the concentration of CO, using oxidation catalyst, and using a CPMS	i. The average CO concentration determined from the initial performance test is less than or equal to the CO emission limitation; and
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
3. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or	a. Reduce CO     emissions and not     using oxidation	i. The average reduction of emissions of CO determined from the initial performance test achieves the required

reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	catalyst	CO percent reduction; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and iii. You have recorded the approved operating parameters (if any) during the initial performance test.
4. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Limit the concentration of CO, and not using oxidation catalyst	i. The average CO concentration determined from the initial performance test is less than or equal to the CO emission limitation; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.
5. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Reduce CO emissions, and using a CEMS	i. You have installed a CEMS to continuously monitor CO and either O <sub>2</sub> or CO <sub>2</sub> at both the inlet and outlet of the oxidation catalyst according to the requirements in §63.6625(a); and ii. You have conducted a performance evaluation of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B; and
		iii. The average reduction of CO calculated using §63.6620 equals or exceeds the required percent reduction. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average percent reduction achieved during the 4-hour period.
6. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Limit the concentration of CO, and using a CEMS	i. You have installed a CEMS to continuously monitor CO and either O <sub>2</sub> or CO <sub>2</sub> at the outlet of the oxidation catalyst according to the requirements in §63.6625(a); and
		ii. You have conducted a performance evaluation of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B; and
		iii. The average concentration of CO

		calculated using §63.6620 is less than or equal to the CO emission limitation. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average concentration measured during the 4-hour period.
7. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde emissions and using NSCR	i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction, or the average reduction of emissions of THC determined from the initial performance test is equal to or greater than 30 percent; and
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
8. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde emissions and not using NSCR	i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction or the average reduction of emissions of THC determined from the initial performance test is equal to or greater than 30 percent; and
		ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.
9. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP, and existing non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR	i. The average formaldehyde concentration, corrected to 15 percent O <sub>2</sub> , dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the

		requirements in SC2 SC2E(b), and
		requirements in §63.6625(b); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR	i. The average formaldehyde concentration, corrected to 15 percent O <sub>2</sub> , dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.
11. Existing non-emergency stationary RICE 100≤HP≤500 located at a major source of HAP, and existing non-emergency stationary CI RICE 300 <hp≤500 an="" area="" at="" hap<="" located="" of="" source="" td=""><td>a. Reduce CO emissions</td><td>i. The average reduction of emissions of CO or formaldehyde, as applicable determined from the initial performance test is equal to or greater than the required CO or formaldehyde, as applicable, percent reduction.</td></hp≤500>	a. Reduce CO emissions	i. The average reduction of emissions of CO or formaldehyde, as applicable determined from the initial performance test is equal to or greater than the required CO or formaldehyde, as applicable, percent reduction.
RICE 100≤HP≤500 located at a major source of HAP, and existing non-		i. The average formaldehyde or CO concentration, as applicable, corrected to 15 percent O <sub>2</sub> , dry basis, from the three test runs is less than or equal to the formaldehyde or CO emission limitation, as applicable.
13. Existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year	a. Install an oxidation catalyst	i. You have conducted an initial compliance demonstration as specified in §63.6630(e) to show that the average reduction of emissions of CO is 93 percent or more, or the average CO concentration is less than or equal to 47 ppmvd at 15 percent O <sub>2</sub> ;
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b), or you have installed equipment to automatically shut down the engine if the catalyst inlet temperature exceeds 1350 °F.
14. Existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated	a. Install NSCR	i. You have conducted an initial compliance demonstration as specified in §63.6630(e) to show that the average reduction of emissions of CO is 75

more than 24 hours per calendar year	percent or more, the average CO concentration is less than or equal to 270 ppmvd at 15 percent O <sub>2</sub> , or the average reduction of emissions of THC is 30 percent or more;
	ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b), or you have installed equipment to automatically shut down the engine if the catalyst inlet temperature exceeds 1250 °F.

[78 FR 6712, Jan. 30, 2013]

**≜** Back to Top

# Table 6 to Subpart ZZZZ of Part 63—Continuous Compliance With Emission Limitations, and Other Requirements

As stated in §63.6640, you must continuously comply with the emissions and operating limitations and work or management practices as required by the following:

For each	Complying with the requirement to	You must demonstrate continuous compliance by
1. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, and new or reconstructed non-emergency CI stationary RICE >500 HP located at a major source of HAP	a. Reduce CO emissions and using an oxidation catalyst, and using a CPMS	i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved <sup>a</sup> ; and ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
2. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or	a. Reduce CO emissions and not using an oxidation	i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is

	<u> </u>	
	CPMS	achieved <sup>a</sup> ; and ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB	emissions or limit the concentration of CO in the stationary RICE exhaust, and using a CEMS	i. Collecting the monitoring data according to §63.6625(a), reducing the measurements to 1-hour averages, calculating the percent reduction or concentration of CO emissions according to §63.6620; and ii. Demonstrating that the catalyst achieves the required percent reduction of CO emissions over the 4-hour averaging period, or that the emission remain at or below the CO concentration limit; and
		iii. Conducting an annual RATA of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B, as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.
HAP		i. Collecting the catalyst inlet temperature data according to §63.6625(b); and
		ii. Reducing these data to 4-hour rolling averages; and
		iii. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		iv. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
HAP	a. Reduce formaldehyde emissions and not using NSCR	i. Collecting the approved operating parameter (if any) data according to §63.6625(b); and

		ii. Reducing these data to 4-hour rolling averages; and
		iii. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
6. Non-emergency 4SRB stationary RICE with a brake HP ≥5,000 located at a major source of HAP	a. Reduce formaldehyde emissions	Conducting semiannual performance tests for formaldehyde to demonstrate that the required formaldehyde percent reduction is achieved, or to demonstrate that the average reduction of emissions of THC determined from the performance test is equal to or greater than 30 percent. <sup>a</sup>
7. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP and new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR	i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit <sup>a</sup> ; and ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
8. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP and new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR	i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit <sup>a</sup> ; and ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters

	established during the performance
9. Existing emergency and black start stationary RICE ≤500 HP located at a major source of HAP, existing non-emergency stationary RICE <100 HP located at a major source of HAP, existing emergency and black start stationary RICE located at an area source of HAP, existing non-emergency stationary CI RICE ≤300 HP located at an area source of HAP, existing non-emergency 2SLB stationary RICE located at an area source of HAP, existing non-emergency stationary SI RICE located at an area source of HAP which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, existing non-emergency 4SLB and 4SRB stationary RICE ≤500 HP located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate 24 hours or less per calendar year, and existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate 24 hours or less per calendar year, and existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that are remote stationary RICE	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
10. Existing stationary CI RICE >500 HP that are not limited use stationary RICE	i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and
	ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and
	iii. Reducing these data to 4-hour rolling averages; and
	iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
	v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop

	T	
		across the catalyst is within the operating limitation established during the performance test.
11. Existing stationary CI RICE >500 HP that are not limited use stationary RICE	emissions, or limit the	i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and
		ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
12. Existing limited use CI stationary RICE >500 HP	emissions or limit the concentration of CO in the stationary RICE exhaust, and using an oxidation catalyst	i. Conducting performance tests every 8,760 hours or 5 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and
		ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
13. Existing limited use CI stationary	a. Reduce CO	i. Conducting performance tests every

		T
RICE >500 HP	emissions or limit the concentration of CO in the stationary RICE exhaust, and not using an oxidation catalyst	8,760 hours or 5 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and
		ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
14. Existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year	a. Install an oxidation catalyst	i. Conducting annual compliance demonstrations as specified in §63.6640(c) to show that the average reduction of emissions of CO is 93 percent or more, or the average CO concentration is less than or equal to 47 ppmvd at 15 percent O <sub>2</sub> ; and either ii. Collecting the catalyst inlet temperature data according to §63.6625(b), reducing these data to 4-hour rolling averages; and maintaining the 4-hour rolling averages within the limitation of greater than 450 °F and less than or equal to 1350 °F for the catalyst inlet temperature; or iii. Immediately shutting down the engine if the catalyst inlet temperature exceeds 1350 °F.
15. Existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year	a. Install NSCR	i. Conducting annual compliance demonstrations as specified in §63.6640(c) to show that the average reduction of emissions of CO is 75 percent or more, the average CO concentration is less than or equal to 270 ppmvd at 15 percent O <sub>2</sub> , or the average reduction of emissions of THC is 30 percent or more; and either ii. Collecting the catalyst inlet temperature data according to §63.6625(b), reducing these data to 4-hour rolling averages; and maintaining the 4-hour rolling averages within the limitation of greater than or equal to 750

	°F and less than or equal to 1250 °F for the catalyst inlet temperature; or iii. Immediately shutting down the engine if the catalyst inlet temperature exceeds 1250 °F.
--	--

<sup>&</sup>lt;sup>a</sup>After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

[78 FR 6715, Jan. 30, 2013]

**≜** Back to Top

# Table 7 to Subpart ZZZZ of Part 63—Requirements for Reports

As stated in §63.6650, you must comply with the following requirements for reports:

For each	You must submit a	The report must contain	You must submit the report
1. Existing non-emergency, non-black start stationary RICE 100≤HP≤500 located at a major source of HAP; existing non-emergency, non-black start stationary CI RICE >500 HP located at a major source of HAP; existing non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP; existing non-emergency, non-black start stationary CI RICE >300 HP located at an area source of HAP; new or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP; and new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP	Compliance report	no deviations from the emission limitations or operating limitations during the reporting period. If there were no periods during which the CMS, including	according to the
		b. If you had a deviation from any emission limitation or operating limitation during the reporting period, the information in §63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in	i. Semiannually according to the requirements in §63.6650(b).

		§63.8(c)(7), the information in §63.6650(e); or	
		c. If you had a malfunction during the reporting period, the information in §63.6650(c)(4).	i. Semiannually according to the requirements in §63.6650(b).
2. New or reconstructed non- emergency stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis	Report		i. Annually, according to the requirements in §63.6650.
		b. The operating limits provided in your federally enforceable permit, and any deviations from these limits; and	i. See item 2.a.i.
		c. Any problems or errors suspected with the meters.	i. See item 2.a.i.
3. Existing non-emergency, non- black start 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that operate more than 24 hours per calendar year	Compliance report		i. Semiannually according to the requirements in §63.6650(b)(1)-(5).
4. Emergency stationary RICE that operate or are contractually obligated to be available for more than 15 hours per year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or that operate for the purposes specified in §63.6640(f)(4)(ii)	Report	§63.6650(h)(1)	i. annually according to the requirements in §63.6650(h)(2)-(3).

[78 FR 6719, Jan. 30, 2013]

# **≜** Back to Top

# Table 8 to Subpart ZZZZ of Part 63—Applicability of General Provisions to Subpart ZZZZ.

As stated in §63.6665, you must comply with the following applicable general provisions.

_		_	
General	Subject of citation	Applies to	Explanation

provisions citation		subpart	
§63.1	General applicability of the General Provisions	Yes.	
§63.2	Definitions	Yes	Additional terms defined in §63.6675.
§63.3	Units and abbreviations	Yes.	
§63.4	Prohibited activities and circumvention	Yes.	
§63.5	Construction and reconstruction	Yes.	
§63.6(a)	Applicability	Yes.	
§63.6(b)(1)-(4)	Compliance dates for new and reconstructed sources	Yes.	
§63.6(b)(5)	Notification	Yes.	
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources	Yes.	
§63.6(c)(1)-(2)	Compliance dates for existing sources	Yes.	
§63.6(c)(3)-(4)	[Reserved]		
§63.6(c)(5)	Compliance dates for existing area sources that become major sources	Yes.	
§63.6(d)	[Reserved]		
§63.6(e)	Operation and maintenance	No.	
§63.6(f)(1)	Applicability of standards	No.	
§63.6(f)(2)	Methods for determining compliance	Yes.	
§63.6(f)(3)	Finding of compliance	Yes.	
§63.6(g)(1)-(3)	Use of alternate standard	Yes.	
§63.6(h)	Opacity and visible emission standards	No	Subpart ZZZZ does not contain opacity or visible emission standards.
§63.6(i)	Compliance extension procedures and criteria	Yes.	
§63.6(j)	Presidential compliance exemption	Yes.	
§63.7(a)(1)-(2)	Performance test dates	Yes	Subpart ZZZZ contains

			performance test dates at §§63.6610, 63.6611, and 63.6612.
§63.7(a)(3)	CAA section 114 authority	Yes.	
§63.7(b)(1)	Notification of performance test	Yes	Except that §63.7(b)(1) only applies as specified in §63.6645.
§63.7(b)(2)	Notification of rescheduling	Yes	Except that §63.7(b)(2) only applies as specified in §63.6645.
§63.7(c)	Quality assurance/test plan	Yes	Except that §63.7(c) only applies as specified in §63.6645.
§63.7(d)	Testing facilities	Yes.	
§63.7(e)(1)	Conditions for conducting performance tests	No.	Subpart ZZZZ specifies conditions for conducting performance tests at §63.6620.
§63.7(e)(2)	Conduct of performance tests and reduction of data	Yes	Subpart ZZZZ specifies test methods at §63.6620.
§63.7(e)(3)	Test run duration	Yes.	
§63.7(e)(4)	Administrator may require other testing under section 114 of the CAA	Yes.	
§63.7(f)	Alternative test method provisions	Yes.	
§63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes.	
§63.7(h)	Waiver of tests	Yes.	
§63.8(a)(1)	Applicability of monitoring requirements	Yes	Subpart ZZZZ contains specific requirements for monitoring at §63.6625.
§63.8(a)(2)	Performance specifications	Yes.	
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring for control devices	No.	
§63.8(b)(1)	Monitoring	Yes.	
§63.8(b)(2)-(3)	Multiple effluents and multiple monitoring systems	Yes.	
§63.8(c)(1)	Monitoring system operation and maintenance	Yes.	
§63.8(c)(1)(i)	Routine and predictable SSM	No	
§63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan	Yes.	
§63.8(c)(1)(iii)	Compliance with operation and	No	

	maintananaa raguiramanta		
\$62.9(a)(2) (2)	maintenance requirements	Yes.	
§63.8(c)(2)-(3) §63.8(c)(4)	Monitoring system installation  Continuous monitoring system (CMS) requirements	Yes	Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).
§63.8(c)(5)	COMS minimum procedures	No	Subpart ZZZZ does not require COMS.
§63.8(c)(6)-(8)	CMS requirements	Yes	Except that subpart ZZZZ does not require COMS.
§63.8(d)	CMS quality control	Yes.	
§63.8(e)	CMS performance evaluation	Yes	Except for §63.8(e)(5)(ii), which applies to COMS.
		Except that §63.8(e) only applies as specified in §63.6645.	
§63.8(f)(1)-(5)	Alternative monitoring method	Yes	Except that §63.8(f)(4) only applies as specified in §63.6645.
§63.8(f)(6)	Alternative to relative accuracy test	Yes	Except that §63.8(f)(6) only applies as specified in §63.6645.
§63.8(g)	Data reduction	Yes	Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at §§63.6635 and 63.6640.
§63.9(a)	Applicability and State delegation of notification requirements	Yes.	
§63.9(b)(1)-(5)	Initial notifications	Yes	Except that §63.9(b)(3) is reserved.
		Except that §63.9(b) only applies as specified in §63.6645.	
§63.9(c)	Request for compliance extension	Yes	Except that §63.9(c) only applies as specified in §63.6645.
§63.9(d)	Notification of special compliance requirements for new sources	Yes	Except that §63.9(d) only applies as specified in §63.6645.
§63.9(e)	Notification of performance test	Yes	Except that §63.9(e) only applies as specified in §63.6645.
§63.9(f)	Notification of visible emission (VE)/opacity test	No	Subpart ZZZZ does not contain opacity or VE standards.

Notification of performance evaluation	Yes	Except that §63.9(g) only applies as specified in §63.6645.
Notification of use of COMS data	No	Subpart ZZZZ does not contain opacity or VE standards.
Notification that criterion for alternative to RATA is exceeded	Yes	If alternative is in use.
	Except that §63.9(g) only applies as specified in §63.6645.	
Notification of compliance status	Yes	Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. §63.9(h)(4) is reserved.
		Except that §63.9(h) only applies as specified in §63.6645.
Adjustment of submittal deadlines	Yes.	
Change in previous information	Yes.	
Administrative provisions for recordkeeping/reporting	Yes.	
Record retention	Yes	Except that the most recent 2 years of data do not have to be retained on site.
Records related to SSM	No.	
Records	Yes.	
Record when under waiver	Yes.	
Records when using alternative to RATA	Yes	For CO standard if using RATA alternative.
Records of supporting documentation	Yes.	
Records of applicability determination	Yes.	
Additional records for sources using CEMS	Yes	Except that §63.10(c)(2)-(4) and (9) are reserved.
General reporting requirements	Yes.	
Report of performance test results	Yes.	_
Reporting opacity or VE	No	Subpart ZZZZ does not contain
	evaluation  Notification of use of COMS data  Notification that criterion for alternative to RATA is exceeded  Notification of compliance status  Notification of compliance status  Adjustment of submittal deadlines  Change in previous information  Administrative provisions for recordkeeping/reporting  Record retention  Records related to SSM  Records  Records when under waiver  Records when using alternative to RATA  Records of supporting documentation  Records of applicability determination  Additional records for sources using CEMS  General reporting requirements  Report of performance test results	evaluation  Notification of use of COMS data  No  Notification that criterion for alternative to RATA is exceeded  Except that \$63.9(g) only applies as specified in \$63.6645.  Notification of compliance status  Adjustment of submittal deadlines  Change in previous information  Administrative provisions for recordkeeping/reporting  Record retention  Records related to SSM  Records when under waiver  Records when using alternative to RATA  Records of supporting yes.  Records of supporting yes.  Records of applicability determination  Additional records for sources using CEMS  Report of performance test results

	observations		opacity or VE standards.
§63.10(d)(4)	Progress reports	Yes.	
§63.10(d)(5)	Startup, shutdown, and malfunction reports	No.	
§63.10(e)(1) and (2)(i)	Additional CMS Reports	Yes.	
§63.10(e)(2)(ii)	COMS-related report	No	Subpart ZZZZ does not require COMS.
§63.10(e)(3)	Excess emission and parameter exceedances reports	Yes.	Except that §63.10(e)(3)(i) (C) is reserved.
§63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
§63.10(f)	Waiver for recordkeeping/reporting	Yes.	
§63.11	Flares	No.	
§63.12	State authority and delegations	Yes.	
§63.13	Addresses	Yes.	
§63.14	Incorporation by reference	Yes.	
§63.15	Availability of information	Yes.	

[75 FR 9688, Mar. 3, 2010, as amended at 78 FR 6720, Jan. 30, 2013]

#### **≜** Back to Top

# Appendix A to Subpart ZZZZ of Part 63—Protocol for Using an Electrochemical Analyzer to Determine Oxygen and Carbon Monoxide Concentrations From Certain Engines

## 1.0 Scope and Application. What is this Protocol?

This protocol is a procedure for using portable electrochemical (EC) cells for measuring carbon monoxide (CO) and oxygen (O<sub>2</sub>) concentrations in controlled and uncontrolled emissions from existing stationary 4-stroke lean burn and 4-stroke rich burn reciprocating internal combustion engines as specified in the applicable rule.

# 1.1 Analytes. What does this protocol determine?

This protocol measures the engine exhaust gas concentrations of carbon monoxide (CO) and oxygen ( $O_2$ ).

	CAS	
Analyte	No.	Sensitivity

Carbon monoxide (CO)		Minimum detectable limit should be 2 percent of the nominal range or 1 ppm, whichever is less restrictive.
Oxygen (O <sub>2</sub> )	7782- 44-7	

### 1.2 Applicability. When is this protocol acceptable?

This protocol is applicable to 40 CFR part 63, subpart ZZZZ. Because of inherent cross sensitivities of EC cells, you must not apply this protocol to other emissions sources without specific instruction to that effect.

### 1.3 Data Quality Objectives. How good must my collected data be?

Refer to Section 13 to verify and document acceptable analyzer performance.

## 1.4 Range. What is the targeted analytical range for this protocol?

The measurement system and EC cell design(s) conforming to this protocol will determine the analytical range for each gas component. The nominal ranges are defined by choosing up-scale calibration gas concentrations near the maximum anticipated flue gas concentrations for CO and  $O_2$ , or no more than twice the permitted CO level.

# 1.5 Sensitivity. What minimum detectable limit will this protocol yield for a particular gas component?

The minimum detectable limit depends on the nominal range and resolution of the specific EC cell used, and the signal to noise ratio of the measurement system. The minimum detectable limit should be 2 percent of the nominal range or 1 ppm, whichever is less restrictive.

## 2.0 SUMMARY OF PROTOCOL

In this protocol, a gas sample is extracted from an engine exhaust system and then conveyed to a portable EC analyzer for measurement of CO and  $O_2$  gas concentrations. This method provides measurement system performance specifications and sampling protocols to ensure reliable data. You may use additions to, or modifications of vendor supplied measurement systems (e.g., heated or unheated sample lines, thermocouples, flow meters, selective gas scrubbers, etc.) to meet the design specifications of this protocol. Do not make changes to the measurement system from the as-verified configuration (Section 3.12).

## 3.0 DEFINITIONS

- 3.1 Measurement System. The total equipment required for the measurement of CO and O<sub>2</sub> concentrations. The measurement system consists of the following major subsystems:
- 3.1.1 Data Recorder. A strip chart recorder, computer or digital recorder for logging measurement data from the analyzer output. You may record measurement data from the digital data display manually or electronically.

- 3.1.2 Electrochemical (EC) Cell. A device, similar to a fuel cell, used to sense the presence of a specific analyte and generate an electrical current output proportional to the analyte concentration.
- 3.1.3 Interference Gas Scrubber. A device used to remove or neutralize chemical compounds that may interfere with the selective operation of an EC cell.
- 3.1.4 Moisture Removal System. Any device used to reduce the concentration of moisture in the sample stream so as to protect the EC cells from the damaging effects of condensation and to minimize errors in measurements caused by the scrubbing of soluble gases.
- 3.1.5 Sample Interface. The portion of the system used for one or more of the following: sample acquisition; sample transport; sample conditioning or protection of the EC cell from any degrading effects of the engine exhaust effluent; removal of particulate matter and condensed moisture.
- 3.2 Nominal Range. The range of analyte concentrations over which each EC cell is operated (normally 25 percent to 150 percent of up-scale calibration gas value). Several nominal ranges can be used for any given cell so long as the calibration and repeatability checks for that range remain within specifications.
- 3.3 Calibration Gas. A vendor certified concentration of a specific analyte in an appropriate balance gas.
- 3.4 Zero Calibration Error. The analyte concentration output exhibited by the EC cell in response to zero-level calibration gas.
- 3.5 *Up-Scale Calibration Error.* The mean of the difference between the analyte concentration exhibited by the EC cell and the certified concentration of the up-scale calibration gas.
- 3.6 Interference Check. A procedure for quantifying analytical interference from components in the engine exhaust gas other than the targeted analytes.
- 3.7 Repeatability Check. A protocol for demonstrating that an EC cell operated over a given nominal analyte concentration range provides a stable and consistent response and is not significantly affected by repeated exposure to that gas.
- 3.8 Sample Flow Rate. The flow rate of the gas sample as it passes through the EC cell. In some situations, EC cells can experience drift with changes in flow rate. The flow rate must be monitored and documented during all phases of a sampling run.
- 3.9 Sampling Run. A timed three-phase event whereby an EC cell's response rises and plateaus in a sample conditioning phase, remains relatively constant during a measurement data phase, then declines during a refresh phase. The sample conditioning phase exposes the EC cell to the gas sample for a length of time sufficient to reach a constant response. The measurement data phase is the time interval during which gas sample measurements can be made that meet the acceptance criteria of this protocol. The refresh phase then purges the EC cells with CO-free air. The refresh phase replenishes requisite O<sub>2</sub> and moisture in the electrolyte reserve and provides a mechanism to de-gas or desorb any interference gas scrubbers or filters so as to enable a stable CO EC cell response. There are four primary types of sampling runs: pre- sampling calibrations; stack gas sampling; post-sampling calibration checks; and measurement system repeatability checks. Stack gas sampling runs can be chained together for extended evaluations, providing all other procedural specifications are met.
  - 3.10 Sampling Day. A time not to exceed twelve hours from the time of the pre-sampling calibration

to the post-sampling calibration check. During this time, stack gas sampling runs can be repeated without repeated recalibrations, providing all other sampling specifications have been met.

- 3.11 Pre-Sampling Calibration/Post-Sampling Calibration Check. The protocols executed at the beginning and end of each sampling day to bracket measurement readings with controlled performance checks.
- 3.12 Performance-Established Configuration. The EC cell and sampling system configuration that existed at the time that it initially met the performance requirements of this protocol.

#### 4.0 Interferences.

When present in sufficient concentrations, NO and NO<sub>2</sub> are two gas species that have been reported to interfere with CO concentration measurements. In the likelihood of this occurrence, it is the protocol user's responsibility to employ and properly maintain an appropriate CO EC cell filter or scrubber for removal of these gases, as described in Section 6.2.12.

# 5.0 SAFETY. [RESERVED]

#### 6.0 Equipment and Supplies.

#### 6.1 What equipment do I need for the measurement system?

The system must maintain the gas sample at conditions that will prevent moisture condensation in the sample transport lines, both before and as the sample gas contacts the EC cells. The essential components of the measurement system are described below.

# 6.2 Measurement System Components.

- 6.2.1 Sample Probe. A single extraction-point probe constructed of glass, stainless steel or other non-reactive material, and of length sufficient to reach any designated sampling point. The sample probe must be designed to prevent plugging due to condensation or particulate matter.
- 6.2.2 Sample Line. Non-reactive tubing to transport the effluent from the sample probe to the EC cell.
- 6.2.3 Calibration Assembly (optional). A three-way valve assembly or equivalent to introduce calibration gases at ambient pressure at the exit end of the sample probe during calibration checks. The assembly must be designed such that only stack gas or calibration gas flows in the sample line and all gases flow through any gas path filters.
- 6.2.4 Particulate Filter (optional). Filters before the inlet of the EC cell to prevent accumulation of particulate material in the measurement system and extend the useful life of the components. All filters must be fabricated of materials that are non-reactive to the gas mixtures being sampled.
- 6.2.5 Sample Pump. A leak-free pump to provide undiluted sample gas to the system at a flow rate sufficient to minimize the response time of the measurement system. If located upstream of the EC cells, the pump must be constructed of a material that is non-reactive to the gas mixtures being sampled.

- 6.2.8 Sample Flow Rate Monitoring. An adjustable rotameter or equivalent device used to adjust and maintain the sample flow rate through the analyzer as prescribed.
- 6.2.9 Sample Gas Manifold (optional). A manifold to divert a portion of the sample gas stream to the analyzer and the remainder to a by-pass discharge vent. The sample gas manifold may also include provisions for introducing calibration gases directly to the analyzer. The manifold must be constructed of a material that is non-reactive to the gas mixtures being sampled.
- 6.2.10 EC cell. A device containing one or more EC cells to determine the CO and O<sub>2</sub> concentrations in the sample gas stream. The EC cell(s) must meet the applicable performance specifications of Section 13 of this protocol.
- 6.2.11 Data Recorder. A strip chart recorder, computer or digital recorder to make a record of analyzer output data. The data recorder resolution (i.e., readability) must be no greater than 1 ppm for CO; 0.1 percent for O<sub>2</sub>; and one degree (either °C or °F) for temperature. Alternatively, you may use a digital or analog meter having the same resolution to observe and manually record the analyzer responses.
- 6.2.12 Interference Gas Filter or Scrubber. A device to remove interfering compounds upstream of the CO EC cell. Specific interference gas filters or scrubbers used in the performance-established configuration of the analyzer must continue to be used. Such a filter or scrubber must have a means to determine when the removal agent is exhausted. Periodically replace or replenish it in accordance with the manufacturer's recommendations.

# 7.0 REAGENTS AND STANDARDS. WHAT CALIBRATION GASES ARE NEEDED?

- 7.1 Calibration Gases. CO calibration gases for the EC cell must be CO in nitrogen or CO in a mixture of nitrogen and  $O_2$ . Use CO calibration gases with labeled concentration values certified by the manufacturer to be within  $\pm 5$  percent of the label value. Dry ambient air (20.9 percent  $O_2$ ) is acceptable for calibration of the  $O_2$  cell. If needed, any lower percentage  $O_2$  calibration gas must be a mixture of  $O_2$  in nitrogen.
- 7.1.1 Up-Scale CO Calibration Gas Concentration. Choose one or more up-scale gas concentrations such that the average of the stack gas measurements for each stack gas sampling run are between 25 and 150 percent of those concentrations. Alternatively, choose an up-scale gas that does not exceed twice the concentration of the applicable outlet standard. If a measured gas value exceeds 150 percent of the up-scale CO calibration gas value at any time during the stack gas sampling run, the run must be discarded and repeated.
  - 7.1.2 Up-Scale O₂ Calibration Gas Concentration.

Select an  $O_2$  gas concentration such that the difference between the gas concentration and the average stack gas measurement or reading for each sample run is less than 15 percent  $O_2$ . When the average exhaust gas  $O_2$  readings are above 6 percent, you may use dry ambient air (20.9 percent  $O_2$ ) for the up-scale  $O_2$  calibration gas.

7.1.3 Zero Gas. Use an inert gas that contains less than 0.25 percent of the up-scale CO calibration gas concentration. You may use dry air that is free from ambient CO and other combustion gas products (e.g., CO<sub>2</sub>).

#### 8.0 SAMPLE COLLECTION AND ANALYSIS

- 8.1 Selection of Sampling Sites.
- 8.1.1 Control Device Inlet. Select a sampling site sufficiently downstream of the engine so that the combustion gases should be well mixed. Use a single sampling extraction point near the center of the duct (e.g., within the 10 percent centroidal area), unless instructed otherwise.
- 8.1.2 Exhaust Gas Outlet. Select a sampling site located at least two stack diameters downstream of any disturbance (e.g., turbocharger exhaust, crossover junction or recirculation take-off) and at least one-half stack diameter upstream of the gas discharge to the atmosphere. Use a single sampling extraction point near the center of the duct (e.g., within the 10 percent centroidal area), unless instructed otherwise.
- 8.2 Stack Gas Collection and Analysis. Prior to the first stack gas sampling run, conduct that the pre-sampling calibration in accordance with Section 10.1. Use Figure 1 to record all data. Zero the analyzer with zero gas. Confirm and record that the scrubber media color is correct and not exhausted. Then position the probe at the sampling point and begin the sampling run at the same flow rate used during the up-scale calibration. Record the start time. Record all EC cell output responses and the flow rate during the "sample conditioning phase" once per minute until constant readings are obtained. Then begin the "measurement data phase" and record readings every 15 seconds for at least two minutes (or eight readings), or as otherwise required to achieve two continuous minutes of data that meet the specification given in Section 13.1. Finally, perform the "refresh phase" by introducing dry air, free from CO and other combustion gases, until several minute-to-minute readings of consistent value have been obtained. For each run use the "measurement data phase" readings to calculate the average stack gas CO and O<sub>2</sub> concentrations.
- 8.3 EC Cell Rate. Maintain the EC cell sample flow rate so that it does not vary by more than ±10 percent throughout the pre-sampling calibration, stack gas sampling and post-sampling calibration check. Alternatively, the EC cell sample flow rate can be maintained within a tolerance range that does not affect the gas concentration readings by more than ±3 percent, as instructed by the EC cell manufacturer.

# 9.0 QUALITY CONTROL (RESERVED)

## 10.0 CALIBRATION AND STANDARDIZATION

- 10.1 Pre-Sampling Calibration. Conduct the following protocol once for each nominal range to be used on each EC cell before performing a stack gas sampling run on each field sampling day. Repeat the calibration if you replace an EC cell before completing all of the sampling runs. There is no prescribed order for calibration of the EC cells; however, each cell must complete the measurement data phase during calibration. Assemble the measurement system by following the manufacturer's recommended protocols including for preparing and preconditioning the EC cell. Assure the measurement system has no leaks and verify the gas scrubbing agent is not depleted. Use Figure 1 to record all data.
- 10.1.1 Zero Calibration. For both the O<sub>2</sub> and CO cells, introduce zero gas to the measurement system (e.g., at the calibration assembly) and record the concentration reading every minute until readings are constant for at least two consecutive minutes. Include the time and sample flow rate. Repeat the steps in this section at least once to verify the zero calibration for each component gas.
- 10.1.2 Zero Calibration Tolerance. For each zero gas introduction, the zero level output must be less than or equal to ±3 percent of the up-scale gas value or ±1 ppm, whichever is less restrictive, for the

CO channel and less than or equal to  $\pm 0.3$  percent  $O_2$  for the  $O_2$  channel.

- 10.1.3 Up-Scale Calibration. Individually introduce each calibration gas to the measurement system (e.g., at the calibration assembly) and record the start time. Record all EC cell output responses and the flow rate during this "sample conditioning phase" once per minute until readings are constant for at least two minutes. Then begin the "measurement data phase" and record readings every 15 seconds for a total of two minutes, or as otherwise required. Finally, perform the "refresh phase" by introducing dry air, free from CO and other combustion gases, until readings are constant for at least two consecutive minutes. Then repeat the steps in this section at least once to verify the calibration for each component gas. Introduce all gases to flow through the entire sample handling system (i.e., at the exit end of the sampling probe or the calibration assembly).
- 10.1.4 Up-Scale Calibration Error. The mean of the difference of the "measurement data phase" readings from the reported standard gas value must be less than or equal to  $\pm 5$  percent or  $\pm 1$  ppm for CO or  $\pm 0.5$  percent O<sub>2</sub>, whichever is less restrictive, respectively. The maximum allowable deviation from the mean measured value of any single "measurement data phase" reading must be less than or equal to  $\pm 2$  percent or  $\pm 1$  ppm for CO or  $\pm 0.5$  percent O<sub>2</sub>, whichever is less restrictive, respectively.
- 10.2 Post-Sampling Calibration Check. Conduct a stack gas post-sampling calibration check after the stack gas sampling run or set of runs and within 12 hours of the initial calibration. Conduct up-scale and zero calibration checks using the protocol in Section 10.1. Make no changes to the sampling system or EC cell calibration until all post-sampling calibration checks have been recorded. If either the zero or up-scale calibration error exceeds the respective specification in Sections 10.1.2 and 10.1.4 then all measurement data collected since the previous successful calibrations are invalid and re-calibration and re-sampling are required. If the sampling system is disassembled or the EC cell calibration is adjusted, repeat the calibration check before conducting the next analyzer sampling run.

#### 11.0 ANALYTICAL PROCEDURE

The analytical procedure is fully discussed in Section 8.

#### 12.0 CALCULATIONS AND DATA ANALYSIS

Determine the CO and O<sub>2</sub> concentrations for each stack gas sampling run by calculating the mean gas concentrations of the data recorded during the "measurement data phase".

#### 13.0 PROTOCOL PERFORMANCE

Use the following protocols to verify consistent analyzer performance during each field sampling day.

13.1 Measurement Data Phase Performance Check. Calculate the mean of the readings from the "measurement data phase". The maximum allowable deviation from the mean for each of the individual readings is ±2 percent, or ±1 ppm, whichever is less restrictive. Record the mean value and maximum deviation for each gas monitored. Data must conform to Section 10.1.4. The EC cell flow rate must conform to the specification in Section 8.3.

*Example:* A measurement data phase is invalid if the maximum deviation of any single reading comprising that mean is greater than  $\pm 2$  percent  $or \pm 1$  ppm (the default criteria). For example, if the mean = 30 ppm, single readings of below 29 ppm and above 31 ppm are disallowed).

- 13.2 Interference Check. Before the initial use of the EC cell and interference gas scrubber in the field, and semi-annually thereafter, challenge the interference gas scrubber with NO and NO<sub>2</sub> gas standards that are generally recognized as representative of diesel-fueled engine NO and NO<sub>2</sub> emission values. Record the responses displayed by the CO EC cell and other pertinent data on Figure 1 or a similar form.
- 13.2.1 Interference Response. The combined NO and  $NO_2$  interference response should be less than or equal to  $\pm 5$  percent of the up-scale CO calibration gas concentration.
- 13.3 Repeatability Check. Conduct the following check once for each nominal range that is to be used on the CO EC cell within 5 days prior to each field sampling program. If a field sampling program lasts longer than 5 days, repeat this check every 5 days. Immediately repeat the check if the EC cell is replaced or if the EC cell is exposed to gas concentrations greater than 150 percent of the highest upscale gas concentration.
- 13.3.1 Repeatability Check Procedure. Perform a complete EC cell sampling run (all three phases) by introducing the CO calibration gas to the measurement system and record the response. Follow Section 10.1.3. Use Figure 1 to record all data. Repeat the run three times for a total of four complete runs. During the four repeatability check runs, do not adjust the system except where necessary to achieve the correct calibration gas flow rate at the analyzer.
- 13.3.2 Repeatability Check Calculations. Determine the highest and lowest average "measurement data phase" CO concentrations from the four repeatability check runs and record the results on Figure 1 or a similar form. The absolute value of the difference between the maximum and minimum average values recorded must not vary more than ±3 percent or ±1 ppm of the up-scale gas value, whichever is less restrictive.
- 14.0 POLLUTION PREVENTION (RESERVED)
- 15.0 WASTE MANAGEMENT (RESERVED)
- 16.0 ALTERNATIVE PROCEDURES (RESERVED)

#### 17.0 REFERENCES

- (1) "Development of an Electrochemical Cell Emission Analyzer Test Protocol", Topical Report, Phil Juneau, Emission Monitoring, Inc., July 1997.
- (2) "Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Emissions from Natural Gas-Fired Engines, Boilers, and Process Heaters Using Portable Analyzers", EMC Conditional Test Protocol 30 (CTM-30), Gas Research Institute Protocol GRI-96/0008, Revision 7, October 13, 1997.
- (3) "ICAC Test Protocol for Periodic Monitoring", EMC Conditional Test Protocol 34 (CTM-034), The Institute of Clean Air Companies, September 8, 1999.
- (4) "Code of Federal Regulations", Protection of Environment, 40 CFR, Part 60, Appendix A, Methods 1-4; 10.

#### TABLE 1: APPENDIX A—SAMPLING RUN DATA.

Facility		Date											
Run Type:				_)				(	(_)			(_)	
(X)			S						Post-Sample Cal. Check			Repeatability Check	
Run #	1	1	2	2	3	3	4	4	Time	Scru OK	ıb.	Flow- Rate	
Gas	O <sub>2</sub>	СО	O <sub>2</sub>	СО	O <sub>2</sub>	СО	O <sub>2</sub>	CC	O .				
Sample Cond. Phase													
II .													
"													
"													
"													
Measurement Data Phase													
"													
"													
"													
"													
"													
"													
"													
"													
"													
"													
Mean													
Refresh Phase													
"													

m						
m						
"						

[78 FR 6721, Jan. 30, 2013]

# Appendix B:

40 CFR Part 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion

#### **ELECTRONIC CODE OF FEDERAL REGULATIONS**

View past updates to the e-CFR. Click here to learn more.

### e-CFR data is current as of April 30, 2015

 $\underline{\text{Title 40}} \rightarrow \underline{\text{Chapter I}} \rightarrow \underline{\text{Subchapter C}} \rightarrow \underline{\text{Part 60}} \rightarrow \underline{\text{Subpart IIII}}$ 

Browse Previous | Browse Next

Title 40: Protection of Environment

PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

# Subpart IIII—Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

#### **Contents**

WHAT THIS SUBPART COVERS

§60.4200 Am I subject to this subpart? EMISSION STANDARDS FOR MANUFACTURERS

§60.4201 What emission standards must I meet for non-emergency engines if I am a stationary CI internal combustion engine manufacturer?

§60.4202 What emission standards must I meet for emergency engines if I am a stationary CI internal combustion engine manufacturer?

§60.4203 How long must my engines meet the emission standards if I am a manufacturer of stationary CI internal combustion engines?

EMISSION STANDARDS FOR OWNERS AND OPERATORS

<u>§60.4204</u> What emission standards must I meet for non-emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

<u>§60.4205</u> What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

§60.4206 How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine?

FUEL REQUIREMENTS FOR OWNERS AND OPERATORS

§60.4207 What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?

Other Requirements for Owners and Operators

<u>§60.4208</u> What is the deadline for importing or installing stationary CI ICE produced in previous model years?

§60.4209 What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?

**COMPLIANCE REQUIREMENTS** 

§60.4210 What are my compliance requirements if I am a stationary CI internal combustion engine manufacturer?

§60.4211 What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

TESTING REQUIREMENTS FOR OWNERS AND OPERATORS

§60.4212 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of less than 30 liters per cylinder? §60.4213 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of greater than or equal to 30 liters per cylinder?

NOTIFICATION, REPORTS, AND RECORDS FOR OWNERS AND OPERATORS

§60.4214 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?

Special Requirements

§60.4215 What requirements must I meet for engines used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands?

§60.4216 What requirements must I meet for engines used in Alaska?

§60.4217 What emission standards must I meet if I am an owner or operator of a stationary internal combustion engine using special fuels?

GENERAL PROVISIONS

§60.4218 What parts of the General Provisions apply to me?

§60.4219 What definitions apply to this subpart?

Table 1 to Subpart IIII of Part 60—Emission Standards for Stationary Pre-2007 Model Year Engines With a Displacement of <10 Liters per Cylinder and 2007-2010 Model Year Engines >2,237 KW (3,000 HP) and With a Displacement of <10 Liters per Cylinder

Table 2 to Subpart IIII of Part 60—Emission Standards for 2008 Model Year and Later

Emergency Stationary CI ICE <37 KW (50 HP) With a Displacement of <10 Liters per Cylinder Table 3 to Subpart IIII of Part 60—Certification Requirements for Stationary Fire Pump Engines

Table 4 to Subpart IIII of Part 60—Emission Standards for Stationary Fire Pump Engines

<u>Table 5 to Subpart IIII of Part 60—Labeling and Recordkeeping Requirements for New Stationary Emergency Engines</u>

<u>Table 6 to Subpart IIII of Part 60—Optional 3-Mode Test Cycle for Stationary Fire Pump</u> Engines

Table 7 to Subpart IIII of Part 60—Requirements for Performance Tests for Stationary CI ICE

With a Displacement of ≥30 Liters per Cylinder

<u>Table 8 to Subpart IIII of Part 60—Applicability of General Provisions to Subpart IIII</u>

Source: 71 FR 39172, July 11, 2006, unless otherwise noted.

**≜** Back to Top

#### WHAT THIS SUBPART COVERS

**♣** Back to Top

### §60.4200 Am I subject to this subpart?

- (a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) and other persons as specified in paragraphs (a)(1) through (4) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.
- (1) Manufacturers of stationary CI ICE with a displacement of less than 30 liters per cylinder where the model year is:
  - (i) 2007 or later, for engines that are not fire pump engines;
  - (ii) The model year listed in Table 3 to this subpart or later model year, for fire pump engines.
- (2) Owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are:
  - (i) Manufactured after April 1, 2006, and are not fire pump engines, or
- (ii) Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.
- (3) Owners and operators of any stationary CI ICE that are modified or reconstructed after July 11, 2005 and any person that modifies or reconstructs any stationary CI ICE after July 11, 2005.
- (4) The provisions of §60.4208 of this subpart are applicable to all owners and operators of stationary CI ICE that commence construction after July 11, 2005.
- (b) The provisions of this subpart are not applicable to stationary CI ICE being tested at a stationary CI ICE test cell/stand.
- (c) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart applicable to area sources.
- (d) Stationary CI ICE may be eligible for exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C (or the exemptions described in 40 CFR part 89, subpart J and 40 CFR part 94, subpart J, for engines that would need to be certified to standards in those parts), except that owners and operators, as well as manufacturers, may be eligible to request an exemption for national security.

(e) Owners and operators of facilities with CI ICE that are acting as temporary replacement units and that are located at a stationary source for less than 1 year and that have been properly certified as meeting the standards that would be applicable to such engine under the appropriate nonroad engine provisions, are not required to meet any other provisions under this subpart with regard to such engines.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37967, June 28, 2011]

**≜** Back to Top

#### **EMISSION STANDARDS FOR MANUFACTURERS**

**≜** Back to Top

# §60.4201 What emission standards must I meet for non-emergency engines if I am a stationary CI internal combustion engine manufacturer?

- (a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later non-emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 kilowatt (KW) (3,000 horsepower (HP)) and a displacement of less than 10 liters per cylinder to the certification emission standards for new nonroad CI engines in 40 CFR 89.112, 40 CFR 89.113, 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR 1039.115, as applicable, for all pollutants, for the same model year and maximum engine power.
- (b) Stationary CI internal combustion engine manufacturers must certify their 2007 through 2010 model year non-emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder to the emission standards in table 1 to this subpart, for all pollutants, for the same maximum engine power.
- (c) Stationary CI internal combustion engine manufacturers must certify their 2011 model year and later non-emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder to the certification emission standards for new nonroad CI engines in 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR 1039.115, as applicable, for all pollutants, for the same maximum engine power.
- (d) Stationary CI internal combustion engine manufacturers must certify the following nonemergency stationary CI ICE to the certification emission standards for new marine CI engines in 40 CFR 94.8, as applicable, for all pollutants, for the same displacement and maximum engine power:
- (1) Their 2007 model year through 2012 non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder;
- (2) Their 2013 model year non-emergency stationary CI ICE with a maximum engine power greater than or equal to 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder; and
- (3) Their 2013 model year non-emergency stationary CI ICE with a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder.

- (e) Stationary CI internal combustion engine manufacturers must certify the following non-emergency stationary CI ICE to the certification emission standards and other requirements for new marine CI engines in 40 CFR 1042.101, 40 CFR 1042.107, 40 CFR 1042.110, 40 CFR 1042.115, 40 CFR 1042.120, and 40 CFR 1042.145, as applicable, for all pollutants, for the same displacement and maximum engine power:
- (1) Their 2013 model year non-emergency stationary CI ICE with a maximum engine power less than 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder; and
- (2) Their 2014 model year and later non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder.
- (f) Notwithstanding the requirements in paragraphs (a) through (c) of this section, stationary nonemergency CI ICE identified in paragraphs (a) and (c) may be certified to the provisions of 40 CFR part 94 or, if Table 1 to 40 CFR 1042.1 identifies 40 CFR part 1042 as being applicable, 40 CFR part 1042, if the engines will be used solely in either or both of the following locations:
  - (1) Areas of Alaska not accessible by the Federal Aid Highway System (FAHS); and
  - (2) Marine offshore installations.
- (g) Notwithstanding the requirements in paragraphs (a) through (f) of this section, stationary CI internal combustion engine manufacturers are not required to certify reconstructed engines; however manufacturers may elect to do so. The reconstructed engine must be certified to the emission standards specified in paragraphs (a) through (e) of this section that are applicable to the model year, maximum engine power, and displacement of the reconstructed stationary CI ICE.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37967, June 28, 2011]

# **≜** Back to Top

# §60.4202 What emission standards must I meet for emergency engines if I am a stationary CI internal combustion engine manufacturer?

- (a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (a)(1) through (2) of this section.
  - (1) For engines with a maximum engine power less than 37 KW (50 HP):
- (i) The certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants for model year 2007 engines, and
- (ii) The certification emission standards for new nonroad CI engines in 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, 40 CFR 1039.115, and table 2 to this subpart, for 2008 model year and later engines.

- (2) For engines with a maximum engine power greater than or equal to 37 KW (50 HP), the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants beginning in model year 2007.
- (b) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (b)(1) through (2) of this section.
- (1) For 2007 through 2010 model years, the emission standards in table 1 to this subpart, for all pollutants, for the same maximum engine power.
- (2) For 2011 model year and later, the certification emission standards for new nonroad CI engines for engines of the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants.

#### (c) [Reserved]

- (d) Beginning with the model years in table 3 to this subpart, stationary CI internal combustion engine manufacturers must certify their fire pump stationary CI ICE to the emission standards in table 4 to this subpart, for all pollutants, for the same model year and NFPA nameplate power.
- (e) Stationary CI internal combustion engine manufacturers must certify the following emergency stationary CI ICE that are not fire pump engines to the certification emission standards for new marine CI engines in 40 CFR 94.8, as applicable, for all pollutants, for the same displacement and maximum engine power:
- (1) Their 2007 model year through 2012 emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder;
- (2) Their 2013 model year and later emergency stationary CI ICE with a maximum engine power greater than or equal to 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder;
- (3) Their 2013 model year emergency stationary CI ICE with a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder; and
- (4) Their 2014 model year and later emergency stationary CI ICE with a maximum engine power greater than or equal to 2,000 KW (2,682 HP) and a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder.
- (f) Stationary CI internal combustion engine manufacturers must certify the following emergency stationary CI ICE to the certification emission standards and other requirements applicable to Tier 3 new marine CI engines in 40 CFR 1042.101, 40 CFR 1042.107, 40 CFR 1042.115, 40 CFR 1042.120, and 40 CFR 1042.145, for all pollutants, for the same displacement and maximum engine power:
- (1) Their 2013 model year and later emergency stationary CI ICE with a maximum engine power less than 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder; and
- (2) Their 2014 model year and later emergency stationary CI ICE with a maximum engine power less than 2,000 KW (2,682 HP) and a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder.

- (g) Notwithstanding the requirements in paragraphs (a) through (d) of this section, stationary emergency CI internal combustion engines identified in paragraphs (a) and (c) may be certified to the provisions of 40 CFR part 94 or, if Table 2 to 40 CFR 1042.101 identifies Tier 3 standards as being applicable, the requirements applicable to Tier 3 engines in 40 CFR part 1042, if the engines will be used solely in either or both of the following locations:
  - (1) Areas of Alaska not accessible by the FAHS; and
  - (2) Marine offshore installations.
- (h) Notwithstanding the requirements in paragraphs (a) through (f) of this section, stationary CI internal combustion engine manufacturers are not required to certify reconstructed engines; however manufacturers may elect to do so. The reconstructed engine must be certified to the emission standards specified in paragraphs (a) through (f) of this section that are applicable to the model year, maximum engine power and displacement of the reconstructed emergency stationary CI ICE.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37968, June 28, 2011]

**≜** Back to Top

# §60.4203 How long must my engines meet the emission standards if I am a manufacturer of stationary CI internal combustion engines?

Engines manufactured by stationary CI internal combustion engine manufacturers must meet the emission standards as required in §§60.4201 and 60.4202 during the certified emissions life of the engines.

[76 FR 37968, June 28, 2011]

**≜** Back to Top

#### EMISSION STANDARDS FOR OWNERS AND OPERATORS

**≜** Back to Top

# §60.4204 What emission standards must I meet for non-emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

- (a) Owners and operators of pre-2007 model year non-emergency stationary CI ICE with a displacement of less than 10 liters per cylinder must comply with the emission standards in table 1 to this subpart. Owners and operators of pre-2007 model year non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder must comply with the emission standards in 40 CFR 94.8(a)(1).
- (b) Owners and operators of 2007 model year and later non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder must comply with the emission standards for new CI engines in §60.4201 for their 2007 model year and later stationary CI ICE, as applicable.

- (c) Owners and operators of non-emergency stationary CI engines with a displacement of greater than or equal to 30 liters per cylinder must meet the following requirements:
- (1) For engines installed prior to January 1, 2012, limit the emissions of  $NO_x$  in the stationary CI internal combustion engine exhaust to the following:
- (i) 17.0 grams per kilowatt-hour (g/KW-hr) (12.7 grams per horsepower-hr (g/HP-hr)) when maximum engine speed is less than 130 revolutions per minute (rpm):
- (ii)  $45 \cdot n^{-0.2}$  g/KW-hr ( $34 \cdot n^{-0.2}$  g/HP-hr) when maximum engine speed is 130 or more but less than 2,000 rpm, where n is maximum engine speed; and
  - (iii) 9.8 g/KW-hr (7.3 g/HP-hr) when maximum engine speed is 2,000 rpm or more.
- (2) For engines installed on or after January 1, 2012 and before January 1, 2016, limit the emissions of  $NO_x$  in the stationary CI internal combustion engine exhaust to the following:
  - (i) 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;
- (ii)  $44 \cdot n^{-0.23}$  g/KW-hr ( $33 \cdot n^{-0.23}$  g/HP-hr) when maximum engine speed is greater than or equal to 130 but less than 2,000 rpm and where n is maximum engine speed; and
  - (iii) 7.7 g/KW-hr (5.7 g/HP-hr) when maximum engine speed is greater than or equal to 2,000 rpm.
- (3) For engines installed on or after January 1, 2016, limit the emissions of  $NO_x$  in the stationary CI internal combustion engine exhaust to the following:
  - (i) 3.4 g/KW-hr (2.5 g/HP-hr) when maximum engine speed is less than 130 rpm;
- (ii)  $9.0 \cdot n^{-0.20}$  g/KW-hr (6.7  $\cdot$   $n^{-0.20}$  g/HP-hr) where n (maximum engine speed) is 130 or more but less than 2,000 rpm; and
  - (iii) 2.0 g/KW-hr (1.5 g/HP-hr) where maximum engine speed is greater than or equal to 2,000 rpm.
- (4) Reduce particulate matter (PM) emissions by 60 percent or more, or limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.15 g/KW-hr (0.11 g/HP-hr).
- (d) Owners and operators of non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests in-use must meet the not-to-exceed (NTE) standards as indicated in §60.4212.
- (e) Owners and operators of any modified or reconstructed non-emergency stationary CI ICE subject to this subpart must meet the emission standards applicable to the model year, maximum engine power, and displacement of the modified or reconstructed non-emergency stationary CI ICE that are specified in paragraphs (a) through (d) of this section.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37968, June 28, 2011]

**≜** Back to Top

# §60.4205 What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

- (a) Owners and operators of pre-2007 model year emergency stationary CI ICE with a displacement of less than 10 liters per cylinder that are not fire pump engines must comply with the emission standards in Table 1 to this subpart. Owners and operators of pre-2007 model year emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards in 40 CFR 94.8(a)(1).
- (b) Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in §60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.
- (c) Owners and operators of fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emission standards in table 4 to this subpart, for all pollutants.
- (d) Owners and operators of emergency stationary CI engines with a displacement of greater than or equal to 30 liters per cylinder must meet the requirements in this section.
- (1) For engines installed prior to January 1, 2012, limit the emissions of  $NO_x$  in the stationary CI internal combustion engine exhaust to the following:
  - (i) 17.0 g/KW-hr (12.7 g/HP-hr) when maximum engine speed is less than 130 rpm;
- (ii)  $45 \cdot n^{-0.2}$  g/KW-hr ( $34 \cdot n^{-0.2}$  g/HP-hr) when maximum engine speed is 130 or more but less than 2,000 rpm, where n is maximum engine speed; and
  - (iii) 9.8 g/kW-hr (7.3 g/HP-hr) when maximum engine speed is 2,000 rpm or more.
- (2) For engines installed on or after January 1, 2012, limit the emissions of  $NO_x$  in the stationary CI internal combustion engine exhaust to the following:
  - (i) 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;
- (ii)  $44 \cdot n^{-0.23}$  g/KW-hr ( $33 \cdot n^{-0.23}$  g/HP-hr) when maximum engine speed is greater than or equal to 130 but less than 2,000 rpm and where n is maximum engine speed; and
  - (iii) 7.7 g/KW-hr (5.7 g/HP-hr) when maximum engine speed is greater than or equal to 2,000 rpm.
- (3) Limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.40 g/KW-hr (0.30 g/HP-hr).
- (e) Owners and operators of emergency stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests in-use must meet the NTE standards as indicated in §60.4212.
- (f) Owners and operators of any modified or reconstructed emergency stationary CI ICE subject to this subpart must meet the emission standards applicable to the model year, maximum engine power,

and displacement of the modified or reconstructed CI ICE that are specified in paragraphs (a) through (e) of this section.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

**≜** Back to Top

## §60.4206 How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine?

Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in §§60.4204 and 60.4205 over the entire life of the engine.

[76 FR 37969, June 28, 2011]

**≜** Back to Top

### FUEL REQUIREMENTS FOR OWNERS AND OPERATORS

**≜** Back to Top

# §60.4207 What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?

- (a) Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a).
- (b) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.
  - (c) [Reserved]
- (d) Beginning June 1, 2012, owners and operators of stationary CI ICE subject to this subpart with a displacement of greater than or equal to 30 liters per cylinder are no longer subject to the requirements of paragraph (a) of this section, and must use fuel that meets a maximum per-gallon sulfur content of 1,000 parts per million (ppm).
- (e) Stationary CI ICE that have a national security exemption under §60.4200(d) are also exempt from the fuel requirements in this section.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011; 78 FR 6695, Jan. 30, 2013]

**≜** Back to Top

### OTHER REQUIREMENTS FOR OWNERS AND OPERATORS

### **≜** Back to Top

## §60.4208 What is the deadline for importing or installing stationary CI ICE produced in previous model years?

- (a) After December 31, 2008, owners and operators may not install stationary CI ICE (excluding fire pump engines) that do not meet the applicable requirements for 2007 model year engines.
- (b) After December 31, 2009, owners and operators may not install stationary CI ICE with a maximum engine power of less than 19 KW (25 HP) (excluding fire pump engines) that do not meet the applicable requirements for 2008 model year engines.
- (c) After December 31, 2014, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 19 KW (25 HP) and less than 56 KW (75 HP) that do not meet the applicable requirements for 2013 model year non-emergency engines.
- (d) After December 31, 2013, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 56 KW (75 HP) and less than 130 KW (175 HP) that do not meet the applicable requirements for 2012 model year non-emergency engines.
- (e) After December 31, 2012, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 130 KW (175 HP), including those above 560 KW (750 HP), that do not meet the applicable requirements for 2011 model year non-emergency engines.
- (f) After December 31, 2016, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 560 KW (750 HP) that do not meet the applicable requirements for 2015 model year non-emergency engines.
- (g) After December 31, 2018, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power greater than or equal to 600 KW (804 HP) and less than 2,000 KW (2,680 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that do not meet the applicable requirements for 2017 model year non-emergency engines.
- (h) In addition to the requirements specified in §§60.4201, 60.4202, 60.4204, and 60.4205, it is prohibited to import stationary CI ICE with a displacement of less than 30 liters per cylinder that do not meet the applicable requirements specified in paragraphs (a) through (g) of this section after the dates specified in paragraphs (a) through (g) of this section.
- (i) The requirements of this section do not apply to owners or operators of stationary CI ICE that have been modified, reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

**≜** Back to Top

## §60.4209 What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?

If you are an owner or operator, you must meet the monitoring requirements of this section. In addition, you must also meet the monitoring requirements specified in §60.4211.

- (a) If you are an owner or operator of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine.
- (b) If you are an owner or operator of a stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in §60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

**≜** Back to Top

### **COMPLIANCE REQUIREMENTS**

**≜** Back to Top

## §60.4210 What are my compliance requirements if I am a stationary CI internal combustion engine manufacturer?

- (a) Stationary CI internal combustion engine manufacturers must certify their stationary CI ICE with a displacement of less than 10 liters per cylinder to the emission standards specified in §60.4201(a) through (c) and §60.4202(a), (b) and (d) using the certification procedures required in 40 CFR part 89, subpart B, or 40 CFR part 1039, subpart C, as applicable, and must test their engines as specified in those parts. For the purposes of this subpart, engines certified to the standards in table 1 to this subpart shall be subject to the same requirements as engines certified to the standards in 40 CFR part 89. For the purposes of this subpart, engines certified to the standards in table 4 to this subpart shall be subject to the same requirements as engines certified to the standards in 40 CFR part 89, except that engines with NFPA nameplate power of less than 37 KW (50 HP) certified to model year 2011 or later standards shall be subject to the same requirements as engines certified to the standards in 40 CFR part 1039.
- (b) Stationary CI internal combustion engine manufacturers must certify their stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder to the emission standards specified in §60.4201(d) and (e) and §60.4202(e) and (f) using the certification procedures required in 40 CFR part 94, subpart C, or 40 CFR part 1042, subpart C, as applicable, and must test their engines as specified in 40 CFR part 94 or 1042, as applicable.
- (c) Stationary CI internal combustion engine manufacturers must meet the requirements of 40 CFR 1039.120, 1039.125, 1039.130, and 1039.135, and 40 CFR part 1068 for engines that are certified to the emission standards in 40 CFR part 1039. Stationary CI internal combustion engine manufacturers must meet the corresponding provisions of 40 CFR part 89, 40 CFR part 94 or 40 CFR part 1042 for engines that would be covered by that part if they were nonroad (including marine) engines. Labels on such engines must refer to stationary engines, rather than or in addition to nonroad or marine engines, as appropriate. Stationary CI internal combustion engine manufacturers must label their engines according to paragraphs (c)(1) through (3) of this section.

- (1) Stationary CI internal combustion engines manufactured from January 1, 2006 to March 31, 2006 (January 1, 2006 to June 30, 2006 for fire pump engines), other than those that are part of certified engine families under the nonroad CI engine regulations, must be labeled according to 40 CFR 1039.20.
- (2) Stationary CI internal combustion engines manufactured from April 1, 2006 to December 31, 2006 (or, for fire pump engines, July 1, 2006 to December 31 of the year preceding the year listed in table 3 to this subpart) must be labeled according to paragraphs (c)(2)(i) through (iii) of this section:
- (i) Stationary CI internal combustion engines that are part of certified engine families under the nonroad regulations must meet the labeling requirements for nonroad CI engines, but do not have to meet the labeling requirements in 40 CFR 1039.20.
- (ii) Stationary CI internal combustion engines that meet Tier 1 requirements (or requirements for fire pumps) under this subpart, but do not meet the requirements applicable to nonroad CI engines must be labeled according to 40 CFR 1039.20. The engine manufacturer may add language to the label clarifying that the engine meets Tier 1 requirements (or requirements for fire pumps) of this subpart.
- (iii) Stationary CI internal combustion engines manufactured after April 1, 2006 that do not meet Tier 1 requirements of this subpart, or fire pumps engines manufactured after July 1, 2006 that do not meet the requirements for fire pumps under this subpart, may not be used in the U.S. If any such engines are manufactured in the U.S. after April 1, 2006 (July 1, 2006 for fire pump engines), they must be exported or must be brought into compliance with the appropriate standards prior to initial operation. The export provisions of 40 CFR 1068.230 would apply to engines for export and the manufacturers must label such engines according to 40 CFR 1068.230.
- (3) Stationary CI internal combustion engines manufactured after January 1, 2007 (for fire pump engines, after January 1 of the year listed in table 3 to this subpart, as applicable) must be labeled according to paragraphs (c)(3)(i) through (iii) of this section.
- (i) Stationary CI internal combustion engines that meet the requirements of this subpart and the corresponding requirements for nonroad (including marine) engines of the same model year and HP must be labeled according to the provisions in 40 CFR parts 89, 94, 1039 or 1042, as appropriate.
- (ii) Stationary CI internal combustion engines that meet the requirements of this subpart, but are not certified to the standards applicable to nonroad (including marine) engines of the same model year and HP must be labeled according to the provisions in 40 CFR parts 89, 94, 1039 or 1042, as appropriate, but the words "stationary" must be included instead of "nonroad" or "marine" on the label. In addition, such engines must be labeled according to 40 CFR 1039.20.
- (iii) Stationary CI internal combustion engines that do not meet the requirements of this subpart must be labeled according to 40 CFR 1068.230 and must be exported under the provisions of 40 CFR 1068.230.
- (d) An engine manufacturer certifying an engine family or families to standards under this subpart that are identical to standards applicable under 40 CFR parts 89, 94, 1039 or 1042 for that model year may certify any such family that contains both nonroad (including marine) and stationary engines as a single engine family and/or may include any such family containing stationary engines in the averaging, banking and trading provisions applicable for such engines under those parts.
- (e) Manufacturers of engine families discussed in paragraph (d) of this section may meet the labeling requirements referred to in paragraph (c) of this section for stationary CI ICE by either adding a separate label containing the information required in paragraph (c) of this section or by adding the words "and stationary" after the word "nonroad" or "marine," as appropriate, to the label.

- (f) Starting with the model years shown in table 5 to this subpart, stationary CI internal combustion engine manufacturers must add a permanent label stating that the engine is for stationary emergency use only to each new emergency stationary CI internal combustion engine greater than or equal to 19 KW (25 HP) that meets all the emission standards for emergency engines in §60.4202 but does not meet all the emission standards for non-emergency engines in §60.4201. The label must be added according to the labeling requirements specified in 40 CFR 1039.135(b). Engine manufacturers must specify in the owner's manual that operation of emergency engines is limited to emergency operations and required maintenance and testing.
- (g) Manufacturers of fire pump engines may use the test cycle in table 6 to this subpart for testing fire pump engines and may test at the NFPA certified nameplate HP, provided that the engine is labeled as "Fire Pump Applications Only".
- (h) Engine manufacturers, including importers, may introduce into commerce uncertified engines or engines certified to earlier standards that were manufactured before the new or changed standards took effect until inventories are depleted, as long as such engines are part of normal inventory. For example, if the engine manufacturers' normal industry practice is to keep on hand a one-month supply of engines based on its projected sales, and a new tier of standards starts to apply for the 2009 model year, the engine manufacturer may manufacture engines based on the normal inventory requirements late in the 2008 model year, and sell those engines for installation. The engine manufacturer may not circumvent the provisions of §§60.4201 or 60.4202 by stockpiling engines that are built before new or changed standards take effect. Stockpiling of such engines beyond normal industry practice is a violation of this subpart.
- (i) The replacement engine provisions of 40 CFR 89.1003(b)(7), 40 CFR 94.1103(b)(3), 40 CFR 94.1103(b)(4) and 40 CFR 1068.240 are applicable to stationary CI engines replacing existing equipment that is less than 15 years old.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

**≜** Back to Top

## §60.4211 What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

- (a) If you are an owner or operator and must comply with the emission standards specified in this subpart, you must do all of the following, except as permitted under paragraph (g) of this section:
- (1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions:
  - (2) Change only those emission-related settings that are permitted by the manufacturer; and
  - (3) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.
- (b) If you are an owner or operator of a pre-2007 model year stationary CI internal combustion engine and must comply with the emission standards specified in §§60.4204(a) or 60.4205(a), or if you are an owner or operator of a CI fire pump engine that is manufactured prior to the model years in table 3 to this subpart and must comply with the emission standards specified in §60.4205(c), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) through (5) of this section.

- (1) Purchasing an engine certified according to 40 CFR part 89 or 40 CFR part 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.
- (2) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.
  - (3) Keeping records of engine manufacturer data indicating compliance with the standards.
  - (4) Keeping records of control device vendor data indicating compliance with the standards.
- (5) Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in §60.4212, as applicable.
- (c) If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in §60.4204(b) or §60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards specified in §60.4205(c), you must comply by purchasing an engine certified to the emission standards in §60.4204(b), or §60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in paragraph (g) of this section.
- (d) If you are an owner or operator and must comply with the emission standards specified in §60.4204(c) or §60.4205(d), you must demonstrate compliance according to the requirements specified in paragraphs (d)(1) through (3) of this section.
- (1) Conducting an initial performance test to demonstrate initial compliance with the emission standards as specified in §60.4213.
- (2) Establishing operating parameters to be monitored continuously to ensure the stationary internal combustion engine continues to meet the emission standards. The owner or operator must petition the Administrator for approval of operating parameters to be monitored continuously. The petition must include the information described in paragraphs (d)(2)(i) through (v) of this section.
  - (i) Identification of the specific parameters you propose to monitor continuously;
- (ii) A discussion of the relationship between these parameters and  $NO_x$  and PM emissions, identifying how the emissions of these pollutants change with changes in these parameters, and how limitations on these parameters will serve to limit  $NO_x$  and PM emissions;
- (iii) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;
- (iv) A discussion identifying the methods and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and
- (v) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

- (3) For non-emergency engines with a displacement of greater than or equal to 30 liters per cylinder, conducting annual performance tests to demonstrate continuous compliance with the emission standards as specified in §60.4213.
- (e) If you are an owner or operator of a modified or reconstructed stationary CI internal combustion engine and must comply with the emission standards specified in §60.4204(e) or §60.4205(f), you must demonstrate compliance according to one of the methods specified in paragraphs (e)(1) or (2) of this section.
- (1) Purchasing, or otherwise owning or operating, an engine certified to the emission standards in §60.4204(e) or §60.4205(f), as applicable.
- (2) Conducting a performance test to demonstrate initial compliance with the emission standards according to the requirements specified in §60.4212 or §60.4213, as appropriate. The test must be conducted within 60 days after the engine commences operation after the modification or reconstruction.
- (f) If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs (f)(1) through (3) of this section. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (3) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (3) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.
  - (1) There is no time limit on the use of emergency stationary ICE in emergency situations.
- (2) You may operate your emergency stationary ICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (f)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).
- (i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.
- (ii) Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.
- (iii) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.
- (3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraph (f)(3)(i) of this section, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand

response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

- (i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
- (A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
- (B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
- (C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
- (D) The power is provided only to the facility itself or to support the local transmission and distribution system.
- (E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

#### (ii) [Reserved]

- (g) If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows:
- (1) If you are an owner or operator of a stationary CI internal combustion engine with maximum engine power less than 100 HP, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, if you do not install and configure the engine and control device according to the manufacturer's emission-related written instructions, or you change the emission-related settings in a way that is not permitted by the manufacturer, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action.
- (2) If you are an owner or operator of a stationary CI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer.
- (3) If you are an owner or operator of a stationary CI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to

demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. You must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37970, June 28, 2011; 78 FR 6695, Jan. 30, 2013]

**≜** Back to Top

### TESTING REQUIREMENTS FOR OWNERS AND OPERATORS

**≜** Back to Top

# §60.4212 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of less than 30 liters per cylinder?

Owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to this subpart must do so according to paragraphs (a) through (e) of this section.

- (a) The performance test must be conducted according to the in-use testing procedures in 40 CFR part 1039, subpart F, for stationary CI ICE with a displacement of less than 10 liters per cylinder, and according to 40 CFR part 1042, subpart F, for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder.
- (b) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1039 must not exceed the not-to-exceed (NTE) standards for the same model year and maximum engine power as required in 40 CFR 1039.101(e) and 40 CFR 1039.102(g)(1), except as specified in 40 CFR 1039.104(d). This requirement starts when NTE requirements take effect for nonroad diesel engines under 40 CFR part 1039.
- (c) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8, as applicable, must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112 or 40 CFR 94.8, as applicable, determined from the following equation:

NTE requirement for each pollutant =  $(1.25) \times (STD)$  (Eq. 1)

View or download PDF

Where:

STD = The standard specified for that pollutant in 40 CFR 89.112 or 40 CFR 94.8, as applicable.

Alternatively, stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8 may follow the testing procedures specified in §60.4213 of this subpart, as appropriate.

(d) Exhaust emissions from stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in §60.4204(a), §60.4205(a), or §60.4205(c) must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in §60.4204(a), §60.4205(a), or §60.4205(c), determined from the equation in paragraph (c) of this section.

Where:

STD = The standard specified for that pollutant in §60.4204(a), §60.4205(a), or §60.4205(c).

Alternatively, stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in §60.4204(a), §60.4205(a), or §60.4205(c) may follow the testing procedures specified in §60.4213, as appropriate.

(e) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1042 must not exceed the NTE standards for the same model year and maximum engine power as required in 40 CFR 1042.101(c).

[71 FR 39172, July 11, 2006, as amended at 76 FR 37971, June 28, 2011]

**≜** Back to Top

# §60.4213 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of greater than or equal to 30 liters per cylinder?

Owners and operators of stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder must conduct performance tests according to paragraphs (a) through (f) of this section.

- (a) Each performance test must be conducted according to the requirements in §60.8 and under the specific conditions that this subpart specifies in table 7. The test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load.
- (b) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §60.8(c).
- (c) You must conduct three separate test runs for each performance test required in this section, as specified in §60.8(f). Each test run must last at least 1 hour.
- (d) To determine compliance with the percent reduction requirement, you must follow the requirements as specified in paragraphs (d)(1) through (3) of this section.
- (1) You must use Equation 2 of this section to determine compliance with the percent reduction requirement:

$$\frac{C_i - C_o}{C_i} \times 100 = R \qquad (Eq. 2)$$

View or download PDF

Where:

 $C_i$  = concentration of  $NO_x$  or PM at the control device inlet,

C<sub>o</sub> = concentration of NO<sub>x</sub> or PM at the control device outlet, and

R = percent reduction of NO<sub>x</sub> or PM emissions.

(2) You must normalize the NO<sub>x</sub> or PM concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen (O<sub>2</sub>) using Equation 3 of this section, or an equivalent percent carbon dioxide (CO<sub>2</sub>) using the procedures described in paragraph (d)(3) of this section.

$$C_{adj} = C_d \frac{5.9}{20.9 - \% O_q}$$
 (Eq. 3)

### View or download PDF

Where:

 $C_{adj}$  = Calculated NO<sub>x</sub> or PM concentration adjusted to 15 percent O<sub>2</sub>.

C<sub>d</sub> = Measured concentration of NO<sub>x</sub> or PM, uncorrected.

5.9 = 20.9 percent  $O_2$ -15 percent  $O_2$ , the defined  $O_2$  correction value, percent.

 $%O_2$  = Measured  $O_2$  concentration, dry basis, percent.

- (3) If pollutant concentrations are to be corrected to 15 percent O<sub>2</sub> and CO<sub>2</sub> concentration is measured in lieu of O<sub>2</sub> concentration measurement, a CO<sub>2</sub> correction factor is needed. Calculate the CO<sub>2</sub> correction factor as described in paragraphs (d)(3)(i) through (iii) of this section.
- (i) Calculate the fuel-specific  $F_{\circ}$  value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:

$$F_o = \frac{0.209_{E_o}}{F_c}$$
 (Eq. 4)

### View or download PDF

Where:

 $F_o$  = Fuel factor based on the ratio of  $O_2$  volume to the ultimate  $CO_2$  volume produced by the fuel at zero percent excess air.

0.209 = Fraction of air that is O<sub>2</sub>, percent/100.

F<sub>d</sub> = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm³/J (dscf/10<sup>s</sup> Btu).

F<sub>c</sub> = Ratio of the volume of CO<sub>2</sub> produced to the gross calorific value of the fuel from Method 19, dsm³/J (dscf/10<sup>6</sup> Btu).

(ii) Calculate the CO<sub>2</sub> correction factor for correcting measurement data to 15 percent O<sub>2</sub>, as follows:

$$X_{CO_1} = \frac{5.9}{F_o}$$
 (Eq. 5)

### View or download PDF

Where:

 $X_{CO2} = CO_2$  correction factor, percent.

5.9 = 20.9 percent  $O_2$ -15 percent  $O_2$ , the defined  $O_2$  correction value, percent.

(iii) Calculate the NO<sub>x</sub> and PM gas concentrations adjusted to 15 percent O<sub>2</sub> using CO<sub>2</sub> as follows:

$$C_{adj} = C_d \frac{X_{CO_d}}{\%CO_g}$$
 (Eq. 6)

### View or download PDF

Where:

 $C_{\text{adj}}$  = Calculated NO<sub>x</sub> or PM concentration adjusted to 15 percent O<sub>2</sub>.

 $C_d$  = Measured concentration of  $NO_x$  or PM, uncorrected.

%CO<sub>2</sub> = Measured CO<sub>2</sub> concentration, dry basis, percent.

(e) To determine compliance with the  $NO_x$  mass per unit output emission limitation, convert the concentration of  $NO_x$  in the engine exhaust using Equation 7 of this section:

$$ER = \frac{C_4 \times 1.912 \times 10^{-3} \times Q \times T}{KW\text{-hour}} \qquad (Eq. 7)$$

### View or download PDF

Where:

ER = Emission rate in grams per KW-hour.

C<sub>d</sub> = Measured NO<sub>x</sub> concentration in ppm.

1.912x10<sup>-3</sup> = Conversion constant for ppm NO<sub>x</sub> to grams per standard cubic meter at 25 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour.

T = Time of test run, in hours.

KW-hour = Brake work of the engine, in KW-hour.

(f) To determine compliance with the PM mass per unit output emission limitation, convert the concentration of PM in the engine exhaust using Equation 8 of this section:

$$ER = \frac{C_{adj} \times Q \times T}{KW\text{-hour}} \qquad (E \neq \emptyset)$$

### View or download PDF

Where:

ER = Emission rate in grams per KW-hour.

C<sub>adj</sub> = Calculated PM concentration in grams per standard cubic meter.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour.

T = Time of test run, in hours.

KW-hour = Energy output of the engine, in KW.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37971, June 28, 2011]

**≜** Back to Top

### NOTIFICATION, REPORTS, AND RECORDS FOR OWNERS AND OPERATORS

**≜** Back to Top

# §60.4214 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?

- (a) Owners and operators of non-emergency stationary CI ICE that are greater than 2,237 KW (3,000 HP), or have a displacement of greater than or equal to 10 liters per cylinder, or are pre-2007 model year engines that are greater than 130 KW (175 HP) and not certified, must meet the requirements of paragraphs (a)(1) and (2) of this section.
- (1) Submit an initial notification as required in  $\S60.7(a)(1)$ . The notification must include the information in paragraphs (a)(1)(i) through (v) of this section.
  - (i) Name and address of the owner or operator;
  - (ii) The address of the affected source;
- (iii) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
  - (iv) Emission control equipment; and
  - (v) Fuel used.
  - (2) Keep records of the information in paragraphs (a)(2)(i) through (iv) of this section.

- (i) All notifications submitted to comply with this subpart and all documentation supporting any notification.
  - (ii) Maintenance conducted on the engine.
- (iii) If the stationary CI internal combustion is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards.
- (iv) If the stationary CI internal combustion is not a certified engine, documentation that the engine meets the emission standards.
- (b) If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.
- (c) If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.
- (d) If you own or operate an emergency stationary CI ICE with a maximum engine power more than 100 HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §60.4211(f)(2)(ii) and (iii) or that operates for the purposes specified in §60.4211(f)(3)(i), you must submit an annual report according to the requirements in paragraphs (d)(1) through (3) of this section.
  - (1) The report must contain the following information:
  - (i) Company name and address where the engine is located.
  - (ii) Date of the report and beginning and ending dates of the reporting period.
  - (iii) Engine site rating and model year.
  - (iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.
- (v) Hours operated for the purposes specified in §60.4211(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in §60.4211(f)(2)(ii) and (iii).
- (vi) Number of hours the engine is contractually obligated to be available for the purposes specified in §60.4211(f)(2)(ii) and (iii).
- (vii) Hours spent for operation for the purposes specified in  $\S60.4211(f)(3)(i)$ , including the date, start time, and end time for engine operation for the purposes specified in  $\S60.4211(f)(3)(i)$ . The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.
- (2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

(3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in §60.4.

[71 FR 39172, July 11, 2006, as amended at 78 FR 6696, Jan. 30, 2013]

**≜** Back to Top

### SPECIAL REQUIREMENTS

**≜** Back to Top

## §60.4215 What requirements must I meet for engines used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands?

- (a) Stationary CI ICE with a displacement of less than 30 liters per cylinder that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are required to meet the applicable emission standards in §§60.4202 and 60.4205.
- (b) Stationary CI ICE that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are not required to meet the fuel requirements in §60.4207.
- (c) Stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are required to meet the following emission standards:
- (1) For engines installed prior to January 1, 2012, limit the emissions of  $NO_x$  in the stationary CI internal combustion engine exhaust to the following:
  - (i) 17.0 g/KW-hr (12.7 g/HP-hr) when maximum engine speed is less than 130 rpm;
- (ii)  $45 \cdot n^{-0.2}$  g/KW-hr ( $34 \cdot n^{-0.2}$  g/HP-hr) when maximum engine speed is 130 or more but less than 2,000 rpm, where n is maximum engine speed; and
  - (iii) 9.8 g/KW-hr (7.3 g/HP-hr) when maximum engine speed is 2,000 rpm or more.
- (2) For engines installed on or after January 1, 2012, limit the emissions of  $NO_x$  in the stationary CI internal combustion engine exhaust to the following:
  - (i) 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;
- (ii)  $44 \cdot n^{-0.23}$  g/KW-hr ( $33 \cdot n^{-0.23}$  g/HP-hr) when maximum engine speed is greater than or equal to 130 but less than 2,000 rpm and where n is maximum engine speed; and
  - (iii) 7.7 g/KW-hr (5.7 g/HP-hr) when maximum engine speed is greater than or equal to 2,000 rpm.
- (3) Limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.40 g/KW-hr (0.30 g/HP-hr).

### **≜** Back to Top

### §60.4216 What requirements must I meet for engines used in Alaska?

- (a) Prior to December 1, 2010, owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder located in areas of Alaska not accessible by the FAHS should refer to 40 CFR part 69 to determine the diesel fuel requirements applicable to such engines.
- (b) Except as indicated in paragraph (c) of this section, manufacturers, owners and operators of stationary CI ICE with a displacement of less than 10 liters per cylinder located in areas of Alaska not accessible by the FAHS may meet the requirements of this subpart by manufacturing and installing engines meeting the requirements of 40 CFR parts 94 or 1042, as appropriate, rather than the otherwise applicable requirements of 40 CFR parts 89 and 1039, as indicated in sections §§60.4201(f) and 60.4202(g) of this subpart.
- (c) Manufacturers, owners and operators of stationary CI ICE that are located in areas of Alaska not accessible by the FAHS may choose to meet the applicable emission standards for emergency engines in §60.4202 and §60.4205, and not those for non-emergency engines in §60.4201 and §60.4204, except that for 2014 model year and later non-emergency CI ICE, the owner or operator of any such engine that was not certified as meeting Tier 4 PM standards, must meet the applicable requirements for PM in §60.4201 and §60.4204 or install a PM emission control device that achieves PM emission reductions of 85 percent, or 60 percent for engines with a displacement of greater than or equal to 30 liters per cylinder, compared to engine-out emissions.
- (d) The provisions of §60.4207 do not apply to owners and operators of pre-2014 model year stationary CI ICE subject to this subpart that are located in areas of Alaska not accessible by the FAHS.
- (e) The provisions of §60.4208(a) do not apply to owners and operators of stationary CI ICE subject to this subpart that are located in areas of Alaska not accessible by the FAHS until after December 31, 2009.
- (f) The provisions of this section and §60.4207 do not prevent owners and operators of stationary CI ICE subject to this subpart that are located in areas of Alaska not accessible by the FAHS from using fuels mixed with used lubricating oil, in volumes of up to 1.75 percent of the total fuel. The sulfur content of the used lubricating oil must be less than 200 parts per million. The used lubricating oil must meet the on-specification levels and properties for used oil in 40 CFR 279.11.

[76 FR 37971, June 28, 2011]

### **≜** Back to Top

## §60.4217 What emission standards must I meet if I am an owner or operator of a stationary internal combustion engine using special fuels?

Owners and operators of stationary CI ICE that do not use diesel fuel may petition the Administrator for approval of alternative emission standards, if they can demonstrate that they use a fuel that is not the fuel on which the manufacturer of the engine certified the engine and that the engine cannot meet the

applicable standards required in §60.4204 or §60.4205 using such fuels and that use of such fuel is appropriate and reasonably necessary, considering cost, energy, technical feasibility, human health and environmental, and other factors, for the operation of the engine.

[76 FR 37972, June 28, 2011]

**≜** Back to Top

### GENERAL PROVISIONS

**≜** Back to Top

### §60.4218 What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§60.1 through 60.19 apply to you.

### **DEFINITIONS**

**≜** Back to Top

### §60.4219 What definitions apply to this subpart?

As used in this subpart, all terms not defined herein shall have the meaning given them in the CAA and in subpart A of this part.

Certified emissions life means the period during which the engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured, specified as a number of hours of operation or calendar years, whichever comes first. The values for certified emissions life for stationary CI ICE with a displacement of less than 10 liters per cylinder are given in 40 CFR 1039.101(g). The values for certified emissions life for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder are given in 40 CFR 94.9(a).

Combustion turbine means all equipment, including but not limited to the turbine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), and any ancillary components and sub-components comprising any simple cycle combustion turbine, any regenerative/recuperative cycle combustion turbine, the combustion turbine portion of any cogeneration cycle combustion system, or the combustion turbine portion of any combined cycle steam/electric generating system.

Compression ignition means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

Date of manufacture means one of the following things:

- (1) For freshly manufactured engines and modified engines, date of manufacture means the date the engine is originally produced.
- (2) For reconstructed engines, date of manufacture means the date the engine was originally produced, except as specified in paragraph (3) of this definition.

(3) Reconstructed engines are assigned a new date of manufacture if the fixed capital cost of the new and refurbished components exceeds 75 percent of the fixed capital cost of a comparable entirely new facility. An engine that is produced from a previously used engine block does not retain the date of manufacture of the engine in which the engine block was previously used if the engine is produced using all new components except for the engine block. In these cases, the date of manufacture is the date of reconstruction or the date the new engine is produced.

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is number 2 distillate oil.

Diesel particulate filter means an emission control technology that reduces PM emissions by trapping the particles in a flow filter substrate and periodically removes the collected particles by either physical action or by oxidizing (burning off) the particles in a process called regeneration.

Emergency stationary internal combustion engine means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary ICE must comply with the requirements specified in §60.4211(f) in order to be considered emergency stationary ICE. If the engine does not comply with the requirements specified in §60.4211(f), then it is not considered to be an emergency stationary ICE under this subpart.

- (1) The stationary ICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc.
- (2) The stationary ICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in §60.4211(f).
- (3) The stationary ICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in §60.4211(f)(2)(ii) or (iii) and §60.4211(f)(3)(i).

Engine manufacturer means the manufacturer of the engine. See the definition of "manufacturer" in this section.

*Fire pump engine* means an emergency stationary internal combustion engine certified to NFPA requirements that is used to provide power to pump water for fire suppression or protection.

*Freshly manufactured engine* means an engine that has not been placed into service. An engine becomes freshly manufactured when it is originally produced.

*Installed* means the engine is placed and secured at the location where it is intended to be operated.

Manufacturer has the meaning given in section 216(1) of the Act. In general, this term includes any person who manufactures a stationary engine for sale in the United States or otherwise introduces a new stationary engine into commerce in the United States. This includes importers who import stationary engines for sale or resale.

Maximum engine power means maximum engine power as defined in 40 CFR 1039.801.

*Model year* means the calendar year in which an engine is manufactured (see "date of manufacture"), except as follows:

- (1) Model year means the annual new model production period of the engine manufacturer in which an engine is manufactured (see "date of manufacture"), if the annual new model production period is different than the calendar year and includes January 1 of the calendar year for which the model year is named. It may not begin before January 2 of the previous calendar year and it must end by December 31 of the named calendar year.
- (2) For an engine that is converted to a stationary engine after being placed into service as a nonroad or other non-stationary engine, model year means the calendar year or new model production period in which the engine was manufactured (see "date of manufacture").

Other internal combustion engine means any internal combustion engine, except combustion turbines, which is not a reciprocating internal combustion engine or rotary internal combustion engine.

Reciprocating internal combustion engine means any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work.

Rotary internal combustion engine means any internal combustion engine which uses rotary motion to convert heat energy into mechanical work.

Spark ignition means relating to a gasoline, natural gas, or liquefied petroleum gas fueled engine or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for CI and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

Stationary internal combustion engine means any internal combustion engine, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE differ from mobile ICE in that a stationary internal combustion engine is not a nonroad engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition), and is not used to propel a motor vehicle, aircraft, or a vehicle used solely for competition. Stationary ICE include reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.

Subpart means 40 CFR part 60, subpart IIII.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37972, June 28, 2011; 78 FR 6696, Jan. 30, 2013]

### **≜** Back to Top

# Table 1 to Subpart IIII of Part 60—Emission Standards for Stationary Pre-2007 Model Year Engines With a Displacement of <10 Liters per Cylinder and 2007-2010 Model Year Engines >2,237 KW (3,000 HP) and With a Displacement of <10 Liters per Cylinder

[As stated in  $\S 60.4201(b)$ , 60.4202(b), 60.4204(a), and 60.4205(a), you must comply with the following emission standards]

	Emission standards for stationary pre-2007 model year engines with a				
Maximum engine	displacement of <10 liters per cylinder and 2007-2010 model year engines >2,237				
power	KW (3,000 HP) and with a displacement of <10 liters per cylinder in g/KW-hr				

	(g/HP-hr)						
	NMHC + NO <sub>x</sub>	нс	NO <sub>x</sub>	СО	PM		
KW<8 (HP<11)	10.5 (7.8)			8.0 (6.0)	1.0 (0.75)		
8≤KW<19 (11≤HP<25)	9.5 (7.1)			6.6 (4.9)	0.80 (0.60)		
19≤KW<37 (25≤HP<50)	9.5 (7.1)			5.5 (4.1)	0.80 (0.60)		
37≤KW<56 (50≤HP<75)			9.2 (6.9)				
56≤KW<75 (75≤HP<100)			9.2 (6.9)				
75≤KW<130 (100≤HP<175)			9.2 (6.9)				
130≤KW<225 (175≤HP<300)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)		
225≤KW<450 (300≤HP<600)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)		
450≤KW≤560 (600≤HP≤750)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)		
KW>560 (HP>750)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)		

**<sup>≜</sup>** Back to Top

# Table 2 to Subpart IIII of Part 60—Emission Standards for 2008 Model Year and Later Emergency Stationary CI ICE <37 KW (50 HP) With a Displacement of <10 Liters per Cylinder

[As stated in §60.4202(a)(1), you must comply with the following emission standards]

	Emission standards for 2008 model year and later emergency stationary CI ICE <37 KW (50 HP) with a displacement of <10 liters per cylinder in g/KW-hr (g/HP-hr						
Engine power	Model year(s)	NO <sub>x</sub> + NMHC	со	PM			
KW<8 (HP<11)	2008+	7.5 (5.6)	8.0 (6.0)	0.40 (0.30)			
8≤KW<19 (11≤HP<25)	2008+	7.5 (5.6)	6.6 (4.9)	0.40 (0.30)			
19≤KW<37 (25≤HP<50)	2008+	7.5 (5.6)	5.5 (4.1)	0.30 (0.22)			

**<sup>≜</sup>** Back to Top

## Table 3 to Subpart IIII of Part 60—Certification Requirements for Stationary Fire Pump Engines

As stated in §60.4202(d), you must certify new stationary fire pump engines beginning with the following model years:

Engine	Starting model year engine manufacturers must certify new stationary fire pump engines according to §60.4202(d) <sup>1</sup>
KW<75 (HP<100)	2011
75≤KW<130 (100≤HP<175)	2010
130≤KW≤560 (175≤HP≤750)	2009
KW>560 (HP>750)	2008

<sup>&</sup>lt;sup>1</sup>Manufacturers of fire pump stationary CI ICE with a maximum engine power greater than or equal to 37 kW (50 HP) and less than 450 KW (600 HP) and a rated speed of greater than 2,650 revolutions per minute (rpm) are not required to certify such engines until three model years following the model year indicated in this Table 3 for engines in the applicable engine power category.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37972, June 28, 2011]

### **≜** Back to Top

## Table 4 to Subpart IIII of Part 60—Emission Standards for Stationary Fire Pump Engines

[As stated in §§60.4202(d) and 60.4205(c), you must comply with the following emission standards for stationary fire pump engines]

Maximum engine power	Model year(s)	NMHC + NO <sub>x</sub>	СО	РМ
KW<8 (HP<11)	2010 and earlier	10.5 (7.8)	8.0 (6.0)	1.0 (0.75)
	2011+	7.5 (5.6)		0.40 (0.30)
8≤KW<19 (11≤HP<25)	2010 and earlier	9.5 (7.1)	6.6 (4.9)	0.80 (0.60)
	2011+	7.5 (5.6)		0.40 (0.30)
19≤KW<37 (25≤HP<50)	2010 and earlier	9.5 (7.1)	5.5 (4.1)	0.80 (0.60)
	2011+	7.5 (5.6)		0.30 (0.22)

37≤KW<56 (50≤HP<75)	2010 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2011+ <sup>1</sup>	4.7 (3.5)		0.40 (0.30)
56≤KW<75 (75≤HP<100)	2010 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2011+ <sup>1</sup>	4.7 (3.5)		0.40 (0.30)
75≤KW<130 (100≤HP<175)	2009 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2010+ <sup>2</sup>	4.0 (3.0)		0.30 (0.22)
130≤KW<225 (175≤HP<300)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009+ <sup>3</sup>	4.0 (3.0)		0.20 (0.15)
225≤KW<450 (300≤HP<600)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009+ <sup>3</sup>	4.0 (3.0)		0.20 (0.15)
450≤KW≤560 (600≤HP≤750)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009+	4.0 (3.0)		0.20 (0.15)
KW>560 (HP>750)	2007 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2008+	6.4 (4.8)		0.20 (0.15)

<sup>&</sup>lt;sup>1</sup>For model years 2011-2013, manufacturers, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 revolutions per minute (rpm) may comply with the emission limitations for 2010 model year engines.

### **≜** Back to Top

## Table 5 to Subpart IIII of Part 60—Labeling and Recordkeeping Requirements for New Stationary Emergency Engines

[You must comply with the labeling requirements in §60.4210(f) and the recordkeeping requirements in §60.4214(b) for new emergency stationary CI ICE beginning in the following model years:]

Engine power	Starting model year
19≤KW<56 (25≤HP<75)	2013
56≤KW<130 (75≤HP<175)	2012
KW≥130 (HP≥175)	2011

<sup>&</sup>lt;sup>2</sup>For model years 2010-2012, manufacturers, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2009 model year engines.

<sup>&</sup>lt;sup>3</sup>In model years 2009-2011, manufacturers of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2008 model year engines.

## Table 6 to Subpart IIII of Part 60—Optional 3-Mode Test Cycle for Stationary Fire Pump Engines

[As stated in §60.4210(g), manufacturers of fire pump engines may use the following test cycle for testing fire pump engines:]

Mode No.	Engine speed <sup>1</sup>	Torque (percent) <sup>2</sup>	Weighting factors
1	Rated	100	0.30
2	Rated	75	0.50
3	Rated	50	0.20

<sup>&</sup>lt;sup>1</sup>Engine speed: ±2 percent of point.

### **♣** Back to Top

# Table 7 to Subpart IIII of Part 60—Requirements for Performance Tests for Stationary CI ICE With a Displacement of ≥30 Liters per Cylinder

As stated in §60.4213, you must comply with the following requirements for performance tests for stationary CI ICE with a displacement of ≥30 liters per cylinder:

Each	Complying with the requirement to	You must	Using	According to the following requirements
1. Stationary CI internal combustion engine with a displacement of ≥ 30 liters per cylinder	emissions by 90 percent or more;	i. Select the sampling port location and number/location of traverse points at the inlet and outlet of the control device;		(a) For NO <sub>x</sub> , O <sub>2</sub> , and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line ('3-point long line'). If the duct is >12 inches in diameter and the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A-1, the duct may be sampled at

 $<sup>^2</sup>$ Torque: NFPA certified nameplate HP for 100 percent point. All points should be  $\pm 2$  percent of engine percent load value.

1			T	1
				'3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A-4.
	ļi	inlet and outlet of the	part 60, appendix A-2	(b) Measurements to determine O₂ concentration must be made at the same time as the measurements for NO₂ concentration.
	r	and outlet of the control device; and	CFR part 60, appendix A-3, Method 320 of 40	(c) Measurements to determine moisture content must be made at the same time as the measurements for NO <sub>x</sub> concentration.
	t	the inlet and outlet of the control device.	appendix A-4, Method 320 of 40	(d) NO <sub>x</sub> concentration must be at 15 percent O <sub>2</sub> , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
cor NO sta inte cor	ncentration of $p_{x}$ in the ationary CI ternal mbustion	i. Select the sampling port location and number/location of traverse points at the exhaust of the stationary internal combustion engine;		(a) For NO <sub>x</sub> , O <sub>2</sub> , and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line ('3-point long line'). If the duct is >12 inches in diameter and the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A-1, the duct may be sampled at '3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section

			8.1.2 of Method 7E of 40 CFR part 60, appendix A-4.
	concentration of the	(1) Method 3, 3A, or 3B of 40 CFR part 60, appendix A-2	(b) Measurements to determine O₂ concentration must be made at the same time as the measurement for NO <sub>x</sub> concentration.
		CFR part 60, appendix A-3, Method 320 of 40	(c) Measurements to determine moisture content must be made at the same time as the measurement for NO <sub>x</sub> concentration.
	the exhaust of the stationary internal	40 CFR part 60, Appendix A-4, Method 320 of 40 CFR part 63,	(d) NO <sub>x</sub> concentration must be at 15 percent O <sub>2</sub> , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
emissions by 60			(a) Sampling sites must be located at the inlet and outlet of the control device.
	inlet and outlet of the	or 3B of 40 CFR part 60, appendix A-2	(b) Measurements to determine O <sub>2</sub> concentration must be made at the same time as the measurements for PM concentration.
	iii. If necessary, measure moisture content at the inlet and outlet of the control device; and	(3) Method 4 of 40 CFR part 60, appendix A-3	(c) Measurements to determine and moisture content must be made at the same time as the measurements for PM concentration.
		` '	(d) PM concentration must be at 15 percent O <sub>2</sub> , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
d. Limit the	i. Select the sampling	(1) Method 1 or 1A	(a) If using a control device,

PM in the		of 40 CFR part 60, appendix A-1	the sampling site must be located at the outlet of the control device.
	ii. Determine the O <sub>2</sub> concentration of the stationary internal combustion engine exhaust at the sampling port location;	(2) Method 3, 3A, or 3B of 40 CFR part 60, appendix A-2	(b) Measurements to determine O₂ concentration must be made at the same time as the measurements for PM concentration.
	iii. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(3) Method 4 of 40 CFR part 60, appendix A-3	(c) Measurements to determine moisture content must be made at the same time as the measurements for PM concentration.
	iv. Measure PM at the exhaust of the stationary internal combustion engine.	(4) Method 5 of 40 CFR part 60, appendix A-3.	(d) PM concentration must be at 15 percent O <sub>2</sub> , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

[79 FR 11251, Feb. 27, 2014]

### **≜** Back to Top

## Table 8 to Subpart IIII of Part 60—Applicability of General Provisions to Subpart IIII

[As stated in §60.4218, you must comply with the following applicable General Provisions:]

General Provisions citation	Subject of citation	Applies to subpart	Explanation
§60.1	General applicability of the General Provisions	Yes	
§60.2	Definitions	Yes	Additional terms defined in §60.4219.
§60.3	Units and abbreviations	Yes	
§60.4	Address	Yes	
§60.5	Determination of construction or modification	Yes	
§60.6	Review of plans	Yes	

§60.7	Notification and Recordkeeping	Yes	Except that §60.7 only applies as specified in §60.4214(a).
§60.8	Performance tests	Yes	Except that §60.8 only applies to stationary CI ICE with a displacement of (≥30 liters per cylinder and engines that are not certified.
§60.9	Availability of information	Yes	
§60.10	State Authority	Yes	
§60.11	Compliance with standards and maintenance requirements	No	Requirements are specified in subpart IIII.
§60.12	Circumvention	Yes	
§60.13	Monitoring requirements	Yes	Except that §60.13 only applies to stationary CI ICE with a displacement of (≥30 liters per cylinder.
§60.14	Modification	Yes	
§60.15	Reconstruction	Yes	
§60.16	Priority list	Yes	
§60.17	Incorporations by reference	Yes	
§60.18	General control device requirements	No	
§60.19	General notification and reporting requirements	Yes	

**<sup>≜</sup>** Back to Top

### Appendix C:

40 CFR Part 63, Subpart CCCCCC – National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities

### **ELECTRONIC CODE OF FEDERAL REGULATIONS**

<u>View past updates to the e-CFR.</u> Click here to learn more.

### e-CFR data is current as of April 30, 2015

 $\underline{\text{Title 40}} \rightarrow \underline{\text{Chapter I}} \rightarrow \underline{\text{Subchapter C}} \rightarrow \underline{\text{Part 63}} \rightarrow \underline{\text{Subpart CCCCC}}$ 

Browse Previous | Browse Next

Title 40: Protection of Environment

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (CONTINUED)

## Subpart CCCCC—National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities

#### **Contents**

WHAT THIS SUBPART COVERS

§63.11110 What is the purpose of this subpart?

§63.11111 Am I subject to the requirements in this subpart?

§63.11112 What parts of my affected source does this subpart cover?

§63.11113 When do I have to comply with this subpart?

EMISSION LIMITATIONS AND MANAGEMENT PRACTICES

§63.11115 What are my general duties to minimize emissions?

§63.11116 Requirements for facilities with monthly throughput of less than 10,000 gallons of gasoline.

§63.11117 Requirements for facilities with monthly throughput of 10,000 gallons of gasoline or more.

§63.11118 Requirements for facilities with monthly throughput of 100,000 gallons of gasoline or more.

TESTING AND MONITORING REQUIREMENTS

§63.11120 What testing and monitoring requirements must I meet?

NOTIFICATIONS, RECORDS, AND REPORTS

§63.11124 What notifications must I submit and when?

§63.11125 What are my recordkeeping requirements?

§63.11126 What are my reporting requirements?

OTHER REQUIREMENTS AND INFORMATION

§63.11130 What parts of the General Provisions apply to me?

§63.11131 Who implements and enforces this subpart?

§63.11132 What definitions apply to this subpart?

<u>Table 1 to Subpart CCCCCC of Part 63—Applicability Criteria and Management Practices for Gasoline Dispensing Facilities With Monthly Throughput of 100,000 Gallons of Gasoline or More</u>

<u>Table 2 to Subpart CCCCCC of Part 63—Applicability Criteria and Management Practices for Gasoline Cargo Tanks Unloading at Gasoline Dispensing Facilities With Monthly Throughput of 100,000 Gallons of Gasoline or More</u>

Table 3 to Subpart CCCCCC of Part 63—Applicability of General Provisions

Source: 73 FR 1945, Jan. 10, 2008, unless otherwise noted.

**≜** Back to Top

### WHAT THIS SUBPART COVERS

### **≜** Back to Top

### §63.11110 What is the purpose of this subpart?

This subpart establishes national emission limitations and management practices for hazardous air pollutants (HAP) emitted from the loading of gasoline storage tanks at gasoline dispensing facilities (GDF). This subpart also establishes requirements to demonstrate compliance with the emission limitations and management practices.

### **≜** Back to Top

### §63.11111 Am I subject to the requirements in this subpart?

- (a) The affected source to which this subpart applies is each GDF that is located at an area source. The affected source includes each gasoline cargo tank during the delivery of product to a GDF and also includes each storage tank.
- (b) If your GDF has a monthly throughput of less than 10,000 gallons of gasoline, you must comply with the requirements in §63.11116.
- (c) If your GDF has a monthly throughput of 10,000 gallons of gasoline or more, you must comply with the requirements in §63.11117.
- (d) If your GDF has a monthly throughput of 100,000 gallons of gasoline or more, you must comply with the requirements in §63.11118.
- (e) An affected source shall, upon request by the Administrator, demonstrate that their monthly throughput is less than the 10,000-gallon or the 100,000-gallon threshold level, as applicable. For new or reconstructed affected sources, as specified in §63.11112(b) and (c), recordkeeping to document monthly throughput must begin upon startup of the affected source. For existing sources, as specified in §63.11112(d), recordkeeping to document monthly throughput must begin on January 10, 2008. For existing sources that are subject to this subpart only because they load gasoline into fuel tanks other than those in motor vehicles, as defined in §63.11132, recordkeeping to document monthly throughput must begin on January 24, 2011. Records required under this paragraph shall be kept for a period of 5 years.
- (f) If you are an owner or operator of affected sources, as defined in paragraph (a) of this section, you are not required to obtain a permit under 40 CFR part 70 or 40 CFR part 71 as a result of being subject to this subpart. However, you must still apply for and obtain a permit under 40 CFR part 70 or 40 CFR part 71 if you meet one or more of the applicability criteria found in 40 CFR 70.3(a) and (b) or 40 CFR 71.3(a) and (b).
- (g) The loading of aviation gasoline into storage tanks at airports, and the subsequent transfer of aviation gasoline within the airport, is not subject to this subpart.
- (h) Monthly throughput is the total volume of gasoline loaded into, or dispensed from, all the gasoline storage tanks located at a single affected GDF. If an area source has two or more GDF at separate locations within the area source, each GDF is treated as a separate affected source.

- (i) If your affected source's throughput ever exceeds an applicable throughput threshold, the affected source will remain subject to the requirements for sources above the threshold, even if the affected source throughput later falls below the applicable throughput threshold.
- (j) The dispensing of gasoline from a fixed gasoline storage tank at a GDF into a portable gasoline tank for the on-site delivery and subsequent dispensing of the gasoline into the fuel tank of a motor vehicle or other gasoline-fueled engine or equipment used within the area source is only subject to §63.11116 of this subpart.
- (k) For any affected source subject to the provisions of this subpart and another Federal rule, you may elect to comply only with the more stringent provisions of the applicable subparts. You must consider all provisions of the rules, including monitoring, recordkeeping, and reporting. You must identify the affected source and provisions with which you will comply in your Notification of Compliance Status required under §63.11124. You also must demonstrate in your Notification of Compliance Status that each provision with which you will comply is at least as stringent as the otherwise applicable requirements in this subpart. You are responsible for making accurate determinations concerning the more stringent provisions, and noncompliance with this rule is not excused if it is later determined that your determination was in error, and, as a result, you are violating this subpart. Compliance with this rule is your responsibility and the Notification of Compliance Status does not alter or affect that responsibility.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4181, Jan. 24, 2011]

### **≜** Back to Top

### §63.11112 What parts of my affected source does this subpart cover?

- (a) The emission sources to which this subpart applies are gasoline storage tanks and associated equipment components in vapor or liquid gasoline service at new, reconstructed, or existing GDF that meet the criteria specified in §63.11111. Pressure/Vacuum vents on gasoline storage tanks and the equipment necessary to unload product from cargo tanks into the storage tanks at GDF are covered emission sources. The equipment used for the refueling of motor vehicles is not covered by this subpart.
- (b) An affected source is a new affected source if you commenced construction on the affected source after November 9, 2006, and you meet the applicability criteria in §63.11111 at the time you commenced operation.
  - (c) An affected source is reconstructed if you meet the criteria for reconstruction as defined in §63.2.
  - (d) An affected source is an existing affected source if it is not new or reconstructed.

### **≜** Back to Top

### §63.11113 When do I have to comply with this subpart?

- (a) If you have a new or reconstructed affected source, you must comply with this subpart according to paragraphs (a)(1) and (2) of this section, except as specified in paragraph (d) of this section.
- (1) If you start up your affected source before January 10, 2008, you must comply with the standards in this subpart no later than January 10, 2008.

- (2) If you start up your affected source after January 10, 2008, you must comply with the standards in this subpart upon startup of your affected source.
- (b) If you have an existing affected source, you must comply with the standards in this subpart no later than January 10, 2011.
- (c) If you have an existing affected source that becomes subject to the control requirements in this subpart because of an increase in the monthly throughput, as specified in §63.11111(c) or §63.11111(d), you must comply with the standards in this subpart no later than 3 years after the affected source becomes subject to the control requirements in this subpart.
- (d) If you have a new or reconstructed affected source and you are complying with Table 1 to this subpart, you must comply according to paragraphs (d)(1) and (2) of this section.
- (1) If you start up your affected source from November 9, 2006 to September 23, 2008, you must comply no later than September 23, 2008.
- (2) If you start up your affected source after September 23, 2008, you must comply upon startup of your affected source.
- (e) The initial compliance demonstration test required under §63.11120(a)(1) and (2) must be conducted as specified in paragraphs (e)(1) and (2) of this section.
- (1) If you have a new or reconstructed affected source, you must conduct the initial compliance test upon installation of the complete vapor balance system.
- (2) If you have an existing affected source, you must conduct the initial compliance test as specified in paragraphs (e)(2)(i) or (e)(2)(ii) of this section.
- (i) For vapor balance systems installed on or before December 15, 2009, you must test no later than 180 days after the applicable compliance date specified in paragraphs (b) or (c) of this section.
- (ii) For vapor balance systems installed after December 15, 2009, you must test upon installation of the complete vapor balance system.
- (f) If your GDF is subject to the control requirements in this subpart only because it loads gasoline into fuel tanks other than those in motor vehicles, as defined in  $\S63.11132$ , you must comply with the standards in this subpart as specified in paragraphs (f)(1) or (f)(2) of this section.
  - (1) If your GDF is an existing facility, you must comply by January 24, 2014.
- (2) If your GDF is a new or reconstructed facility, you must comply by the dates specified in paragraphs (f)(2)(i) and (ii) of this section.
- (i) If you start up your GDF after December 15, 2009, but before January 24, 2011, you must comply no later than January 24, 2011.
  - (ii) If you start up your GDF after January 24, 2011, you must comply upon startup of your GDF.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 35944, June 25, 2008; 76 FR 4181, Jan. 24, 2011]

Back to Top

### EMISSION LIMITATIONS AND MANAGEMENT PRACTICES

### **≜** Back to Top

### §63.11115 What are my general duties to minimize emissions?

Each owner or operator of an affected source under this subpart must comply with the requirements of paragraphs (a) and (b) of this section.

- (a) You must, at all times, 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. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which 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 source.
- (b) You must keep applicable records and submit reports as specified in §63.11125(d) and §63.11126(b).

[76 FR 4182, Jan. 24, 2011]

**≜** Back to Top

## §63.11116 Requirements for facilities with monthly throughput of less than 10,000 gallons of gasoline.

- (a) You must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:
  - (1) Minimize gasoline spills;
  - (2) Clean up spills as expeditiously as practicable;
- (3) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;
- (4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.
- (b) You are not required to submit notifications or reports as specified in §63.11125, §63.11126, or subpart A of this part, but you must have records available within 24 hours of a request by the Administrator to document your gasoline throughput.
- (c) You must comply with the requirements of this subpart by the applicable dates specified in §63.11113.
- (d) Portable gasoline containers that meet the requirements of 40 CFR part 59, subpart F, are considered acceptable for compliance with paragraph (a)(3) of this section.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4182, Jan. 24, 2011]

## §63.11117 Requirements for facilities with monthly throughput of 10,000 gallons of gasoline or more.

- (a) You must comply with the requirements in section §63.11116(a).
- (b) Except as specified in paragraph (c) of this section, you must only load gasoline into storage tanks at your facility by utilizing submerged filling, as defined in §63.11132, and as specified in paragraphs (b)(1), (b)(2), or (b)(3) of this section. The applicable distances in paragraphs (b)(1) and (2) shall be measured from the point in the opening of the submerged fill pipe that is the greatest distance from the bottom of the storage tank.
- (1) Submerged fill pipes installed on or before November 9, 2006, must be no more than 12 inches from the bottom of the tank.
- (2) Submerged fill pipes installed after November 9, 2006, must be no more than 6 inches from the bottom of the tank.
- (3) Submerged fill pipes not meeting the specifications of paragraphs (b)(1) or (b)(2) of this section are allowed if the owner or operator can demonstrate that the liquid level in the tank is always above the entire opening of the fill pipe. Documentation providing such demonstration must be made available for inspection by the Administrator's delegated representative during the course of a site visit.
- (c) Gasoline storage tanks with a capacity of less than 250 gallons are not required to comply with the submerged fill requirements in paragraph (b) of this section, but must comply only with all of the requirements in §63.11116.
- (d) You must have records available within 24 hours of a request by the Administrator to document your gasoline throughput.
  - (e) You must submit the applicable notifications as required under §63.11124(a).
- (f) You must comply with the requirements of this subpart by the applicable dates contained in §63.11113.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 12276, Mar. 7, 2008; 76 FR 4182, Jan. 24, 2011]

#### **≜** Back to Top

## §63.11118 Requirements for facilities with monthly throughput of 100,000 gallons of gasoline or more.

- (a) You must comply with the requirements in §§63.11116(a) and 63.11117(b).
- (b) Except as provided in paragraph (c) of this section, you must meet the requirements in either paragraph (b)(1) or paragraph (b)(2) of this section.
  - (1) Each management practice in Table 1 to this subpart that applies to your GDF.

- (2) If, prior to January 10, 2008, you satisfy the requirements in both paragraphs (b)(2)(i) and (ii) of this section, you will be deemed in compliance with this subsection.
- (i) You operate a vapor balance system at your GDF that meets the requirements of either paragraph (b)(2)(i)(A) or paragraph (b)(2)(i)(B) of this section.
  - (A) Achieves emissions reduction of at least 90 percent.
  - (B) Operates using management practices at least as stringent as those in Table 1 to this subpart.
- (ii) Your gasoline dispensing facility is in compliance with an enforceable State, local, or tribal rule or permit that contains requirements of either paragraph (b)(2)(i)(A) or paragraph (b)(2)(i)(B) of this section.
- (c) The emission sources listed in paragraphs (c)(1) through (3) of this section are not required to comply with the control requirements in paragraph (b) of this section, but must comply with the requirements in §63.11117.
- (1) Gasoline storage tanks with a capacity of less than 250 gallons that are constructed after January 10, 2008.
- (2) Gasoline storage tanks with a capacity of less than 2,000 gallons that were constructed before January 10, 2008.
  - (3) Gasoline storage tanks equipped with floating roofs, or the equivalent.
- (d) Cargo tanks unloading at GDF must comply with the management practices in Table 2 to this subpart.
  - (e) You must comply with the applicable testing requirements contained in §63.11120.
  - (f) You must submit the applicable notifications as required under §63.11124.
  - (g) You must keep records and submit reports as specified in §§63.11125 and 63.11126.
- (h) You must comply with the requirements of this subpart by the applicable dates contained in §63.11113.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 12276, Mar. 7, 2008]

**≜** Back to Top

#### **TESTING AND MONITORING REQUIREMENTS**

**≜** Back to Top

#### §63.11120 What testing and monitoring requirements must I meet?

(a) Each owner or operator, at the time of installation, as specified in §63.11113(e), of a vapor balance system required under §63.11118(b)(1), and every 3 years thereafter, must comply with the requirements in paragraphs (a)(1) and (2) of this section.

- (1) You must demonstrate compliance with the leak rate and cracking pressure requirements, specified in item 1(g) of Table 1 to this subpart, for pressure-vacuum vent valves installed on your gasoline storage tanks using the test methods identified in paragraph (a)(1)(i) or paragraph (a)(1)(ii) of this section.
- (i) California Air Resources Board Vapor Recovery Test Procedure TP-201.1E,—Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves, adopted October 8, 2003 (incorporated by reference, see §63.14).
- (ii) Use alternative test methods and procedures in accordance with the alternative test method requirements in §63.7(f).
- (2) You must demonstrate compliance with the static pressure performance requirement specified in item 1(h) of Table 1 to this subpart for your vapor balance system by conducting a static pressure test on your gasoline storage tanks using the test methods identified in paragraphs (a)(2)(i), (a)(2)(ii), or (a)(2)(iii) of this section.
- (i) California Air Resources Board Vapor Recovery Test Procedure TP-201.3,—Determination of 2-Inch WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities, adopted April 12, 1996, and amended March 17, 1999 (incorporated by reference, see §63.14).
- (ii) Use alternative test methods and procedures in accordance with the alternative test method requirements in §63.7(f).
- (iii) Bay Area Air Quality Management District Source Test Procedure ST-30—Static Pressure Integrity Test—Underground Storage Tanks, adopted November 30, 1983, and amended December 21, 1994 (incorporated by reference, see §63.14).
- (b) Each owner or operator choosing, under the provisions of §63.6(g), to use a vapor balance system other than that described in Table 1 to this subpart must demonstrate to the Administrator or delegated authority under paragraph §63.11131(a) of this subpart, the equivalency of their vapor balance system to that described in Table 1 to this subpart using the procedures specified in paragraphs (b)(1) through (3) of this section.
- (1) You must demonstrate initial compliance by conducting an initial performance test on the vapor balance system to demonstrate that the vapor balance system achieves 95 percent reduction using the California Air Resources Board Vapor Recovery Test Procedure TP-201.1,—Volumetric Efficiency for Phase I Vapor Recovery Systems, adopted April 12, 1996, and amended February 1, 2001, and October 8, 2003, (incorporated by reference, see §63.14).
- (2) You must, during the initial performance test required under paragraph (b)(1) of this section, determine and document alternative acceptable values for the leak rate and cracking pressure requirements specified in item 1(g) of Table 1 to this subpart and for the static pressure performance requirement in item 1(h) of Table 1 to this subpart.
  - (3) You must comply with the testing requirements specified in paragraph (a) of this section.
- (c) Conduct of performance tests. Performance tests conducted for this subpart shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance (*i.e.*, performance based on normal operating conditions) of the affected source. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

(d) Owners and operators of gasoline cargo tanks subject to the provisions of Table 2 to this subpart must conduct annual certification testing according to the vapor tightness testing requirements found in §63.11092(f).

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4182, Jan. 24, 2011]

**≜** Back to Top

#### NOTIFICATIONS, RECORDS, AND REPORTS

**≜** Back to Top

#### §63.11124 What notifications must I submit and when?

- (a) Each owner or operator subject to the control requirements in §63.11117 must comply with paragraphs (a)(1) through (3) of this section.
- (1) You must submit an Initial Notification that you are subject to this subpart by May 9, 2008, or at the time you become subject to the control requirements in §63.11117, unless you meet the requirements in paragraph (a)(3) of this section. If your affected source is subject to the control requirements in §63.11117 only because it loads gasoline into fuel tanks other than those in motor vehicles, as defined in §63.11132, you must submit the Initial Notification by May 24, 2011. The Initial Notification must contain the information specified in paragraphs (a)(1)(i) through (iii) of this section. The notification must be submitted to the applicable EPA Regional Office and delegated State authority as specified in §63.13.
  - (i) The name and address of the owner and the operator.
  - (ii) The address (i.e., physical location) of the GDF.
- (iii) A statement that the notification is being submitted in response to this subpart and identifying the requirements in paragraphs (a) through (c) of §63.11117 that apply to you.
- (2) You must submit a Notification of Compliance Status to the applicable EPA Regional Office and the delegated State authority, as specified in §63.13, within 60 days of the applicable compliance date specified in §63.11113, unless you meet the requirements in paragraph (a)(3) of this section. The Notification of Compliance Status must be signed by a responsible official who must certify its accuracy, must indicate whether the source has complied with the requirements of this subpart, and must indicate whether the facilities' monthly throughput is calculated based on the volume of gasoline loaded into all storage tanks or on the volume of gasoline dispensed from all storage tanks. If your facility is in compliance with the requirements of this subpart at the time the Initial Notification required under paragraph (a)(1) of this section is due, the Notification of Compliance Status may be submitted in lieu of the Initial Notification provided it contains the information required under paragraph (a)(1) of this section.
- (3) If, prior to January 10, 2008, you are operating in compliance with an enforceable State, local, or tribal rule or permit that requires submerged fill as specified in §63.11117(b), you are not required to submit an Initial Notification or a Notification of Compliance Status under paragraph (a)(1) or paragraph (a)(2) of this section.
- (b) Each owner or operator subject to the control requirements in §63.11118 must comply with paragraphs (b)(1) through (5) of this section.

- (1) You must submit an Initial Notification that you are subject to this subpart by May 9, 2008, or at the time you become subject to the control requirements in §63.11118. If your affected source is subject to the control requirements in §63.11118 only because it loads gasoline into fuel tanks other than those in motor vehicles, as defined in §63.11132, you must submit the Initial Notification by May 24, 2011. The Initial Notification must contain the information specified in paragraphs (b)(1)(i) through (iii) of this section. The notification must be submitted to the applicable EPA Regional Office and delegated State authority as specified in §63.13.
  - (i) The name and address of the owner and the operator.
  - (ii) The address (i.e., physical location) of the GDF.
- (iii) A statement that the notification is being submitted in response to this subpart and identifying the requirements in paragraphs (a) through (c) of §63.11118 that apply to you.
- (2) You must submit a Notification of Compliance Status to the applicable EPA Regional Office and the delegated State authority, as specified in §63.13, in accordance with the schedule specified in §63.9(h). The Notification of Compliance Status must be signed by a responsible official who must certify its accuracy, must indicate whether the source has complied with the requirements of this subpart, and must indicate whether the facility's throughput is determined based on the volume of gasoline loaded into all storage tanks or on the volume of gasoline dispensed from all storage tanks. If your facility is in compliance with the requirements of this subpart at the time the Initial Notification required under paragraph (b)(1) of this section is due, the Notification of Compliance Status may be submitted in lieu of the Initial Notification provided it contains the information required under paragraph (b)(1) of this section.
- (3) If, prior to January 10, 2008, you satisfy the requirements in both paragraphs (b)(3)(i) and (ii) of this section, you are not required to submit an Initial Notification or a Notification of Compliance Status under paragraph (b)(1) or paragraph (b)(2) of this subsection.
- (i) You operate a vapor balance system at your gasoline dispensing facility that meets the requirements of either paragraphs (b)(3)(i)(A) or (b)(3)(i)(B) of this section.
  - (A) Achieves emissions reduction of at least 90 percent.
  - (B) Operates using management practices at least as stringent as those in Table 1 to this subpart.
- (ii) Your gasoline dispensing facility is in compliance with an enforceable State, local, or tribal rule or permit that contains requirements of either paragraphs (b)(3)(i)(A) or (b)(3)(i)(B) of this section.
- (4) You must submit a Notification of Performance Test, as specified in §63.9(e), prior to initiating testing required by §63.11120(a) and (b).
  - (5) You must submit additional notifications specified in §63.9, as applicable.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 12276, Mar. 7, 2008; 76 FR 4182, Jan. 24, 2011]

**≜** Back to Top

#### §63.11125 What are my recordkeeping requirements?

(a) Each owner or operator subject to the management practices in §63.11118 must keep records of all tests performed under §63.11120(a) and (b).

- (b) Records required under paragraph (a) of this section shall be kept for a period of 5 years and shall be made available for inspection by the Administrator's delegated representatives during the course of a site visit.
- (c) Each owner or operator of a gasoline cargo tank subject to the management practices in Table 2 to this subpart must keep records documenting vapor tightness testing for a period of 5 years. Documentation must include each of the items specified in §63.11094(b)(2)(i) through (viii). Records of vapor tightness testing must be retained as specified in either paragraph (c)(1) or paragraph (c)(2) of this section.
  - (1) The owner or operator must keep all vapor tightness testing records with the cargo tank.
- (2) As an alternative to keeping all records with the cargo tank, the owner or operator may comply with the requirements of paragraphs (c)(2)(i) and (ii) of this section.
- (i) The owner or operator may keep records of only the most recent vapor tightness test with the cargo tank, and keep records for the previous 4 years at their office or another central location.
- (ii) Vapor tightness testing records that are kept at a location other than with the cargo tank must be instantly available (e.g., via e-mail or facsimile) to the Administrator's delegated representative during the course of a site visit or within a mutually agreeable time frame. Such records must be an exact duplicate image of the original paper copy record with certifying signatures.
- (d) Each owner or operator of an affected source under this subpart shall keep records as specified in paragraphs (d)(1) and (2) of this section.
- (1) Records of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment.
- (2) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.11115(a), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4183, Jan. 24, 2011]

#### **≜** Back to Top

#### §63.11126 What are my reporting requirements?

- (a) Each owner or operator subject to the management practices in §63.11118 shall report to the Administrator the results of all volumetric efficiency tests required under §63.11120(b). Reports submitted under this paragraph must be submitted within 180 days of the completion of the performance testing.
- (b) Each owner or operator of an affected source under this subpart shall report, by March 15 of each year, the number, duration, and a brief description of each type of malfunction which occurred during the previous calendar year and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.11115(a), including actions taken to correct a malfunction. No report is necessary for a calendar year in which no malfunctions occurred.

#### OTHER REQUIREMENTS AND INFORMATION

**≜** Back to Top

#### §63.11130 What parts of the General Provisions apply to me?

Table 3 to this subpart shows which parts of the General Provisions apply to you.

**≜** Back to Top

#### §63.11131 Who implements and enforces this subpart?

- (a) This subpart can be implemented and enforced by the U.S. EPA or a delegated authority such as the applicable State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to a State, local, or tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. Contact the applicable U.S. EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to a 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 of U.S. EPA and cannot be transferred to the State, local, or tribal agency.
- (c) The authorities that cannot be delegated to State, local, or tribal agencies are as specified in paragraphs (c)(1) through (3) of this section.
  - (1) Approval of alternatives to the requirements in §§63.11116 through 63.11118 and 63.11120.
- (2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f), as defined in §63.90, and as required in this subpart.
- (3) Approval of major alternatives to recordkeeping and reporting under §63.10(f), as defined in §63.90, and as required in this subpart.

**≜** Back to Top

#### §63.11132 What definitions apply to this subpart?

As used in this subpart, all terms not defined herein shall have the meaning given them in the Clean Air Act (CAA), or in subparts A and BBBBB of this part. For purposes of this subpart, definitions in this section supersede definitions in other parts or subparts.

Dual-point vapor balance system means a type of vapor balance system in which the storage tank is equipped with an entry port for a gasoline fill pipe and a separate exit port for a vapor connection.

Gasoline means any petroleum distillate or petroleum distillate/alcohol blend having a Reid vapor pressure of 27.6 kilopascals or greater, which is used as a fuel for internal combustion engines.

Gasoline cargo tank means a delivery tank truck or railcar which is loading or unloading gasoline, or which has loaded or unloaded gasoline on the immediately previous load.

Gasoline dispensing facility (GDF) means any stationary facility which dispenses gasoline into the fuel tank of a motor vehicle, motor vehicle engine, nonroad vehicle, or nonroad engine, including a nonroad vehicle or nonroad engine used solely for competition. These facilities include, but are not limited to, facilities that dispense gasoline into on- and off-road, street, or highway motor vehicles, lawn equipment, boats, test engines, landscaping equipment, generators, pumps, and other gasoline-fueled engines and equipment.

*Monthly throughput* means the total volume of gasoline that is loaded into, or dispensed from, all gasoline storage tanks at each GDF during a month. Monthly throughput is calculated by summing the volume of gasoline loaded into, or dispensed from, all gasoline storage tanks at each GDF during the current day, plus the total volume of gasoline loaded into, or dispensed from, all gasoline storage tanks at each GDF during the previous 364 days, and then dividing that sum by 12.

*Motor vehicle* means any self-propelled vehicle designed for transporting persons or property on a street or highway.

Nonroad engine means an internal combustion engine (including the fuel system) that is not used in a motor vehicle or a vehicle used solely for competition, or that is not subject to standards promulgated under section 7411 of this title or section 7521 of this title.

Nonroad vehicle means a vehicle that is powered by a nonroad engine, and that is not a motor vehicle or a vehicle used solely for competition.

Submerged filling means, for the purposes of this subpart, the filling of a gasoline storage tank through a submerged fill pipe whose discharge is no more than the applicable distance specified in §63.11117(b) from the bottom of the tank. Bottom filling of gasoline storage tanks is included in this definition.

Vapor balance system means a combination of pipes and hoses that create a closed system between the vapor spaces of an unloading gasoline cargo tank and a receiving storage tank such that vapors displaced from the storage tank are transferred to the gasoline cargo tank being unloaded.

Vapor-tight means equipment that allows no loss of vapors. Compliance with vapor-tight requirements can be determined by checking to ensure that the concentration at a potential leak source is not equal to or greater than 100 percent of the Lower Explosive Limit when measured with a combustible gas detector, calibrated with propane, at a distance of 1 inch from the source.

Vapor-tight gasoline cargo tank means a gasoline cargo tank which has demonstrated within the 12 preceding months that it meets the annual certification test requirements in §63.11092(f) of this part.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4183, Jan. 24, 2011]

**≜** Back to Top

# Table 1 to Subpart CCCCCC of Part 63—Applicability Criteria and Management Practices for Gasoline Dispensing Facilities With Monthly Throughput of 100,000 Gallons of Gasoline or More

If you own or operate	Then you must

A new, reconstructed, or existing GDF subject to §63.11118	Install and operate a vapor balance system on your gasoline storage tanks that meets the design criteria in paragraphs (a) through (h).
	(a) All vapor connections and lines on the storage tank shall be equipped with closures that seal upon disconnect.
	(b) The vapor line from the gasoline storage tank to the gasoline cargo tank shall be vapor-tight, as defined in §63.11132.
	(c) The vapor balance system shall be designed such that the pressure in the tank truck does not exceed 18 inches water pressure or 5.9 inches water vacuum during product transfer.
	(d) The vapor recovery and product adaptors, and the method of connection with the delivery elbow, shall be designed so as to prevent the over-tightening or loosening of fittings during normal delivery operations.
	(e) If a gauge well separate from the fill tube is used, it shall be provided with a submerged drop tube that extends the same distance from the bottom of the storage tank as specified in §63.11117(b).
	(f) Liquid fill connections for all systems shall be equipped with vaportight caps.
	(g) Pressure/vacuum (PV) vent valves shall be installed on the storage tank vent pipes. The pressure specifications for PV vent valves shall be: a positive pressure setting of 2.5 to 6.0 inches of water and a negative pressure setting of 6.0 to 10.0 inches of water. The total leak rate of all PV vent valves at an affected facility, including connections, shall not exceed 0.17 cubic foot per hour at a pressure of 2.0 inches of water and 0.63 cubic foot per hour at a vacuum of 4 inches of water.
	(h) The vapor balance system shall be capable of meeting the static pressure performance requirement of the following equation:
	$Pf = 2e^{-500.887/v}$
	Where:
	Pf = Minimum allowable final pressure, inches of water.
	v = Total ullage affected by the test, gallons.
	e = Dimensionless constant equal to approximately 2.718.
	2 = The initial pressure, inches water.
2. A new or reconstructed GDF, or any storage tank(s) constructed after November 9, 2006, at an existing affected facility subject to §63.11118	Equip your gasoline storage tanks with a dual-point vapor balance system, as defined in §63.11132, and comply with the requirements of item 1 in this Table.

<sup>&</sup>lt;sup>1</sup>The management practices specified in this Table are not applicable if you are complying with the requirements in §63.11118(b)(2), except that if you are complying with the requirements in §63.11118(b)(2)(i)(B), you must operate using management practices at least as stringent as those listed in this Table.

# Table 2 to Subpart CCCCCC of Part 63—Applicability Criteria and Management Practices for Gasoline Cargo Tanks Unloading at Gasoline Dispensing Facilities With Monthly Throughput of 100,000 Gallons of Gasoline or More

If you own or operate	Then you must
A gasoline cargo tank	Not unload gasoline into a storage tank at a GDF subject to the control requirements in this subpart unless the following conditions are met:
	(i) All hoses in the vapor balance system are properly connected,
	(ii) The adapters or couplers that attach to the vapor line on the storage tank have closures that seal upon disconnect,
	(iii) All vapor return hoses, couplers, and adapters used in the gasoline delivery are vaportight,
	(iv) All tank truck vapor return equipment is compatible in size and forms a vapor-tight connection with the vapor balance equipment on the GDF storage tank, and
	(v) All hatches on the tank truck are closed and securely fastened.
	(vi) The filling of storage tanks at GDF shall be limited to unloading from vapor-tight gasoline cargo tanks. Documentation that the cargo tank has met the specifications of EPA Method 27 shall be carried with the cargo tank, as specified in §63.11125(c).

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4184, Jan. 24, 2011]

#### **≜** Back to Top

## Table 3 to Subpart CCCCC of Part 63—Applicability of General Provisions

Citation	Subject	Brief description	Applies to subpart CCCCCC
§63.1	Applicability	Initial applicability determination; applicability after standard established; permit requirements; extensions, notifications	Yes, specific requirements given in §63.11111.
§63.1(c)(2)	Title V Permit	Requirements for obtaining a title V permit from the applicable permitting authority	Yes, §63.11111(f) of subpart CCCCCC exempts identified area sources from the obligation to obtain title V

			operating permits.
§63.2	Definitions	Definitions for part 63 standards	Yes, additional definitions in §63.11132.
§63.3	Units and Abbreviations	Units and abbreviations for part 63 standards	Yes.
§63.4	Prohibited Activities and Circumvention	Prohibited activities; Circumvention, severability	Yes.
§63.5	Construction/Reconstruction	Applicability; applications; approvals	Yes, except that these notifications are not required for facilities subject to §63.11116
§63.6(a)	Compliance with Standards/Operation & Maintenance—Applicability	General Provisions apply unless compliance extension; General Provisions apply to area sources that become major	Yes.
§63.6(b)(1)-(4)	Compliance Dates for New and Reconstructed Sources	Standards apply at effective date; 3 years after effective date; upon startup; 10 years after construction or reconstruction commences for CAA section 112(f)	Yes.
§63.6(b)(5)	Notification	Must notify if commenced construction or reconstruction after proposal	Yes.
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance Dates for New and Reconstructed Area Sources That Become Major	Area sources that become major must comply with major source standards immediately upon becoming major, regardless of whether required to comply when they were an area source	No.
§63.6(c)(1)-(2)	Compliance Dates for Existing Sources	Comply according to date in this subpart, which must be no later than 3 years after effective date; for CAA section 112(f) standards, comply within 90 days of effective date unless compliance extension	No, §63.11113 specifies the compliance dates.
§63.6(c)(3)-(4)	[Reserved]		
§63.6(c)(5)	Compliance Dates for Existing Area Sources That Become Major	Area sources That become major must comply with major source standards by date indicated in this subpart or by equivalent time period (e.g., 3 years)	No.
§63.6(d)	[Reserved]		
63.6(e)(1)(i)	General duty to minimize emissions	Operate to minimize emissions at all times; information Administrator will	No. See §63.11115 for

		use to determine if operation and	general duty
		maintenance requirements were met.	requirement.
63.6(e)(1)(ii)	Requirement to correct malfunctions ASAP	Owner or operator must correct malfunctions as soon as possible.	No.
§63.6(e)(2)	[Reserved]		
§63.6(e)(3)	Startup, Shutdown, and Malfunction (SSM) Plan	Requirement for SSM plan; content of SSM plan; actions during SSM	No.
§63.6(f)(1)	Compliance Except During SSM	You must comply with emission standards at all times except during SSM	No.
§63.6(f)(2)-(3)	Methods for Determining Compliance	Compliance based on performance test, operation and maintenance plans, records, inspection	Yes.
§63.6(g)(1)-(3)	Alternative Standard	Procedures for getting an alternative standard	Yes.
§63.6(h)(1)	Compliance with Opacity/Visible Emission (VE) Standards	You must comply with opacity/VE standards at all times except during SSM	No.
§63.6(h)(2)(i)	Determining Compliance with Opacity/VE Standards	If standard does not State test method, use EPA Method 9 for opacity in appendix A of part 60 of this chapter and EPA Method 22 for VE in appendix A of part 60 of this chapter	No.
§63.6(h)(2)(ii)	[Reserved]		
§63.6(h)(2)(iii)	Using Previous Tests To Demonstrate Compliance With Opacity/VE Standards		No.
§63.6(h)(3)	[Reserved]		
§63.6(h)(4)	Notification of Opacity/VE Observation Date	Must notify Administrator of anticipated date of observation	No.
§63.6(h)(5)(i), (iii)-(v)	Conducting Opacity/VE Observations	Dates and schedule for conducting opacity/VE observations	No.
§63.6(h)(5)(ii)	Opacity Test Duration and Averaging Times	Must have at least 3 hours of observation with 30 6-minute averages	No.
§63.6(h)(6)	Records of Conditions During Opacity/VE Observations	Must keep records available and allow Administrator to inspect	No.
§63.6(h)(7)(i)	Report Continuous Opacity Monitoring System (COMS) Monitoring Data From Performance Test	Must submit COMS data with other performance test data	No.
§63.6(h)(7)(ii)	Using COMS Instead of EPA Method 9	Can submit COMS data instead of EPA Method 9 results even if rule requires EPA Method 9 in appendix A of part 60 of this chapter, but must	No.

		notify Administrator before performance test	
§63.6(h)(7)(iii)	Averaging Time for COMS During Performance Test	To determine compliance, must reduce COMS data to 6-minute averages	No.
§63.6(h)(7)(iv)	COMS Requirements	Owner/operator must demonstrate that COMS performance evaluations are conducted according to §63.8(e); COMS are properly maintained and operated according to §63.8(c) and data quality as §63.8(d)	No.
§63.6(h)(7)(v)	Determining Compliance with Opacity/VE Standards	COMS is probable but not conclusive evidence of compliance with opacity standard, even if EPA Method 9 observation shows otherwise. Requirements for COMS to be probable evidence-proper maintenance, meeting Performance Specification 1 in appendix B of part 60 of this chapter, and data have not been altered	No.
§63.6(h)(8)	Determining Compliance with Opacity/VE Standards	Administrator will use all COMS, EPA Method 9 (in appendix A of part 60 of this chapter), and EPA Method 22 (in appendix A of part 60 of this chapter) results, as well as information about operation and maintenance to determine compliance	No.
§63.6(h)(9)	Adjusted Opacity Standard	Procedures for Administrator to adjust an opacity standard	No.
§63.6(i)(1)-(14)	Compliance Extension	Procedures and criteria for Administrator to grant compliance extension	Yes.
§63.6(j)	Presidential Compliance Exemption	President may exempt any source from requirement to comply with this subpart	Yes.
§63.7(a)(2)	Performance Test Dates	Dates for conducting initial performance testing; must conduct 180 days after compliance date	Yes.
§63.7(a)(3)	CAA Section 114 Authority	Administrator may require a performance test under CAA section 114 at any time	Yes.
§63.7(b)(1)	Notification of Performance Test	Must notify Administrator 60 days before the test	Yes.
§63.7(b)(2)	Notification of Re-scheduling	If have to reschedule performance test, must notify Administrator of rescheduled date as soon as practicable and without delay	Yes.

§63.7(c)	Quality Assurance (QA)/Test Plan	Requirement to submit site-specific test plan 60 days before the test or on date Administrator agrees with; test plan approval procedures; performance audit requirements; internal and external QA procedures for testing	Yes.
§63.7(d)	Testing Facilities	Requirements for testing facilities	Yes.
63.7(e)(1)	Conditions for Conducting Performance Tests	Performance test must be conducted under representative conditions	No, §63.11120(c) specifies conditions for conducting performance tests.
§63.7(e)(2)	Conditions for Conducting Performance Tests	Must conduct according to this subpart and EPA test methods unless Administrator approves alternative	Yes.
§63.7(e)(3)	Test Run Duration	Must have three test runs of at least 1 hour each; compliance is based on arithmetic mean of three runs; conditions when data from an additional test run can be used	Yes.
§63.7(f)	Alternative Test Method	Procedures by which Administrator can grant approval to use an intermediate or major change, or alternative to a test method	Yes.
§63.7(g)	Performance Test Data Analysis	Must include raw data in performance test report; must submit performance test data 60 days after end of test with the Notification of Compliance Status; keep data for 5 years	Yes.
§63.7(h)	Waiver of Tests	Procedures for Administrator to waive performance test	Yes.
§63.8(a)(1)	Applicability of Monitoring Requirements	Subject to all monitoring requirements in standard	Yes.
§63.8(a)(2)	Performance Specifications	Performance Specifications in appendix B of 40 CFR part 60 apply	Yes.
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring of Flares	Monitoring requirements for flares in §63.11 apply	Yes.
§63.8(b)(1)	Monitoring	Must conduct monitoring according to standard unless Administrator approves alternative	Yes.
§63.8(b)(2)-(3)	Multiple Effluents and Multiple Monitoring Systems	Specific requirements for installing monitoring systems; must install on each affected source or after combined with another affected source	No.

			1
		before it is released to the atmosphere provided the monitoring is sufficient to demonstrate compliance with the standard; if more than one monitoring system on an emission point, must report all monitoring system results, unless one monitoring system is a backup	
	Monitoring System Operation and Maintenance	Maintain monitoring system in a manner consistent with good air pollution control practices	No.
	Operation and Maintenance of Continuous Monitoring Systems (CMS)	Must maintain and operate each CMS as specified in §63.6(e)(1); must keep parts for routine repairs readily available; must develop a written SSM plan for CMS, as specified in §63.6(e)(3)	No.
§63.8(c)(2)-(8)	CMS Requirements	Must install to get representative emission or parameter measurements; must verify operational status before or at performance test	No.
§63.8(d)	CMS Quality Control	Requirements for CMS quality control, including calibration, etc.; must keep quality control plan on record for 5 years; keep old versions for 5 years after revisions	No.
§63.8(e)	CMS Performance Evaluation	Notification, performance evaluation test plan, reports	No.
§63.8(f)(1)-(5)	Alternative Monitoring Method	Procedures for Administrator to approve alternative monitoring	No.
·	Alternative to Relative Accuracy Test	Procedures for Administrator to approve alternative relative accuracy tests for continuous emissions monitoring system (CEMS)	No.
§63.8(g)	Data Reduction	COMS 6-minute averages calculated over at least 36 evenly spaced data points; CEMS 1 hour averages computed over at least 4 equally spaced data points; data that cannot be used in average	No.
§63.9(a)	Notification Requirements	Applicability and State delegation	Yes.
§63.9(b)(1)-(2), (4)-(5)	Initial Notifications	Submit notification within 120 days after effective date; notification of intent to construct/reconstruct, notification of commencement of construction/reconstruction, notification of startup; contents of each	Yes.
§63.9(c)	Request for Compliance	Can request if cannot comply by date	Yes.

			1
	Extension	or if installed best available control technology or lowest achievable emission rate	
§63.9(d)	Notification of Special Compliance Requirements for New Sources	For sources that commence construction between proposal and promulgation and want to comply 3 years after effective date	Yes.
§63.9(e)	Notification of Performance Test	Notify Administrator 60 days prior	Yes.
§63.9(f)	Notification of VE/Opacity Test	Notify Administrator 30 days prior	No.
§63.9(g)	Additional Notifications when Using CMS	Notification of performance evaluation; notification about use of COMS data; notification that exceeded criterion for relative accuracy alternative	Yes, however, there are no opacity standards.
§63.9(h)(1)-(6)	Notification of Compliance Status	Contents due 60 days after end of performance test or other compliance demonstration, except for opacity/VE, which are due 30 days after; when to submit to Federal vs. State authority	Yes, however, there are no opacity standards.
§63.9(i)	Adjustment of Submittal Deadlines	Procedures for Administrator to approve change when notifications must be submitted	Yes.
§63.9(j)	Change in Previous Information	Must submit within 15 days after the change	Yes.
§63.10(a)	Recordkeeping/Reporting	Applies to all, unless compliance extension; when to submit to Federal vs. State authority; procedures for owners of more than one source	Yes.
§63.10(b)(1)	Recordkeeping/Reporting	General requirements; keep all records readily available; keep for 5 years	Yes.
§63.10(b)(2)(i)	Records related to SSM	Recordkeeping of occurrence and duration of startups and shutdowns	No.
§63.10(b)(2)(ii)	Records related to SSM	Recordkeeping of malfunctions	No. See §63.11125(d) for recordkeeping of (1) occurrence and duration and (2) actions taken during malfunction.
§63.10(b)(2)(iii)	Maintenance records	Recordkeeping of maintenance on air pollution control and monitoring equipment	Yes.
§63.10(b)(2)(iv)	Records Related to SSM	Actions taken to minimize emissions during SSM	No.

§63.10(b)(2)(v)	Records Related to SSM	Actions taken to minimize emissions during SSM	No.
§63.10(b)(2)(vi)- (xi)	CMS Records	Malfunctions, inoperative, out-of- control periods	No.
§63.10(b)(2)(xii)	Records	Records when under waiver	Yes.
§63.10(b)(2)(xiii)	Records	Records when using alternative to relative accuracy test	Yes.
§63.10(b)(2)(xiv)	Records	All documentation supporting Initial Notification and Notification of Compliance Status	Yes.
§63.10(b)(3)	Records	Applicability determinations	Yes.
§63.10(c)	Records	Additional records for CMS	No.
§63.10(d)(1)	General Reporting Requirements	Requirement to report	Yes.
§63.10(d)(2)	Report of Performance Test Results	When to submit to Federal or State authority	Yes.
§63.10(d)(3)	Reporting Opacity or VE Observations	What to report and when	No.
§63.10(d)(4)	Progress Reports	Must submit progress reports on schedule if under compliance extension	Yes.
§63.10(d)(5)	SSM Reports	Contents and submission	No. See §63.11126(b) for malfunction reporting requirements.
§63.10(e)(1)-(2)	Additional CMS Reports	Must report results for each CEMS on a unit; written copy of CMS performance evaluation; two-three copies of COMS performance evaluation	No.
§63.10(e)(3)(i)- (iii)	Reports	Schedule for reporting excess emissions	No.
§63.10(e)(3)(iv)- (v)	Excess Emissions Reports	Requirement to revert to quarterly submission if there is an excess emissions and parameter monitor exceedances (now defined as deviations); provision to request semiannual reporting after compliance for 1 year; submit report by 30th day following end of quarter or calendar half; if there has not been an exceedance or excess emissions (now defined as deviations), report contents in a statement that there have been no deviations; must submit report	

		<del>-</del>	
		containing all of the information in §§63.8(c)(7)-(8) and 63.10(c)(5)-(13)	
§63.10(e)(3)(iv)- (v)	Excess Emissions Reports	Requirement to revert to quarterly submission if there is an excess emissions and parameter monitor exceedances (now defined as deviations); provision to request semiannual reporting after compliance for 1 year; submit report by 30th day following end of quarter or calendar half; if there has not been an exceedance or excess emissions (now defined as deviations), report contents in a statement that there have been no deviations; must submit report containing all of the information in §§63.8(c)(7)-(8) and 63.10(c)(5)-(13)	No, §63.11130(K) specifies excess emission events for this subpart.
§63.10(e)(3)(vi)- (viii)	Excess Emissions Report and Summary Report	Requirements for reporting excess emissions for CMS; requires all of the information in §§63.10(c)(5)-(13) and 63.8(c)(7)-(8)	No.
§63.10(e)(4)	Reporting COMS Data	Must submit COMS data with performance test data	No.
§63.10(f)	Waiver for Recordkeeping/Reporting	Procedures for Administrator to waive	Yes.
§63.11(b)	Flares	Requirements for flares	No.
§63.12	Delegation	State authority to enforce standards	Yes.
§63.13	Addresses	Addresses where reports, notifications, and requests are sent	Yes.
§63.14	Incorporations by Reference	Test methods incorporated by reference	Yes.
§63.15	Availability of Information	Public and confidential information	Yes.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4184, Jan. 24, 2011]

**≜** Back to Top

#### Appendix D:

40 CFR Part 63, Subpart HHHHHH – National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources

#### **ELECTRONIC CODE OF FEDERAL REGULATIONS**

View past updates to the e-CFR. Click here to learn more.

#### e-CFR data is current as of April 30, 2015

<u>Title 40</u> → <u>Chapter I</u> → <u>Subchapter C</u> → <u>Part 63</u> → Subpart HHHHHH

#### Browse Previous | Browse Next

Title 40: Protection of Environment

<u>PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS</u> FOR SOURCE CATEGORIES (CONTINUED)

## Subpart HHHHHH—National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources

#### Contents

WHAT THIS SUBPART COVERS

§63.11169 What is the purpose of this subpart?

§63.11170 Am I subject to this subpart?

§63.11171 How do I know if my source is considered a new source or an existing source? General Compliance Requirements

§63.11172 When do I have to comply with this subpart?

§63.11173 What are my general requirements for complying with this subpart?

§63.11174 What parts of the General Provisions apply to me?

NOTIFICATIONS, REPORTS, AND RECORDS

§63.11175 What notifications must I submit?

§63.11176 What reports must I submit?

§63.11177 What records must I keep?

§63.11178 In what form and for how long must I keep my records?

OTHER REQUIREMENTS AND INFORMATION

§63.11179 Who implements and enforces this subpart?

§63.11180 What definitions do I need to know?

Table 1 to Subpart HHHHHHH of Part 63—Applicability of General Provisions to Subpart

HHHHHH of Part 63

Source: 73 FR 1759, Jan. 9, 2008, unless otherwise noted.

**≜** Back to Top

#### WHAT THIS SUBPART COVERS

**≜** Back to Top

#### §63.11169 What is the purpose of this subpart?

Except as provided in paragraph (d) of this section, this subpart establishes national emission standards for hazardous air pollutants (HAP) for area sources involved in any of the activities in paragraphs (a) through (c) of this section. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission standards contained herein.

- (a) Paint stripping operations that involve the use of chemical strippers that contain methylene chloride (MeCl), Chemical Abstract Service number 75092, in paint removal processes;
- (b) Autobody refinishing operations that encompass motor vehicle and mobile equipment sprayapplied surface coating operations;
- (c) Spray application of coatings containing compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd), collectively referred to as the target HAP to any part or product made of metal or plastic, or combinations of metal and plastic that are not motor vehicles or mobile equipment.
- (d) This subpart does not apply to any of the activities described in paragraph (d)(1) through (6) of this section.
- (1) Surface coating or paint stripping 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), the National Aeronautics and Space Administration, or the National Nuclear Security Administration.
- (2) Surface coating or paint stripping of military munitions, as defined in §63.11180, manufactured by or for the Armed Forces of the United States (including the Coast Guard and the National Guard of any such State) or equipment directly and exclusively used for the purposes of transporting military munitions.
- (3) Surface coating or paint stripping performed by individuals on their personal vehicles, possessions, or property, either as a hobby or for maintenance of their personal vehicles, possessions, or property. This subpart also does not apply when these operations are performed by individuals for others without compensation. An individual who spray applies surface coating to more than two motor vehicles or pieces of mobile equipment per year is subject to the requirements in this subpart that pertain to motor vehicle and mobile equipment surface coating regardless of whether compensation is received.
- (4) Surface coating or paint stripping that meets the definition of "research and laboratory activities" in §63.11180.
- (5) Surface coating or paint stripping that meets the definition of "quality control activities" in §63.11180.
- (6) Surface coating or paint stripping activities that are covered under another area source NESHAP.

#### §63.11170 Am I subject to this subpart?

- (a) You are subject to this subpart if you operate an area source of HAP as defined in paragraph (b) of this section, including sources that are part of a tribal, local, State, or Federal facility and you perform one or more of the activities in paragraphs (a)(1) through (3) of this section:
- (1) Perform paint stripping using MeCl for the removal of dried paint (including, but not limited to, paint, enamel, varnish, shellac, and lacquer) from wood, metal, plastic, and other substrates.
- (2) Perform spray application of coatings, as defined in §63.11180, to motor vehicles and mobile equipment including operations that are located in stationary structures at fixed locations, and mobile repair and refinishing operations that travel to the customer's location, except spray coating applications that meet the definition of facility maintenance in §63.11180. However, if you are the owner or operator of a motor vehicle or mobile equipment surface coating operation, you may petition the Administrator for an exemption from this subpart if you can demonstrate, to the satisfaction of the Administrator, that you spray apply no coatings that contain the target HAP, as defined in §63.11180. Petitions must include a description of the coatings that you spray apply and your certification that you do not spray apply any coatings containing the target HAP. If circumstances change such that you intend to spray apply coatings containing the target HAP, you must submit the initial notification required by 63.11175 and comply with the requirements of this subpart.
- (3) Perform spray application of coatings that contain the target HAP, as defined in §63.11180, to a plastic and/or metal substrate on a part or product, except spray coating applications that meet the definition of facility maintenance or space vehicle in §63.11180.
- (b) An area source of HAP is a source of HAP that is not a major source of HAP, is not located at a major source, and is not part of a major source of HAP emissions. 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 emit any combination of HAP at a rate of 22.68 Mg (25 tons) or more per year.

#### **≜** Back to Top

## §63.11171 How do I know if my source is considered a new source or an existing source?

- (a) This subpart applies to each new and existing affected area source engaged in the activities listed in §63.11170, with the exception of those activities listed in §63.11169(d) of this subpart.
- (b) The affected source is the collection of all of the items listed in paragraphs (b)(1) through (6) of this section. Not all affected sources will have all of the items listed in paragraphs (b)(1) through (6) of this section.
  - (1) Mixing rooms and equipment;
  - (2) Spray booths, ventilated prep stations, curing ovens, and associated equipment;
  - (3) Spray guns and associated equipment;

- (4) Spray gun cleaning equipment;
- (5) Equipment used for storage, handling, recovery, or recycling of cleaning solvent or waste paint; and
- (6) Equipment used for paint stripping at paint stripping facilities using paint strippers containing MeCl.
- (c) An affected source is a new source if it meets the criteria in paragraphs (c)(1) and (c)(2) of this section.
- (1) You commenced the construction of the source after September 17, 2007 by installing new paint stripping or surface coating equipment. If you purchase and install spray booths, enclosed spray gun cleaners, paint stripping equipment to reduce MeCl emissions, or purchase new spray guns to comply with this subpart at an existing source, these actions would not make your existing source a new source.
- (2) The new paint stripping or surface coating equipment is used at a source that was not actively engaged in paint stripping and/or miscellaneous surface coating prior to September 17, 2007.
  - (d) An affected source is reconstructed if it meets the definition of reconstruction in §63.2.
  - (e) An affected source is an existing source if it is not a new source or a reconstructed source.

#### GENERAL COMPLIANCE REQUIREMENTS

**≜** Back to Top

#### §63.11172 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) and (b) of this section.

- (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 after September 17, 2007, the compliance date is January 9, 2008.
- (2) If the initial startup of your new or reconstructed affected source occurs after January 9, 2008, the compliance date is the date of initial startup of your affected source.
  - (b) For an existing affected source, the compliance date is January 10, 2011.

#### **≜** Back to Top

## §63.11173 What are my general requirements for complying with this subpart?

- (a) Each paint stripping operation that is an affected area source must implement management practices to minimize the evaporative emissions of MeCl. The management practices must address, at a minimum, the practices in paragraphs (a)(1) through (5) of this section, as applicable, for your operations.
- (1) Evaluate each application to ensure there is a need for paint stripping (e.g., evaluate whether it is possible to re-coat the piece without removing the existing coating).
- (2) Evaluate each application where a paint stripper containing MeCl is used to ensure that there is no alternative paint stripping technology that can be used.
  - (3) Reduce exposure of all paint strippers containing MeCl to the air.
- (4) Optimize application conditions when using paint strippers containing MeCl to reduce MeCl evaporation (e.g., if the stripper must be heated, make sure that the temperature is kept as low as possible to reduce evaporation).
- (5) Practice proper storage and disposal of paint strippers containing MeCl (e.g., store stripper in closed, air-tight containers).
- (b) Each paint stripping operation that has annual usage of more than one ton of MeCl must develop and implement a written MeCl minimization plan to minimize the use and emissions of MeCl. The MeCl minimization plan must address, at a minimum, the management practices specified in paragraphs (a)(1) through (5) of this section, as applicable, for your operations. Each operation must post a placard or sign outlining the MeCl minimization plan in each area where paint stripping operations subject to this subpart occur. Paint stripping operations with annual usage of less than one ton of MeCl, must comply with the requirements in paragraphs (a)(1) through (5) of this section, as applicable, but are not required to develop and implement a written MeCl minimization plan.
- (c) Each paint stripping operation must maintain copies of annual usage of paint strippers containing MeCl on site at all times.
- (d) Each paint stripping operation with annual usage of more than one ton of MeCl must maintain a copy of their current MeCl minimization plan on site at all times.
- (e) Each motor vehicle and mobile equipment surface coating operation and each miscellaneous surface coating operation must meet the requirements in paragraphs (e)(1) through (e)(5) of this section.
- (1) All painters must be certified that they have completed training in the proper spray application of surface coatings and the proper setup and maintenance of spray equipment. The minimum requirements for training and certification are described in paragraph (f) of this section. The spray application of surface coatings is prohibited by persons who are not certified as having completed the training described in paragraph (f) of this section. The requirements of this paragraph do not apply to the students of an accredited surface coating training program who are under the direct supervision of an instructor who meets the requirements of this paragraph.
- (2) All spray-applied coatings must be applied in a spray booth, preparation station, or mobile enclosure that meets the requirements of paragraph (e)(2)(i) of this section and either paragraph (e)(2)(ii), (e)(2)(iii), or (e)(2)(iv) of this section.

- (i) All spray booths, preparation stations, and mobile enclosures must be fitted with a type of filter technology that is demonstrated to achieve at least 98-percent capture of paint overspray. The procedure used to demonstrate filter efficiency must be consistent with the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Method 52.1, "Gravimetric and Dust-Spot Procedures for Testing Air-Cleaning Devices Used in General Ventilation for Removing Particulate Matter, June 4, 1992" (incorporated by reference, see §63.14 of subpart A of this part). The test coating for measuring filter efficiency shall be a high solids bake enamel delivered at a rate of at least 135 grams per minute from a conventional (non-HVLP) air-atomized spray gun operating at 40 pounds per square inch (psi) air pressure; the air flow rate across the filter shall be 150 feet per minute. Owners and operators may use published filter efficiency data provided by filter vendors to demonstrate compliance with this requirement and are not required to perform this measurement. The requirements of this paragraph do not apply to waterwash spray booths that are operated and maintained according to the manufacturer's specifications.
- (ii) Spray booths and preparation stations used to refinish complete motor vehicles or mobile equipment must be fully enclosed with a full roof, and four complete walls or complete side curtains, and must be ventilated at negative pressure so that air is drawn into any openings in the booth walls or preparation station curtains. However, if a spray booth is fully enclosed and has seals on all doors and other openings and has an automatic pressure balancing system, it may be operated at up to, but not more than, 0.05 inches water gauge positive pressure.
- (iii) Spray booths and preparation stations that are used to coat miscellaneous parts and products or vehicle subassemblies must have a full roof, at least three complete walls or complete side curtains, and must be ventilated so that air is drawn into the booth. The walls and roof of a booth may have openings, if needed, to allow for conveyors and parts to pass through the booth during the coating process.
- (iv) Mobile ventilated enclosures that are used to perform spot repairs must enclose and, if necessary, seal against the surface around the area being coated such that paint overspray is retained within the enclosure and directed to a filter to capture paint overspray.
- (3) All spray-applied coatings must be applied with a high volume, low pressure (HVLP) spray gun, electrostatic application, airless spray gun, air-assisted airless spray gun, or an equivalent technology that is demonstrated by the spray gun manufacturer to achieve transfer efficiency comparable to one of the spray gun technologies listed above for a comparable operation, and for which written approval has been obtained from the Administrator. The procedure used to demonstrate that spray gun transfer efficiency is equivalent to that of an HVLP spray gun must be equivalent to the California South Coast Air Quality Management District's "Spray Equipment Transfer Efficiency Test Procedure for Equipment User, May 24, 1989" and "Guidelines for Demonstrating Equivalency with District Approved Transfer Efficient Spray Guns, September 26, 2002" (incorporated by reference, see §63.14 of subpart A of this part). The requirements of this paragraph do not apply to painting performed by students and instructors at paint training centers. The requirements of this paragraph do not apply to the surface coating of aerospace vehicles that involves the coating of components that normally require the use of an airbrush or an extension on the spray gun to properly reach limited access spaces; to the application of coatings on aerospace vehicles that contain fillers that adversely affect atomization with HVLP spray guns; or to the application of coatings on aerospace vehicles that normally have a dried film thickness of less than 0.0013 centimeter (0.0005 in.).
- (4) All paint spray gun cleaning must be done so that an atomized mist or spray of gun cleaning solvent and paint residue is not created outside of a container that collects used gun cleaning solvent. Spray gun cleaning may be done with, for example, hand cleaning of parts of the disassembled gun in a container of solvent, by flushing solvent through the gun without atomizing the solvent and paint residue, or by using a fully enclosed spray gun washer. A combination of non-atomizing methods may also be used.

- (5) 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 emission standards in this section after you have requested approval to do so according to §63.6(g)(2).
- (f) Each owner or operator of an affected miscellaneous surface coating source must ensure and certify that all new and existing personnel, including contract personnel, who spray apply surface coatings, as defined in §63.11180, are trained in the proper application of surface coatings as required by paragraph (e)(1) of this section. The training program must include, at a minimum, the items listed in paragraphs (f)(1) through (f)(3) of this section.
  - (1) A list of all current personnel by name and job description who are required to be trained;
- (2) Hands-on and classroom instruction that addresses, at a minimum, initial and refresher training in the topics listed in paragraphs (f)(2)(i) through (2)(iv) of this section.
- (i) Spray gun equipment selection, set up, and operation, including measuring coating viscosity, selecting the proper fluid tip or nozzle, and achieving the proper spray pattern, air pressure and volume, and fluid delivery rate.
- (ii) Spray technique for different types of coatings to improve transfer efficiency and minimize coating usage and overspray, including maintaining the correct spray gun distance and angle to the part, using proper banding and overlap, and reducing lead and lag spraying at the beginning and end of each stroke.
  - (iii) Routine spray booth and filter maintenance, including filter selection and installation.
  - (iv) Environmental compliance with the requirements of this subpart.
- (3) A description of the methods to be used at the completion of initial or refresher training to demonstrate, document, and provide certification of successful completion of the required training. Owners and operators who can show by documentation or certification that a painter's work experience and/or training has resulted in training equivalent to the training required in paragraph (f)(2) of this section are not required to provide the initial training required by that paragraph to these painters.
- (g) As required by paragraph (e)(1) of this section, all new and existing personnel at an affected motor vehicle and mobile equipment or miscellaneous surface coating source, including contract personnel, who spray apply surface coatings, as defined in §63.11180, must be trained by the dates specified in paragraphs (g)(1) and (2) of this section. Employees who transfer within a company to a position as a painter are subject to the same requirements as a new hire.
- (1) If your source is a new source, all personnel must be trained and certified no later than 180 days after hiring or no later than July 7, 2008, whichever is later. Painter training that was completed within five years prior to the date training is required, and that meets the requirements specified in paragraph (f)(2) of this section satisfies this requirement and is valid for a period not to exceed five years after the date the training is completed.
- (2) If your source is an existing source, all personnel must be trained and certified no later than 180 days after hiring or no later than January 10, 2011, whichever is later. Painter training that was completed within five years prior to the date training is required, and that meets the requirements specified in paragraph (f)(2) of this section satisfies this requirement and is valid for a period not to exceed five years after the date the training is completed.

(3) Training and certification will be valid for a period not to exceed five years after the date the training is completed, and all personnel must receive refresher training that meets the requirements of this section and be re-certified every five years.

[73 FR 1760, Jan. 9, 2008; 73 FR 8408, Feb. 13, 2008]

**≜** Back to Top

#### §63.11174 What parts of the General Provisions apply to me?

- (a) Table 1 of this subpart shows which parts of the General Provisions in subpart A apply to you.
- (b) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart applicable to area sources.

**≜** Back to Top

#### NOTIFICATIONS, REPORTS, AND RECORDS

**≜** Back to Top

#### §63.11175 What notifications must I submit?

- (a) Initial Notification. If you are the owner or operator of a paint stripping operation using paint strippers containing MeCl and/or a surface coating operation subject to this subpart, you must submit the initial notification required by §63.9(b). For a new affected source, you must submit the Initial Notification no later than 180 days after initial startup or July 7, 2008, whichever is later. For an existing affected source, you must submit the initial notification no later than January 11, 2010. The initial notification must provide the information specified in paragraphs (a)(1) through (8) of this section.
  - (1) The company name, if applicable.
- (2) The name, title, street address, telephone number, e-mail address (if available), and signature of the owner and operator, or other certifying company official;
- (3) The street address (physical location) of the affected source and the street address where compliance records are maintained, if different. If the source is a motor vehicle or mobile equipment surface coating operation that repairs vehicles at the customer's location, rather than at a fixed location, such as a collision repair shop, the notification should state this and indicate the physical location where records are kept to demonstrate compliance;
  - (4) An identification of the relevant standard (i.e., this subpart, 40 CFR part 63, subpart HHHHHH);
  - (5) A brief description of the type of operation as specified in paragraph (a)(5)(i) or (ii) of this section.
- (i) For all surface coating operations, indicate whether the source is a motor vehicle and mobile equipment surface coating operation or a miscellaneous surface coating operation, and include the

number of spray booths and preparation stations, and the number of painters usually employed at the operation.

- (ii) For paint stripping operations, identify the method(s) of paint stripping employed (e.g., chemical, mechanical) and the substrates stripped (e.g., wood, plastic, metal).
- (6) Each paint stripping operation must indicate whether they plan to annually use more than one ton of MeCl after the compliance date.
- (7) A statement of whether the source is already in compliance with each of the relevant requirements of this subpart, or whether the source will be brought into compliance by the compliance date. For paint stripping operations, the relevant requirements that you must evaluate in making this determination are specified in §63.11173(a) through (d) of this subpart. For surface coating operations, the relevant requirements are specified in §63.11173(e) through (g) of this subpart.
- (8) If your source is a new source, you must certify in the initial notification whether the source is in compliance with each of the requirements of this subpart. If your source is an existing source, you may certify in the initial notification that the source is already in compliance. If you are certifying in the initial notification that the source is in compliance with the relevant requirements of this subpart, then include also a statement by a responsible official with that official's name, title, phone number, e-mail address (if available) and signature, certifying the truth, accuracy, and completeness of the notification, a statement that the source has complied with all the relevant standards of this subpart, and that this initial notification also serves as the notification of compliance status.
- (b) Notification of Compliance Status. If you are the owner or operator of a new source, you are not required to submit a separate notification of compliance status in addition to the initial notification specified in paragraph (a) of this subpart provided you were able to certify compliance on the date of the initial notification, as part of the initial notification, and your compliance status has not since changed. If you are the owner or operator of any existing source and did not certify in the initial notification that your source is already in compliance as specified in paragraph (a) of this section, then you must submit a notification of compliance status. You must submit a Notification of Compliance Status on or before March 11, 2011. You are required to submit the information specified in paragraphs (b)(1) through (4) of this section with your Notification of Compliance Status:
- (1) Your company's name and the street address (physical location) of the affected source and the street address where compliance records are maintained, if different.
- (2) The name, title, address, telephone, e-mail address (if available) and signature of the owner and operator, or other certifying company official, certifying the truth, accuracy, and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of this subpart or an explanation of any noncompliance and a description of corrective actions being taken to achieve compliance. For paint stripping operations, the relevant requirements that you must evaluate in making this determination are specified in §63.11173(a) through (d). For surface coating operations, the relevant requirements are specified in §63.11173(e) through (g).
  - (3) The date of the Notification of Compliance Status.
- (4) If you are the owner or operator of an existing affected paint stripping source that annually uses more than one ton of MeCl, you must submit a statement certifying that you have developed and are implementing a written MeCl minimization plan in accordance with §63.11173(b).

#### §63.11176 What reports must I submit?

- (a) Annual Notification of Changes Report. If you are the owner or operator of a paint stripping, motor vehicle or mobile equipment, or miscellaneous surface coating affected source, you are required to submit a report in each calendar year in which information previously submitted in either the initial notification required by §63.11175(a), Notification of Compliance, or a previous annual notification of changes report submitted under this paragraph, has changed. Deviations from the relevant requirements in §63.11173(a) through (d) or §63.11173(e) through (g) on the date of the report will be deemed to be a change. This includes notification when paint stripping affected sources that have not developed and implemented a written MeCI minimization plan in accordance with §63.11173(b) used more than one ton of MeCI in the previous calendar year. The annual notification of changes report must be submitted prior to March 1 of each calendar year when reportable changes have occurred and must include the information specified in paragraphs (a)(1) through (2) of this section.
- (1) Your company's name and the street address (physical location) of the affected source and the street address where compliance records are maintained, if different.
- (2) The name, title, address, telephone, e-mail address (if available) and signature of the owner and operator, or other certifying company official, certifying the truth, accuracy, and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of this subpart or an explanation of any noncompliance and a description of corrective actions being taken to achieve compliance.
- (b) If you are the owner or operator of a paint stripping affected source that has not developed and implemented a written MeCl minimization plan in accordance with §63.11173(b) of this subpart, you must submit a report for any calendar year in which you use more than one ton of MeCl. This report must be submitted no later than March 1 of the following calendar year. You must also develop and implement a written MeCl minimization plan in accordance with §63.11173(b) no later than December 31. You must then submit a Notification of Compliance Status report containing the information specified in §63.11175(b) by March 1 of the following year and comply with the requirements for paint stripping operations that annually use more than one ton of MeCl in §63.11173(d) and 63.11177(f).

#### **≜** Back to Top

#### §63.11177 What records must I keep?

If you are the owner or operator of a surface coating operation, you must keep the records specified in paragraphs (a) through (d) and (g) of this section. If you are the owner or operator of a paint stripping operation, you must keep the records specified in paragraphs (e) through (g) of this section, as applicable.

- (a) Certification that each painter has completed the training specified in §63.11173(f) with the date the initial training and the most recent refresher training was completed.
- (b) Documentation of the filter efficiency of any spray booth exhaust filter material, according to the procedure in §63.11173(e)(3)(i).
- (c) Documentation from the spray gun manufacturer that each spray gun with a cup capacity equal to or greater than 3.0 fluid ounces (89 cc) that does not meet the definition of an HVLP spray gun, electrostatic application, airless spray gun, or air assisted airless spray gun, has been determined by the Administrator to achieve a transfer efficiency equivalent to that of an HVLP spray gun, according to the procedure in §63.11173(e)(4).

- (d) Copies of any notification submitted as required by §63.11175 and copies of any report submitted as required by §63.11176.
- (e) Records of paint strippers containing MeCl used for paint stripping operations, including the MeCl content of the paint stripper used. Documentation needs to be sufficient to verify annual usage of paint strippers containing MeCl (e.g., material safety data sheets or other documentation provided by the manufacturer or supplier of the paint stripper, purchase receipts, records of paint stripper usage, engineering calculations).
- (f) If you are a paint stripping source that annually uses more than one ton of MeCl you are required to maintain a record of your current MeCl minimization plan on site for the duration of your paint stripping operations. You must also keep records of your annual review of, and updates to, your MeCl minimization plan.
- (g) Records of any deviation from the requirements in §63.11173, §63.11174, §63.11175, or §63.11176. These records must include the date and time period of the deviation, and a description of the nature of the deviation and the actions taken to correct the deviation.
- (h) Records of any assessments of source compliance performed in support of the initial notification, notification of compliance status, or annual notification of changes report.

#### §63.11178 In what form and for how long must I keep my records?

(a) If you are the owner or operator of an affected source, you must maintain copies of the records specified in §63.11177 for a period of at least five years after the date of each record. Copies of records must be kept on site and in a printed or electronic form that is readily accessible for inspection for at least the first two years after their date, and may be kept off-site after that two year period.

**≜** Back to Top

#### OTHER REQUIREMENTS AND INFORMATION

Back to Top

#### §63.11179 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 authority in §63.11173(e)(5) will not be delegated to State, local, or tribal agencies.

**≜** Back to Top

#### §63.11180 What definitions do I need to know?

Terms used in this subpart are defined in the Clean Air Act, 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).

Administrator means, for the purposes of this rulemaking, the Administrator of the U.S. Environmental Protection Agency or the State or local agency that is granted delegation for implementation of this subpart.

Aerospace vehicle or component means any fabricated part, processed part, assembly of parts, or completed unit, with the exception of electronic components, of any aircraft including but not limited to airplanes, helicopters, missiles, rockets, and space vehicles.

Airless and air-assisted airless spray mean any paint spray technology that relies solely on the fluid pressure of the paint to create an atomized paint spray pattern and does not apply any atomizing compressed air to the paint before it leaves the paint nozzle. Air-assisted airless spray uses compressed air to shape and distribute the fan of atomized paint, but still uses fluid pressure to create the atomized paint.

Appurtenance means any accessory to a stationary structure coated at the site of installation, whether installed or detached, including but not limited to: bathroom and kitchen fixtures; cabinets; concrete forms; doors; elevators; fences; hand railings; heating equipment, air conditioning equipment, and other fixed mechanical equipment or stationary tools; lamp posts; partitions; pipes and piping systems; rain gutters and downspouts; stairways, fixed ladders, catwalks, and fire escapes; and window screens.

Architectural coating means a coating to be applied to stationary structures or their appurtenances at the site of installation, to portable buildings at the site of installation, to pavements, or to curbs.

Cleaning material means a solvent used to remove contaminants and other materials, such as dirt, grease, or oil, 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, for the purposes of this subpart, a material spray-applied to a substrate for decorative, protective, or functional purposes. For the purposes of this subpart, coating does not include the following materials:

- (1) Decorative, protective, or functional materials that consist only of protective oils for metal, acids, bases, or any combination of these substances.
  - (2) Paper film or plastic film that may be pre-coated with an adhesive by the film manufacturer.
  - (3) Adhesives, sealants, maskants, or caulking materials.
  - (4) Temporary protective coatings, lubricants, or surface preparation materials.
  - (5) In-mold coatings that are spray-applied in the manufacture of reinforced plastic composite parts.

Compliance date means the date by which you must comply with this subpart.

Deviation means any instance in which an affected source, subject to this subpart, or an owner or operator of such a source fails to meet any requirement or obligation established by this subpart.

Dry media blasting means abrasive blasting using dry media. Dry media blasting relies on impact and abrasion to remove paint from a substrate. Typically, a compressed air stream is used to propel the media against the coated surface.

*Electrostatic application* means any method of coating application where an electrostatic attraction is created between the part to be coated and the atomized paint particles.

Equipment cleaning means the use of an organic solvent to remove coating residue from the surfaces of paint spray guns and other painting related equipment, including, but not limited to stir sticks, paint cups, brushes, and spray booths.

Facility maintenance means, for the purposes of this subpart, surface coating performed as part of the routine repair or renovation 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. Facility maintenance also includes surface coating associated with the installation of new equipment or structures, and the application of any surface coating as part of janitorial activities. Facility maintenance includes the application of coatings to stationary structures or their appurtenances at the site of installation, to portable buildings at the site of installation, to pavements, or to curbs, Facility maintenance also includes the refinishing of mobile equipment in the field or at the site where they are used in service and at which they are intended to remain indefinitely after refinishing. Such mobile equipment includes, but is not limited to, farm equipment and mining equipment for which it is not practical or feasible to move to a dedicated mobile equipment refinishing facility. Such mobile equipment also includes items, such as fork trucks, that are used in a manufacturing facility and which are refinished in that same facility. Facility maintenance does not include surface coating of motor vehicles, mobile equipment, or items that routinely leave and return to the facility, such as delivery trucks, rental equipment, or containers used to transport, deliver, distribute, or dispense commercial products to customers, such as compressed gas canisters.

High-volume, low-pressure (HVLP) spray equipment means spray equipment that is permanently labeled as such and used to apply any coating by means of a spray gun which is designed and operated between 0.1 and 10 pounds per square inch gauge (psig) air atomizing pressure measured dynamically at the center of the air cap and at the air horns.

*Initial startup* means the first time equipment is brought online in a paint stripping or surface coating operation, and paint stripping or surface coating is first performed.

Materials that contain HAP or HAP-containing materials mean, for the purposes of this subpart, materials that contain 0.1 percent or more by mass of any individual HAP that is an OSHA-defined carcinogen as specified in 29 CFR 1910.1200(d)(4), or 1.0 percent or more by mass for any other individual HAP.

Military munitions means all ammunition products and components produced or used by or for the U.S. Department of Defense (DoD) or for the U.S. Armed Services for national defense and security, including military munitions under the control of the Department of Defense, the U.S. Coast Guard, the National Nuclear Security Administration (NNSA), U.S. Department of Energy (DOE), and National Guard personnel. The term military munitions includes: confined gaseous, liquid, and solid propellants, explosives, pyrotechnics, chemical and riot control agents, smokes, and incendiaries used by DoD components, including bulk explosives and chemical warfare agents, chemical munitions, biological weapons, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition,

small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges, nonnuclear components of nuclear weapons, wholly inert ammunition products, and all devices and components of any items listed in this definition.

Miscellaneous parts and/or products means any part or product made of metal or plastic, or combinations of metal and plastic. Miscellaneous parts and/or products include, but are not limited to, metal and plastic components of the following types of products as well as the products themselves: motor vehicle parts and accessories for automobiles, trucks, recreational vehicles; automobiles and light duty trucks at automobile and light duty truck assembly plants; boats; sporting and recreational goods; toys; business machines; laboratory and medical equipment; and household and other consumer products.

Miscellaneous surface coating operation means the collection of equipment used to apply surface coating to miscellaneous parts and/or products made of metal or plastic, including applying cleaning solvents to prepare the surface before coating application, mixing coatings before application, applying coating to a surface, drying or curing the coating after application, and cleaning coating application equipment, but not plating. A single surface coating operation may include any combination of these types of equipment, but always includes at least the point at which a coating material is applied to a given part. A surface coating operation includes all other steps (such as surface preparation with solvent and equipment cleaning) in the affected source where HAP are emitted from the coating of a part. The use of solvent to clean parts (for example, to remove grease during a mechanical repair) does not constitute a miscellaneous surface coating operation if no coatings are applied. A single affected source may have multiple surface coating operations. Surface coatings applied to wood, leather, rubber, ceramics, stone, masonry, or substrates other than metal and plastic are not considered miscellaneous surface coating operations for the purposes of this subpart.

Mobile equipment means any device that may be drawn and/or driven on a roadway including, but not limited to, heavy-duty trucks, truck trailers, fleet delivery trucks, buses, mobile cranes, bulldozers, street cleaners, agriculture equipment, motor homes, and other recreational vehicles (including camping trailers and fifth wheels).

*Motor vehicle* means any self-propelled vehicle, including, but not limited to, automobiles, light duty trucks, golf carts, vans, and motorcycles.

Motor vehicle and mobile equipment surface coating means the spray application of coatings to assembled motor vehicles or mobile equipment. For the purposes of this subpart, it does not include the surface coating of motor vehicle or mobile equipment parts or subassemblies at a vehicle assembly plant or parts manufacturing plant.

Non-HAP solvent means, for the purposes of this subpart, a solvent (including thinners and cleaning solvents) that contains less than 0.1 percent by mass of any individual HAP that is an OSHA-defined carcinogen as specified in 29 CFR 1910.1200(d)(4) and less than 1.0 percent by mass for any other individual HAP.

Paint stripping and/or miscellaneous surface coating source or facility means any shop, business, location, or parcel of land where paint stripping or miscellaneous surface coating operations are conducted.

*Paint stripping* means the removal of dried coatings from wood, metal, plastic, and other substrates. A single affected source may have multiple paint stripping operations.

Painter means any person who spray applies coating.

*Plastic* refers to substrates containing one or more resins and may be solid, porous, flexible, or rigid. Plastics include fiber reinforced plastic composites.

*Protective oil* means 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.

Quality control activities means surface coating or paint stripping activities that meet all of the following criteria:

- (1) The activities associated with a surface coating or paint stripping operation are intended to detect and correct defects in the final product by selecting a limited number of samples from the operation, and comparing the samples against specific performance criteria.
- (2) The activities do not include the production of an intermediate or final product for sale or exchange for commercial profit; for example, parts that are surface coated or stripped are not sold and do not leave the facility.
- (3) The activities are not a normal part of the surface coating or paint stripping operation; for example, they do not include color matching activities performed during a motor vehicle collision repair.
- (4) The activities do not involve surface coating or stripping 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; that is, the activities are not facility maintenance.

Research and laboratory activities means surface coating or paint stripping activities that meet one of the following criteria:

- (1) Conducted at a laboratory to analyze air, soil, water, waste, or product samples for contaminants, or environmental impact.
- (2) Activities conducted to test more efficient production processes, including alternative paint stripping or surface coating materials or application methods, or methods for preventing or reducing adverse environmental impacts, provided that the activities do not include the production of an intermediate or final product for sale or exchange for commercial profit.
- (3) Activities conducted at a research or laboratory facility that is operated under the close supervision of technically trained personnel, the primary purpose of which is to conduct research and development into new processes and products and that is not engaged in the manufacture of products for sale or exchange for commercial profit.

*Solvent* means a fluid containing organic compounds used to perform paint stripping, surface prep, or cleaning of surface coating equipment.

Space Vehicle means vehicles designed to travel beyond the limit of the earth's atmosphere, including but not limited to satellites, space stations, and the Space Shuttle System (including orbiter, external tanks, and solid rocket boosters).

Spray-applied coating operations means coatings that are applied using a hand-held device that creates an atomized mist of coating and deposits the coating on a substrate. For the purposes of this subpart, spray-applied coatings do not include the following materials or activities:

- (1) Coatings applied from a hand-held device with a paint cup capacity that is equal to or less than 3.0 fluid ounces (89 cubic centimeters).
- (2) Surface coating application using powder coating, hand-held, non-refillable aerosol containers, or non-atomizing application technology, including, but not limited to, paint brushes, rollers, hand wiping, flow coating, dip coating, electrodeposition coating, web coating, coil coating, touch-up markers, or marking pens.
- (3) Thermal spray operations (also known as metallizing, flame spray, plasma arc spray, and electric arc spray, among other names) in which solid metallic or non-metallic material is heated to a molten or semi-molten state and propelled to the work piece or substrate by compressed air or other gas, where a bond is produced upon impact.

Surface preparation or Surface prep means use of a cleaning material on a portion of or all of a substrate prior to the application of a coating.

Target HAP are compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd).

Target HAP containing coating means a spray-applied coating that contains any individual target HAP that is an Occupational Safety and Health Administration (OSHA)-defined carcinogen as specified in 29 CFR 1910.1200(d)(4) at a concentration greater than 0.1 percent by mass, or greater than 1.0 percent by mass for any other individual target HAP compound. For the purpose of determining whether materials you use contain the target HAP compounds, you may rely on formulation data provided by the manufacturer or supplier, such as the material safety data sheet (MSDS), as long as it represents each target HAP compound in the material that is present at 0.1 percent by mass or more for OSHA-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other target HAP compounds.

Transfer efficiency means the amount of coating solids adhering to the object being coated divided by the total amount of coating solids sprayed, expressed as a percentage. Coating solids means the nonvolatile portion of the coating that makes up the dry film.

*Truck bed liner coating* means any coating, excluding color coats, labeled and formulated for application to a truck bed to protect it from surface abrasion.

#### **≜** Back to Top

Table 1 to Subpart HHHHHH of Part 63—Applicability of General Provisions to Subpart HHHHHH of Part 63

Citation	Subject	Applicable to subpart HHHHHHH	Explanation
§63.1(a)(1)-(12)	General Applicability	Yes	
§63.1(b)(1)-(3)	Initial Applicability Determination		Applicability of subpart HHHHHH is also specified in §63.11170.
§63.1(c)(1)	Applicability After Standard Established	Yes	
§63.1(c)(2)	Applicability of Permit Program for	Yes	(63.11174(b) of Subpart HHHHHH

	Area Sources		exempts area sources from the obligation to obtain Title V operating permits.
§63.1(c)(5)	Notifications	Yes	
§63.1(e)	Applicability of Permit Program to Major Sources Before Relevant Standard is Set	No	(63.11174(b) of Subpart HHHHHH exempts area sources from the obligation to obtain Title V operating permits.
§63.2	Definitions	Yes	Additional definitions are specified in §63.11180.
§63.3(a)-(c)	Units and Abbreviations	Yes	
§63.4(a)(1)-(5)	Prohibited Activities	Yes	
§63.4(b)-(c)	Circumvention/Fragmentation	Yes	
§63.5	Construction/Reconstruction of major sources	No	Subpart HHHHHH applies only to area sources.
§63.6(a)	Compliance With Standards and Maintenance Requirements— Applicability	Yes	
§63.6(b)(1)-(7)	Compliance Dates for New and Reconstructed Sources	Yes	§63.11172 specifies the compliance dates.
§63.6(c)(1)-(5)	Compliance Dates for Existing Sources	Yes	§63.11172 specifies the compliance dates.
§63.6(e)(1)-(2)	Operation and Maintenance	Yes	
§63.6(e)(3)	Startup, Shutdown, and Malfunction Plan	No	No startup, shutdown, and malfunction plan is required by subpart HHHHHH.
§63.6(f)(1)	Compliance Except During Startup, Shutdown, and Malfunction	Yes	
§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	Subpart HHHHHH does not establish opacity or visible emission standards.
§63.6(i)(1)-(16)	Extension of Compliance	Yes	
§63.6(j)	Presidential Compliance Exemption	Yes	
§63.7	Performance Testing Requirements	No	No performance testing is required by subpart HHHHHH.
§63.8	Monitoring Requirements	No	Subpart HHHHHH does not require the use of continuous monitoring systems.
§63.9(a)-(d)	Notification Requirements	Yes	§63.11175 specifies notification

			requirements.
§63.9(e)	9(e) Notification of Performance Test		Subpart HHHHHH does not require performance tests.
§63.9(f)	Notification of Visible Emissions/Opacity Test		Subpart HHHHHH does not have opacity or visible emission standards.
§63.9(g)	Additional Notifications When Using CMS		Subpart HHHHHH does not require the use of continuous monitoring systems.
§63.9(h) Notification of Compliance Status		No	§63.11175 specifies the dates and required content for submitting the notification of compliance status.
§63.9(i)	Adjustment of Submittal Deadlines	Yes	
§63.9(j)	Change in Previous Information		§63.11176(a) specifies the dates for submitting the notification of changes report.
§63.10(a)	Recordkeeping/Reporting— Applicability and General Information		
§63.10(b)(1)	General Recordkeeping Requirements	Yes	Additional requirements are specified in §63.11177.
§63.10(b)(2)(i)- (xi)	Recordkeeping Relevant to Startup, Shutdown, and Malfunction Periods and CMS	No	Subpart HHHHHH does not require startup, shutdown, and malfunction plans, or CMS.
§63.10(b)(2)(xii)	Waiver of recordkeeping requirements	Yes	
§63.10(b)(2)(xiii)	(b)(2)(xiii) Alternatives to the relative accuracy test		Subpart HHHHHH does not require the use of CEMS.
§63.10(b)(2)(xiv)	10(b)(2)(xiv) Records supporting notifications		
§63.10(b)(3)	.,.,,		
§63.10(c)	Additional Recordkeeping Requirements for Sources with CMS	No	Subpart HHHHHH does not require the use of CMS.
§63.10(d)(1)	O(d)(1) General Reporting Requirements		Additional requirements are specified in §63.11176.
§63.10(d)(2)-(3)	Report of Performance Test Results, and Opacity or Visible Emissions Observations	No	Subpart HHHHHH does not require performance tests, or opacity or visible emissions observations.
§63.10(d)(4)	Progress Reports for Sources With Compliance Extensions	Yes	
§63.10(d)(5)	Startup, Shutdown, and Malfunction Reports	No	Subpart HHHHHH does not require startup, shutdown, and malfunction reports.
§63.10(e)	Additional Reporting requirements	No	Subpart HHHHHH does not require

	for Sources with CMS		the use of CMS.
§63.10(f) Recordkeeping/Reporting Waiver		Yes	
§63.11	Control Device Requirements/Flares		Subpart HHHHHH does not require the use of flares.
§63.12	State Authority and Delegations	Yes	
§63.13	Addresses of State Air Pollution Control Agencies and EPA Regional Offices		
§63.14	Incorporation by Reference	Yes	Test methods for measuring paint booth filter efficiency and spray gun transfer efficiency in §63.11173(e)(2) and (3) are incorporated and included in §63.14.
§63.15	Availability of Information/Confidentiality	Yes	
§63.16(a)	Performance Track Provisions— reduced reporting	Yes	
§63.16(b)-(c)	c) Performance Track Provisions— reduced reporting		Subpart HHHHHH does not establish numerical emission limits.

**<sup>≜</sup>** Back to Top

# Appendix E:

40 CFR Part 63, Subpart WWWWWW – National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations

#### **ELECTRONIC CODE OF FEDERAL REGULATIONS**

View past updates to the e-CFR.
Click here to learn more.

## e-CFR data is current as of April 30, 2015

Title  $40 \rightarrow$  Chapter I  $\rightarrow$  Subchapter C  $\rightarrow$  Part  $63 \rightarrow$  Subpart WWWWWW

#### Browse Previous | Browse Next

Title 40: Protection of Environment

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (CONTINUED)

# Subpart WWWWWW—National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations

#### Contents

#### APPLICABILITY AND COMPLIANCE DATES

§63.11504 Am I subject to this subpart?

§63.11505 What parts of my plant does this subpart cover?

§63.11506 What are my compliance dates?

STANDARDS AND COMPLIANCE REQUIREMENTS

§63.11507 What are my standards and management practices?

§63.11508 What are my compliance requirements?

§63.11509 What are my notification, reporting, and recordkeeping requirements?

OTHER REQUIREMENTS AND INFORMATION

§63.11510 What General Provisions apply to this subpart?

§63.11511 What definitions apply to this subpart?

§63.11512 Who implements and enforces this subpart?

§63.11513 [Reserved]

<u>Table 1 to Subpart WWWWWW of Part 63—Applicability of General Provisions to Plating and Polishing Area Sources</u>

Source: 73 FR 37741, July 1, 2008, unless otherwise noted.



#### **APPLICABILITY AND COMPLIANCE DATES**

## **≜** Back to Top

## §63.11504 Am I subject to this subpart?

- (a) You are subject to this subpart if you own or operate a plating and polishing facility that is an area source of hazardous air pollutant (HAP) emissions and meets the criteria specified in paragraphs (a)(1) through (3) of this section.
- (1) A plating and polishing facility is a plant site that is engaged in one or more of the processes listed in paragraphs (a)(1)(i) through (vi) of this section.
  - (i) Electroplating other than chromium electroplating (i.e., non-chromium electroplating).
  - (ii) Electroless or non-eletrolytic plating.
- (iii) Other non-electrolytic metal coating processes, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating; and thermal spraying.
- (iv) Dry mechanical polishing of finished metals and formed products after plating or thermal spraying.
  - (v) Electroforming.
  - (vi) Electropolishing.
- (2) A plating or polishing facility is an area source of HAP emissions, where an area source is any stationary source or group of stationary sources within a contiguous area under common control that does not have the potential to emit any single HAP at a rate of 9.07 megagrams per year (Mg/yr) (10 tons per year (tpy)) or more and any combination of HAP at a rate of 22.68 Mg/yr (25 tpy) or more.
- (3) Your plating and polishing facility uses or has emissions of compounds of one or more plating and polishing metal HAP, which means any compound of any of the following metals: cadmium, chromium, lead, manganese, and nickel, as defined in §63.11511, "What definitions apply to this subpart?" With the exception of lead, plating and polishing metal HAP also include any of these metals in the elemental form.
  - (b) [Reserved]

[73 FR 37741, July 1, 2008, as amended at 76 FR 57919, Sept. 19, 2011]

# **≜** Back to Top

# §63.11505 What parts of my plant does this subpart cover?

(a) This subpart applies to each new or existing affected source, as specified in paragraphs (a)(1) through (3) of this section, at all times. A new source is defined in §63.11511, "What definitions apply to this subpart?"

- (1) Each tank that contains one or more of the plating and polishing metal HAP, as defined in §63.11511, "What definitions apply to this subpart?", and is used for non-chromium electroplating; electroforming; electropolishing; electroless plating or other non-electrolytic metal coating operations, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating.
- (2) Each thermal spraying operation that applies one or more of the plating and polishing metal HAP, as defined in §63.11511, "What definitions apply to this subpart?"
- (3) Each dry mechanical polishing operation that emits one or more of the plating and polishing metal HAP, as defined in §63.11511, "What definitions apply to this subpart?"
- (b) An affected source is existing if you commenced construction or reconstruction of the affected source on or before March 14, 2008.
- (c) An affected source is new if you commenced construction or reconstruction of the affected source after March 14. 2008.
- (d) This subpart does not apply to any of the process units or operations described in paragraphs (d)(1) through (6) of this section.
- (1) Process units that are subject to the requirements of 40 CFR part 63, subpart N (National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks).
- (2) Research and development process units, as defined in §63.11511, "What definitions apply to this subpart?"
  - (3) Process units that are used strictly for educational purposes.
  - (4) Plating, polishing, coating, or thermal spraying conducted to repair surfaces or equipment.
  - (5) Dry mechanical polishing conducted to restore the original finish to a surface.
- (6) Any plating or polishing process that uses process materials that contain cadmium, chromium, lead, or nickel (as the metal) in amounts less than 0.1 percent by weight, or that contain manganese in amounts less than 1.0 percent by weight (as the metal), as used. Information used to determine the amount of plating and polishing metal HAP in materials used in the plating or polishing process may include information reported on the Material Safety Data Sheet for the material, but is not required. For plating or polishing tanks, the HAP content may be determined from the final bath contents "as used" to plate or to polish.
- (e) You are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, "Title V," provided you are not otherwise required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart applicable to area sources.

[73 FR 37741, July 1, 2008, as amended at 76 FR 57919, Sept. 19, 2011]

# §63.11506 What are my compliance dates?

- (a) If you own or operate an existing affected source, you must achieve compliance with the applicable provisions of this subpart no later than July 1, 2010.
- (b) If you own or operate a new affected source for which the initial startup date is on or before July 1, 2008, you must achieve compliance with the provisions of this subpart no later than July 1, 2008.
- (c) If you own or operate a new affected source for which the initial startup date is after July 1, 2008, you must achieve compliance with the provisions of this subpart upon initial startup of your affected source.
- **≜** Back to Top

#### STANDARDS AND COMPLIANCE REQUIREMENTS

**≜** Back to Top

## §63.11507 What are my standards and management practices?

- (a) If you own or operate an affected new or existing non-cyanide electroplating, electroforming, or electropolishing tank (hereafter referred to as an "electrolytic" process tank, as defined in §63.11511, "What definitions apply to this subpart?") that contains one or more of the plating and polishing metal HAP and operates at a pH of less than 12, you must comply with the requirements in paragraph (a)(1), (2), or (3) of this section, and implement the applicable management practices in paragraph (g) of this section, as practicable.
- (1) You must use a wetting agent/fume suppressant in the bath of the affected tank, as defined in §63.11511, "What definitions apply to this subpart?" and according to paragraphs (a)(1)(i) through (iii) of this section.
- (i) You must initially add the wetting agent/fume suppressant in the amounts recommended by the manufacturer for the specific type of electrolytic process.
- (ii) You must add wetting agent/fume suppressant in proportion to the other bath chemistry ingredients that are added to replenish the bath, as in the original make-up of the bath, or in proportions such that the bath contents are returned to that of the original make-up of the bath.
- (iii) If a wetting agent/fume suppressant is included in the electrolytic process bath chemicals used in the affected tank according to the manufacturer's instructions, it is not necessary to add additional wetting agent/fume suppressants to the tank to comply with this rule.
- (2) You must capture and exhaust emissions from the affected tank to any one of the following emission control devices: composite mesh pad, packed bed scrubber, or mesh pad mist eliminator, according to paragraphs (a)(2)(i) and (ii) of this section.
- (i) You must operate all capture and control devices according to the manufacturer's specifications and operating instructions.
- (ii) You must keep the manufacturer's specifications and operating instructions at the facility at all times in a location where they can be easily accessed by the operators.

- (3) You must cover the tank surface according to paragraph (a)(3)(i) or (ii) of this section.
- (i) For batch electrolytic process tanks, as defined in §63.11511, "What definitions apply to this subpart?", you must use a tank cover, as defined in §63.11511, over all of the effective surface area of the tank for at least 95 percent of the electrolytic process operating time.
- (ii) For continuous electrolytic process tanks, as defined in §63.11511, "What definitions apply to this subpart?", you must cover at least 75 percent of the surface of the tank, as defined in §63.11511, whenever the electrolytic process tank is in operation.
- (b) If you own or operate an affected new or existing "flash" or short-term electroplating tank, as defined in §63.11511, "What definitions apply to this subpart?", that uses or emits one or more of the plating and polishing metal HAP, you must comply with the requirements specified in paragraph (b)(1) or (b)(2), and implement the applicable management practices in paragraph (g) of this section, as practicable.
- (1) You must limit short-term or "flash" electroplating to no more than 1 cumulative hour per day or 3 cumulative minutes per hour of plating time.
- (2) You must use a tank cover, as defined in §63.11511, "What definitions apply to this subpart?", for at least 95 percent of the plating time.
- (c) If you own or operate an affected new or existing process tank that is used both for short-term electroplating and for electrolytic processing of longer duration (i.e., processing that does not meet the definition of short-term or flash electroplating) and contains one or more of the plating and polishing metal HAP, you must meet the requirements specified in paragraph (a) or (b) of this section, whichever apply to the process operation, and implement the applicable management practices in paragraph (g) of this section, as practicable.
- (d) If you own or operate an affected new or existing electroplating tank that uses cyanide in the plating bath, operates at pH greater than or equal to 12, and contains one or more of the plating and polishing metal HAP, you must comply with the requirements in paragraphs (d)(1) and (2) of this section:
- (1) You must measure and record the pH of the bath upon startup of the bath, as defined in §63.11511, "What definitions apply to this subpart?" No additional pH measurements are required.
- (2) You must implement the applicable management practices in paragraph (g) of this section, as practicable.
- (e) If you own or operate an affected new or existing dry mechanical polishing machine that emits one or more of the plating and polishing metal HAP, you must operate a capture system that captures particulate matter (PM) emissions from the dry mechanical polishing process and transports the emissions to a cartridge, fabric, or high efficiency particulate air (HEPA) filter, according to paragraphs (e)(1) and (2) of this section.
- (1) You must operate all capture and control devices according to the manufacturer's specifications and operating instructions.
- (2) You must keep the manufacturer's specifications and operating instructions at the facility at all times in a location where they can be easily accessed by the operators.
- (f) If you own or operate an affected thermal spraying operation that applies one or more of the plating and polishing metal HAP, you must meet the applicable requirements specified in paragraphs

- (f)(1) through (3) of this section, and the applicable management practices in paragraph (g) of this section.
- (1) For existing permanent thermal spraying operations, you must operate a capture system that collects PM emissions from the thermal spraying process and transports the emissions to a water curtain, fabric filter, cartridge, or HEPA filter, according to paragraphs (f)(1)(i) and (ii) of this section.
- (2) For new permanent thermal spraying operations, you must operate a capture system that collects PM emissions from the thermal spraying process and transports the emissions to a fabric, cartridge, or HEPA filter, according to paragraphs (f)(2)(i) and (ii) of this section.
- (3) For temporary thermal spraying operations, as defined in §63.11511 "What definitions apply to this subpart?", you must meet the applicable requirements specified in paragraphs (f)(3)(i) and (ii) of this section.
- (i) You must document the amount of time the thermal spraying occurs each day, and where it is conducted.
- (ii) You must implement the applicable management practices specified in paragraph (g) of this section, as practicable.
- (g) If you own or operate an affected new or existing plating and polishing process unit that contains, applies, or emits one or more of the plating and polishing metal HAP, you must implement the applicable management practices in paragraphs (g)(1) through (12) of this section, as practicable.
- (1) Minimize bath agitation when removing any parts processed in the tank, as practicable except when necessary to meet part quality requirements.
- (2) Maximize the draining of bath solution back into the tank, as practicable, by extending drip time when removing parts from the tank; using drain boards (also known as drip shields); or withdrawing parts slowly from the tank, as practicable.
- (3) Optimize the design of barrels, racks, and parts to minimize dragout of bath solution (such as by using slotted barrels and tilted racks, or by designing parts with flow-through holes to allow the tank solution to drip back into the tank), as practicable.
  - (4) Use tank covers, if already owned and available at the facility, whenever practicable.
- (5) Minimize or reduce heating of process tanks, as practicable (e.g., when doing so would not interrupt production or adversely affect part quality).
- (6) Perform regular repair, maintenance, and preventive maintenance of racks, barrels, and other equipment associated with affected sources, as practicable.
- (7) Minimize bath contamination, such as through the prevention or quick recovery of dropped parts, use of distilled/de-ionized water, water filtration, pre-cleaning of parts to be plated, and thorough rinsing of pre-treated parts to be plated, as practicable.
- (8) Maintain quality control of chemicals, and chemical and other bath ingredient concentrations in the tanks, as practicable.
- (9) Perform general good housekeeping, such as regular sweeping or vacuuming, if needed, and periodic washdowns, as practicable.

- (10) Minimize spills and overflow of tanks, as practicable.
- (11) Use squeegee rolls in continuous or reel-to-reel plating tanks, as practicable.
- (12) Perform regular inspections to identify leaks and other opportunities for pollution prevention.

[73 FR 37741, July 1, 2008, as amended at 76 FR 57920, Sept. 19, 2011]

### **≜** Back to Top

## §63.11508 What are my compliance requirements?

- (a) If you own or operate an affected source, you must submit a Notification of Compliance Status in accordance with §63.11509(b) of "What are my notification, reporting, and recordkeeping requirements?"
- (b) You must be in compliance with the applicable management practices and equipment standards in this subpart at all times.
- (c) To demonstrate initial compliance, you must satisfy the requirements specified in paragraphs (c)(1) through (11) of this section.
- (1) If you own or operate an affected electroplating, electroforming, or electropolishing tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(a), "What are my standards and management practices?", and you use a wetting agent/fume suppressant to comply with this subpart, you must demonstrate initial compliance according to paragraphs (c)(1)(i) through (iv) of this section.
- (i) You must add wetting agent/fume suppressant to the bath of each affected tank according to manufacturer's specifications and instructions.
- (ii) You must state in your Notification of Compliance Status that you add wetting agent/fume suppressant to the bath according to manufacturer's specifications and instructions.
- (iii) You must implement the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.
- (iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.
- (2) If you own or operate an affected electroplating, electroforming, or electropolishing tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(a), "What are my standards and management practices?", and you use a control system, as defined in §63.11511, "What definitions apply to this subpart?", to comply with this subpart, you must demonstrate initial compliance according to paragraphs (c)(2)(i) through (v) of this section.
- (i) You must install a control system designed to capture emissions from the affected tank and exhaust them to a composite mesh pad, packed bed scrubber, or mesh pad mist eliminator.
- (ii) You must state in your Notification of Compliance Status that you have installed the control system according to the manufacturer's specifications and instructions.

- (iii) You must implement the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.
- (iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.
- (v) You must follow the manufacturer's specifications and operating instructions for the control systems at all times.
- (3) If you own or operate an affected batch electrolytic process tank, as defined in §63.11511, "What definitions apply to this subpart?" that contains one or more of the plating and polishing metal HAP and which is subject to the requirements in §63.11507(a), "What are my standards and management practices?" and you use a tank cover, as defined in §63.11511, to comply with §11507(a), (b) or (c) of this subpart, you must demonstrate initial compliance according to paragraphs (c)(3)(i) through (iv) of this section.
  - (i) You must install a tank cover on the affected tank.
- (ii) You must state in your Notification of Compliance Status that you operate the tank with the cover in place at least 95 percent of the electrolytic process operating time.
- (iii) You must implement the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.
- (iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.
- (4) If you own or operate an affected continuous electrolytic process tank, as defined in §63.11511, "What definitions apply to this subpart?" that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(a), "What are my standards and management practices?" and you cover the tank surface to comply with §11507(a), (b) or (c) of this subpart, you must demonstrate initial compliance according to paragraphs (c)(4)(i) through (iv) of this section.
  - (i) You must cover at least 75 percent of the surface area of the affected tank.
- (ii) You must state in your Notification of Compliance Status that you operate the tank with the surface cover in place whenever the continuous electrolytic process is in operation.
- (iii) You must implement the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.
- (iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.
- (5) If you own or operate an affected flash or short-term electroplating tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(b), "What are my standards and management practices?" and you comply with §11507(a), (b) or (c) of this subpart by limiting the plating time of the affected tank, you must demonstrate initial compliance according to paragraphs (c)(5)(i) through (iii) of this section.

- (i) You must state in your Notification of Compliance Status that you limit short-term or flash electroplating to no more than 1 cumulative hour per day, or 3 cumulative minutes per hour of plating time.
- (ii) You must implement the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.
- (iii) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.
- (6) If you own or operate an affected flash or short-term electroplating tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(b), "What are my standards and management practices?" and you comply with §11507(a), (b) or (c) of this subpart by operating the affected tank with a cover, you must demonstrate initial compliance according to paragraphs (c)(6)(i) through (iv) of this section.
  - (i) You must install a tank cover on the affected tank.
- (ii) You must state in your Notification of Compliance Status that you operate the tank with the cover in place at least 95 percent of the plating time.
- (iii) You must implement the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.
- (iv) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.
- (7) If you own or operate an affected tank that contains one or more of the plating and polishing metal HAP, uses cyanide in the bath, and is subject to the management practices specified in §63.11507(d), "What are my standards and management practices?", you must demonstrate initial compliance according to paragraphs (c)(7)(i) through (iii) of this section.
- (i) You must report in your Notification of Compliance Status the pH of the bath solution that was measured at startup, as defined in §63.11511, according to the requirements of §63.11507(d)(1).
- (ii) You must implement the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.
- (iii) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11490(g), "What are my standards and management practices?", as practicable.
- (8) If you own or operate an affected dry mechanical polishing operation that emits one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(e), "What are my standards and management practices?", you must demonstrate initial compliance according to paragraphs (c)(8)(i) through (iii) of this section.
- (i) You must install a control system that is designed to capture PM emissions from the polishing operation and exhaust them to a cartridge, fabric, or HEPA filter.

- (ii) You must state in your Notification of Compliance Status that you have installed the control system according to the manufacturer's specifications and instructions.
- (iii) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.
- (9) If you own or operate an existing affected permanent thermal spraying operation that applies one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(f)(1), "What are my standards and management practices?", you must demonstrate initial compliance according to paragraphs (c)(9)(i) through (iii) of this section.
- (i) You must install a control system that is designed to capture PM emissions from the thermal spraying operation and exhaust them to a water curtain, or a cartridge, fabric, or HEPA filter.
- (ii) You must state in your Notification of Compliance Status that you have installed and are operating the control system according to the manufacturer's specifications and instructions.
- (iii) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.
- (10) If you own or operate a new affected permanent thermal spraying operation that applies one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(f)(2), "What are my standards and management practices?", you must demonstrate initial compliance according to paragraphs (c)(10)(i) through (iii) of this section.
- (i) You must install and operate a control system that is designed to capture PM emissions from the thermal spraying operation and exhaust them to a cartridge, fabric, or HEPA filter.
- (ii) You must state in your Notification of Compliance Status that you have installed and operate the control system according to the manufacturer's specifications and instructions.
- (iii) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.
- (11) If you own or operate an affected temporary thermal spraying operation that applies one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(f)(3), "What are my standards and management practices?", you must demonstrate initial compliance according to paragraphs (c)(11)(i) and (ii) of this section.
- (i) You must implement the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.
- (ii) You must state in your Notification of Compliance Status that you have implemented the applicable management practices specified in §63.11507(g), "What are my standards and management practices?", as practicable.
- (d) To demonstrate continuous compliance with the applicable management practices and equipment standards specified in this subpart, you must satisfy the requirements specified in paragraphs (d)(1) through (8) of this section.
- (1) You must always operate and maintain your affected source, including air pollution control equipment.

- (2) You must prepare an annual compliance certification according to the requirements specified in §63.11509(c), "Notification, Reporting, and Recordkeeping," and keep it in a readily-accessible location for inspector review.
- (3) If you own or operate an affected electroplating, electroforming, or electropolishing tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(a), "What are my standards and management practices?", and you use a wetting agent/fume suppressant to comply with this subpart, you must demonstrate continuous compliance according to paragraphs (d)(3)(i) through (iii) of this section.
- (i) You must record that you have added the wetting agent/fume suppressant to the tank bath in the original make-up of the tank.
- (ii) For tanks where the wetting agent/fume suppressant is a separate ingredient from the other tank additives, you must demonstrate continuous compliance according to paragraphs (d)(3)(ii) (A) and (B) this section.
- (A) You must add wetting agent/fume suppressant in proportion to the other bath chemistry ingredients that are added to replenish the tank bath, as in the original make-up of the tank; or in proportion such that the bath is brought back to the original make-up of the tank.
  - (B) You must record each addition of wetting agent/fume suppressant to the tank bath.
- (iii) You must state in your annual compliance certification that you have added wetting agent/fume suppressant to the bath according to the manufacturer's specifications and instructions.
- (4) If you own or operate an affected electroplating, electroforming, or electropolishing tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(a), "What are my standards and management practices?", and you use a control system to comply with this subpart; an affected dry mechanical polishing operation that is subject to §63.11507(e); or an affected thermal spraying operation that is subject to §63.11507(f)(1) or (2), you must demonstrate continuous compliance according to paragraphs (d)(4)(i) through (v) of this section.
- (i) You must operate and maintain the control system according to the manufacturer's specifications and instructions.
- (ii) Following any malfunction or failure of the capture or control devices to operate properly, you must take immediate corrective action to return the equipment to normal operation according to the manufacturer's specifications and operating instructions.
- (iii) You must state in your annual certification that you have operated and maintained the control system according to the manufacturer's specifications and instructions.
- (iv) You must record the results of all control system inspections, deviations from proper operation, and any corrective action taken.
- (v) You must keep the manufacturer's operating instructions at the facility at all times in a location where they can be easily accessed by the operators.
- (5) If you own or operate an affected flash or short-term electroplating tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(b), "What are my standards and management practices?" and you comply with §11507(a), (b) or (c) of this subpart

by limiting the plating time for the affected tank, you must demonstrate continuous compliance according to paragraphs (d)(5)(i) through (iii) of this section.

- (i) You must limit short-term or flash electroplating to no more than 1 cumulative hour per day or 3 cumulative minutes per hour of plating time.
  - (ii) You must record the times that the affected tank is operated each day.
- (iii) You must state in your annual compliance certification that you have limited short-term or flash electroplating to no more than 1 cumulative hour per day or 3 cumulative minutes per hour of plating time.
- (6) If you own or operate an affected batch electrolytic process tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements of §63.11507(a), "What are my standards and management practices?" or a flash or short-term electroplating tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(b), and you comply with §11507(a), (b) or (c) of this section by operating the affected tank with a cover, you must demonstrate continuous compliance according to paragraphs (d)(6)(i) through (iii) of this section.
- (i) You must operate the tank with the cover in place at least 95 percent of the electrolytic process operating time.
- (ii) You must record the times that the tank is operated and the times that the tank is covered on a daily basis.
- (iii) You must state in your annual certification that you have operated the tank with the cover in place at least 95 percent of the electrolytic process time.
- (7) If you own or operate an affected continuous electrolytic process tank that contains one or more of the plating and polishing metal HAP and is subject to the requirements in §63.11507(a), "What are my standards and management practices?" and you comply with §11507(a), (b) or (c) of this subpart by operating the affected tank with a cover, you must demonstrate continuous compliance according to paragraphs (d)(7)(i) and (ii) of this section.
- (i) You must operate the tank with at least 75 percent of the surface covered during all periods of electrolytic process operation.
- (ii) You must state in your annual certification that you have operated the tank with 75 percent of the surface covered during all periods of electrolytic process operation.
- (8) If you own or operate an affected tank or other operation that is subject to the management practices specified in §63.11507(g), "What are my standards and management practices?", you must demonstrate continuous compliance according to paragraphs (d)(8)(i) and (ii) of this section.
- (i) You must implement the applicable management practices during all times that the affected tank or process is in operation.
- (ii) You must state in your annual compliance certification that you have implemented the applicable management practices, as practicable.

[73 FR 37741, July 1, 2008, as amended at 76 FR 57920, Sept. 19, 2011]

**≜** Back to Top

# §63.11509 What are my notification, reporting, and recordkeeping requirements?

- (a) If you own or operate an affected source, as defined in §63.11505(a), "What parts of my plant does this subpart cover?", you must submit an Initial Notification in accordance with paragraphs (a)(1) through (4) of this section by the dates specified.
- (1) The Initial Notification must include the information specified in §63.9(b)(2)(i) through (iv) of the General Provisions of this part.
- (2) The Initial Notification must include a description of the compliance method (e.g., use of wetting agent/fume suppressant) for each affected source.
- (3) If you start up your affected source on or before July 1, 2008, you must submit an Initial Notification not later than 120 calendar days after July 1, 2008.
- (4) If you startup your new affected source after July 1, 2008, you must submit an Initial Notification when you become subject to this subpart.
- (b) If you own or operate an affected source, you must submit a Notification of Compliance Status in accordance with paragraphs (b)(1) through (3) of this section.
- (1) The Notification of Compliance Status must be submitted before the close of business on the compliance date specified in §63.11506, "What are my compliance dates?"
- (2) The Notification of Compliance Status must include the items specified in paragraphs (b)(2)(i) through (iv) of this section.
- (i) List of affected sources and the plating and polishing metal HAP used in, or emitted by, those sources.
  - (ii) Methods used to comply with the applicable management practices and equipment standards.
- (iii) Description of the capture and emission control systems used to comply with the applicable equipment standards.
- (iv) Statement by the owner or operator of the affected source as to whether the source is in compliance with the applicable standards or other requirements.
- (3) If a facility makes a change to any items in (b)(2)(i), iii, and (iv) of this section that does not result in a deviation, an amended Notification of Compliance Status should be submitted within 30 days of the change.
- (c) If you own or operate an affected source, you must prepare an annual certification of compliance report according to paragraphs (c)(1) through (7) of this section. These reports do not need to be submitted unless a deviation from the requirements of this subpart has occurred during the reporting year, in which case, the annual compliance report must be submitted along with the deviation report.
- (1) If you own or operate an affected electroplating, electroforming, or electropolishing tank that is subject to the requirements in §63.11507(a)(1), "What are my standards and management practices?", you must state in your annual compliance certification that you have added wetting agent/fume suppressant to the bath according to the manufacturer's specifications and instructions.

- (2) If you own or operate any one of the affected sources listed in paragraphs (c)(2)(i) through (iii) of this section, you must state in your annual certification that you have operated and maintained the control system according to the manufacturer's specifications and instructions.
- (i) Electroplating, electroforming, or electropolishing tank that is subject to the requirements in §63.11507(a), "What are my standards and management practices?", and you use a control system to comply with this subpart;
  - (ii) Dry mechanical polishing operation that is subject to §63.11507(e); or
  - (iii) Permanent thermal spraying operation that is subject to §63.11507(f)(1) or (2).
- (3) If you own or operate an affected flash or short-term electroplating tank that is subject to the requirements in §63.11507(b), "What are my standards and management practices?" and you comply with §11507(a), (b) or (c) of this subpart by limiting the plating time of the affected tank, you must state in your annual compliance certification that you have limited short-term or flash electroplating to no more than 1 cumulative hour per day or 3 cumulative minutes per hour of plating time.
- (4) If you own or operate an affected batch electrolytic process tank that is subject to the requirements of §63.11507(a) or a flash or short-term electroplating tank that is subject to the requirements in §63.11507(b), "What are my standards and management practices?" and you comply with §11507(a), (b) or (c) of this subpart by operating the affected tank with a cover, you must state in your annual certification that you have operated the tank with the cover in place at least 95 percent of the electrolytic process time.
- (5) If you own or operate an affected continuous electrolytic process tank that is subject to the requirements of §63.11507(a), "What are my standards and management practices?" and you comply with §11507(a), (b) or (c) of this subpart by operating the affected tank with a cover, you must state in your annual certification that you have covered at least 75 percent of the surface area of the tank during all periods of electrolytic process operation.
- (6) If you own or operate an affected tank or other affected plating and polishing operation that is subject to the management practices specified in §63.11507(g), "What are my standards and management practices?" you must state in your annual compliance certification that you have implemented the applicable management practices, as practicable.
- (7) Each annual compliance report must be prepared no later than January 31 of the year immediately following the reporting period and kept in a readily-accessible location for inspector review. If a deviation has occurred during the year, each annual compliance report must be submitted along with the deviation report, and postmarked or delivered no later than January 31 of the year immediately following the reporting period.
- (d) If you own or operate an affected source, and any deviations from the compliance requirements specified in this subpart occurred during the year, you must report the deviations, along with the corrective action taken, and submit this report to the delegated authority.
  - (e) You must keep the records specified in paragraphs (e)(1) through (3) of this section.
- (1) A copy of any Initial Notification and Notification of Compliance Status that you submitted and all documentation supporting those notifications.
- (2) The records specified in §63.10(b)(2)(i) through (iii) and (xiv) of the General Provisions of this part.

- (3) The records required to show continuous compliance with each management practice and equipment standard that applies to you, as specified in §63.11508(d), "What are my compliance requirements?"
- (f) You must keep each record for a minimum of 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. You must keep each record onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1) of the General Provisions to part 63. You may keep the records offsite for the remaining 3 years.

[73 FR 37741, July 1, 2008, as amended at 76 FR 57920, Sept. 19, 2011]

**≜** Back to Top

#### OTHER REQUIREMENTS AND INFORMATION

**≜** Back to Top

# §63.11510 What General Provisions apply to this subpart?

If you own or operate a new or existing affected source, you must comply with the requirements of the General Provisions (40 CFR part 63, subpart A) according to Table 1 of this subpart.

**≜** Back to Top

# §63.11511 What definitions apply to this subpart?

Terms used in this subpart are defined in this section.

Batch electrolytic process tank means a tank used for an electrolytic process in which a part or group of parts, typically mounted on racks or placed in barrels, is placed in the tank and immersed in an electrolytic process solution as a single unit (i.e., as a batch) for a predetermined period of time, during which none of the parts are removed from the tank and no other parts are added to the tank, and after which the part or parts are removed from the tank as a unit.

Bath means the liquid contents of a tank, as defined in this section, which is used for electroplating, electropolishing, or other metal coating processes at a plating and polishing facility.

Bench-scale means any operation that is small enough to be performed on a bench, table, or similar structure so that the equipment is not directly contacting the floor.

Capture system means the collection of components used to capture gases and fumes released from one or more emissions points and then convey the captured gas stream to a control device, as part of a complete control system. A capture system may include, but is not limited to, the following components as applicable to a given capture system design: duct intake devices, hoods, enclosures, ductwork, dampers, manifolds, plenums, and fans.

Cartridge filter means a type of control device that uses perforated metal cartridges containing a pleated paper or non-woven fibrous filter media to remove PM from a gas stream by sieving and other mechanisms. Cartridge filters can be designed with single use cartridges, which are removed and

disposed after reaching capacity, or continuous use cartridges, which typically are cleaned by means of a pulse-jet mechanism.

Composite mesh pad means a type of control device similar to a mesh pad mist eliminator except that the device is designed with multiple pads in series that are woven with layers of material with varying fiber diameters, which produce a coalescing effect on the droplets or PM that impinge upon the pads.

Continuous electrolytic process tank means a tank that uses an electrolytic process and in which a continuous metal strip or other type of continuous substrate is fed into and removed from the tank continuously. This process is also called reel-to-reel electrolytic plating.

Control device means equipment that is part of a control system that collects and/or reduces the quantity of a pollutant that is emitted to the air. The control device receives emissions that are transported from the process by the capture system.

Control system means the combination of a capture system and a control device. The capture system is designed to collect and transport air emissions from the affected source to the control device. The overall control efficiency of any control system is a combination of the ability of the system to capture the air emissions (i.e., the capture efficiency) and the control device efficiency. Consequently, it is important to achieve good capture to ensure good overall control efficiency. Capture devices that are known to provide high capture efficiencies include hoods, enclosures, or any other duct intake devices with ductwork, dampers, manifolds, plenums, or fans.

Conversion coatings are coatings that form a hard metal finish on an object when the object is submerged in a tank bath or solution that contains the conversion coatings. Conversion coatings for the purposes of this rule include coatings composed of chromium, as well as the other plating and polishing metal HAP, where no electrical current is used.

Cyanide plating means plating processes performed in tanks that use cyanide as a major bath ingredient and that operate at pH of 12 or more, and use or emit any of the plating and polishing metal HAP, as defined in this section. Electroplating and electroforming are performed with or without cyanide. The cyanide in the bath works to dissolve the HAP metal added as a cyanide compound (e.g., cadmium cyanide) and creates free cyanide in solution, which helps to corrode the anode. These tanks are self-regulating to a pH of 12 due to the caustic nature of the cyanide bath chemistry. The cyanide in the bath is a major bath constituent and not an additive; however, the self-regulating chemistry of the bath causes the bath to act as if wetting agents/fume suppressants are being used and to ensure an optimum plating process. All cyanide plating baths at pH greater than or equal to 12 have cyanide-metal complexes in solution. The metal HAP to be plated is not emitted because it is either bound in the metal-cyanide complex or reduced at the cathode to elemental metal, and plated onto the immersed parts. Cyanide baths are not intentionally operated at pH less 12 since unfavorable plating conditions would occur in the tank, among other negative effects.

Deviation means any instance in which an affected source or an owner or operator of such an affected source:

- (1) Fails to meet any requirement or obligation established by this rule including, but not limited to, any equipment standard (including emissions and operating limits), management practice, or operation and maintenance requirement;
- (2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this rule and that is included in the operating permit for any affected facility required to obtain such a permit; or

(3) Fails to meet any equipment standard (including emission and operating limits), management standard, or operation and maintenance requirement in this rule during startup, shutdown, or malfunction.

Dry mechanical polishing means a process used for removing defects from and smoothing the surface of finished metals and formed products after plating or thermal spraying with any of the plating and polishing metal HAP, as defined in this section, using automatic or manually-operated machines that have hard-faced abrasive wheels or belts and where no liquids or fluids are used to trap the removed metal particles. The affected process does not include polishing with use of pastes, liquids, lubricants, or any other added materials.

Electroforming means an electrolytic process using or emitting any of the plating and polishing metal HAP, as defined in this section, that is used for fabricating metal parts. This process is essentially the same as electroplating except that the plated substrate (mandrel) is removed, leaving only the metal plate. In electroforming, the metal plate is self-supporting and generally thicker than in electroplating.

Electroless plating means a non-electrolytic process that uses or emits any of the plating and polishing metal HAP, as defined in this section, in which metallic ions in a plating bath or solution are reduced to form a metal coating at the surface of a catalytic substrate without the use of external electrical energy. Electroless plating is also called non-electrolytic plating. Examples include, but are not limited to, chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating.

Electrolytic plating processes means electroplating and electroforming that use or emit any of the plating and polishing metal HAP, as defined in this section, where metallic ions in a plating bath or solution are reduced to form a metal coating on the surface of parts and products using electrical energy.

Electroplating means an electrolytic process that uses or emits any of the plating and polishing metal HAP, as defined in this section, in which metal ions in solution are reduced onto the surface of the work piece (the cathode) via an electrical current. The metal ions in the solution are usually replenished by the dissolution of metal from solid metal anodes fabricated of the same metal being plated, or by direct replenishment of the solution with metal salts or oxides; electroplating is also called electrolytic plating.

Electropolishing means an electrolytic process performed in a tank after plating that uses or emits any of the plating and polishing metal HAP, as defined in this section, in which a work piece is attached to an anode immersed in a bath, and the metal substrate is dissolved electrolytically, thereby removing the surface contaminant; electropolishing is also called electrolytic polishing. For the purposes of this subpart, electropolishing does not include bench-scale operations.

Fabric filter means a type of control device used for collecting PM by filtering a process exhaust stream through a filter or filter media. A fabric filter is also known as a baghouse.

Filters, for the purposes of this part, include cartridge, fabric, or HEPA filters, as defined in this section.

Flash electroplating means an electrolytic process performed in a tank that uses or emits any of the plating and polishing metal HAP, as defined in this section, and that is used no more than 3 cumulative minutes per hour or no more than 1 cumulative hour per day.

General Provisions of this part (40 CFR part 63, subpart A) means the section of the Code of Federal Regulations (CFR) that addresses air pollution rules that apply to all HAP sources addressed in part 63, which includes the National Emission Standards for Hazardous Air Pollutants (NESHAP).

HAP means hazardous air pollutant as defined from the list of 188 chemicals and compounds specified in the CAA Amendments of 1990; HAP are also called "air toxics." The five plating and polishing metal HAP, as defined in this section, are on this list of 188 chemicals.

High efficiency particulate air (HEPA) filter means a type of control device that uses a filter composed of a mat of randomly arranged fibers and is designed to remove at least 99.97 percent of airborne particles that are 0.3 micrometers or larger in diameter.

*Maintenance* is any process at a plating and polishing facility that is performed to keep the process equipment or the facility operating properly and is not performed on items to be sold as products.

*Major facility for HAP* is any facility that emits greater than 10 tpy of any HAP, or that emits a combined total of all HAP of over 25 tpy, where the HAP used to determine the total facility emissions are not restricted to only plating and polishing metal HAP or from only plating and polishing operations.

Mesh pad mist eliminator means a type of control device, consisting of layers of interlocked filaments densely packed between two supporting grids that remove liquid droplets and PM from the gas stream through inertial impaction and direct interception.

Metal coating operation means any process performed either in a tank that contains liquids or as part of a thermal spraying operation, that applies one or more plating and polishing metal HAP, as defined in this section, to the surface of parts and products used in manufacturing. These processes include but are not limited to: non-chromium electroplating; electroforming; electropolishing; non-electrolytic metal coating processes, such as chromate conversion coating, electroless nickel plating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating; and thermal or flame spraying.

Metal HAP content of material used in plating and polishing is the HAP content as determined from an analysis or engineering estimate of the HAP contents of the tank bath or solution, in the case of plating, metal coating, or electropolishing; or the HAP content of the metal coating being applied in the case of thermal spraying. Safety data sheet (SDS) information may be used in lieu of testing or engineering estimates but is not required to be used.

*New source* means any affected source for which you commenced construction or reconstruction after March 14, 2008.

Non-cyanide electrolytic plating and electropolishing processes means electroplating, electroforming, and electropolishing that uses or emits any of the plating and polishing metal HAP, as defined in this section, performed without cyanide in the tank. These processes do not use cyanide in the tank and operate at pH values less than 12. These processes use electricity and add or remove metals such as metal HAP from parts and products used in manufacturing. Both electroplating and electroforming can be performed with cyanide as well.

Non-electrolytic plating means a process that uses or emits any of the plating and polishing metal HAP, as defined in this section, in which metallic ions in a plating bath or solution are reduced to form a metal coating at the surface of a catalytic substrate without the use of external electrical energy. Non-electrolytic plating is also called electroless plating. Examples include chromate conversion coating, nickel acetate sealing, electroless nickel plating, sodium dichromate sealing, and manganese phosphate coating.

Packed-bed scrubber means a type of control device that includes a single or double packed bed that contains packing media on which PM and droplets impinge and are removed from the gas stream. The packed-bed section of the scrubber is followed by a mist eliminator to remove any water entrained from the packed-bed section.

Plating and polishing facility means a facility engaged in one or more of the following processes that uses or emits any of the plating and polishing metal HAP, as defined in this section: electroplating processes other than chromium electroplating (*i.e.*, non-chromium electroplating); electroless plating; other non-electrolytic metal coating processes performed in a tank, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating; thermal spraying; and the dry mechanical polishing of finished metals and formed products after plating or thermal spraying. Plating is performed in a tank or thermally sprayed so that a metal coating is irreversibly applied to an object. Plating and polishing does not include any bench-scale processes.

Plating and polishing metal HAP means any compound of any of the following metals: cadmium, chromium, lead, manganese, and nickel, or any of these metals in the elemental form, with the exception of lead. Any material that does not contain cadmium, chromium, lead, or nickel in amounts greater than or equal to 0.1 percent by weight (as the metal), and does not contain manganese in amounts greater than or equal to 1.0 percent by weight (as the metal), as reported on the Material Safety Data Sheet for the material, is not considered to be a plating and polishing metal HAP.

Plating and polishing process tanks means any tank in which a process is performed at an affected plating and polishing facility that uses or has the potential to emit any of the plating and polishing metal HAP, as defined in this section. The processes performed in plating and polishing tanks include the following: electroplating processes other than chromium electroplating (*i.e.*, non-chromium electroplating) performed in a tank; electroless plating; and non-electrolytic metal coating processes, such as chromate conversion coating, nickel acetate sealing, sodium dichromate sealing, and manganese phosphate coating; and electropolishing. This term does not include tanks containing solutions that are used to clean, rinse or wash parts prior to placing the parts in a plating and polishing process tank, or subsequent to removing the parts from a plating and polishing process tank. This term also does not include any bench-scale operations.

PM means solid or particulate matter that is emitted into the air.

Repair means any process used to return a finished object or tool back to its original function or shape.

Research and development process unit means any process unit that is used for conducting research and development for new processes and products and is not used to manufacture products for commercial sale, except in a *de minimis* manner.

Short-term plating means an electroplating process that uses or emits any of the plating and polishing metal HAP, as defined in this section, and that is used no more than 3 cumulative minutes per hour or 1 hour cumulative per day.

Startup of the tank bath is when the components or relative proportions of the various components in the bath have been altered from the most recent operating period. Startup of the bath does not include events where only the tank's heating or agitation and other mechanical operations are turned back on after being turned off for a period of time.

*Tank cover* for batch process units means a solid structure made of an impervious material that is designed to cover the entire open surface of a tank or process unit that is used for plating or other metal coating processes.

Tank cover for continuous process units, means a solid structure or combination of structures, made of an impervious material that is designed to cover at least 75 percent of the open surface of the tank or process unit that is used for continuous plating or other continuous metal coating processes.

Temporary thermal spraying means a thermal spraying operation that uses or emits any of the plating and polishing metal HAP, as defined in this section, and that lasts no more than 1 hour in duration during any one day and is conducted in situ. Thermal spraying that is conducted in a dedicated thermal spray booth or structure is not considered to be temporary thermal spraying.

Thermal spraying (also referred to as metal spraying or flame spraying) is a process that uses or emits any of the plating and polishing metal HAP, as defined in this section, in which a metallic coating is applied by projecting heated, molten, or semi-molten metal particles onto a substrate. Commonly-used thermal spraying methods include high velocity oxy-fuel (HVOF) spraying, flame spraying, electric arc spraying, plasma arc spraying, and detonation gun spraying. This operation does not include spray painting at ambient temperatures.

*Water curtain* means a type of control device that draws the exhaust stream through a continuous curtain of moving water to scrub out suspended PM.

Wetting agent/fume suppressant means any chemical agent that reduces or suppresses fumes or mists from a plating and polishing tank by reducing the surface tension of the tank bath.

[73 FR 37741, July 1, 2008, as amended at 76 FR 57921, Sept. 19, 2011]

**≜** Back to Top

## §63.11512 Who implements and enforces this subpart?

- (a) This subpart can be implemented and enforced by EPA or a delegated authority such as your State, local, or tribal agency. If the EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency, in addition to 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 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the EPA Administrator and are not transferred to the State, local, or tribal agency.
- (c) The authorities that cannot be delegated to State, local, or tribal agencies are specified in paragraphs (c)(1) through (5) of this section.
- (1) Approval of an alternative non-opacity emissions standard under 40 CFR 63.6(g), of the General Provisions of this part.
- (2) Approval of an alternative opacity emissions standard under §63.6(h)(9), of the General Provisions of this part.
- (3) Approval of a major change to test methods under §63.7(e)(2)(ii) and (f), of the General Provisions of this part. A "major change to test method" is defined in §63.90.
- (4) Approval of a major change to monitoring under §63.8(f), of the General Provisions of this part. A "major change to monitoring" is defined in §63.90.
- (5) Approval of a major change to recordkeeping and reporting under §63.10(f), of the General Provisions of this part. A "major change to recordkeeping/reporting" is defined in §63.90.

**≜** Back to Top

# §63.11513 [Reserved]

**≜** Back to Top

# Table 1 to Subpart WWWWWW of Part 63—Applicability of General Provisions to Plating and Polishing Area Sources

As required in §63.11510, "What General Provisions apply to this subpart?", you must meet each requirement in the following table that applies to you.

Citation	Subject		
63.1 <sup>1</sup>	Applicability.		
63.2	Definitions.		
63.3	Units and abbreviations.		
63.4	Prohibited activities.		
63.6(a), (b)(1)-(b)(5), (c)(1), (c)(2), (c)(5), and (j)	Compliance with standards and maintenance requirements.		
63.10(a), (b)(1), (b)(2)(i)-(iii), (xiv), (b)(3), (d)(1), (f)	Recordkeeping and reporting.		
63.12	State authority and delegations.		
63.13	Addresses of State air pollution control agencies and EPA regional offices.		
63.14	Incorporation by reference.		
63.15	Availability of information and confidentiality.		

<sup>&</sup>lt;sup>1</sup>Section 63.11505(e), "What parts of my plant does this subpart cover?", exempts affected sources from the obligation to obtain title V operating permits.

[73 FR 37741, July 1, 2008, as amended at 76 FR 57922, Sept. 19, 2011]

**≜** Back to Top

# **CERTIFICATE OF SERVICE**

I, Cynthia Hook, hereby certify that a copy of this permit has been mailed by first class mail to
Dassault Falcon Jet Corp., 3801 East 10th Street, Little Rock, AR, 72202, on this  day of
Cynthia Hook, ASIII, Air Division