

# DEPARTMENT OF ENVIRONMENTAL CONSERVATION

## AIR QUALITY OPERATING PERMIT

Permit No. AQ0264TVP03

Issue Date: [Public Comment - March 26, 2026]

Expiration Date: [Five Years]

The Alaska Department of Environmental Conservation, under the authority of AS 46.14 and 18 AAC 50, issues an operating permit to the Permittee, **United States Air Force**, for the operation of the **Eielson Air Force Base**.

This permit satisfies the obligation of the owner and operator to obtain an operating permit as set out in AS 46.14.130(b).

As set out in AS 46.14.120(c), the Permittee shall comply with the terms and conditions of this operating permit.

Citations listed herein are contained within the effective version of 18 AAC 50 at permit issuance. All federal regulation citations are from those sections adopted by reference in this version of regulation in 18 AAC 50.040 unless otherwise specified.

All currently applicable stationary source-specific terms and conditions of Air Quality Control Permit to Operate No. 9331-AA001 Amendment #2, and Minor Permit Nos. AQ0264MSS05 and AQ0264MSS07 have been incorporated into this operating permit.

Upon effective date of this permit, Operating Permit No. AQ0264TVP02 Revision 05 expires.

This Operating Permit becomes effective <insert date—30 days after issue date>.

---

James R. Plosay, Manager  
Air Permits Program

## Table of Contents

	Abbreviations and Acronyms .....	iv
Section 1.	Stationary Source Information.....	1
	Identification .....	1
Section 2.	Emissions Unit Inventory and Description .....	2
Section 3.	State Requirements .....	9
	Visible Emissions Standard .....	9
	Visible Emissions Monitoring, Recordkeeping, and Reporting (MR&R).....	10
	Particulate Matter (PM) Emissions Standard.....	17
	PM MR&R.....	18
	Sulfur Compound Emissions Standard .....	21
	Sulfur Compound MR&R.....	22
	Preconstruction Permit Requirements.....	23
	Insignificant Emissions Units .....	32
Section 4.	Standard Operating Permit Conditions for Coal-Fired Boilers.....	34
Section 5.	Performance Audits for COMS .....	42
Section 6.	Federal Requirements .....	44
	40 C.F.R. Part 60 New Source Performance Standards (NSPS) .....	44
	NSPS Subpart A – General Provisions .....	44
	NSPS Subpart Db –Institutional Steam Generating Units, EU IDs 1A, 2A, 4A, 5A, and 6A.....	51
	NSPS Subpart Dc – Small Institutional Steam Generating Units, EU IDs 7, 8, 15, & 16.....	68
	NSPS Subpart IIII – Compression Ignition Internal Combustion Engines (CI ICE), EU IDs 19A, 24A, 28A, 30A, 32A, 33, 35A-37A, 50, 55A, 56, 63-70B, 72-75, 77- 80, 82-84, 116, 118A, 119, 124, 125, 129-132 .....	76
	NSPS Subpart OOO – Nonmetallic Mineral Processing Plants, EU IDs 86 – 103 ..	83
	NSPS Subpart Y – Coal Preparation and Processing Equipment, EU IDs 110A, 110B, 111 .....	86
	40 C.F.R. Part 63 National Emission Standards for Hazardous Air Pollutants (NESHAP) .....	94
	NESHAP Subpart A – General Provisions .....	94
	NESHAP Subpart ZZZZ – Reciprocating Internal Combustion Engines .....	94
	NESHAP Subpart CCCCCC – Gasoline Dispensing Facilities.....	105

	NESHAP Subpart JJJJJ – Industrial, Commercial, and Institutional (ICI) Boilers .....	107
	40 C.F.R. Part 61 National Emission Standards for Hazardous Air Pollutants (NESHAP) .....	124
	Subpart A – General Provisions & Subpart M – Asbestos .....	124
	40 C.F.R. Part 64 Compliance Assurance Monitoring (CAM) Requirements .....	124
	40 C.F.R. Part 82 Protection of Stratospheric Ozone .....	126
	NESHAP Applicability Determination Requirements.....	126
Section 7.	General Conditions .....	128
	Standard Terms and Conditions.....	128
	Open Burning Requirements.....	131
Section 8.	General Source Testing and Monitoring Requirements.....	132
Section 9.	General Recordkeeping and Reporting Requirements.....	135
	Recordkeeping Requirements .....	135
	Reporting Requirements .....	135
Section 10.	Permit Changes and Renewal .....	142
Section 11.	Compliance Requirements .....	144
	General Compliance Requirements .....	144
	Compliance Schedule.....	145
Section 12.	Permit As Shield from Inapplicable Requirements .....	146
Section 13.	Visible Emissions Forms .....	150
Section 14.	SO <sub>2</sub> Material Balance Calculation .....	152
Section 15.	Crusher Location Change Form.....	153
Section 16.	Notification Form.....	154

### Abbreviations and Acronyms

AAC.....	Alaska Administrative Code	MMscf.....	million standard cubic feet
ADEC .....	Alaska Department of Environmental Conservation	MR&R.....	monitoring, recordkeeping, and reporting
Administrator.....	EPA and the Department.	NAICS.....	North American Industrial Classification System
AOS .....	Air Online Services	NESHAP .....	National Emission Standards for Hazardous Air Pollutants [as contained in 40 C.F.R. 61 and 63]
AS .....	Alaska Statutes	NH <sub>3</sub> .....	ammonia
ASTM.....	American Society for Testing and Materials	NO <sub>x</sub> .....	nitrogen oxides
BACT .....	best available control technology	N <sub>2</sub> O .....	Nitrous Oxide
bhp.....	brake horsepower	NSPS.....	New Source Performance Standards [as contained in 40 C.F.R. 60]
CBI .....	confidential business information	O <sub>2</sub> .....	oxygen
CDX.....	Central Data Exchange	Pb .....	lead
CEDRI.....	Compliance and Emissions Data Reporting Interface	PM.....	particulate matter
C.F.R. ....	Code of Federal Regulations	PM <sub>10</sub> .....	particulate matter less than or equal to a nominal 10 microns in diameter
CAA or The Act .	Clean Air Act	PM <sub>2.5</sub> .....	particulate matter less than or equal to a nominal 2.5 microns in diameter
CO .....	carbon monoxide	ppm .....	parts per million
CO <sub>2e</sub> .....	CO <sub>2</sub> -equivalent	ppmv, ppmvd .....	parts per million by volume on a dry basis
CROMERR.....	Cross-Media Electronic Reporting Rule	psia .....	pounds per square inch (absolute)
Department .....	Alaska Department of Environmental Conservation	PSD .....	prevention of significant deterioration
dscf.....	dry standard cubic foot	PTE .....	potential to emit
EPA .....	US Environmental Protection Agency	SIC. ....	Standard Industrial Classification
ERT .....	Electronic Reporting Tool	SIP.....	State Implementation Plan
EU ID .....	emissions unit identification number	SPC .....	Standard Permit Condition
GAPCP .....	Good Air Pollution Control Practice	SO <sub>2</sub> .....	sulfur dioxide
GHG .....	Greenhouse Gas	tph .....	tons per hour
gr/dscf.....	grain per dry standard cubic foot (1 pound = 7000 grains)	TPY .....	tons per year
gph.....	gallons per hour	VOC .....	volatile organic compound [as defined in 40 C.F.R. 51.100(s)]
HAPs .....	hazardous air pollutants [as defined in AS 46.14.990]	VOL .....	volatile organic liquid [as defined in 40 C.F.R. 60.111b, Subpart Kb]
Hp .....	horsepower	vol% .....	volume percent
kPa.....	kiloPascals	wt% .....	weight percent
LAER.....	lowest achievable emission rate	wt%S <sub>fuel</sub> .....	weight percent of sulfur in fuel
MACT .....	maximum achievable control technology [as defined in 40 C.F.R. 63]		
MMBtu/hr.....	million British thermal units per hour		

**Section 1. Stationary Source Information**

**Identification**

Permittee:	<b>United States Air Force</b> 354 Broadway Street, Unit 19A Eielson Air Force Base, AK 99702-1899	
Stationary Source Name:	<b>Eielson Air Force Base</b>	
Location:	64° 40' 29.53" North; 147° 5' 34.08" West	
Physical Address:	354 Broadway Street, Unit 19A Eielson Air Force Base, AK 99702-1899	
Owner/Operator:	<b>United States Department of the Air Force</b> 354 Broadway Street, Unit 19A Eielson Air Force Base, AK 99702-1899	
Permittee's Responsible Official:	Matthew R. Johnston, Colonel / Commander, 354 <sup>th</sup> Fighter Wing (FW) 354 Broadway Street, Suite 19A Eielson Air Force Base, AK 99702-1899	
Designated Agent:	354 FW/JA 354 Broadway Street, Unit 2B Eielson Air Force Base, AK 99702-1899	
Stationary Source and Building Contact:	Jamie Martin, Air Quality Program Manager 354 CES/CEIE 2310 Central Avenue, Suite 100 Eielson Air Force Base, AK 99702-1899 (907) 377-1815 <a href="mailto:jamie.martin.8@us.af.mil">jamie.martin.8@us.af.mil</a>	
Fee Contact:	Jamie Martin, Air Quality Program Manager 354 CES/CEIE 2310 Central Avenue, Suite 100 Eielson Air Force Base, AK 99702-1899 (907) 377-1815 <a href="mailto:jamie.martin.8@us.af.mil">jamie.martin.8@us.af.mil</a>	
Permit Contact:	Jamie Martin, Air Quality Program Manager 354 CES/CEIE 2310 Central Avenue, Suite 100 Eielson Air Force Base, AK 99702-1899 (907) 377-1815 <a href="mailto:jamie.martin.8@us.af.mil">jamie.martin.8@us.af.mil</a>	
Process Description:	SIC Code	9711 - National Security
	NAICS Code:	928110 - National Security

[18 AAC 50.040(j)(3) & 50.326(a)]  
 [40 C.F.R. 71.5(c)(1) & (2)]

**Section 2. Emissions Unit Inventory and Description**

Emissions units (EUs) listed in Table A have specific monitoring, recordkeeping, or reporting conditions in this permit. Emissions unit descriptions and ratings are given for identification purposes only, unless noted elsewhere in the permit.

**Table A - Emissions Unit Inventory**

EU ID	Emissions Unit Name	Emissions Unit Description	Rating/Size	Building Number	Install/Construction Date
<b>Coal-Fired Boilers</b>					
1	CH&PP Main Boiler #1	Springfield Boiler SN: HSB50480 A	132,000 lb steam/hr, 174 MMBtu/hr	6203	1952
1A	CH&PP Main Replacement Boiler #1A	TBD	132,000 lb steam/hr 174 MMBtu/hr	6203	TBD
2	CH&PP Main Boiler #2	Springfield Boiler SN: HSB50480 C	132,000 lb steam/hr, 174 MMBtu/hr	6203	1952
2A	CH&PP Main Replacement Boiler #2A	TBD	132,000 lb steam/hr, 174 MMBtu/hr	6203	TBD
3	CH&PP Main Boiler #3	Springfield Boiler SN: HSB50480 B	132,000 lb steam/hr, 174 MMBtu/hr	6203	1952
4	CH&PP Main Boiler #4	Springfield Boiler SN: HSB50480 D	132,000 lb steam/hr, 174 MMBtu/hr	6203	1952
4A	CH&PP Main Replacement Boiler #4A	TBD	132,000 lb steam/hr, 174 MMBtu/hr	6203	TBD
5A	CH&PP Main Replacement Boiler #5a	Indeck Keystone Energy Boiler SN: 2011-002	132,000 lb steam/hr, 174 MMBtu/hr	6203	Inst. 2016 Constr 2015
6A	CH&PP Main Replacement Boiler #6A	Indeck Keystone Energy Boiler SN: 2001-001	132,000 lb steam/hr, 174 MMBtu/hr	6203	2014 Constr 2013
<b>Liquid Fuel-Fired Boilers</b>					
7	Auxiliary Heating Plant Boiler #1	Cleaver Brooks D-68 Boiler	60.6 MMBtu/hr	3351	2002
8	Auxiliary Heating Plant Boiler #2	Cleaver Brooks D-68 Boiler	60.6 MMBtu/hr	3351	2002
9	Missile Storage Boiler #1	Cleaver Brooks CB-100-80 Boiler	3.3 MMBtu/hr	1316	1991
10	Missile Storage Boiler #2	Cleaver Brooks CB-100-70 Boiler	2.9 MMBtu/hr	1316	1993

EU ID	Emissions Unit Name	Emissions Unit Description	Rating/Size	Building Number	Install/Construction Date
11	Alert Hangar Boiler #1	Cleaver Brooks CB-100-150 Boiler	6.0 MMBtu/hr	1300	2008
12	Alert Hanger Boiler #2	Cleaver Brooks CB-100-150 Boiler	6.0 MMBtu/hr	1300	2008
13	Wastewater Treatment Boiler #1	Cleaver Brooks CBLE-100-2001-30HW Boiler	6.7 MMBtu/hr	2081	2012
14	Wastewater Treatment Boiler #2	Cleaver Brooks CBLE-100-2001-30HW Boiler	6.7 MMBtu/hr	2081	2012
15	Auxiliary Heating Plant II Boiler #1	TBD	98 MMBtu/hr	B1342	TBD
16	Auxiliary Heating Plant II Boiler #2	TBD	98 MMBtu/hr	B1342	TBD
<b>Propane-Fired Boilers</b>					
17	Corrosion Control Heater #1	Weather Rite MD-240	14.7 MMBtu/hr	1348	1987
18	Corrosion Control Heater #2	Weather Rite MD-240	14.7 MMBtu/hr	1348	1987
<b>Non-emergency Internal Combustion Engines (ICE)</b>					
19A	CH&PP Main Auxiliary Generator	Cummins QSK95-G9 SN 37285272	4,039 bhp	6203	Inst 11/23/24 Const 2021
20	CH&PP Auxiliary Generator #1	Cummins Onan KTTA50-G2 SN 33140317	2,200 bhp 1,500 kW	6203	1998
21	CH&PP Auxiliary Generator #2	Cummins Onan KTTA50-G2 SN 33140312	2,200 bhp 1,500 kW	6203	1998
22	CH&PP Auxiliary Generator #3	Cummins Onan KTTA50-G2 SN 33140322	2,220 bhp 1,500 kW	6203	1998
23A	CH&PP Auxiliary Generator #4	Cummins Onan KTTA50-G2 SN 33131285	1,855 bhp	6203	Inst 11/18/24 Const 1995
<b>Emergency Internal Combustion Engines (ICE)</b>					
24A	Wastewater Treatment Emergency Generator [R-13]	Cummins QSX15-G9 SN 80290304	755 bhp	2316	2021 Const 2020
25	Central Avenue (Clinic) Generator [R-23]	Cummins QSM11-G2 SN 35150886	470 bhp	3349	2006
26	Refueling Station Generator – Oscar Row [R-16]	Cummins Onan KTA38-G1 SN 97613-121	1,135 hp	1245	1994
28A	Alert Hangar Generator [R-25]	Cummins QSB5G13 SN 74731853	173 hp	1300	2022 Const 2020
29	Power Plant Fire Pump [P-21]	Caterpillar D3208 SN 03Z06180	196 hp	6203	1987
30A	Missile Maintenance Generator	Cummins Onan 6BTA5.9-G3 SN 46339016	207 bhp	1302	TBD

EU ID	Emissions Unit Name	Emissions Unit Description	Rating/Size	Building Number	Install/ Construction Date
31	Control Tower Generator [R-03]	Cummins Onan 6BTAA5.9 G-1 SN 46339712	207 bhp	1216	2005
32A	Telephone Exchange Generator [R-14]	Caterpillar C7.1 SN 45506018	229 bhp	3110	2024
33	Command Post Generator [R-02]	Cummins QSB5-G3 SN 46962129	145 bhp	3112	2009
34	Airfield Lighting Generator [R-01]	Cummins Onan QSM11-G2 SN 35087769	470 hp	1146	2003
35A	Fire Pump P-08 (Thunder Dome #1)	Cummins QSL9 Firewater Pump Engine SN 73418762	365 bhp	1142	2016 Const 2012
36A	Fire Pump P-09 (Thunder Dome #2)	Cummins QSL9 Firewater Pump Engine SN 73418764	365 bhp	1142	2015 Const 2012
37A	Fire Pump P-10 (Thunder Dome #3)	Cummins QSL9 Firewater Pump Engine SN 73418760	365 bhp	1142	2016 Const 2012
38	Fire Pump P-11 (F-16 Hangar Pump #1)	Cummins NT855-F3 Firewater Pump Engine SN 18109820	340 bhp	1310	1986
39	Fire Pump P-12 (F-16 Hangar Pump #2)	Cummins NT855-F3 Firewater Pump Engine SN 18109821	340 bhp	1310	1986
40	Fire Pump P-13 (F-16 Hangar Pump #3)	Cummins NT855-F3 Firewater Pump Engine SN 18109825	340 bhp	1310	1986
41	Fire Pump P-19 (Hog Pen A-10s)	Detroit Diesel DDFP-04AT 7088 Firewater Pump Engine SN 4A-288070	235 hp	1225	Inst 1994 Const 1994
43	Fire Pump P-06 – Fire Support	Caterpillar 3208 Firewater Pump Engine SN 90N70458	121 bhp	1250	1989
44	Fire Pump P-05 – Fire Support	Caterpillar 3208 Firewater Pump Engine SN 90N70449	121 bhp	1235	1990
45	Fire Pump P-01 – Fire Support	Caterpillar 3208 Firewater Pump Engine SN 90N70452	121 bhp	1118	1989
46	Taxi Way P-04 Fire Pump #3	Caterpillar 3208 Firewater Pump Engine SN 90N70460	121 bhp	1210	1989
47	Flightline P-03 Fire Pump #3	Caterpillar 3208 Firewater Pump Engine SN 90N70463	121 bhp	1170	1989
48	Fire Pump P-02	Caterpillar 3208 Firewater Pump Engine SN 90N70454	121 bhp	1139	1989
49	Communications Squadron Emergency Generator [R-10]	Cummins-Onan 6BT5.9-G6 SN 46302171	170 bhp	2268	2003
50	Water Treatment Plant Generator [R-35]	Cummins QSM11-G4 NR3 SN 35253797	470 bhp	3228	2012
51	Utilidor (Auxiliary Heat Plant) Emergency Generator [R-11]	Cummins-Onan KTA65306 SN 37201881	755 bhp	3351	2002

EU ID	Emissions Unit Name	Emissions Unit Description	Rating/Size	Building Number	Install/Construction Date
52	E-2 Complex Fuel Tank Emergency Generator [R-17]	Detroit Diesel R0837K36 SN 968830	765 bhp	6231	2002
53	Fuel Hydrant System Emergency Generator [R-15]	Caterpillar 3412 SN 3FZ02226	749 hp	1211	2002
54	Joint Mobility Complex (JMC) Emergency Generator [R-24]	Cummins QST30-G2NRI SN 37204892	1,200 hp	4370	2002
55A	North ILS Generator [R-07]	Cummins 4BT3.3-G5 SN 72055506	69 bhp	1103	2021 Const 2020
56	DET 460 Generator [R-04]	Cummins QSB5-G3-NR3 SN 46964574	145 bhp	1183	2010
59	New Security Forces Facility Generator [R-18]	Cummins NTA-855-G3 SN 30371641	535 hp	3134	2005
60	Fire Station No. 1 Generator [R-21]	Cummins 6BT5.9-G6 SN 46302244	170 hp	1206	2003
62	354 Wing MOC Generator [R-28]	Cummins 6BT5.9-G6 Diesel SN 46302331	170 hp	1347	2004
63	F-Well Pump [P-17]	Cummins QSB5.9-230HD SN 73073203	230 hp	3427	2010
64A	A Water Well Pump Generator [R-31]	Cummins QSB5-G3 NR3 SN 73353381	145 hp	3408	2012
64B	B Water Well Pump Generator	Cummins QSB5-G3 NR3 SN 73353386	145 bhp	3430	2018
65B	Aircraft Arrestor Engine NW	Deutz D2011L04i SN 11966836	64 bhp	1113	2025 Const 2016
66B	Aircraft Arrestor Engine NE	Deutz D2011L04i SN 12062787	64 bhp	1113	2025 Const 2016
67A	Aircraft Arrestor Engine ¾ W	Deutz D2011L04i SN 13388457	61 bhp	1119	2015 Const 2013
68A	Aircraft Arrestor Engine ¾ E	Deutz D2011L04i SN 11340562	61 bhp	1119	2015 Const 2012
69A	Aircraft Arrestor Engine SE	Deutz D2011L04i SN 12599304	64 hp	1265	2022 Const 2020
70B	Aircraft Arrestor Engine SW	Deutz D2011L04i SN 12599301	64 bhp	1265	2022 Const 2020
71	Loop Refueling (Type III Hydrant) Generator [R-36]	Cummins KTA19-G3 SN 37218566	685 hp	1308	2006
72	AH&P Plant II Generator	TBD	1,810 bhp	TBD	TBD

EU ID	Emissions Unit Name	Emissions Unit Description	Rating/Size	Building Number	Install/Construction Date
73	4 Bay Loop Hangar Emergency Generator [R-26]	Cummins QSB7-G3-NR3 SN 73056416	250 bhp	1335	2010
74	8 Bay Loop Hangar Emergency Generator [R-39]	Cummins QSL9-GN-NR3 SN 46355721	364 hp	1338	2010
75	Missile Maintenance Well Pump Emergency Generator [R-37]	Cummins 4BT3.9-G4 SN 46600983	99 hp	1301	2006 Const 2006
76	E-2 Farm Fire Pump Emergency Generator [P-25]	John Deere JU4HUF50 SN PE4045T282577	130 hp	6247	Mfg. 2003
77	Dining Facility Emergency Generator [R-27]	Cummins QSL9-G2 NR3 SN 73059990	364 bhp	2207	2010
78	Red Flag Emergency Generator [R-29]	Cummins QSB5-G3 NR3 SN 46925031	145 bhp	1141	2009
79	Tank E-6 Generator	Caterpillar C13	539 bhp	6250	TBD
80	Cooling Pond Generator [R-41]	Cummins QSX15-G9 SN 79397696	755 bhp	6207	2011
112	North Glideslope Generator [R-08]	Kubota V3300-BG-ET01 SN CA0228	36.5 hp	1110	2001
113	ASOS/GPS Generator [R-09]	Cummins Onan 4B3.9-G2 SN 46453162	68 bhp	1117	2005
114	Base Radio MARS Generator [R-30]	Cummins Onan B3.3-G1 SN 68013834	56 bhp	4308	2003
115	TACAN South Glideslope Generator [R-05]	Cummins Onan 4BT3.9-G4 SN 46388901	49 hp	1259	2005
116	Lift Station Generator [R-12]	Cummins Onan QSB5-G3 NR3 SN 73224517	145 bhp	2212	2011
117	South ILS Generator [R-06]	Cummins Onan 4BT3.9-G4 SN 46388888	99 bhp	1333	2005
118A	Quarry Hill Emergency Generator [R-34]	Kubota V3300-BG-ET01 SN CA0591	48.9 bhp	6402	2018 Const 2012
119	POL Control Generator [R-33]	Kubota V2203-M-BG-ET02 SN 9U0752	26.9 hp	3240	2010
120	Maintenance Squadron/Unit Control Center (MXS/UCC) Generator [R-32]	Lister Petter LPW4 SN 754-40011	38.6 bhp	3462	1999
122	Fire Station #2 Generator [R-22]	John Deere 4039TF004 SN CD4039T305177	102 bhp	4870	1997

EU ID	Emissions Unit Name	Emissions Unit Description	Rating/Size	Building Number	Install/Construction Date
124	Emergency Wastewater Pump Engine	John Deere 4045DF270B	80 bhp	2316	2008
125	Emergency Wastewater Pump Engine	John Deere 4045DF270B	80 bhp	2316	2008
129	North Slope Relay Generator [R-38]	Cummins QSB5-G3 NR3 SN 73039590	145 bhp	6401	2011
130	OSS/Weapons/Intel Facility Emergency Generator [R-19]	Cummins QSB5-G6 NR3 SN 74451329	208 bhp 155 kWe	1220	2019 Const 2019
131	Consolidated Munitions Facility Emergency Generator [R-40]	Cummins QSB5-G13 SN 74551896	173 bhp 129 kWe	6210	2020 Const 2019
132	Tank E-11 Generator [R-42]	Caterpillar C13 SN PW301775	539 bhp	6261	2023 Const 2023
<b>Hush House (Jet Engine Test Facility)</b>					
81	Hush House	Model A/F37T-10 SN 122	N/A	1350	1989
<b>Portable Asphalt/Rock Crusher Diesel Fired Internal Combustion Engines</b>					
82	Recycle Plant Engine	John Deere Diesel Engine	450 hp	N/A	2006
83	Jaw Crusher Engine	John Deere Diesel Engine	450 hp	N/A	2006
84	Hydrascreen Engine	Deutz Diesel Engine	96 hp	N/A	2006
<b>Portable Asphalt/Rock Crusher Equipment</b>					
86	Tertiary Crusher(s)	TBD	150 TPH	N/A	TBD
89	Screen(s)	TBD	600 TPH	N/A	TBD
93	Fines Screen(s)	TBD	150 TPH	N/A	TBD
97	Truck Unloading to All Crushers	TBD	1,500 TPH	N/A	TBD
101	Primary/Secondary Crusher(s)	TBD	600 TPH	N/A	TBD
87-88, 90-92, 94-96, 98-100, 102, 103	Up to 13 Transfer Points	Misc.	1,500 TPH (combined)	N/A	TBD
<b>Other Regulated Sources</b>					
85	Fire Training	Fire Training	10,000 gal	N/A	2000
109	Aircraft Corrosion Control Facility	Regulated Surface Coating	N/A	1348	1987
<b>Coal Processing Equipment Subject to NSPS Subpart Y</b>					

EU ID	Emissions Unit Name	Emissions Unit Description	Rating/Size	Building Number	Install/Construction Date
110A	Sandwich Belt Conveyor	Regulated Coal Processing System	N/A	N/A	1994
110B	Segment Crusher	Regulated Coal Processing System	N/A	N/A	2013
111	Coal Tripper System	6 Identical 2,500 cfm Pulse Jet Collector Bin Vent Filters	150 TPH	6203	2010
<b>Gasoline Storage Tanks Subject to NESHAP Subpart CCCCCC</b>					
126	Underground Storage Tank	Horizontal Gasoline Fuel Tank at Quartermaster Station (Tank 1207-3)	26,000 gal	1217	1987
127	Underground Storage Tank	Horizontal Gasoline Fuel Tank at Quartermaster Station (Tank 1207-4)	26,000 gal	1218	1987
128	Underground Storage Tank	Horizontal Gasoline Fuel Tank at Quartermaster Station (Tank 1207-5)	26,000 gal	1219	1987

Notes:

1. EU IDs 7-9 and 11-14 are insignificant on an actual emission basis, and are listed in Table A because they are subject to Title I and Title V requirements.
2. EU IDs 10, 24A-26, 28A-41, 43-56, 59, 60, 62-71, 73-80, 112-122, 124, 125, and 129-132 are insignificant on a potential to emit basis and are listed in Table A because they are subject to Title I and Title V requirements.
3. EU IDs 119 and 126-128 are insignificant on an unrestricted potential to emit basis and are listed in Table A because they are subject to Title V requirements.
4. EU IDs 85 and 109 (Fire Training and Aircraft Corrosion Control Facility) are insignificant on unrestricted potential emissions basis and are listed in Table A for administrative purposes only.

[18 AAC 50.326(a)]  
 [40 C.F.R. 71.5(c)(3)]

### **Section 3. State Requirements**

#### **Visible Emissions Standard**

- 1. Industrial Process and Fuel-Burning Equipment Visible Emissions.** The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from EU IDs 7 - 26, 28A - 41, 43 - 56, 59, 60, 62 - 80, 82 - 84, 86 - 103, 110 - 120, 122, 124, 125, and 129 - 132 listed in Table A to reduce visibility through the exhaust effluent by more than 20 percent averaged over any six consecutive minutes.

[18 AAC 50.040(j)(4), 50.055(a)(1), 50.326(j)(3), & 50.346(c)]  
[40 C.F.R. 71.6(a)(1)]

- 1.1. For EU IDs 15, 16, 19A - 23A, and 72 monitor, record, and report in accordance with Conditions 2 - 4.
- 1.2. For each of EU IDs 24A, 25, 28A-41, 43-53, 55A, 56, 59, 60, 62-71, 73-80, and 122, as long as the emissions unit does not exceed the limit in Condition 23, monitoring shall consist of an annual compliance certification under Condition 140 for the visible emissions standard based on reasonable inquiry. Otherwise, comply with Condition 1.3.
- 1.3. For each of EU IDs 7-14, 24A-26, 28A-41, 43-56, 59, 60, 62-71, 73-80, 112-118, 120, 122, 124, 125, and 129-132, as long as actual emissions from the emissions unit are less than the significant emissions thresholds listed in 18 AAC 50.326(e)<sup>1</sup> during any consecutive 12-month period, monitoring shall consist of an annual compliance certification under Condition 140 for the visible emissions standard based on reasonable inquiry. The Permittee shall report in the operating report under Condition 138 if any of EU IDs 7-14, 24A-26, 28A-41, 43-56, 59, 60, 62-71, 73-80, 112-118, 120, 122, 124, 125, and 129-132 reaches any of the significant emissions thresholds listed in 18 AAC 50.326(e) and monitor, record, and report in accordance with Conditions 2 through 4 for the remainder of the permit term for that emissions unit.
- 1.4. For EU IDs 17 and 18, burn only gas as fuel. In each operating report under Condition 138 indicate whether each of these emissions units burned only gas during the period covered by the report. Report under Condition 137 if any fuel other than gas is burned in any of these emissions units.
- 1.5. For EU IDs 82 – 84, monitor, record, and report in accordance with Condition 5.

---

<sup>1</sup> EU IDs will exceed the significant emissions thresholds listed in 18 AAC 50.326(e) after operating beyond the following applicable gallons or hours in a 12 consecutive month period: For EU IDs 7-14: 185,000 gallons; EU IDs 24A: 500 hours; EU IDs 25, 34: 275 hours; EU ID 26: 150 hours; 28A: 3,000 hours; EU IDs 29, 31: 650 hours; EU ID 30A, 130: 2,400 hours; EU IDs 32A, 63: 2,200 hours; EU IDs 33, 64A, 64B, 56, 78, 112, 116, 129: 3,500 hours; EU IDs 35A-37A: 350 hours; EU IDs 38-40: 375 hours; EU ID 41: 550 hours; EU IDs 43-48 and 50: 1,050 hours; EU IDs 49, 60, 62: 750 hours; EU IDs 51-53: 220 hours; EU ID 54: 140 hours; EU ID 55A, 118A: 7,000 hours; EU ID 59 and 71: 240 hours; EU IDs 65B-68A: 2,100 hours; EU IDs 69A, 70B, 73: 2,000 hours; EU ID 74, 77: 1,400 hours; EU ID 75, 122: 1,250 hours; EU ID 76: 1,000 hours; EU ID 79, 132: 950 hours; EU ID 80: 400 hours; EU ID 113: 1,900 hours; EU ID 114: 2,300 hours; EU ID 115: 2,600 hours; EU ID 117: 1,300 hours; EU ID 120: 3,300 hours; EU IDs 124, 125: 1,500 hours; and EU ID 131: 2,900 hours.

- 1.6. For EU IDs 86 – 103, monitor, record, and report in accordance with Conditions 6 through 8.
- 1.7. For EU IDs 110 – 111, monitor, record and report in accordance with Conditions 84.1 and 84.2.
- 1.8. For EU IDs 119, monitoring shall consist of an annual compliance certification under Condition 140 for the visible emissions standard based on reasonable inquiry.  
[18 AAC 50.040(j)(4), 50.326(j)(3) & (4), & 50.346(c)]  
[40 C.F.R. 71.6(a)(3) & (c)(6)]

## Visible Emissions Monitoring, Recordkeeping, and Reporting (MR&R)

### *Liquid Fuel-Burning Equipment*

2. **Visible Emissions Monitoring.** When required by any of Conditions 1.1 through 1.3, or in the event of replacement<sup>2</sup> during the permit term, the Permittee shall observe the exhaust of EU IDs 7-16, 19A-26, 28A-41, 43-56, 59, 60, 62-80, 112-118, 120, 122, 124, 125, and 129-132 for visible emissions using either the Method 9 Plan under Condition 2.3 or the Smoke/No-Smoke Plan under Condition 2.4.
  - 2.1. The Permittee may change the visible emissions monitoring plan for an emissions unit at any time unless prohibited from doing so by Condition 2.5.
  - 2.2. The Permittee may for each unit elect to continue the visible emissions monitoring schedule specified in Conditions 2.3.b through 2.3.e or Conditions 2.4.b through 2.5 that remains in effect from a previous permit.
  - 2.3. **Method 9 Plan.** For all observations in this plan, observe emissions unit exhaust, following 40 C.F.R. 60, Appendix A-4, Method 9 for 18 minutes to obtain 72 consecutive 15-second opacity observations.<sup>3</sup>
    - a. First Method 9 Observation. Except as provided in Condition 2.2 or Condition 2.5.c(ii), observe the exhausts of EU IDs 7-16, 19A-26, 28A-41, 43-56, 59, 60, 62-80, 112-118, 120, 122, 124, 125, and 129-132 according to the following criteria:
      - (i) For any unit, observe emissions unit exhaust within 14 calendar days after changing from the Smoke/No-Smoke Plan of Condition 2.4.
      - (ii) Except as provided in Condition 2.3.a(iii), for any of EU IDs 15, 16, 19A - 23A, and 72, observe exhaust within six months after the effective date of this permit.

<sup>2</sup> "Replacement," as defined in 40 C.F.R. 51.166(b)(32).

<sup>3</sup> Visible emissions observations are not required during emergency operations.

- (iii) For any unit replaced, observe exhaust within 60 days of the newly installed emissions unit becoming fully operational.<sup>4</sup> Except as provided in Condition 2.3.e, after the First Method 9 observation:
    - (A) For EU IDs 15, 16, 19A - 23A, and 72, continue with the monitoring schedule of the replaced emissions unit; and
    - (B) For EU IDs 7-14, 24A-26, 28A-41, 43-56, 59, 60, 62-71, 73-80, 112-118, 120, 122, 124, 125, and 129-132 comply with Conditions 1.2 and/or 1.3, as applicable.
  - (iv) For each of EU IDs 7-14, 24A-26, 28A-41, 43-56, 59, 60, 62-71, 73-80, 112-118, 120, 122, 124, 125, and 129-132, observe the exhaust of the emissions unit within 30 days after the end of the calendar month during which monitoring was triggered under Condition 1.3; or for an emissions unit with intermittent operations, within the first 30 days during the unit's next scheduled operation.
- b. Monthly Method 9 Observations. After the first Method 9 observation conducted under Condition 2.3.a, perform observations at least once in each calendar month that the emissions unit operates.
  - c. Semiannual Method 9 Observations. After at least three monthly observations under Condition 2.3.b unless a six-consecutive-minute average opacity is greater than 15 percent and one or more individual observations are greater than 20 percent, perform semiannual observations
    - (i) no later than seven months, but not earlier than five months, after the preceding observation; or
    - (ii) for an emissions unit with intermittent operations, during the next scheduled operation immediately following seven months after the preceding observation.
  - d. Annual Method 9 Observations. After at least two semiannual observations under Condition 2.3.c, unless a six-consecutive-minute average opacity is greater than 15 percent and one or more individual observations are greater than 20 percent, perform annual observations
    - (i) no later than 12 months, but not earlier than 10 months, after the preceding observation; or
    - (ii) for an emissions unit with intermittent operations, during the next scheduled operation immediately following 14 months after the preceding observation.

---

<sup>4</sup> "Fully operational" means upon completion of all functionality checks and commissioning after unit installation. "Installation" is complete when the unit is ready for functionality checks to begin.

- e. Increased Method 9 Frequency. If a six-consecutive-minute average opacity is observed during the most recent set of observations to be greater than 15 percent and one or more individual observations are greater than 20 percent, then increase or maintain the observation frequency for that emissions unit to at least monthly intervals as described in Condition 2.3.b, and continue monitoring in accordance with the Method 9 Plan.
- 2.4. **Smoke/No Smoke Plan.** Observe the emissions unit exhaust for the presence or absence of visible emissions, excluding condensed water vapor.
- a. Initial Monitoring Frequency. Observe the emissions unit exhaust during each calendar day that the emissions unit operates for a minimum of 30 days.
  - b. Reduced Monitoring Frequency. If the emissions unit operates without visible emissions for 30 consecutive operating days as required in Condition 2.4.a, observe the emissions unit exhaust at least once in every calendar month that the emissions unit operates.
  - c. Smoke Observed. If visible emissions are observed, comply with Condition 2.5.
- 2.5. **Corrective Actions Based on Smoke/No Smoke Observations.** If visible emissions are present in the emissions unit exhaust during an observation performed under the Smoke/No Smoke Plan of Condition 2.4, then the Permittee shall either begin the Method 9 Plan of Condition 2.3 or:
- a. Initiate actions to eliminate visible emissions from the emissions unit within 24 hours of the observation;
  - b. Keep a written record of the starting date, the completion date, and a description of the actions taken to reduce visible emissions; and
  - c. After completing the actions required under Condition 2.5.a,
    - (i) conduct smoke/no smoke observations in accordance with Condition 2.4:
      - (A) at least once per day for the next seven operating days and, if applicable, until the initial 30-day observation period of Condition 2.4.a is completed; and
      - (B) continue as described in Condition 2.4.b; or

- (ii) if the actions taken under Condition 2.5.a do not eliminate the visible emissions, or if subsequent visible emissions are observed under the schedule of Condition 2.5.c(i)(A), then observe the emissions unit exhaust using the Method 9 Plan unless the Department gives written approval to resume observations under the Smoke/No Smoke Plan. After observing visible emissions and making observations under the Method 9 Plan, the Permittee may at any time take corrective action to eliminate visible emissions and restart the Smoke/No Smoke Plan under Condition 2.4.a.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]  
[40 C.F.R. 71.6(a)(3)(i)]

**3. Visible Emissions Recordkeeping.** The Permittee shall keep records as follows:

3.1. For all Method 9 observations,

- a. the observer shall record the following:
  - (i) the name of the stationary source, emissions unit and location, emissions unit type, observer's name and affiliation, and the date on the Visible Emissions Observation Form in Section 13;
  - (ii) the time, estimated distance to the emissions location, sun location, approximate wind direction, estimated wind speed, description of the sky condition (presence and color of clouds), plume background, and operating rate (load or fuel consumption rate or best estimate, if unknown) on the sheet at the time opacity observations are initiated and completed;
  - (iii) the presence or absence of an attached or detached plume and the approximate distance from the emissions outlet to the point in the plume at which the observations are made;
  - (iv) opacity observations to the nearest five percent at 15-second intervals on the Visible Emission Observation Form in Section 13; and
  - (v) the minimum number of observations required by the permit; each momentary observation recorded shall be deemed to represent the average opacity of emissions for a 15-second period.
- b. To determine the six-minute average opacity,
  - (i) divide the observations recorded on the record sheet into sets of 24 consecutive observations;
  - (ii) sets need not be consecutive in time and in no case shall two sets overlap;
  - (iii) for each set of 24 observations, calculate the average by summing the opacity of the 24 observations and dividing this sum by 24; and

- (iv) record the average opacity on the sheet.
  - c. Calculate and record the highest six- and 18-consecutive-minute average opacities observed.
- 3.2. If using the Smoke/No Smoke Plan of Condition 2.4, record the following information in a written log for each observation and submit copies of the recorded information upon request of the Department:
- a. the date and time of the observation;
  - b. the EU ID of the emissions unit observed;
  - c. whether visible emissions are present or absent in the emissions unit exhaust;
  - d. a description of the background to the exhaust during the observation;
  - e. if the emissions unit starts operation on the day of the observation, the startup time of the emissions unit;
  - f. name and title of the person making the observation; and
  - g. operating rate (load or fuel consumption rate or best estimate, if unknown).
- 3.3. The records required by Conditions 3.1 and 3.2 may be kept in electronic format.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]  
[40 C.F.R. 71.6(a)(3)(ii)]

**4. Visible Emissions Reporting.** The Permittee shall report as follows:

- 4.1. In the first operating report required in Condition 138 under this permit term, the Permittee shall state the intention to either continue the visible emissions monitoring schedule in effect from the previous permit or reset the visible emissions monitoring schedule.
- 4.2. Include in each operating report required under Condition 138 for the period covered by the report
  - a. which visible emissions plan of Condition 2 was used for each emissions unit; if more than one plan was used, give the time periods covered by each plan;
  - b. for all Method 9 Plan observations:
    - (i) copies of the observation results (i.e., opacity observations) for each emissions unit, except for the observations the Permittee has already supplied to the Department; and
    - (ii) a summary to include:
      - (A) number of days observations were made;
      - (B) highest six-consecutive- and 18-consecutive-minute average opacities observed; and

- (C) dates when one or more observed six-consecutive-minute average opacities were greater than 20 percent;
  - c. for each emissions unit under the Smoke/No Smoke Plan, the number of days that smoke/no smoke observations were made and which days, if any, that visible emissions were observed; and
  - d. a summary of any monitoring or recordkeeping required under Conditions 2 and 3 that was not done.
- 4.3. Report under Condition 137
- a. the results of Method 9 observations that exceed 20 percent average opacity for any six-consecutive-minute period; and
  - b. if any monitoring under Condition 2 was not performed when required, report within three days of the date that the monitoring was required.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]  
[40 C.F.R. 71.6(a)(3)(iii)]

*For Asphalt/Rock Crusher Liquid Fuel-Fired Engines (EU IDs 82 – 84)*

**5. Visible Emissions Monitoring.** The Permittee shall observe the exhaust of EU IDs 82 – 84 for visible emissions using either the Method 9 plan under Condition 5.1 or the Smoke/No-Smoke Plan under Condition 5.2. The Permittee may change visible-emissions plans for any emissions unit at any time unless prohibited from doing so by Condition 2.5. The Permittee may for each unit elect to continue the visible emission monitoring schedule in effect from the previous permit at the time a renewed permit is issued, if applicable.

- 5.1. **Method 9 Plan.** For all 18-minute observations in this plan, observe exhaust, following 40 C.F.R. 60, Appendix A-4, Method 9, adopted by reference in 18 AAC 50.040(a), for 18 minutes to obtain 72 consecutive 15-second opacity observations.
- a. **First Method 9 Observation.** Observe exhaust for 18 minutes within 3 operating days after changing from the Smoke/No-Smoke Plan of Condition 5.2.
  - b. **Monthly Method 9 Observations.** After the first Method 9 observation, perform 18-minute observations at least once in each calendar month that the engine operates.
    - (i) **Less Frequent Method 9 Observations.** After observing emissions for three consecutive operating months under Condition 5.1.b, unless a six minute average is greater than 15 percent and one or more observations are greater than 20 percent, observe emissions at least once for 18 minutes during the first calendar month that the engine operates for each construction season. If the source operates during more than six calendar months in a year, repeat the observations during the seventh calendar month that the engine operates during the calendar year.

- (ii) **Increased Method 9 Frequency.** If a six-minute average opacity is observed during the most recent set of observations to be greater than 15 percent and one or more observations are greater than 20 percent, then increase or maintain the 18-minute observation frequency for that unit to at least monthly intervals, until the criteria in Condition 5.1.b(i) for semiannual monitoring are met.
- 5.2. **Smoke/No Smoke Plan.** Observe the exhaust for the presence of absence of visible emissions, excluding condensed water vapor.
- a. **Initial Monitoring Frequency.** Observe the exhaust during each calendar day that an emissions unit operates.
  - b. **Reduced Monitoring Frequency.** After the emissions unit has been observed on 30 consecutive operating days, if the emissions unit operated without visible smoke in the exhaust for those 30 days, then observe emissions at least once in every calendar month that an emission unit operates.
  - c. **Smoke Observed.** If smoke is observed, either begin the Method 9 Plan of Condition 5.1 or perform the corrective action required under Condition 2.5.
- 5.3. **Visible Emissions Recordkeeping and Reporting.** Record and report according to Conditions 3 and 4.

[18 AAC 50.040(j), 50.326(j), & 50.346(c)]  
[40 C.F.R. 71.6(a)(3)(iii)]

*For Portable Asphalt Rock Crusher Fugitives (EU IDs 86 – 103)*

6. **Visible Emissions Monitoring for Crusher Fugitives.** The Permittee shall observe visible emissions for each EU IDs 86 – 103 as follows:
- 6.1. Observe visible emissions following 40 C.F.R. 60, Appendix A-4, Method 9, adopted by reference in 18 AAC 50.040(a), for 18 minutes to obtain 72 consecutive 15-second opacity observations.
- a. Select an observer position that is a minimum of 15 feet from the emission unit.
    - (i) When possible, select an observer position that minimizes interference from other fugitive emission sources, while maintaining the observer position relative to the sun required by Method 9.
    - (ii) If water mist is present, make the observation at a point in the plume where the mist is no longer visible.
    - (iii) Conduct the observation at a load typical of the maximum operation during the reporting period described in Condition 138.
  - b. Conduct the observations
    - (i) within two days of initial startup, if not already conducted;

- (ii) within two days after startup at each new location;
- (iii) at least once in every 30-day period of operation at the same location;  
and
- (iv) within 24 hours following the startup of the rock crusher after a  
shutdown period of more than five days.

[18 AAC 50.040(j) & 50.326(j)]  
[40 C.F.R. 71.6(a)(3)(i)]

7. **Visible Emissions Recordkeeping for Crusher Fugitives.** The Permittee shall keep records of each Method 9 observation in accordance with Conditions 3.1.a and 3.1.b.

[18 AAC 50.040(j) & 50.326(j)]  
[40 C.F.R. 71.6(a)(3)(ii)]

8. **Visible Emissions Reporting for Crusher Fugitives.** The Permittee shall report visible emissions as follows:

8.1. Include in each stationary source operating report under Condition 138:

- a. copies of the Method 9 observation results (i.e. opacity observations), except for the observations the Permittee has already supplied to the Department; and
- b. a summary to include:
  - (i) number of days observations were made;
  - (ii) highest six-minute average observed;
  - (iii) dates when one or more observed six-minute averages were greater than 20 percent; and
  - (iv) any monitoring or recordkeeping required under Conditions 6 and 7 that was not done.

8.2. Report under Condition 137:

- a. the results of Method 9 observations that exceed an average 20 percent for any six-minute period; and
- b. if any monitoring under Condition 6 was not performed when required, report within three days of the date the monitoring was required.

[18 AAC 50.040(j) & 50.326(j)]  
[40 C.F.R. 71.6(a)(3)(iii)]

### **Particulate Matter (PM) Emissions Standard**

9. **Industrial Process and Fuel-Burning Equipment PM Emissions.** The Permittee shall not cause or allow particulate matter emitted from EU IDs 7 - 26, 28A - 41, 43 - 56, 59, 60, 62 - 80, 82 - 84, 86 - 103, 110 - 120, 122, 124, 125, and 129 - 132 listed in Table A to exceed 0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.

[18 AAC 50.040(j)(4), 50.055(b)(1), 50.326(j)(3), & 50.346(c)]  
[40 C.F.R. 71.6(a)(1)]

- 9.1. For EU ID 72, monitor, record and report in accordance with Conditions 10 through 12.
- 9.2. For EU IDs 15, 16, and 19A - 23A, monitor, record and report in accordance with Conditions 13 through 15.
- 9.3. For each of EU IDs 24A, 25, 28A-41, 43-53, 55A, 56, 59, 60, 62-71, 73-80, and 122, as long as the emissions unit does not exceed the limits in Condition 23, monitoring shall consist of an annual compliance certification under Condition 140 for the PM emissions standard based on reasonable inquiry. Otherwise, comply with Condition 9.4.
- 9.4. For each of EU IDs 7-14, 24A-26, 28A-41, 43-56, 59, 60, 62-71, 73-80, 112-118, 120, 122, 124, 125, and 129-132, as long as actual emissions from the emissions unit are less than the significant emissions thresholds listed in 18 AAC 50.326(e) during any consecutive 12-month period, monitoring shall consist of an annual compliance certification under Condition 140 for the PM emissions standard based on reasonable inquiry. The Permittee shall report in the operating report under Condition 138 if any of EU IDs 7-14, 24A-26, 28A-41, 43-56, 59, 60, 62-71, 73-80, 112-118, 120, 122, 124, 125, and 129-132 reaches any of the significant emissions thresholds and monitor, record and report in accordance with Conditions 10 through 12 and/or Conditions 13 through 15 for the remainder of the permit term for that emissions unit.
- 9.5. For EU IDs 110, 111, and 119, the Permittee must annually certify compliance under Condition 140 for the PM emissions standard based on reasonable inquiry.
- 9.6. For EU IDs 17 and 18, the Permittee shall comply with Condition 1.4.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]  
[40 C.F.R. 71.6(a)(3)]

## PM MR&R

### *Liquid Fuel-Burning Engines*

- 10. PM Monitoring.** The Permittee shall conduct source tests on EU ID 72 and EU IDs 24A-26, 28A-41, 43-56, 59, 60, 62-71, 73-80, 112-118, 120, 122, 124, 125, and 129-132 (when required by Condition 9.4), to determine the concentration of PM in the exhaust of each emissions unit as follows:

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]  
[40 C.F.R. 71.6(a)(3)(i)]

- 10.1. If the result of any Method 9 observation conducted under Condition 2.3 for any of EU ID 72 and EU IDs 24A-26, 28A-41, 43-56, 59, 60, 62-71, 73-80, 112-118, 120, 122, 124, 125, and 129-132 is greater than the criteria of Condition 10.2.a or Condition 10.2.b, the Permittee shall, within six months of that Method 9 observation, either:

- a. take corrective action and observe the emissions unit exhaust under load conditions comparable to those when the criteria were exceeded, following 40 C.F.R. 60, Appendix A-4 Method 9 for 18 minutes to obtain 72 consecutive 15-second opacity observations, to show that emissions are no longer greater than the criteria of Condition 10.2; or
  - b. except as exempted in Condition 10.4, conduct a PM source test according to requirements set out in Section 8.
- 10.2. Take corrective action or conduct a PM source test, in accordance with Condition 10.1, if any Method 9 observation under Condition 2.3 results in an 18-minute average opacity greater than
- a. 20 percent for an emissions unit with an exhaust stack diameter that is equal to or greater than 18 inches; or
  - b. 15 percent for an emissions unit with an exhaust stack diameter that is less than 18 inches, unless the Department has waived this requirement in writing.
- 10.3. During each one-hour PM source test run under Condition 10.1.b, observe the emissions unit exhaust for 60 minutes in accordance with Method 9 and calculate the highest 18-consecutive-minute average opacity measured during each one-hour test run. Submit a copy of these observations with the source test report.
- 10.4. The PM source test requirements in Condition 10.1.b are waived for an emissions unit if
- a. a PM source test on that unit has shown compliance with the PM standard during this permit term; or
  - b. corrective action was taken to reduce visible emissions and two consecutive 18-minute Method 9 visible emissions observations (as described in Condition 2.3) conducted thereafter within a six-month period show visible emissions less than the threshold in Condition 10.2.

**11. PM Recordkeeping.** The Permittee shall comply with the following:

- 11.1. Within 30 calendar days of startup, the Permittee shall record the exhaust stack diameters of EU IDs 19A, 23A, 30A, 35A, 65B-69A, and 118A.
- 11.2. Keep records of the results of any source test and visible emissions observations conducted under Condition 10.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]  
[40 C.F.R. 71.6(a)(3)(ii)]

**12. PM Reporting.** The Permittee shall report as follows:

- 12.1. Notify the Department of any Method 9 observation results that are greater than the threshold of either Condition 10.2.a or Condition 10.2.b within 30 days of the end of the month in which the observations occurred. Include the dates, EU ID(s), and results when an observed 18-minute average opacity was greater than an applicable threshold in Condition 10.2.
- 12.2. In each operating report under Condition 138, include:
  - a. a summary of the results of any PM source test and visible emissions observations conducted under Condition 10; and
  - b. copies of any visible emissions observation results greater than the thresholds of Condition 10.2, if they were not already submitted.
- 12.3. Report the stack diameters of EU IDs 19A, 23A, 30A, 35A, 65B-69A, and 118A in the next operating report under Condition 138 following the deadline in Condition 11.1 for collecting the stack diameter records.
- 12.4. Report in accordance with Condition 137
  - a. anytime the results of a PM source test exceed the PM emissions standard in Condition 9; or
  - b. if the requirements under Condition 10.1 were triggered and the Permittee did not comply on time with either Condition 10.1.a or 10.1.b. Report the deviation within 24 hours of the date compliance with Condition 10.1 was required.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]  
[40 C.F.R. 71.6(a)(3)(iii)]

*Liquid Fuel-Burning Boilers and Heaters*

**13. PM Monitoring.** The Permittee shall conduct source tests on EU IDs 15, 16, and 19A - 23A and EU IDs 7 – 14 (when required by Condition 9.4) to determine the concentration of PM in the exhaust of each emissions unit as follows:

- 13.1. If the result of any Method 9 observation conducted under Condition 2.3 for any of EU IDs 7 – 16 and 19A – 23A results in an 18-minute average opacity greater than 20 percent opacity, the Permittee shall, within six months of that Method 9 observation, either:
  - a. take corrective action and observe the emissions unit exhaust under load conditions comparable to those when the criteria were exceeded, following 40 C.F.R. 60, Appendix A-4 Method 9 for 18 minutes to obtain 72 consecutive 15-second opacity observations, to show that emissions are no longer greater than an 18-minute average opacity of 20 percent; or
  - b. except as exempted under Condition 13.3, conduct a PM source test according to the requirements in Section 8.

- 13.2. During each one-hour PM source test run under Condition 13.1, observe the emissions unit exhaust for 60 minutes in accordance with Method 9 and calculate the highest 18-consecutive-minute average opacity measured during each one-hour test run. Submit a copy of these observations with the source test report.
- 13.3. The PM source test requirement in Condition 13.1 is waived for an emissions unit if:
  - a. a source test on that unit has shown compliance with the PM standard during the permit term; or
  - b. corrective action was taken to reduce visible emissions and two consecutive 18-minute Method 9 visible emissions observations (as described in Condition 2.3) conducted thereafter within a six-month period show visible emissions less than the threshold in Condition 13.1.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]  
[40 C.F.R. 71.6(a)(3)(i)]

- 14. PM Recordkeeping.** The Permittee shall keep records of the results of any source test and visible emissions observations conducted under Condition 13.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]  
[40 C.F.R. 71.6(a)(3)(ii)]

- 15. PM Reporting.** The Permittee shall report as follows:

15.1. Notify the Department of any Method 9 observation results that are greater than the threshold of Condition 13.1 within 30 days of the end of the month in which the observations occurred. Include the dates, EU ID(s), and results when an observed 18-minute average opacity was greater than the threshold in Condition 13.1.

15.2. In each operating report required by Condition 138, include:

- a. a summary of the results of any source test and visible emissions observations conducted under Condition 13; and
- b. copies of any visible emissions observation results greater than the threshold in Condition 13.1, if they were not already submitted.

15.3. Report in accordance with Condition 137 any time the results of a source test exceed the PM emission standard in Condition 9.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]  
[40 C.F.R. 71.6(a)(3)(iii)]

### **Sulfur Compound Emissions Standard**

- 16. Sulfur Compound Emissions.** The Permittee shall not cause or allow sulfur compound emissions, expressed as SO<sub>2</sub>, from EU IDs 7 - 26, 28A - 41, 43 - 56, 59, 60, 62 - 80, 82 - 84, 112 - 120, 122, 124, 125, and 129 - 132 listed in Table A to exceed 500 ppm averaged over three hours.

[18 AAC 50.040(j)(4), 50.055(c), 50.326(j)(3), & 50.346(c)]  
[40 C.F.R. 71.6(a)(1)]

17. For EU IDs 7 – 16, 19A – 80, 112 – 120, 122 – 125, and 129, to ensure compliance with Condition 16, the Permittee shall comply with the fuel sulfur content limit in Condition 22.

[18 AAC 50.040(j)(4) & 50.326(j)(4)]  
[40 C.F.R. 71.6(a)(3) & (c)(6)]

### Sulfur Compound MR&R

*Fuel Oil<sup>5</sup> (EU IDs 7 – 16, 19A – 80, 82 – 84, 112 – 120, 122 – 125, and 129 – 132)*

18. **Sulfur Compound Monitoring and Recordkeeping.** The Permittee shall monitor and keep records, as follows:

- 18.1. Comply with either Condition 18.1.a or Condition 18.1.b:

- a. For each shipment of fuel:

(i) If the fuel grade requires a sulfur content 0.5 percent by weight ( $\text{wt}\%S_{\text{fuel}}$ ) or less, keep receipts that specify fuel grade and amount; or

(ii) If the fuel grade does not require a sulfur content 0.5  $\text{wt}\%S_{\text{fuel}}$  or less, keep receipts that specify fuel grade and amount, and either

(A) test the fuel for sulfur content; or

(B) obtain test results showing the sulfur content of the fuel from the supplier or refinery; the test results must include a statement signed by the supplier or refinery of what fuel they represent; or

- b. Test the sulfur content of the fuel in each storage tank that supplies fuel to EU IDs 7 – 16, 19A – 80, 82 – 84, 112 – 125, and 129 – 132 at least monthly.

- 18.2. Fuel testing under Condition 18.1.a or Condition 18.1.b must follow an appropriate method listed in 18 AAC 50.035(b)-(c) or 40 C.F.R. 60.17 incorporated by reference in 18 AAC 50.040(a)(1).

- 18.3. If a shipment of fuel contains greater than 0.75  $\text{wt}\%S_{\text{fuel}}$  or if the results of a fuel sulfur content test indicate that the fuel contains greater than 0.75  $\text{wt}\%S_{\text{fuel}}$ , the Permittee shall calculate  $\text{SO}_2$  emissions in parts per million (ppm) using either the  $\text{SO}_2$  material balance calculation in Section 14 or Method 19 of 40 C.F.R. 60, Appendix A-7, adopted by reference in 18 AAC 50.040(a)(3).

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]  
[40 C.F.R. 71.6(a)(3)(i) & (ii)]

19. **Sulfur Compound Reporting.** The Permittee shall report as follows:

- 19.1. If  $\text{SO}_2$  emissions calculated under Condition 18.3 exceed 500 ppm, the Permittee shall report in accordance with Condition 137. When reporting under this condition, include the calculation under Condition 18.3.

---

<sup>5</sup> *Oil* means crude oil or petroleum or a liquid fuel derived from crude oil or petroleum, including distillate and residual oil, as defined in 40 C.F.R. 60.41b.

- 19.2. The Permittee shall include in the operating report required by Condition 138 for each month covered by the report:
- a. a list of the fuel grades received at the stationary source;
  - b. for any fuel received with a fuel sulfur content greater than 0.5 wt% $S_{\text{fuel}}$ , the fuel sulfur content of the shipment;
  - c. the results of all fuel sulfur analyses conducted under Condition 18.1.a or Condition 18.1.b and documentation of the method(s) used to complete the analyses; and
  - d. for any fuel received with a sulfur content greater than 0.75 wt% $S_{\text{fuel}}$ , the calculated SO<sub>2</sub> emissions in ppm calculated under Condition 18.3.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]  
[40 C.F.R. 71.6(a)(3)(iii)]

## Preconstruction Permit<sup>6</sup> Requirements

### *Best Available Control Technology Limits*

#### **20. EU IDs 20 – 23A BACT NO<sub>x</sub> Limits.**

- 20.1. The Permittee shall not cause or allow the following limits on EU IDs 20 – 23A to be exceeded:
- a. NO<sub>x</sub> emissions shall not exceed 10.8 grams per horsepower-hour;
  - b. Maximum power output shall not exceed 1,125 kW for each unit averaged over one hour (the load for which the performance test shows compliance with the NO<sub>x</sub> emission limit). After a performance test, the maximum power output, averaged over one hour, may exceed 1,125 kW up to any load for which a performance test shows compliance with Condition 20.1.a<sup>7</sup>; and
  - c. Fuel consumption shall not exceed a combined cumulative total of 173,800 gallons in any 12 consecutive months.
- 20.2. Monitoring and Recordkeeping. The Permittee shall:
- a. Install an engine or generator governor that will limit maximum power output of each unit to no more than power output specified in Condition 20.1.b for periods when the generators are in operation.
  - b. Monitor and record the monthly and the 12-month rolling fuel consumption for each of EU IDs 20 – 23A. Fuel consumption may be measured either by:

<sup>6</sup> *Preconstruction Permit* refers to federal PSD permits, state-issued permits-to-operate issued on or before January 17, 1997 (these permits cover both construction and operations), construction permits issued on or after January 18, 1997, and minor permits issued on or after October 1, 2004.

<sup>7</sup> On 1/27/2014, the Department approved a 11/27/2013 performance test on EU IDs 21 and 22 demonstrating a maximum power output of 1,425 kW shows compliance with Condition 20.1.a. The Department approved the request to operate EU IDs 20 – 23A at the maximum power of 1,425 kW and not lower than 300 kW.

- (i) Storing fuel in tanks dedicated only to EU IDs 20 – 23A and directly measuring tank contents to an accuracy of  $\pm 100$  gallons; or
  - (ii) Installing and using fuel meters calibrated and certified to be accurate to  $\pm 5$  percent.
- c. Calculate and record the combined 12-month rolling fuel consumption for EU IDs 20 – 23A on a monthly basis.

20.3. Reporting. The Permittee shall:

- a. Include in each operating report under Condition 138, the monthly and 12-month rolling total fuel consumption recorded for EU IDs 20 – 23A as set out by Conditions 20.2.b and 20.2.c for each month covered by the report.
- b. Report as excess emissions and permit deviations under Condition 137, should EU IDs 20 – 23A exceed any of the limits set out in Condition 20.

[Condition 7, Minor Permit No. AQ0264MSS07, DATE]  
 [18 AAC 50.040(j) & 50.326(j)]  
 [40 C.F.R. 71.6(a)]

*Owner Requested Limits to Avoid PSD Major Modification and Avoid Minor Permit Classification, and Ambient Air Quality Protection Requirements*

**21. Boiler Replacement Schedule:** The Permittee is authorized to remove the existing boilers (1, 2, 3, 4, 5, and 6) and install the replacement boilers (1A, 2A, 4A, 5A, and 6A) in the footprints of the removed boilers as specified in Table B.

**Table B - Order of Replacing Existing Boilers with New Boilers**

Replacement Stage	Boilers in use at start of Stage	Existing Boiler Removed	Replacement Boiler Added	Boilers in use at end of Stage
1	Completed.			
2	Completed.			
3	1, 2, 3, 4, 6A, 5A	4	4A	1, 2, 3, 6A, 5A, 4A
4	1, 2, 3, 6A, 5A, 4A	2	2A	1, 3, 6A, 5A, 4A, 2A
5	1, 3, 6A, 5A, 4A, 2A	1	1A	3, 6A, 5A, 4A, 2A, 1A
Completed	3, 6A, 5A, 4A, 2A, 1A	3	None	6A, 5A, 4A, 2A, 1A

- 21.1. Notify the Department within seven days after beginning the installation of a replacement unit. The notification must identify
- a. unit number and serial number of the replacement emission unit;
  - b. unit number and serial number of the existing emission unit replaced;
  - c. make, model, and rating of the replacement emission unit;
  - d. make, model, and rating of the existing emission unit replaced;
  - e. removal date of a replaced emission unit;

- f. installation/modification date; and
- g. anticipated start-up date of a replacement emissions unit.

[Condition 2, Minor Permit No. AQ0264MSS05, 8/9/2010]  
[18 AAC 50.040(j) & 50.326(j)]  
[40 C.F.R. 71.6(a)]

**22. Fuel Sulfur Limit.** The Permittee shall comply with the following fuel sulfur content limit to protect ambient air:

- 22.1. For EU IDs 7 – 16, 19A – 80, 112 – 120, 122 – 125, and 129, the maximum sulfur content of diesel or distillate fuel burned shall not exceed 0.15 percent by weight; and
- 22.2. Monitor, record, and report as described in Conditions 18 through 19.
- 22.3. Report as excess emissions and permit deviation under Condition 137 any time the fuel sulfur content exceeds the limit in Condition 22.1.

[Condition 8, Minor Permit No. AQ0264MSS07, DATE]  
[18 AAC 50.040(j) & 50.326(j)]  
[40 C.F.R. 71.6(a)]

**23. Emergency Engine Hourly Operations Limit.** The Permittee shall not operate any of EU IDs 24A – 80, and 122 for greater than 200 hours per 12-month rolling period.

- 23.1. Monitoring and Recordkeeping. The Permittee shall:
  - a. Monitor and record the hours of operation of each unit at least once per month.
  - b. Calculate and record the total monthly and the consecutive 12-month period total hours of operation for each unit.
- 23.2. Reporting. The Permittee shall:
  - a. Include in the operating report under Condition 138, the consecutive 12-month total hours of operation for each of EU IDs 24A – 80, and 122 for each of the months covered by the report.
  - b. Report as excess emissions and permit deviation under Condition 137, if the consecutive 12-month total hours of operation of any of EU IDs 24A – 80, or 122 for a given month exceed the limit in Condition 23.

[Condition 9, Minor Permit No. AQ0264MSS07, DATE]  
[18 AAC 50.040(j) & 50.326(j)]  
[40 C.F.R. 71.6(a)]

**24. EU ID 81 Hush House Jet Engine Test Limit.** The Permittee shall limit combined F-16 engine tests to no greater than 70 tests per 12-month rolling period.

- 24.1. Monitoring and Recordkeeping. The Permittee shall:
  - a. For each test, record the date and type of engine tested.

- b. For each month, calculate and record the 12-month totals of F-16 engine tests.

24.2. Reporting. The Permittee shall:

- a. Including in the operating report under Condition 138, the 12-month rolling total of F-16 engine tests for each month of the reporting period.
- b. Report as excess emissions and permit deviation under Condition 137, if the limit of Condition 24 is exceeded.

[Condition 10, Minor Permit No. AQ0264MSS07, DATE]  
[18 AAC 50.040(j) & 50.326(j)]  
[40 C.F.R. 71.6(a)]

**25. Asphalt/Rock Crusher Location.**

25.1. The Permittee shall not operate the asphalt/rock crusher at a location:

- a. Within 400 feet of any occupied building that can be access by the general public<sup>8</sup>;
- b. Within 1,000 feet of a building used for residential or temporary lodging purposes; or
- c. Within 1,000 feet of any access road that constitutes ambient air.

25.2. Monitoring, Recordkeeping, and Reporting. The Permittee shall:

- a. Apply wet suppression methods (i.e. spray nozzles) to EU ID 86 – 103. Monitor using visual observations to ensure that dust is continuously controlled (i.e. apply more water in the event rock crusher operations are visually generating dust at any time).
- b. For operations in locations other than the following locations at Eielson Air Force Base described in Attachment B, including: Loop Access Road, Mullins Pit, and Cathers Lake, the Permittee shall:
  - (i) Provide notice to the Department at least 10 days in advance of the move of any crusher operation by using the Location Change Form in Section 15 of this permit; and
  - (ii) Give adequate consideration to siting issues as described in Condition 25.1 when operating or changing locations of a crusher permitted to operate under this permit.
- c. In addition to complying with Condition 25.1, if the operator selects a location near residences or other occupied structures that can be accessed by the general public and this location results in complaints concerning the air emissions, the Department will investigate the complaints. These investigations could result in:

---

<sup>8</sup> In this permit “general public” includes families and guests of base personnel.

- (i) The operator being required to prove, by air quality dispersion modeling or other means, that emissions from the crusher are not harmful to the neighbors by conducting an ambient air quality investigation under 18 AAC 50.201;
  - (ii) The requirements to reduce emissions or implement another control strategy to reduce the ambient impact of those emissions as necessary to ensure that the concentration of air pollutants in the ambient air does not exceed the ambient air quality standards, maximum allowable ambient concentrations, or the limitations of 18 AAC 50.110;
  - (iii) Air quality monitoring investigations; and
  - (iv) The requirement to obtain a site-specific permit with requirements tailored to the exact operation contemplated.
- d. Operators must be aware that if additional dispersion modeling, an investigation under 18 AAC 50.201, or a site-specific permit is needed, these requirements could result in significant delays and expenses.

[Condition 11, Minor Permit No. AQ0264MSS07, DATE]  
[18 AAC 50.040(j) & 50.326(j)]  
[40 C.F.R. 71.6(a)]

**26. Asphalt/Rock Crusher Signage.** The Permittee shall erect signs at locations that are 400 feet or more away from the asphalt/rock crusher while operating, indicating that:

- 26.1. Authorized personnel only can proceed beyond the signs; and
- 26.2. Any person who proceeds beyond the signs will be escorted from the area.

[Condition 12, Minor Permit No. AQ0264MSS07, DATE]  
[18 AAC 50.040(j) & 50.326(j)]  
[40 C.F.R. 71.6(a)]

**27. EU IDs 86 – 103 Crusher Equipment Limits.** The Permittee shall:

- 27.1. Limit the combined ratings of equipment installed as EU IDs 86 – 103 as follows:
- a. EU ID 97 (Truck unloading to all crushers) to no more than 1,500 tons per hour (TPH);
  - b. EU ID 101 (Primary/Secondary crushing) to a combined rating of no more than 600 TPH;
  - c. EU ID 86 (Tertiary Crushing) to a combined rating of no more than 150 TPH;
  - d. EU ID 89 (Screening) to a combined rating of no more than 600 TPH;
  - e. EU ID 93 (Fines Screening) to a combined rating of no more than 150 TPH; and
  - f. EU IDs 87, 88, 90 – 92, 94 – 96, 98, 99, 100, 102, and 103 (Conveyor transfer points) to a combined rating of no more than 1,500 TPH.

- 27.2. At least once every semiannual period, the Permittee shall record:
- a. The maximum rated capacity for each crusher and screen installed at the facility;
  - b. The maximum combined capacity of all crushers of each type (primary/secondary or tertiary);
  - c. The combined capacity of screens of each type (standard screening or fines screening);
  - d. The total number and combined capacity of conveyor drop points; and
  - e. The power source (i.e., highline power, nonroad engine) for each of EU IDs 86 – 103 while in operation for that semiannual period.

27.3. Reporting. The Permittee shall report as follows:

- a. Include the records and calculations required under Condition 27.2 in the operating report under Condition 138. Additionally, include a statement certifying that the equipment EU IDs 86 – 103 did not operate in excess of 3,650 hours in the most recent consecutive 12-month period.
- b. Report as excess emissions and permit deviation under Condition 137, if the limits in Condition 27.1 or the recordkeeping requirements in Condition 27.2 are not met.

[Condition 13, Minor Permit No. AQ0264MSS07, DATE]  
[18 AAC 50.040(j) & 50.326(j)]  
[40 C.F.R. 71.6(a)]

**28. EU IDs 15 and 16 Fuel Limit.** The Permittee shall limit combined fuel consumption of EU IDs 15 and 16 to no greater than 3,583,851 gallons fuel per 12-month rolling period.

28.1. Monitoring and Recordkeeping. The Permittee shall

- a. Record daily fuel consumption in accordance with the reporting and recordkeeping requirements of 40 C.F.R. 60.48c (NSPS Subpart Dc) as specified in Condition 66.2.
- b. Calculate and record the cumulative monthly 12-month rolling total gallons of fuel consumed by EU IDs 15 and 16.

28.2. Reporting. The Permittee shall:

- a. Include in the operating report under Condition 138, the cumulative 12-month total fuel consumption for EU IDs 15 and 16 for each of the months covered by the report.
- b. Report as excess emissions and permit deviation under Condition 137, if the cumulative 12-month total fuel consumption for a given month exceeds the limit of Condition 28.

[Condition 14, Minor Permit No. AQ0264MSS07, DATE]

[18 AAC 50.040(j) & 50.326(j)]  
[40 C.F.R. 71.6(a)]

**29. EU IDs 7 and 8 Hourly Operations Limit.** The Permittee shall limit the cumulative hours of operation of EU IDs 7 and 8 to 4,464 hours per consecutive 12-month period.

29.1. Monitoring and Recordkeeping. The Permittee shall monitor and record the cumulative monthly and the cumulative 12-month rolling combined total hours of operation for EU IDs 7 and 8.

29.2. Reporting. The Permittee shall:

- a. Include in the operating report under Condition 138, the monthly and consecutive 12-month total combined hours of operation for EU IDs 7 and 8 for each month of the reporting period.
- b. Report as excess emissions and permit deviation under Condition 137, if the consecutive 12-month cumulative hours of operation of EU IDs 7 and 8 for any given month exceed the limit in Condition 29.

[Condition 18, Minor Permit No. AQ0264MSS07, DATE]  
[18 AAC 50.040(j) & 50.326(j)]  
[40 C.F.R. 71.6(a)]

**30. Asphalt/Rock Crusher Engine Operations Limits.** The Permittee shall:

30.1. Limit EU IDs 82 and 84 to 4,000 hours per 12 consecutive months, each, for PSD modification avoidance; and

30.2. Limit EU ID 83 to 4,000 hours per 12 consecutive months for PSD modification avoidance and to avoid minor permit classification under 18 AAC 50.502(c)(3).

30.3. Monitoring and Recordkeeping. The Permittee shall:

- a. Install and operate a dedicated continuous monitoring system for recording operating hours for each unit that is accurate to  $\pm 5$  percent.
- b. Monitor and record monthly the operating hours for each unit separately.
- c. No later than the end of the following month, add the monthly operating hours for each EU IDs 82, 83, and 84 to the total for the previous 11 months, to get the 12 month total for each unit.

30.4. Reporting. The Permittee shall:

- a. Include the records and calculations required under Conditions 30.3.b and 30.3.c in the operating report described in the operating permit issued for the source under AS 46.14.130(b) and 18 AAC 50.
- b. Report as excess emissions and permit deviation described in the operating permit issued for the source under AS 46.14.130(b) and 18 AAC 50, if the 12 month total in Condition 30.3.c exceeds 4,000 hours for any of the EU IDs 82, 83, or 84.

[Condition 19, Minor Permit No. AQ0264MSS07, DATE]  
[18 AAC 50.040(j) & 50.326(j)]  
[40 C.F.R. 71.6(a)]

**31. Coal Consumption Limit.** The Permittee shall limit coal consumption as indicated in Table C. For the existing and replacement boilers (Units 1 through 4, 1A through 6A), monitor, record, and report coal consumption as indicated in Condition 31.1.

**Table C – Coal Combustion Limits by Stage and Emission Units**

Project Stage	Emission Unit ID (Boilers)	Tons of Coal Burned per 12 consecutive months
1	1, 2, 3, 4, 5, and 6A	220,000
2	1, 2, 3, 4, 5A, and 6A	
3	1, 2, 3, 4A, 5A, and 6A	
4	1, 3, 2A, 4A, 5A, and 6A	

- 31.1. For all stages described in Table C, monitor, record, and report coal consumption prior to the beginning of Stage 5 as follows:
- Track, calculate, and record the tons of coal burned every calendar month in all emissions units listed in Table C during the calendar month and tons of coal burned in all emission units listed in Table C during the preceding consecutive 12 calendar months.
  - Include the records described in Condition 31.1.a with the operating report under Condition 138.
  - If the tons of coal burned in all emission units during the preceding consecutive 12-month period exceed the limits specified in Table C, submit an excess emission report to the Department as described in Condition 137.

[Condition 4, Minor Permit No. AQ0264MSS05, 8/9/2010]  
[18 AAC 50.040(j) & 50.326(j)]  
[40 C.F.R. 71.6(a)]

**32. Coal Boiler NO<sub>x</sub>, CO, and SO<sub>2</sub> Emissions.** NO<sub>x</sub>, CO, and SO<sub>2</sub> emissions of the replacement boilers for the preceding consecutive 12 months shall not exceed the limits in Table D. Monitor, record, and report as follows:

**Table D – Emission Limits for Replacement Boilers in Use (tons per consecutive 12-month period)**

Project Stage	Replacement EU IDs in Use	NO <sub>x</sub>	CO	SO <sub>2</sub>
1	6A	122	147	69
2	5A and 6A	207	195	101
3	4A, 5A, and 6A	337	268	148
4	2A, 4A, 5A, and 6A	504	364	209
5	1A, 2A, 4A, 5A, and 6A	653	448	264
6	1, 3, 2A, 4A, 5A, and 6A	834	551	330

- 32.1. For each of EU IDs 1A, 2A, 4A, 5A, and 6A, install, calibrate, maintain, and operate a Continuous Emissions Monitoring System (CEMS) for measuring concentrations and emissions of NO<sub>x</sub>, CO, and SO<sub>2</sub> discharged to the atmosphere and record the output of the system.
  - a. For NO<sub>x</sub> monitoring and recording, install, calibrate, maintain, and operate the CEMS as described in 40 C.F.R. 60, Appendix B, Performance Specification 2 (PS-2).
  - b. For CO monitoring and recording, install, calibrate, maintain, and operate the CEMS as described in PS-4, PS-4A, PS-4B in Appendix B to 40 C.F.R. 60. 30 days prior to the installation of the CO CEMS on a replacement boilers, the Permittee shall notify the Department which of the CO performance specifications apply to the CO CEMS that the Permittee will install on each replacement boiler.
  - c. For SO<sub>2</sub> monitoring and recording, install, calibrate, maintain, and operate the CEMS as described in 40 C.F.R. 60, Appendix B, PS-2.
- 32.2. Monitor and record NO<sub>x</sub>, CO, and SO<sub>2</sub> emissions from applicable replacement units 1A, 2A, 4A, 5A, and 6A with the CEMS as described in Condition 32.1.
- 32.3. Use the CEMS to calculate and record daily NO<sub>x</sub>, CO, and SO<sub>2</sub> emissions from each replacement boilers.
- 32.4. At the end of every calendar month, calculate and record the monthly emissions of NO<sub>x</sub>, CO, and SO<sub>2</sub>, emissions from all replacement boilers used during the month and for the preceding consecutive 12-month period.
- 32.5. Include the records described in Condition 32.3 and Condition 32.4 with the operating report under Condition 138.
- 32.6. If the NO<sub>x</sub>, CO, and SO<sub>2</sub> emissions for the replacement boilers used during the preceding consecutive 12-months period exceed the limits specified in Table D, submit an excess emission report to the Department under Condition 137.

[Condition 5, Minor Permit No. AQ0264MSS05, 8/9/2010]

[18 AAC 50.040(j) & 50.326(j)]

[40 C.F.R. 71.6(a)]

**33. Particulate Matter Emission Control for Boilers.** The Permittee shall install a baghouse on each coal-fired boiler to control particulate matter (PM). Additionally, the Permittee shall install, calibrate, maintain, and operate a Continuous Opacity Monitoring System (COMS) for measuring the opacity of emissions discharged to the atmosphere and record the output of the system.

- 33.1. PM emitted from the replacement boilers shall not exceed 0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.

- 33.2. Visible emissions in a boiler exhaust, excluding condensed water vapor, shall not reduce visibility through the exhaust effluent by more than 20 percent averaged over any six consecutive minutes.
- 33.3. For replacement boilers EU IDs 1A, 2A, 4A, 5A, and 6A, comply with opacity monitoring and recording described in Condition 36 through 38.
- 33.4. For existing boilers EU IDs 1 – 4, comply with visibility monitoring, recordkeeping, and reporting (MR&R) requirements as described in Conditions 36 through 38.
- 33.5. Report excess visible emissions according to Condition 38.3.

[Condition 6, Minor Permit No. AQ0264MSS05, 8/9/2010]  
[18 AAC 50.040(j) & 50.326(j)]  
[40 C.F.R. 71.6(a)]

### Insignificant Emissions Units

34. For emissions units at the stationary source that are insignificant as defined in 18 AAC 50.326(d) – (i) that are not listed in this permit, the following apply:

- 34.1. **Visible Emissions Standard:** The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from an industrial process or fuel-burning equipment, or an incinerator to reduce visibility through the exhaust effluent by more than 20 percent averaged over any six consecutive minutes.

[18 AAC 50.050(a) & 50.055(a)(1)]

- 34.2. **Particulate Matter Standard:** The Permittee shall not cause or allow particulate matter emitted from an industrial process or fuel-burning equipment to exceed 0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.

[18 AAC 50.055(b)(1)]

- 34.3. **Sulfur Compound Standard:** The Permittee shall not cause or allow sulfur compound emissions, expressed as SO<sub>2</sub>, from an industrial process or fuel-burning equipment, to exceed 500 ppm averaged over three hours.

[18 AAC 50.055(c)]

- 34.4. **General MR&R for Insignificant Emissions Units:** The Permittee shall comply with the following:

- a. Submit the compliance certifications of Condition 140 based on reasonable inquiry;
- b. Comply with the requirements of Condition 120;
- c. Report in the operating report required by Condition 138 if an emissions unit has historically been classified as insignificant because of actual emissions less than the thresholds of 18 AAC 50.326(e) and current actual emissions have become greater than any of those thresholds; and

- d. No other monitoring, recordkeeping or reporting is required for insignificant emissions units to demonstrate compliance with the emissions standards under Conditions 34.1, 34.2, and 34.3.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(b)(4)]  
[40 C.F.R. 71.6(a)(1) & (a)(3)]

## ***Section 4. Standard Operating Permit Conditions for Coal-Fired Boilers***

### **35. Coal-Fired Boiler Visible Emissions Standards.**

- 35.1. The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from EU IDs 1 - 4 listed in Table A to reduce visibility through the exhaust effluent by more than 20 percent for more than three minutes in any one hour, except for an additional three minutes in any one hour if:
- the visible emissions are caused by startup, shutdown, soot blowing, grate cleaning, or other routine maintenance activities specified in Condition 36.2;
  - the Permittee monitors visible emissions by continuous opacity monitoring instrumentation that conforms to the requirements set out in Conditions 36.1 and 36.3;
  - the Permittee provides the Department with a demonstration that the particulate matter emissions from the boiler allowed by this opacity limit will not cause or contribute to a violation of the ambient air quality standards for PM<sub>10</sub> in 18 AAC 50.010, or to cause the maximum allowable increases for PM<sub>10</sub> in 18 AAC 50.020 to be exceeded; and
  - the federal Administrator approves a stationary source-specific revision to the State Implementation Plan, required under 42 U.S.C. 7410, authorizing the application of this opacity limit instead of the opacity limit otherwise applicable under this section.
- 35.2. The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from EU IDs 1A, 2A, 4A, 5A, and 6A listed in Table A to reduce visibility through the exhaust effluent by more than 20 percent averaged over any six consecutive minutes.

[18 AAC 50.040(j)(4), 50.055(a)(9), 50.326(j)(3), & 50.346(c)]  
[40 C.F.R. 71.6(a)(1)]

### **36. Coal-Fired Boiler Visible Emissions Monitoring – Procedures for Operation of a Continuous Opacity Monitoring System (COMS).** The Permittee shall comply with the following procedures when monitoring visible emissions using a COMS:

- the COMS must meet the performance specifications in 40 C.F.R. 60, Appendix B, Performance Specification 1;
- operate and maintain the COMS in accordance with the manufacturer's written requirements and recommendations;
- except during COMS breakdowns, repairs, calibration checks, and zero and upscale adjustments, complete one cycle of sampling and analyzing for each successive 15-second period of emissions unit operation; from this data, calculate and record the average opacity for each successive one-minute period; and

- 36.4. at least once daily, conduct a zero and upscale (span) calibration drifts check in accordance with a written procedure, as described in 40 C.F.R. 60.13(d); adjust whenever the zero or upscale drift error exceeds four percent opacity in a 24-hour period.
- 36.5. The Permittee shall conduct performance audits as follows:
- a. for a COMS that was new, relocated, replaced, or substantially refurbished on or after April 9, 2001, perform an audit that includes the following elements as described in the Department's *Performance Audits for COMS*, adopted by reference in 18 AAC 50.030, at least once in each 12-month period:
    - (i) optical alignment;
    - (ii) zero and upscale response assessment;
    - (iii) zero compensation assessment;
    - (iv) calibration error check; and
    - (v) zero alignment assessment;
  - b. for a COMS that was new, relocated, replaced, or substantially refurbished before April 9, 2001, perform the same audits required under Condition 36.5.a except that Conditions 36.5.a(i) through 36.5.a(iv) must be performed at least quarterly; this frequency may be reduced if
    - (i) the Permittee demonstrates, by applying measurable criteria to the results of quarterly audits, that quarterly audits are not necessary; and
    - (ii) the Department gives written approval for the reduction in frequency.
- [18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]  
[40 C.F.R. 71.6(a)(3)(i)]
- 36.6. If any of the COMS on the coal-fired boilers, EU IDs 1 – 4, 1A, 2A, 4A, 5A, and 6A, is out of service or has failed the performance audit, then the Permittee shall, upon discovery and until the COMS is in good working condition, monitor as follows:
- a. Conduct visible emissions observation once each month starting the following month the COMS is out of service using 40 C.F.R. 60 Method 9 of Appendix A-4 to demonstrate compliance with Condition 35. Except as provided in Condition 36.6.b, the minimum total time of observations shall be three hours (30 six-minute averages). Calculate the highest three-minute and six-minute opacity averages during each observation.
  - b. If during the initial 60 minutes of observation all six-minute and three-minute averages are less than 10 percent and all individual 15-second observations are less than or equal to 20 percent, the observation period may be reduced from three hours to 60 minutes.

[18 AAC 50.040(j)(4) and 50.326(j)(4)]

[40 C.F.R. 71.6(a)(3)(i) & (c)(6)]

**37. Coal Fired Boiler Visible Emissions Recordkeeping.** For EU IDs 1 – 4 and 1A, 2A, 4A, 5A, and 6A listed in Table A, the Permittee shall keep records as follows:

- 37.1. Maintain records of all calculated one-minute average opacity values for COMS and records of the COMS performance audits required under Condition 36.5, according to the requirements of Condition 133.
- 37.2. Maintain records of information required under Condition 3.1.a for all Method 9 visible emissions monitoring conducted pursuant to Condition 36.6.

[18 AAC 50.040(j)(4) and 50.326(j)(4)]  
[40 C.F.R. 71.6(a)(3)(ii) & (c)(6)]

**38. Coal Fired Boiler Visible Emissions Reporting.** For EU IDs 1 – 4 and 1A, 2A, 4A, 5A, and 6A listed in Table A, the Permittee shall report as follows:

- 38.1. If any of the COMS is malfunctioning or non-operable for three or more consecutive days, the Permittee shall notify the Department by telephone or in writing on the fourth day, indicating the cause of failure and anticipated time required to repair or replace the instrument.
- 38.2. Include in the operating report required under Condition 138 the information recorded under Condition 37.2 for all Method 9 visible emissions monitoring conducted pursuant to Condition 36.6 during the period covered by the report.
- 38.3. Report a violation of the emission standard in Condition 35 under Condition 137
  - a. for EU IDs 1 – 4, if the total number of one-minute values that exceed 20 percent opacity is greater than three during any given hour when the boiler is not operating under the conditions as described in Conditions 35.1.a and 35.1.b; or
  - b. for EU IDs 1 – 4, if the total number of one-minute values that exceed 20 percent opacity is greater than six during any given hour when the boiler is operating under the conditions as described in Conditions 35.1.a and 35.1.b; or
  - c. for EU IDs 1A, 2A, 4A, 5A and 6A, if either unit exceeds the limit described in Condition 35.2.

[18 AAC 50.040(j)(4) and 50.326(j)(4)]  
[40 C.F.R. 71.6(a)(3)(iii) & (c)(6)]

**39. Coal-Fired Boiler Particulate Matter (PM) Emissions Standards.**

- 39.1. The Permittee shall not cause or allow PM emitted from EU IDs 1A, 2A, 4A, 5A, and 6A listed in Table A, to exceed 0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.

[18 AAC 50.040(j)(4), 50.055(b)(1), 50.326(j)(3) & 50.346(c)]  
[40 C.F.R. 71.6(a)(1)]

- 39.2. The Permittee shall not cause or allow particulate matter emitted from EU IDs 1 – 4 listed in Table A, to exceed 0.1 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.

[18 AAC 50.040(j)(4), 50.055(b)(2)(A) & (B), 50.326(j)(3) & 50.346(c)]  
[40 C.F.R. 71.6(a)(1)]

- 39.3. The Permittee shall comply with the particulate matter limit of Conditions 39.1 and 39.2 by limiting steam production for EU IDs 1 – 4 to the following rates established during previous source testing conducted in April 2025:

- a. EU ID 1 shall not exceed 118,000 lb/hr;
- b. EU ID 2 shall not exceed 111,000 lb/hr;
- c. EU ID 3 shall not exceed 115,000 lb/hr;
- d. EU ID 4 shall not exceed 118,000 lb/hr;
- e. EU ID 5A shall not exceed 117,000 lb/hr; and
- f. EU ID 6A shall not exceed 117,000 lb/hr.

[Permit to Operate No. 9331-AA001, Amendment #2, 12/29/94]  
[AQ0264TVP02 STR, Alliance Technical Group, 4/1/25-4/7/25 & 4/30/25]  
[18 AAC 50.040(j) & 50.326(j)]  
[40 C.F.R. 71.6(a)]

**40. Coal-Fired Boiler PM Monitoring and Recordkeeping.** The Permittee shall do the following:

- 40.1. At least once every 12 months, for each boiler that has operated 90 days or more during that period, inspect the exhaust duct work and the internal components of the dust collector for the presence of leaks; prior to restarting the boiler, repair all leaks in the exhaust ductwork and all leaks that would allow dirty gas to pass into the clean gas side of the dust collector;

- 40.2. Conduct source tests for PM as follows:

- a. Conduct the tests and report the results in accordance with Section 8. For tests required under Condition 40.2.c, submit the test plan at least 60 days before the deadline for the next test;
- b. Conduct an initial test on each boiler within 8,760 operating hours or two calendar years, whichever is sooner, after the issue date of the initial operating permit;
- c. Conduct additional tests on each boiler according to the following schedule where each test means a three-hour average consistent with 18 AAC 50.220(f):
  - (i) If the most recent source test exceeded 90 percent of the emission standard, conduct a source test within 8,760 operating hours of the previous test;

- (ii) If the most recent source test exceeded 75 percent of the emission standard, conduct a source test within 17,520 operating hours of the previous test; and
  - (iii) Within five years of the previous source test, conduct a test of each boiler operated during that time;
- d. For any boiler with a steam production limit that the operator wishes to change, the operator may operate in excess of the steam limit to perform source tests on which a new limit would be based. The operator may use a new limit based on the source testing if
  - (i) the Permittee submits a source test plan and the Department approves the plan in writing;
  - (ii) the Permittee conducts source testing according to the source test plan and consistent with Section 8;
  - (iii) the Permittee submits the results to the Department;
  - (iv) the test results show compliance with the applicable particulate matter standard in Conditions 39.1 or 39.2 at the requested new steam production rate; and
  - (v) the Department concurs with the new limit in writing, after finding that
    - (A) the test results will be representative of normal operation; and
    - (B) the new limit does not cause the stationary source to be subject to permitting under 18 AAC 50.302 or 18 AAC 50.502;
- e. During each test, measure and record visible emissions and steam production rates, submit the records with the source test report, and determine visible emissions consistent with monitoring methods of Condition 3.1 for the duration of each one hour run;

40.3. Measure and record steam production as follows:

- a. Operate and maintain a device to measure and record steam production in accordance with the manufacturer's written requirements and recommendations;
- b. Except during breakdowns, repairs, calibration checks, and zero and span adjustments of the device, complete at least one cycle of sampling and analyzing for each successive 15-minute period of boiler operation. From this data, calculate and record the average steam production rate for successive one-hour periods. Maintain this data at the stationary source and make it available to the Department upon request;

- c. Within one year after the effective date of this permit and at such times as the Department may require, determine the relative accuracy of each monitoring device required by Condition 40.3.a; and
- d. In addition, keep records of the date and time identifying each period during which a device required by this permit is inoperative (except for zero and span checks), and records of the nature of device repairs and adjustments. Upon request of the Department, submit copies of the records.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]  
[40 C.F.R. 71.6(a)(3)(i) & (ii)]

**41. Coal-Fired Boiler PM Reporting.** The Permittee shall report as follows:

- 41.1. Submit a report in accordance with Condition 137 whenever any of the following situations occur:
  - a. when steam production exceeds a permit limit;
  - b. when the results of a source test exceed the PM emission limit; or
  - c. if a steam production monitoring device malfunctions or becomes inoperable for four or more consecutive hours; in the report, identify the boiler, the cause of failure, and the anticipated time required to repair the device.
- 41.2. Include in each operating report under Condition 138:
  - a. the results of each PM source test;
  - b. for any boiler with a steam production limit, the limit and averaging period, the highest steam production rate for the period covered by the report (averaged over the same averaging period as the limit), and identification of any periods exceeding the limit; and
  - c. the results of any relative accuracy determination of steam monitoring equipment.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]  
[40 C.F.R. 71.6(a)(3)(iii)]

**42. Coal-Fired Boiler Sulfur Compound Emissions Standard.** The Permittee shall not cause or allow sulfur compound emissions, expressed as SO<sub>2</sub>, from EU IDs 1 – 4 and 1A, 2A, 4A, 5A, and 6A to exceed 500 parts per million (ppm) averaged over a period of three hours.

[18 AAC 50.040(j)(4), 50.055(c), 50.326(j)(3) & 50.346(c)]  
[40 C.F.R. 71.6(a)(1)]

**43. Coal-Fired Boiler Sulfur Compound Emissions Monitoring.** The Permittee shall monitor sulfur compound emissions from EU IDs 1 – 4 and 1A, 2A, 4A, 5A, and 6A as follows:

- 43.1. Upon receipt of each shipment of fuel at the stationary source, the Permittee shall

- a. obtain a signed statement from the supplier with the following information:
  - (i) the percent sulfur by weight of the coal;
  - (ii) the method of analysis; and
  - (iii) a statement that the analysis was representative of the coal shipped;
- b. if valid representative results are not available from the supplier, analyze a representative sample of the fuel to determine the sulfur content using an appropriate method listed in 18 AAC 50.035(c) or 40 C.F.R. 60.17; and
- c. if the coal contains more than 0.4 percent sulfur by weight, calculate the three-hour exhaust concentration expected to result from combusting each shipment of fuel using the following equation:

$$\text{SO}_2 \text{ Concentration, PPM} = \frac{1.00 \times 10^6 \times \text{mol}_{\text{SO}_2}}{(\text{mol}_{\text{SO}_2} + \text{mol}_{\text{CO}_2} + \text{mol}_{\text{O}_2} + \text{mol}_{\text{N}_2})}$$

Where:

$$\text{mol}_{\text{SO}_2} = \frac{[\text{wt}\% \text{S}_{\text{fuel}}, \%]}{32.06}$$

$$\text{mol}_{\text{CO}_2} = \frac{[\text{wt}\% \text{C}_{\text{fuel}}, \%]}{12.01}$$

$$\text{mol}_{\text{O}_2} = \text{MF} \times \left[ \frac{[\text{wt}\% \text{N}_{\text{fuel}}, \%]}{28.01} + (4.76 \times \text{mol}_{\text{SO}_2}) + (4.76 \times \text{mol}_{\text{CO}_2}) + (1.88 \times \text{mol}_{\text{H}_2\text{O}}) - \left( 3.76 \times \frac{[\text{wt}\% \text{O}_2, \text{fuel}, \%]}{32.00} \right) \right]$$

$$\text{MF} = \frac{[\text{vol}\% \text{O}_2, \text{exhaust}, \%]}{(100\% - 4.76 \times [\text{vol}\% \text{O}_2, \text{exhaust}, \%])}$$

$$\text{mol}_{\text{H}_2\text{O}} = \frac{[\text{wt}\% \text{H}_{\text{fuel}}, \%]}{2.016}$$

$$\text{mol}_{\text{N}_2} = \left( \frac{[\text{wt}\% \text{N}_{\text{fuel}}, \%]}{28.01} \right) + (3.76 \times \text{mol}_{\text{SO}_2}) + (3.76 \times \text{mol}_{\text{CO}_2}) + (1.88 \times \text{mol}_{\text{H}_2\text{O}}) + (3.76 \times \text{mol}_{\text{O}_2}) - \left( \frac{[\text{wt}\% \text{O}_2, \text{fuel}, \%]}{8.51} \right)$$

The fuel weight percent (wt%) of carbon, nitrogen, oxygen, and hydrogen is obtained from the most recent analysis required by Condition 43.2;

The volume percent of oxygen in the exhaust (vol% O<sub>2</sub>, exhaust,) is obtained from oxygen meters on a three-hour average or from the most recent ORSAT analysis at the same boiler load used in the calculation; and

The fuel weight percent (wt%) of sulfur is obtained pursuant to Condition 43.1.a or 43.1.b;

- 43.2. At least once each year, and whenever a shipment of coal contains more than 0.4 percent sulfur, obtain a representative sample of each fuel that is burned using the applicable procedures in 40 C.F.R. 60, Appendix A-7, Method 19, Section 12.5.2.1; conduct an ultimate analysis of the representative sample using ASTM D3176-89 (1997) or an appropriate method listed in 40 C.F.R. 60.17 to determine the weight percents (dry basis) of carbon, nitrogen, oxygen, and hydrogen; and
- 43.3. Conduct source tests on at least one coal-fired boiler at the stationary source to determine sulfur compound emissions while burning each shipment of fuel if the calculations of Condition 43.1.c show that the exhaust SO<sub>2</sub> concentration would exceed 500 ppm.

[18 AAC 50.035(c), 50.040(a) & (j)(4), 50.326(j)(3), & 50.346(c)]  
[40 C.F.R. 71.6(a)(3)(i)]

- 44. Coal-Fired Boiler Sulfur Compound Emissions Recordkeeping.** The Permittee shall keep records of the sulfur contents of each shipment of fuel, each calculated SO<sub>2</sub> concentration averaged over three-hours, and any test results and calculations under Condition 43.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]  
[40 C.F.R. 71.6(a)(3)(ii)]

- 45. Coal-Fired Boiler Sulfur Compound Emissions Reporting.** The Permittee shall report as follows:

- 45.1. Submit a report in accordance with Condition 137 whenever
- a. a three-hour exhaust concentration calculated pursuant to Condition 43.1.c is greater than 500 ppm; or
  - b. a source test pursuant to Condition 43.3 has not shown compliance;
- 45.2. Include in each operating report under Condition 138 a summary that includes
- a. sulfur contents of each shipment of fuel;
  - b. each calculated SO<sub>2</sub> concentration averaged over three hours; and
  - c. any test results and calculations required under Condition 43.

[18 AAC 50.040(j)(4), 50.326(j)(3), & 50.346(c)]  
[40 C.F.R. 71.6(a)(3)(iii)]

## ***Section 5. Performance Audits for COMS***

**46. Performance Audits.** The following elements shall be included in performance audits for Continuous Opacity Monitoring Systems (COMS), unless the Department gives written approval for unit-specific audit procedures.

[18 AAC 50.030(7), 50.040(j), & 50.326(j)]  
[40 C.F.R. 71.6(a)(3)(i)]

- 46.1. **Optical Alignment Assessment.** The status of the optical alignment of the monitor components shall be checked and recorded according to the procedures specified by the monitor manufacturer. Realign as necessary.
- 46.2. **Zero and Upscale Response Assessment.** The zero and upscale response errors shall be determined and recorded according to the calibration drift procedures of paragraphs 8.1(4)(i) and (ii) in 40 C.F.R. 60, Appendix B, Performance Specification 1 (PS-1), adopted by reference in 18 AAC 50.040(a). The error is defined as the difference (in percent opacity) between the correct value and the observed value for the zero and high-level calibration checks.
- 46.3. **Zero Compensation Assessment.** The value of the zero compensation applied at the time of the audit shall be calculated as equivalent opacity, corrected to stack exit conditions as necessary, according to the procedures specified by the manufacturer. Record the compensation applied to the effluent recorded by the monitor system.
- 46.4. **Calibration Error Check.** Conduct a three-point calibration error test using three calibration attenuators that produce outlet path-length corrected, single-pass opacity values shown in ASTM D 6216-98, Section 7.5, adopted by reference in 18 AAC 50.035(c). If the applicable limit is less than 10 percent opacity, use attenuators as described in ASTM D 6216-98, Section 7.5 for applicable standards of 10 to 19 percent opacity. Confirm the external audit device produces the proper zero value on the COMS data recorder. Separately, insert each calibration attenuator (low, mid, and high-level) into the external audit device. While inserting each attenuator, (1) ensure that the entire light beam passes through the attenuator; (2) minimize interference from reflected light; and (3) leave the attenuator in place for at least two times the shortest recording interval on the COMS data recorder. Make a total of five non-consecutive readings for each attenuator. At the end of the test, correlate each attenuator insertion to the corresponding value from the data recorder. Subtract the single-pass calibration attenuator values corrected to the stack exit conditions from the COMS responses. Calculate the arithmetic mean difference, standard deviation, and confidence coefficient of the five measurements value using equations 1-3, 1-4, and 1-5 of PS-1. Calculate the calibration error as the sum of the absolute value of the mean difference and the 95 percent confidence coefficient for each of the three test attenuators using equations 1 through 6 of PS-1. Report the calibration error test results for each of the three attenuators.
- 46.5. **Zero Alignment Assessment.** Compare the COMS simulated zero to the actual clear path zero of the installation. The assessment may be conducted in conjunction with, but prior to, other performance audit elements.

- a. **Primary Zero Alignment Method.** The primary zero alignment shall be performed under clear path conditions. This may be accomplished if the process is not operating and the monitor path length is free of particulate matter or the monitor may be removed from its installation and set up under clear path conditions. The absence of particulate matter shall be demonstrated prior to conducting the test at the installed site. No adjustment to the monitor is allowed other than the establishment of the proper monitor path length and correct optical alignment of the monitor components. Record the monitor response to a clear path condition and to the monitor's simulated zero condition as percent opacity corrected to stack exit conditions as necessary. For monitors with automatic zero compensation, disconnect or disable the zero compensation mechanism or record the amount of correction applied to the monitor's simulated zero condition. The response difference in percent opacity to the clear path and simulated zero conditions shall be recorded as the zero alignment error. Adjust the monitor's simulated zero device to provide the same response as the clear path condition. Restore the COMS to its operating mode.
- b. **Alternate Zero Alignment Method.** Monitors capable of allowing the installation of an external, removable zero-jig may use the equipment for an alternative zero alignment provided that the zero-jig setting is established for the monitor pathlength and recorded for the specific COMS by comparison of the COMS responses to the installed zero-jig and to the clear path condition. The zero-jig is shown to be capable of producing a consistent zero response when it is repeatedly (i.e., three consecutive installations and removals prior to conducting the final zero alignment check) installed on the COMS. The zero-jig setting shall be permanently set at the time of the initial COMS zeroing to the clear path zero value and protected when not in use to ensure that the setting equivalent to zero opacity does not change. The zero-jig setting shall be checked and recorded prior to initiating the zero alignment. Emissions unit owners and operators that employ a zero-jig shall perform a primary zero alignment audit once every three years.
- c. **Failure Criteria for Zero Alignment.** The zero alignment is acceptable if the error at the simulated zero check is less than or equal to 2 percent opacity prior to adjustment (i.e., if the zero alignment error is 0 percent the analyzer does not need servicing solely based on this test).

## ***Section 6. Federal Requirements***

### **40 C.F.R. Part 60 New Source Performance Standards (NSPS)**

#### **NSPS Subpart A – General Provisions**

**47. NSPS Subpart A Notification.** Unless exempted by a specific subpart, for any affected facility<sup>9</sup> or existing facility<sup>10</sup> regulated under NSPS requirements in 40 C.F.R. 60, the Permittee shall furnish the Administrator<sup>11</sup> written notification or, if acceptable to both the EPA and the Permittee, electronic notification, as follows:

[18 AAC 50.035 & 50.040(a)(1)]  
[40 C.F.R. 60.7(a) & 60.15(d), Subpart A]

- 47.1. a notification of the date construction (or reconstruction as defined under 40 C.F.R. 60.15) of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form;  
[40 C.F.R. 60.7(a)(1), Subpart A]
- 47.2. a notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date;  
[40 C.F.R. 60.7(a)(3), Subpart A]
- 47.3. a notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 C.F.R. 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include<sup>12</sup>
- a. information describing the precise nature of the change,
  - b. present and proposed emission control systems,
  - c. productive capacity of the facility before and after the change, and
  - d. the expected completion date of the change;
- [40 C.F.R. 60.7(a)(4), Subpart A]
- 47.4. a notification of the date upon which demonstration of the continuous monitoring system performance commences in accordance with 40 C.F.R. 60.13(c). The notification shall be postmarked not less than 30 days prior to such date;  
[40 C.F.R. 60.7(a)(5), Subpart A]

---

<sup>9</sup> *Affected facility* means, with reference to a stationary source, any apparatus to which a standard applies, as defined in 40 C.F.R. 60.2.

<sup>10</sup> *Existing facility* means, with reference to a stationary source, any apparatus of the type for which a standard is promulgated in 40 C.F.R. Part 60, and the construction or modification of which was commenced before the date of proposal of that standard; or any apparatus which could be altered in such a way as to be of that type, as defined in 40 C.F.R. 60.2.

<sup>11</sup> The Department defines the “the Administrator” to mean “the EPA and the Department.”

<sup>12</sup> The Department and EPA may request additional relevant information subsequent to this notice.

47.5. a notification of the anticipated date for conducting the opacity observations required by 40 C.F.R. 60.11(e)(1). The notifications shall also include, if appropriate, a request for the EPA to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date;

[40 C.F.R. 60.7(a)(6), Subpart A]

47.6. a notification that continuous opacity monitoring system data results will be used to determine compliance with the applicable opacity standard during a performance test required by 40 C.F.R. 60.8 in lieu of Method 9 observation data as allowed by 40 C.F.R. 60.11(e)(5). This notification shall be postmarked not less than 30 days prior to the date of the performance test; and

[40 C.F.R. 60.7(a)(7), Subpart A]

47.7. a notification of any proposed replacement of components at an existing facility, for which the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, postmarked as soon as practicable, but no less than 60 days before commencement of replacement, and including the following information:

[40 C.F.R. 60.15(d), Subpart A]

- a. the name and address of owner or operator,
- b. the location of the existing facility,
- c. a brief description of the existing facility and the components that are to be replaced,
- d. a description of the existing and proposed air pollution control equipment,
- e. an estimate of the fixed capital cost of the replacements, and of constructing a comparable entirely new facility,
- f. the estimated life of the existing facility after the replacements, and
- g. a discussion of any economic or technical limitations the facility may have in complying with the applicable standards of performance after the proposed replacements.

**48. NSPS Subpart A Startup, Shutdown, & Malfunction Requirements.** The Permittee shall maintain records of the occurrence and duration of any start-up, shutdown, or malfunction in the operation of EU IDs 1A – 6A, 7, 8, 15, 16, 82-84, 86-103, 110B, and 111, any malfunction of the air-pollution control equipment, or any periods during which a continuous monitoring system or monitoring device for EU IDs 1A-6A is inoperative.

[18 AAC 50.040(a)(1)]  
[40 C.F.R. 60.7(b), Subpart A]

**49. NSPS Subpart A Excess Emissions and Monitoring Systems Performance Report.** The Permittee shall submit excess emissions and monitoring systems performance (EEMSP)<sup>13</sup> report and/or summary report form (see Condition 50) to the Administrator semiannually, except when more frequent reporting is specifically required by an applicable subpart; or the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30<sup>th</sup> day following the end of each six-month period. Written reports of excess emissions shall include the following information:

[18 AAC 50.040(a)(1)]  
[40 C.F.R. 60.7(c), Subpart A]

49.1. the magnitude of excess emissions computed in accordance with Condition 56.5, any conversion factors used, the date and time of commencement and completion of each time period of excess emissions, and the process operating time during the reporting period;

[40 C.F.R. 60.7(c)(1), Subpart A]

49.2. specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of EU IDs 1A – 6A; the nature and cause of any malfunction (if known), and the corrective action taken or preventative measures adopted; and

[40 C.F.R. 60.7(c)(2), Subpart A]

49.3. the date and time identifying each period during which a continuous monitoring system (CMS) was inoperative except for zero and span checks and the nature of any repairs or adjustments.

[40 C.F.R. 60.7(c)(3), Subpart A]

49.4. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

[40 C.F.R. 60.7(c)(4), Subpart A]

**50. NSPS Subpart A Summary Report Form.** The Permittee shall submit to the Department and to EPA one “summary report form” in the format shown in Figure 1 of 40 C.F.R. 60.7 (see Attachment A to the Statement of Basis) for each pollutant monitored for EU IDs 1A – 6A. The report shall be submitted semiannually, postmarked by the 30<sup>th</sup> day following the end of each six-month period, except when more frequent reporting is specifically required by an applicable subpart or the EPA, as follows:

[18 AAC 50.040(a)(1)]  
[40 C.F.R. 60.7(c) & (d), Subpart A]

---

<sup>13</sup> The federal EEMSP report is not the same as the state excess emission report required by Condition 137. Excess emissions are defined in applicable subparts.

50.1. If the total duration of excess emissions for the reporting period is less than one percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than five percent of the total operating time for the reporting period, submit a summary report form **unless** the EEMSP report described in Condition 49 is requested.

[40 C.F.R. 60.7(d)(1), Subpart A]

50.2. If the total duration of excess emissions for the reporting period is one percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is five percent or greater of the total time for the reporting period, then submit a summary report form **and the EEMSP report** described in Condition 49.

[40 C.F.R. 60.7(d)(2), Subpart A]

**51. NSPS Subpart A Recordkeeping.** For EU IDs 1A – 6A, the Permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 C.F.R. Part 60 recorded in a permanent form suitable for inspection. Except as provided in 40 C.F.R. 60.7(f)(1) and (2), the file shall be retained for at least five years, in accordance with Condition 133, following the date of such measurements, maintenance, reports, and records.

[18 AAC 50.040(a)(1) & (j)(4)]

[40 C.F.R. 60.7(f), Subpart A]

[40 C.F.R. 71.6(a)(3)(ii)(B)]

**52. NSPS Subpart A Performance (Source) Tests.** The Permittee shall conduct source tests according to Section 8 and as required in this condition on any affected facility.

[18 AAC 50.040(a)(1)]

[40 C.F.R. 60.8(a) – (f), Subpart A]

52.1. Except as specified in 40 C.F.R. 60.8(a)(1),(a)(2), (a)(3), and (a)(4), within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility, or at such other times specified by 40 C.F.R. Part 60, and at such other times as may be required by the Administrator, the Permittee shall conduct performance test(s) and furnish EPA and the Department a written report of the results of such performance test(s).

[40 C.F.R. 60.8(a), Subpart A]

52.2. Conduct source tests and reduce data as set out in 40 C.F.R. 60.8(b), and provide the Department copies of any EPA waivers or approvals of alternative methods.

[40 C.F.R. 60.8(b), Subpart A]

- 52.3. Conduct source tests under conditions specified by EPA to be based on representative performance of EU IDs 1A – 6A. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

[40 C.F.R. 60.8(c), Subpart A]

- 52.4. Provide the EPA and the Department at least 30 days prior notice of any performance test, except as specified under other subparts, to afford the EPA and the Department the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the Permittee shall notify the EPA and the Department as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the EPA and the Department by mutual agreement.

[40 C.F.R. 60.8(d), Subpart A]

- 52.5. Provide or cause to be provided, performance testing facilities as follows:

- a. Sampling ports adequate for test methods applicable to EU IDs 1A – 6A. This includes (i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (ii) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures;
- b. Safe sampling platform(s);
- c. Safe access to sampling platform(s); and
- d. Utilities for sampling and testing equipment.

[40 C.F.R. 60.8(e), Subpart A]

- 52.6. Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method.

- a. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply.

- b. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the EPA's approval, be determined using the arithmetic mean of the results of the two other runs.
- c. Unless otherwise specified in a relevant standard or test method, or as otherwise approved by the Administrator in writing, the report for a performance test shall include the elements identified in 40 C.F.R. 60.8(f)(2)(i) through (vi).

[40 C.F.R. 60.8(f), Subpart A]

- 53. NSPS Subpart A Good Air Pollution Control Practice (GAPCP).** At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate EU IDs 1A – 6A, 7, 8, 15, 16, 86 – 103, 110B, and 111 including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. The Administrator will determine whether acceptable operating and maintenance procedures are being used based on information available, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance records, and inspections of EU IDs 1A – 6A, 7, 8, 15, 16, 86 – 103, 110B, and 111.

[18 AAC 50.040(a)(1)]  
[40 C.F.R. 60.11(d), Subpart A]

- 54. NSPS Subpart A Credible Evidence.** For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of the standards set forth in Conditions 58, 64.1, 65.1, 76, and 82, nothing in 40 C.F.R. Part 60 shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether EU IDs 1A – 6A, 7, 8, 15, 16, 86 – 103, 110B, and 111 would have been in compliance with applicable requirements of 40 C.F.R. Part 60 if the appropriate performance or compliance test or procedure had been performed.

[18 AAC 50.040(a)(1)]  
[40 C.F.R. 60.11(g), Subpart A]

- 55. NSPS Subpart A Concealment of Emissions.** The Permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of a standard set forth in Conditions 58, 64.1, 65.1, 71, 76, and 82. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard that is based on the concentration of a pollutant in the gases discharged to the atmosphere.

[18 AAC 50.040(a)(1)]  
[40 C.F.R. 60.12, Subpart A]

- 56. NSPS Subpart A, Monitoring.** For a Continuous Monitoring System (CMS) required under Conditions 59.3.c and 60.1.a, the Permittee shall comply as follows:

[18 AAC 50.040(a)(1)]  
[40 C.F.R. 60.13(a) Subpart A]

- 56.1. Ensure that all CMS and monitoring devices are installed and operational prior to a performance test conducted under Condition 52. Verification of operational status shall, as a minimum, include completion of manufacturer's written requirements or recommendations for installation, operation, and calibration of device.  
[40 C.F.R. 60.13(b), Subpart A]
- 56.2. Conduct continuous opacity monitoring system (COMS) or continuous emission monitoring system (CEMS) performance evaluations in accordance with 40 C.F.R. 60.13(c) and at such other times as may be required by the Administrator under section 114 of the Act.  
[40 C.F.R. 60.13(c), Subpart A]
- 56.3. Check the zero (or low level value between zero and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with 40 C.F.R. 60.13(d).  
[40 C.F.R. 60.13(d)(1), Subpart A]
- 56.4. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under Condition 56.3, keep all CMS's in operation continuously and as follows:  
[40 C.F.R. 60.13(e), Subpart A]
- a. for a COMS, complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive six-minute period; otherwise  
[40 C.F.R. 60.13(e)(1), Subpart A]
- b. complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.  
[40 C.F.R. 60.13(e)(2), Subpart A]
- 56.5. Reduce data in accordance with the following:  
[40 C.F.R. 60.13(h), Subpart A]
- a. For all CMS for measurement of opacity, reduce all data to six-minute averages. Calculate six-minute opacity averages from 36 or more data points equally spaced over each 6-minute period.  
[40 C.F.R. 60.13(h)(1), Subpart A]
- b. For CMS other than opacity, reduce all data to one-hour averages for time periods as defined in 40 C.F.R. 60.2. Compute one-hour averages in accordance with 40 C.F.R. 60.13(h)(2)(i) through (ix).  
[40 C.F.R. 60.13(h)(2), Subpart A]
- c. Convert all excess emission into units of the standard used in Conditions 59.3.c and 60.1.a. After conversion the Permittee may round data to the same number of significant digits as used in the standards.  
[40 C.F.R. 60.13(h)(3), Subpart A]

56.6. The Permittee may request for an alternative monitoring procedures or requirements of 40 C.F.R. 60 through a written application, subject to the Administrator's approval, in accordance with 40 C.F.R. 60.13(i)(1) through (9).

[40 C.F.R. 60.13(i)(1)-(9), Subpart A]

56.7. The Permittee may request for an alternative to the relative accuracy (RA) test specified in Performance Specification 2 of appendix B in accordance with 40 C.F.R. 60.13(j)(1) through (2).

[40 C.F.R. 60.13(j)(1)-(2), Subpart A]

### **NSPS Subpart Db –Institutional Steam Generating Units, EU IDs 1A, 2A, 4A, 5A, and 6A**

**57. NSPS Subpart Db Applicability.** For EU IDs 1A, 2A, 4A, 5A, and 6A, the Permittee shall comply with the applicable requirements for steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 100 million British thermal units per hour (MMBtu/hr).

[40 C.F.R. 60.40b(a), Subpart Db]  
[18 AAC 50.040(a)(2)(C)]

### **58. NSPS Subpart Db Emission Standards.**

#### **58.1. Standard for sulfur dioxide (SO<sub>2</sub>).**

- a. On and after the date on which the performance test is completed or required to be completed under Condition 52, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification after February 28, 2005, and that combusts coal, oil, natural gas, a mixture of these fuels, or a mixture of these fuels with any other fuels shall cause to be discharged into the atmosphere any gases that contain SO<sub>2</sub> in excess of 0.20 lb/MMBtu.

[40 C.F.R. 60.42b(k)(1), Subpart Db]

- b. Compliance with the emission limits, fuel oil sulfur limits, and/or percent reduction requirements under this section are determined on a 30-day rolling average basis.

[40 C.F.R. 60.42b(e), Subpart Db]

- c. The SO<sub>2</sub> emission limits and percent reduction requirement under this section apply at all times, including periods of startup, shutdown, and malfunction.

[40 C.F.R. 60.42b(g), Subpart Db]

#### **58.2. Standard for particulate matter (PM).**

- a. On and after the date on which the initial performance test is completed or is required to be completed under Condition 52, whichever date comes first, no owner or operator of an affected facility that combusts coal, oil, wood, or mixtures of these fuels with any other fuels shall cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

[40 C.F.R. 60.43b(f), Subpart Db]

- b. The PM and opacity standards apply at all times, except during periods of startup, shutdown, or malfunction.

[40 C.F.R. 60.43b(g), Subpart Db]

- c. On and after the date on which the initial performance test is completed or is required to be completed under Condition 52, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification after February 28, 2005, and that combusts coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 0.030 lb/MMBtu heat input.

[40 C.F.R. 60.43b(h)(1), Subpart Db]

### 58.3. Standard for nitrogen oxides (NO<sub>x</sub>).

- a. On and after the date on which the initial performance test is completed or is required to be completed under 60.8, whichever date is first, no owner or operator of an affected facility that commenced construction after July 9, 1997 shall cause to be discharged into the atmosphere from that affected facility any gases that contain NO<sub>x</sub> (expressed as NO<sub>2</sub>) in excess of the following limits:

- (i) 0.20 lb/MMBtu heat input if the affected facility combusts coal, oil or natural gas, along or with any other fuels; or
- (ii) After February 27, 2006, units where more than 10 percent of total annual output is electrical or mechanical may comply with an optional limit of 2.1 lb/MWh gross energy output, based on a 30-day rolling average. Units complying with this output-based limit must demonstrate compliance according to the procedures of 60.48Da(i) of Subpart Da, and must monitor emissions according to 60.49Da(c), (k) through (n) of Subpart Da.

[40 C.F.R. 60.44b(1)(2) & (3), Subpart Db]

- b. Compliance with the emission limits under this section is determined on a 30-day rolling average basis.

[40 C.F.R. 44b(i), Subpart Db]

- (i) For purposes of Condition 58.1.b, the NO<sub>x</sub> standards under this section apply at all times including periods of startup, shutdown, or malfunction.

[40 C.F.R. 44b(h), Subpart Db]

## 59. NSPS Subpart Db Compliance Determinations

### 59.1. Performance Test Methods and Procedures for SO<sub>2</sub>.

- a. The SO<sub>2</sub> emission standards in Condition 58.1 apply at all times.  
[40 C.F.R. 60.45b(a), Subpart Db]
- b. In conducting the performance tests required under Condition 52, the owner or operator shall use the methods and procedures in Appendix A (including fuel certification and sampling) of 40 C.F.R. 60 or the methods and procedures as specified in Condition 59.1, except as provided in Condition 52.2. Condition 52.6 does not apply to Condition 59.1. The 30-day notice required in Condition 52.4 applies only to the initial performance test unless otherwise specified by the Administrator.  
[40 C.F.R. 60.45b(b), Subpart Db]
- c. The owner or operator of an affected facility shall conduct performance tests to determine compliance with the percent of potential SO<sub>2</sub> emission rate and the SO<sub>2</sub> emission rate pursuant to Condition 58.1 following the procedures listed below.
- (i) The initial performance test shall be conducted over 30 consecutive operating days of the steam generating unit. Compliance with the SO<sub>2</sub> standards shall be determined using a 30-day average. The first operating day included in the initial performance test shall be scheduled within 30 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of the facility.
- (ii) If only coal, only oil, or a mixture of coal and oil is combusted, the following procedures are used:
- (A) The procedures in Method 19 of appendix A-7 of 40 C.F.R. 60 are used to determine the hourly SO<sub>2</sub> emission rate and the 30-day average emission rate. The hourly averages used to compute the 30-day averages are obtained from the CEMS of Conditions 60.1.a or 60.1.b.
- (B) The percent of potential SO<sub>2</sub> emission rate emitted to the atmosphere is computed using the following formula:
- (1) 
$$\%P_s = 100\left(1 - \frac{\%R_g}{100}\right)\left(1 - \frac{\%R_f}{100}\right)$$
- (2) Where:
- i. %P<sub>s</sub> = Potential SO<sub>2</sub> emission rate, percent;
- ii. %R<sub>g</sub> = SO<sub>2</sub> removal efficiency of the control device as determined by Method 19, in percent; and

iii.  $\%R_f$  = SO<sub>2</sub> removal efficiency of fuel pretreatment as determined by Method 19, in percent.

[40 C.F.R. 60.45b(c), (c)(1)-(2), Subpart Db]

- d. For the initial performance test required under Condition 52, compliance with the SO<sub>2</sub> emission limits and percent reduction requirements under Condition 58.1 is based on the average emission rates and the average percent reduction for SO<sub>2</sub> for the first 30 consecutive steam generating unit operating days. The initial performance test is the only test for which at least 30 days prior notice is required unless otherwise specified by the Administrator. The initial performance test is to be scheduled so that the first steam generating unit operating day of the 30 successive steam generating unit operating days is completed within 30 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of the facility. The boiler load during the 30-day period does not have to be the maximum design load, but must be representative of future operating conditions and include at least one 24-hour period at full load.

[40 C.F.R. 60.45b(f), Subpart Db]

- e. After the initial performance test required under Condition 52, compliance with the SO<sub>2</sub> emission limits and percent reduction requirements under Condition 58.1 is based on the average emission rates and the average percent reduction for SO<sub>2</sub> for 30 successive steam generating unit operating days. A separate performance test is completed at the end of each steam generating unit operating day after the initial performance test, and a new 30-day average emission rate and percent reduction for SO<sub>2</sub> are calculated to show compliance with the standard.

[40 C.F.R. 60.45b(g), Subpart Db]

- f. The owner or operator of an affected facility shall use all valid SO<sub>2</sub> emissions data in calculating  $\%P_s$  under Condition 59.1.c, whether or not the minimum emissions data requirements under Conditions 59.2 are achieved. All valid emission data, including valid SO<sub>2</sub> emission data collected during periods of startup, shutdown and malfunction, shall be used in calculating  $\%P_s$  pursuant to Condition 59.1.c.

[40 C.F.R. 60.45b(h), Subpart Db]

## 59.2. Performance Test Methods and Procedures for PM.

- a. The PM emission standards and opacity limits under Condition 58.2 apply at all times except during periods of startup, shutdown, or malfunction.

[40 C.F.R. 60.46b(a), Subpart Db]

- b. Compliance with the PM emission standards under Condition 58.2 shall be determined through performance testing as described in Condition 59.2.c.

[40 C.F.R. 60.46b(b), Subpart Db]

- c. To determine compliance with the PM emission limits and opacity limits under Condition 58.2, the owner or operator of an affected facility shall conduct an initial performance test as required under Condition 52, and shall conduct subsequent performance test as requested by the Administrator, using the following procedures and reference methods:
- (i) Method 3A or 3B of appendix A-2 is used for gas analysis when applying Method 5 of appendix A-3 or Method 17 of appendix A-6.
  - (ii) Method 5, 5B, or 17 of appendix A shall be used to measure the concentration of PM as follows:
    - (A) Method 5 of appendix A shall be used at affected facilities without wet flue gas desulfurization (FGD) systems; and
    - (B) Method 17 of appendix A-6 may be used at facilities with or without wet scrubber systems provided the stack gas temperature does not exceed a temperature of 160 °C (320 °F). The procedures of sections 8.1 and 11.1 of Method 5B of appendix A-3 may be used in Method 17 of appendix A-6 only if it is used after a wet FGD system. Do not use Method 17 of appendix A-6 after wet FGD systems if the effluent is saturated or laden with water droplets.
    - (C) Method 5B of appendix A is to be used only after wet FGD systems.
  - (iii) Method 1 of appendix A is used to select the sampling site and the number of traverse sampling points. The sampling time for each run is at least 120 minutes and the minimum sampling volume is 1.7 dscm (60 dscf) except that smaller sampling times or volumes may be approved by the Administrator when necessitated by process variables or other factors.
  - (iv) For Method 5 of appendix A, the temperature of the sample gas in the probe and filter holder is monitored and is maintained at 160±14 °C (320±25 °F).
  - (v) For determination of PM emissions, the oxygen (O<sub>2</sub>) or CO<sub>2</sub> sample is obtained simultaneously with each run of Method 5, 5B, or 17 of appendix A by traversing the duct at the same sampling location.
  - (vi) For each run using Method 5, 5B, or 17 of appendix A, the emission rate expressed in ng/J heat input is determined using:
    - (A) The O<sub>2</sub> or CO<sub>2</sub> measurements and PM measurements obtained under this section;
    - (B) The dry basis F factor; and

(C) The dry basis emission rate calculation procedure contained in Method 19 of appendix A.

(vii) Method 9 of appendix A is used for determining the opacity of stack emissions.

[40 C.F.R. 60.46b(d), (d)(1) – (7), Subpart Db]

### 59.3. Performance Test Methods and Procedures for NO<sub>x</sub>.

a. The NO<sub>x</sub> emission standards under Condition 58.3 apply at all times.

[40 C.F.R. 60.46b(a), Subpart Db]

b. Compliance with the NO<sub>x</sub> emission standards under Condition 58.3 shall be determined through performance testing under Condition 59.3.c.

[40 C.F.R. 60.46b(c), Subpart Db]

c. To determine compliance with the emission limits for NO<sub>x</sub> required under Condition 58.3, the owner or operator of an affected facility shall conduct the performance test as required under Condition 52 using the continuous system for monitoring NO<sub>x</sub> under Condition 60.3.a.

(i) For the initial compliance test, NO<sub>x</sub> from the steam generating unit are monitored for 30 successive steam generating unit operating days and the 30-day average emission rate is used to determine compliance with the NO<sub>x</sub> emission standards under Condition 58.3. The 30-day average emission rate is calculated as the average of all hourly emissions data recorded by the monitoring system during the 30-day test period.

(ii) Following the date on which the initial performance test is completed or is required to be completed in Condition 52, whichever date comes first, the owner or operator of an affected facility which combusts coal or which combusts residual oil having a nitrogen content greater than 0.30 weight percent shall determine compliance with the NO<sub>x</sub> emission standards in Condition 58.3 on a continuous basis through the use of a 30-day rolling average emission rate. A new 30-day rolling average emission rate is calculated for each steam generating unit operating day as the average of all of the hourly NO<sub>x</sub> emission data for the preceding 30 steam generating unit operating days.

[40 C.F.R. 60.46b(e), (e)(1) & (2), Subpart Db]

## 60. NSPS Subpart Db Monitoring.

### 60.1. Emission Monitoring for SO<sub>2</sub>.

a. Except as provided in Conditions 60.1.b, the owner or operator of an affected facility subject to SO<sub>2</sub> standards in Condition 58.1 shall install, calibrate, maintain, and operate CEMS for measuring SO<sub>2</sub> concentrations and either O<sub>2</sub> or CO<sub>2</sub> concentrations and shall record the output of the systems.

[40 C.F.R. 60.47b(a), Subpart Db]

- b. As an alternative to operating CEMS as required under Condition 60.1.a, an owner or operator may elect to determine the average SO<sub>2</sub> emissions and percent reduction by:
- (i) Collecting coal samples in an as-fired condition at the inlet to the steam generating unit and analyzing them for sulfur and heat content according to Method 19 of appendix A. Method 19 of appendix A provides procedures for converting these measurements into the format to be used in calculating the average SO<sub>2</sub> input rate, or
  - (ii) Measuring SO<sub>2</sub> according to Method 6B of appendix A at the inlet or outlet to the SO<sub>2</sub> control system. An initial stratification test is required to verify the adequacy of the sampling location for Method 6B of appendix A. The stratification test shall consist of three paired runs of a suitable SO<sub>2</sub> and CO<sub>2</sub> measurement train operated at the candidate location and a second similar train operated according to the procedures in Section 3.2 and the applicable procedures in Section 7 of Performance Specification 2. Method 6B of appendix A, Method 6A of appendix A, or a combination of Methods 6 and 3 or 3B of appendix A or Methods 6C or Method 320 of appendix A of 40 C.F.R. 63 and 3A of appendix A are suitable measurement techniques. If Method 6B of appendix A is used for the second train, sampling time and timer operation may be adjusted for the stratification test as long as an adequate sample volume is collected; however, both sampling trains are to be operated similarly. For the location to be adequate for Method 6B of appendix A, 24-hour tests, the mean of the absolute difference between the three paired runs must be less than 10 percent.
  - (iii) A daily SO<sub>2</sub> emission rate, E<sub>D</sub>, shall be determined using the procedure described in Method 6A of appendix A, section 7.6.2 (Equation 6A-8) and stated in ng/J (lb/MMBtu) heat input.
  - (iv) The mean 30-day emission rate is calculated using the daily measured values in ng/J (lb/MMBtu) for 30 successive steam generating unit operating days using equation 19-20 of Method 19 of appendix A.
- [40 C.F.R. 60.47b(b), (b)(1) through (4), Subpart Db]
- c. The owner or operator of an affected facility shall obtain emission data for at least 75 percent of the operating hours in at least 22 out of 30 successive boiler operating days. If this minimum data requirement is not met with a single monitoring system, the owner or operator of the affected facility shall supplement the emission data with data collected with other monitoring systems as approved by the Administrator or the reference methods and procedures as described in Condition 60.1.b.

[40 C.F.R. 60.47b(c), Subpart Db]

- d. The 1-hour average SO<sub>2</sub> emission rates measured by the CEMS required by Condition 60.1.a and required under Condition 56.5 is expressed in ng/J or lb/MMBtu heat input and is used to calculate the average emission rates under Condition 58.1. Each 1-hour average SO<sub>2</sub> emission rate must be based on 30 or more minutes of steam generating unit operation. The hourly averages shall be calculated according to Condition 56.5.b. Hourly SO<sub>2</sub> emission rates are not calculated if the affected facility is operated less than 30 minutes in a given clock hour and are not counted toward determination of a steam generating unit operating day.

[40 C.F.R. 60.47b(d), Subpart Db]

- e. The procedures under Condition 56.5 shall be followed for installation, evaluation, and operation of the CEMS.
- (i) Except as provided for in Condition 60.1.e(iv), all CEMS shall be operated in accordance with the applicable procedures under Performance Specifications 1, 2, and 3 of appendix B.
- (ii) Except as provided for in Condition 60.1.e(iv), quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 1 of appendix F.
- (iii) For affected facilities combusting coal or oil, alone or in combination with other fuels, the span value of the SO<sub>2</sub> CEMS at the inlet of the SO<sub>2</sub> control device is 125 percent of the maximum estimated hourly potential SO<sub>2</sub> emissions of the fuel combusted, and the span value of the CEMS at the outlet to the SO<sub>2</sub> control device is 50 percent of the maximum estimated hourly potential SO<sub>2</sub> emissions of the fuel combusted. Alternatively, SO<sub>2</sub> span values determined according to section 2.1.1 in appendix A to 40 C.F.R. 75 may be used.
- (iv) As an alternative to meeting the requirements of requirements of Conditions 60.1.e(i) and 60.1.e(ii), the owner or operator may elect to implement the following alternative data accuracy assessment procedures:

[40 C.F.R. 60.47b(e), (e)(1) – (4), Subpart Db]

- (A) For all required CO<sub>2</sub> and O<sub>2</sub> monitors and for SO<sub>2</sub> and NO<sub>x</sub> monitors with span values greater than or equal to 100 ppm, the daily calibration error test and calibration adjustment procedures described in sections 2.1.1 and 2.1.3 of appendix B to 40 C.F.R. 75 may be followed instead of the CD assessment procedures in Procedure 1, section 4.1 of appendix F.

- (B) For all required CO<sub>2</sub> and O<sub>2</sub> monitors and for SO<sub>2</sub> and NO<sub>x</sub> monitors with span values greater than 30 ppm, quarterly linearity checks may be performed in accordance with section 2.2.1 of appendix B to 40 C.F.R. 75, instead of performing the cylinder gas audits (CGAs) described in Procedure 1, section 5.1.2 of appendix F. If this option is selected: The frequency of the linearity checks may be as specified in section 2.2.1 of appendix B to 40 C.F.R. 75; the applicable linearity specifications in section 3.2 of appendix A to 40 C.F.R. 75 shall be met; the data validation and out-of-control criteria in section 5.2 of appendix F; and the grace period provisions in section 2.2.4 of appendix B to 40 C.F.R. 75 shall apply. For the purposes of data validation under this subpart, the cylinder gas audits described in Procedure 1, section 5.1.2 of appendix F shall be performed for SO<sub>2</sub> and NO<sub>x</sub> span values less than or equal to 30 ppm; and
- (C) For SO<sub>2</sub>, CO<sub>2</sub>, and O<sub>2</sub> monitoring systems and for NO<sub>x</sub> emission rate monitoring systems, RATAs may be performed in accordance with section 2.3 of appendix B to 40 C.F.R. 75 instead of following the procedures described in Procedure 1, section 5.1.1 of appendix F. If this option is selected: The frequency of each RATA shall be as specified in section 2.3.1 of appendix B to 40 C.F.R. 75; the applicable relative accuracy specifications shown in Figure 2 in appendix B to 40 C.F.R. 75 shall be met; the data validation and out-of-control criteria in section 2.3.2 of appendix B to 40 C.F.R. 75 shall be followed instead of the excessive audit inaccuracy and out-of-control criteria in Procedure 1, section 5.2 of appendix F; and the grace period provisions in section 2.3.3 of appendix B to 40 C.F.R. 75 shall apply. For the purposes of data validation under this subpart, the relative accuracy specification in section 13.2 of Performance Specification 2 in appendix B shall be met on a lb/MMBtu basis for SO<sub>2</sub> (regardless of the SO<sub>2</sub> emission level during the RATA) and for NO<sub>x</sub> when the average NO<sub>x</sub> emission rate measured by the reference method during the RATA is less than 0.100 lb/MMBtu.

[40 C.F.R. 47b(e)(4)(i) – (iii), Subpart Db]

## 60.2. Emission Monitoring for PM.

- a. Except as provided in Condition 60.2.c, the owner or operator of an affected facility subject to the opacity standard under Condition 58.2 shall install, calibrate, maintain, and operate a continuous opacity monitoring system (COMS) for measuring the opacity of emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility subject to an opacity standard under Condition 58.2 and meeting the conditions under Conditions 60.2.c(i) or 60.2.c(ii) who elects not to use a COMS shall conduct a performance test using Method 9 of appendix A-4 and the procedures in 40 C.F.R. 60.11 to demonstrate compliance with the applicable limit in Condition 58.2 by April 29, 2011, within 45 days of stopping use of an existing COMS, or within 180 days after initial startup of the facility, whichever is later, and shall comply with either Conditions 60.2.a(i), 60.2.a(ii), or 60.2.a(iii). The observation period for Method 9 of appendix A-4 performance tests may be reduced from 3 hours to 60 minutes if all 6-minute averages are less than 10 percent and all individual 15-second observations are less than or equal to 20 percent during the initial 60 minutes of observation.

[40 C.F.R. 60.48b(a), Subpart Db]

- (i) Except as provided in Conditions 60.2.a(ii) and 60.2.a(iii), the owner or operator shall conduct subsequent Method 9 of appendix A-4 performance tests using the procedures in Condition 60.2.a according to the applicable schedule in Conditions 60.2.a(i)(A) through 60.2.a(i)(D), as determined by the most recent Method 9 of appendix A-4 performance test results.
- (A) If no visible emissions are observed, a subsequent Method 9 of appendix A-4 performance test must be completed within 12 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later;
- (B) If visible emissions are observed but the maximum 6-minute average opacity is less than or equal to 5 percent, a subsequent Method 9 of appendix A-4 performance test must be completed within 6 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later;
- (C) If the maximum 6-minute average opacity is greater than 5 percent but less than or equal to 10 percent, a subsequent Method 9 of appendix A-4 performance test must be completed within 3 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later; or

- (D) If the maximum 6-minute average opacity is greater than 10 percent, a subsequent Method 9 of appendix A-4 performance test must be completed within 45 calendar days from the date that the most recent performance test was conducted.

[40 C.F.R. 48b(a)(1), Subpart Db]

- (ii) If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 of appendix A-4 performance test, the owner or operator may, as an alternative to performing subsequent Method 9 of appendix A-4 performance tests, elect to perform subsequent monitoring using Method 22 of appendix A-7 according to the procedures specified in Conditions 60.2.a(ii)(A) and 60.2.a(ii)(B).

- (A) The owner or operator shall conduct 10 minute observations (during normal operation) each operating day the affected facility fires fuel for which an opacity standard is applicable using Method 22 of appendix A-7 and demonstrate that the sum of the occurrences of any visible emissions is not in excess of 5 percent of the observation period (i.e., 30 seconds per 10 minute period). If the sum of the occurrence of any visible emissions is greater than 30 seconds during the initial 10 minute observation, immediately conduct a 30 minute observation. If the sum of the occurrence of visible emissions is greater than 5 percent of the observation period (i.e., 90 seconds per 30 minute period), the owner or operator shall either document and adjust the operation of the facility and demonstrate within 24 hours that the sum of the occurrence of visible emissions is equal to or less than 5 percent during a 30 minute observation (i.e., 90 seconds) or conduct a new Method 9 of appendix A-4 performance test using the procedures in Condition 60.2.a within 45 calendar days.

- (B) If no visible emissions are observed for 10 operating days during which an opacity standard is applicable, observations can be reduced to once every 7 operating days during which an opacity standard is applicable. If any visible emissions are observed, daily observations shall be resumed.

[40 C.F.R. 48b(a)(2), Subpart Db]

- (iii) If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 of appendix A-4 performance test, the owner or operator may, as an alternative to performing subsequent Method 9 of appendix A-4 performance tests, elect to perform subsequent monitoring using a digital opacity compliance system according to a site-specific monitoring plan approved by the Administrator. The observations shall be similar, but not necessarily identical, to the requirements in Condition 60.2.a(ii).

[40 C.F.R. 48b(a)(3), Subpart Db]

- b. The procedures under Condition 56 shall be followed for installation, evaluation, and operation of the continuous monitoring systems.
  - (i) For affected facilities combusting coal, the span value for a COMS shall be between 60 and 80 percent.

[40 C.F.R. 48b(e), (e)(1), Subpart Db]
- c. The owner or operator of an affected facility that meets the conditions in either Conditions 60.2.c(i) or 60.2.c(ii) is not required to install or operate a COMS if:
  - (i) The affected facility uses a bag leak detection system to monitor the performance of a fabric filter (baghouse) according to the most current requirements in 40 C.F.R. 60.48Da; or
  - (ii) The affected facility uses an ESP as the primary PM control device and uses an ESP predictive model to monitor the performance of the ESP developed in accordance and operated according to the most current requirements in 40 C.F.R. 60.48Da.

[40 C.F.R. 48b(j) (j)(5) & (6), Subpart Db]

### 60.3. Emission Monitoring for NO<sub>x</sub>.

- a. The owner or operator of an affected facility subject to a NO<sub>x</sub> standard under Condition 58.3 shall comply with Condition 60.3.a(i).
  - (i) Install, calibrate, maintain, and operate CEMS for measuring NO<sub>x</sub> and O<sub>2</sub> (or CO<sub>2</sub>) emissions discharged to the atmosphere, and shall record the output of the system.

[40 C.F.R. 60.48b(b), (b)(1), Subpart Db]
- b. The CEMS required under Condition 60.3.a shall be operated and data recorded during all periods of operation of the affected facility except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.

[40 C.F.R. 60.48b(c), Subpart Db]
- c. The 1-hour average NO<sub>x</sub> emission rates measured by the continuous NO<sub>x</sub> monitor required by Condition 60.3.a and required under 56.5 shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the average emission rates under Condition 58.3. The 1-hour averages shall be calculated using the data points required under Condition 56.5.b.

[40 C.F.R. 60.48b(d), Subpart Db]
- d. The procedures under Condition 56 shall be followed for installation, evaluation, and operation of the continuous monitoring systems.
  - (i) For affected facilities combusting coal, oil, or natural gas, the span value for NO<sub>x</sub> is determined using one of the following procedures:

- (A) Except as provided under Condition 60.3.d(i)(B), NO<sub>x</sub> span values shall be determined as follows: NO<sub>x</sub> span value of 1,000 ppm for coal fuel.
  - (B) As an alternative to meeting the requirement of Condition 60.3.d(i)(A), the owner or operator of an affected facility may elect to use the NO<sub>x</sub> span values determined according to section 2.1.2 in appendix A to 40 C.F.R. 75.
- (ii) All span values computed under Condition 60.3.d(i)(A) for combusting mixtures of regulated fuels are rounded to the nearest 500 ppm. Span values computed under Condition 60.3.d(i)(B) shall be rounded off according to section 2.1.2 in appendix A to 40 C.F.R. 75.
- [40 C.F.R. 48b(e), (e)(2)(i), (ii), (e)(3), Subpart Db]
- e. When NO<sub>x</sub> emission data are not obtained because of CEMS breakdowns, repairs, calibration checks and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7 of appendix A, Method 7A of appendix A, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days.

[40 C.F.R. 48b(f), Subpart Db]

## 61. NSPS Subpart Db Recordkeeping and Reporting.

- 61.1. The owner or operator of each affected facility subject to the SO<sub>2</sub>, PM, and/or NO<sub>x</sub> emission limits under Conditions 58.1, 58.2, and 58.3 shall submit to the Administrator the performance test data from the initial performance test and the performance evaluation of the CEMS using the applicable performance specifications in appendix B.
- [40 C.F.R. 60.49b(b), Subpart Db]
- 61.2. Except as provided in Condition 61.2.b, the owner or operator of an affected facility shall record and maintain records as specified in Condition 61.2.a.
- a. The owner or operator of an affected facility shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor individually for coal for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.
  - b. As an alternative to meeting the requirements of Condition 61.2.a, the owner or operator of an affected facility that is subject to a federally enforceable permit restricting fuel use to a single fuel such that the facility is not required to continuously monitor any emissions (excluding opacity) or parameters indicative of emissions may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

[40 C.F.R. 60.49b(d), Subpart Db]

- 61.3. For an affected facility subject to the opacity standard in Condition 58.2, the owner or operator shall maintain records of opacity. In addition, an owner or operator that elects to monitor emissions according to the requirements in Condition 60.2.a shall maintain records according to the requirements specified in Conditions 61.3.a through 61.3.c, as applicable to the visible emissions monitoring method used.
- a. For each performance test conducted using Method 9 of appendix A-4, the owner or operator shall keep the records including the information specified in Conditions 61.3.a(i) through 61.3.a(iii).
    - (i) Dates and time intervals of all opacity observation periods;
    - (ii) Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and
    - (iii) Copies of all visible emission observer opacity field data sheets;
  - b. For each performance test conducted using Method 22 of appendix A-4, the owner or operator shall keep the records including the information specified in Conditions 61.3.b(i) through 61.3.b(iv).
    - (i) Dates and time intervals of all visible emissions observation periods;
    - (ii) Name and affiliation for each visible emission observer participating in the performance test;
    - (iii) Copies of all visible emission observer opacity field data sheets; and
    - (iv) Documentation of any adjustments made and the time the adjustments were completed to the affected facility operation by the owner or operator to demonstrate compliance with the applicable monitoring requirements.
  - c. For each digital opacity compliance system, the owner or operator shall maintain records and submit reports according to the requirements specified in the site-specific monitoring plan approved by the Administrator.

[40 C.F.R. 49b(f), (f)(1) through (3), Subpart Db]
- 61.4. The owner or operator of an affected facility subject to the NO<sub>x</sub> standards under Condition 58.3 shall maintain records of the following information for each steam generating unit operating day:
- a. Calendar date;
  - b. The average hourly NO<sub>x</sub> emission rates (expressed as NO<sub>2</sub>) (ng/J or lb/MMBtu heat input) measured or predicted;

- c. The 30-day average NO<sub>x</sub> emission rates (ng/J or lb/MMBtu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days;
- d. Identification of the steam generating unit operating days when the calculated 30-day average NO<sub>x</sub> emission rates are in excess of the NO<sub>x</sub> emissions standards under Condition 58.3, with the reasons for such excess emissions as well as a description of corrective actions taken;
- e. Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken;
- f. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data;
- g. Identification of “F” factor used for calculations, method of determination, and type of fuel combusted;
- h. Identification of the times when the pollutant concentration exceeded full span of the CEMS;
- i. Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3; and
- j. Results of daily CEMS drift test and quarterly accuracy assessments as required under appendix F, Procedure 1.

[40 C.F.R. 49b(g), (g)(1) through (10), Subpart Db]

- 61.5. The owner or operator of any affected facility in any category listed in Condition 61.5.a is required to submit excess emission reports for any excess emissions that occurred during the reporting period.
- a. Any affected facility subject to the opacity standards in Condition 58.2.a or to the operating parameter monitoring requirements in Condition 56.6.
  - b. For the purpose of Condition 58.2, excess emissions are defined as all 6-minute periods during which the average opacity exceeds the opacity standards under Condition 58.2.a.

[40 C.F.R. 60.49b(h), (h)(1) & (h)(3), Subpart Db]

- 61.6. The owner or operator of any affected facility subject to the continuous monitoring requirements for NO<sub>x</sub> under Condition 60.3.a shall submit reports containing the information recorded under Condition 61.4.

[40 C.F.R. 60.49b(i), Subpart Db]

- 61.7. The owner or operator of any affected facility subject to the SO<sub>2</sub> standards under Condition 58.1 shall submit reports.

[40 C.F.R. 60.49b(j), Subpart Db]

- 61.8. For each affected facility subject to the compliance and performance testing requirements of Condition 59.1 and the reporting requirements in Condition 61.7, the following information shall be reported to the Administrator:
- a. Calendar dates covered in the reporting period;
  - b. Each 30-day average SO<sub>2</sub> emission rate (lb/MMBtu heat input) measured during the reporting period, ending with the last 30-day period; reasons for noncompliance with the emission standards; and a description of corrective actions taken; For an exceedance due to maintenance of the SO<sub>2</sub> control system covered in Condition 59.1.a, the report shall identify the days on which the maintenance was performed and a description of the maintenance;
  - c. Each 30-day average percent reduction in SO<sub>2</sub> emissions calculated during the reporting period, ending with the last 30-day period; reasons for noncompliance with the emission standards; and a description of corrective actions taken;
  - d. Identification of the steam generating unit operating days that coal or oil was combusted and for which SO<sub>2</sub> or diluent (O<sub>2</sub> or CO<sub>2</sub>) data have not been obtained by an approved method for at least 75 percent of the operating hours in the steam generating unit operating day; justification for not obtaining sufficient data; and description of corrective actions taken;
  - e. Identification of the times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and description of corrective action taken if data have been excluded for periods other than those during which coal or oil were not combusted in the steam generating unit;
  - f. Identification of “F” factor used for calculations, method of determination, and type of fuel combusted;
  - g. Identification of times when hourly averages have been obtained based on manual sampling methods;
  - h. Identification of the times when the pollutant concentration exceeded full span of the CEMS;
  - i. Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3;
  - j. Results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1; and
  - k. The annual capacity factor of each fired as provided under Condition 61.2.
- [40 C.F.R. 49b(k), (k)(1) – (11), Subpart Db]
- 61.9. If a percent removal efficiency by fuel pretreatment (i.e., %R<sub>f</sub>) is used to determine the overall percent reduction (i.e., %R<sub>o</sub>) under Condition 59.1, the owner or operator of the affected facility shall submit a signed statement with the report.

- a. Indicating what removal efficiency by fuel pretreatment (i.e., %R<sub>f</sub>) was credited during the reporting period;
- b. Listing the quantity, heat content, and date each pre-treated fuel shipment was received during the reporting period, the name and location of the fuel pretreatment facility; and the total quantity and total heat content of all fuels received at the affected facility during the reporting period;
- c. Documenting the transport of the fuel from the fuel pretreatment facility to the steam generating unit; and
- d. Including a signed statement from the owner or operator of the fuel pretreatment facility certifying that the percent removal efficiency achieved by fuel pretreatment was determined in accordance with the provisions of Method 19 of appendix A and listing the heat content and sulfur content of each fuel before and after fuel pretreatment.

[40 C.F.R. 60.49b(n), (n)(1) – (4), Subpart Db]

61.10. All records required under this section shall be maintained by the owner or operator of the affected facility for a period of 2 years following the date of such record.

[40 C.F.R. 60.49b(o), Subpart Db]

61.11. The owner or operator of an affected facility may submit electronic quarterly reports for SO<sub>2</sub> and/or NO<sub>x</sub> and/or opacity in lieu of submitting the written reports required under Conditions 61.5, 61.6, 61.7, or 61.8. The format of each quarterly electronic report shall be coordinated with the permitting authority. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the owner or operator, indicating whether compliance with the applicable emission standards and minimum data requirements of this subpart was achieved during the reporting period. Before submitting reports in the electronic format, the owner or operator shall coordinate with the permitting authority to obtain their agreement to submit reports in this alternative format.

[40 C.F.R. 60.49b(v), Subpart Db]

61.12. The reporting period for the reports required under this subpart is each 6 month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30<sup>th</sup> day following the end of the reporting period.

[40 C.F.R. 60.49b(w), Subpart Db]

## **62. NSPS Subpart Db Notification Requirements.**

62.1. The owner or operator of each affected facility shall submit notification of the data of initial startup, as provided by Condition 47. This notification shall include:

- a. The design heat input capacity of the affected facility and identification of the fuels to be combusted in the affected facility;

- b. The annual capacity factor at which the owner or operator anticipates operating facility based on all fuels fired and based on each individual fuel fired; and
- c. Notification that an emerging technology will be used for controlling of SO<sub>2</sub>. The Administrator will examine the description of the emerging technology and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device.

[40 C.F.R. 60.49b(a), (a)(1), (a)(2) & (a)(4), Subpart Db]

### **NSPS Subpart Dc – Small Institutional Steam Generating Units, EU IDs 7, 8, 15, & 16**

**63. NSPS Subpart Dc Applicability.** For EU IDs 7, 8, 15, and 16, the Permittee shall comply with the applicable requirements for steam generating units for which construction, modification, or reconstruction is commenced after June 9, 1989, and that has a maximum design heat input capacity of 100 MMBtu/hr or less, but greater than or equal to 10 MMBtu/hr.

[40 C.F.R. 60.40c(a), Subpart Dc]

### **64. NSPS Subpart Dc Sulfur Standard.**

**64.1. Sulfur Emission Standard.** The SO<sub>2</sub> emission limit and fuel oil sulfur limit under Condition 64.1.a applies at all times, including periods of startup, shutdown, and malfunction.

[40 C.F.R. 60.42c, 42c(i), Subpart Dc]

- a. On and after the date on which the initial performance test is completed or required to be completed under Condition 52, whichever date comes first, no owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO<sub>2</sub> in excess of 0.50 lb/MMBtu heat input from oil; or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur.

[18 AAC 50.040(a)(2)(D)]

[40 C.F.R. 60.42c(d), Subpart Dc]

- b. Except as provided in Condition 64.1.c, compliance with the fuel oil sulfur limits and emission limits shall be determined on a 30-day rolling average basis.

[40 C.F.R. 60.42c(g), Subpart Dc]

- c. Compliance with the emission limits or fuel oil sulfur limits shall be determined based on a certification from the fuel supplier, as described under Condition 66.5.c.

[40 C.F.R. 60.42c(h), (h)(1), Subpart Dc]

64.2. **Compliance and performance test methods and procedures.** Except as provided in Conditions 64.2.b and 64.2.c and Condition 52.2, performance tests required under Condition 52 shall be conducted following the procedure specified in Condition 64.2.a as applicable. Condition 52.6 does not apply to this section. The 30-day notice required in Condition 52.4 applies only to the initial performance test unless otherwise specified by the Administrator.

[40 C.F.R. 60.44c(a), Subpart Dc]

- a. After the initial performance test required under 40 C.F.R. 60.44c(b) and Condition 52, compliance with the SO<sub>2</sub> emission limit under Condition 64.1 is based on the average percent reduction and the average SO<sub>2</sub> emission rates for 30 consecutive steam generating unit operating days. A separate performance test is completed at the end of each steam generating unit operating day, and a new 30-day average percent reduction and SO<sub>2</sub> emission rate are calculated to show compliance with the standard.

[40 C.F.R. 44c(c), Subpart Dc]

- b. For oil-fired affected facilities where the owner or operator seeks to demonstrate compliance with the fuel oil sulfur limits under Condition 64.1 based on shipment fuel sampling, the initial performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in the steam generating unit to demonstrate that the oil contains 0.5 weight percent sulfur or less. Thereafter, the owner or operator of the affected facility shall sample the oil in the fuel tank after each new shipment of oil is received, as described under Condition 64.3.b(ii).

[40 C.F.R. 60.44c(g), Subpart Dc]

- c. For affected facilities subject to Condition 64.1.c, where the owner or operator seeks to demonstrate compliance with the SO<sub>2</sub> standards based on fuel supplier certification, the performance test shall consist of the certification form the fuel supplier, as described in Condition 66.5.c, as applicable.

[40 C.F.R. 60.44c(h), Subpart Dc]

64.3. **Emission monitoring.**

- a. Except as provided in Conditions 64.3.b and 64.3.c, the owner or operator of an affected facility subject to the SO<sub>2</sub> emission limits under Condition 64.1 shall install, calibrate, maintain, and operate a CEMS for measuring SO<sub>2</sub> concentrations and either O<sub>2</sub> or CO<sub>2</sub> concentrations at the outlet of the SO<sub>2</sub> control device (or the outlet of the steam generating unit if no SO<sub>2</sub> control device is used), and shall record the output of the system.

[40 C.F.R. 60.46c(a), Subpart Dc]

- b. As an alternative to operating a CEMS at the inlet to the SO<sub>2</sub> control device (or outlet of the steam generating unit if no SO<sub>2</sub> control device is used) as required under Condition 64.3.a, an owner or operator may elect to determine the average SO<sub>2</sub> emission rate by sampling the fuel prior to combustion. As an alternative to operating a CEMS at the outlet from the SO<sub>2</sub> control device (or outlet of the steam generating unit if no SO<sub>2</sub> control device is used) as required under Condition 64.3.a, an owner or operator may elect to determine the average SO<sub>2</sub> emission rate by using Method 6B of appendix A. Fuel sampling shall be conducted pursuant to either Conditions 64.3.b(i) or 64.3.b(ii).
- (i) For affected facilities combusting oil, oil samples shall be collected daily in an as-fired condition at the inlet to the steam generating unit and analyzed for sulfur content and heat content according to the Method 19 of appendix A. Method 19 of appendix A provides procedures for converting these measurements into the format to be used in calculating the average SO<sub>2</sub> input rate.
- (ii) As an alternative fuel sampling procedure for affected facilities combusting oil, oil samples may be collected from the fuel tank for each steam generating unit immediately after the fuel tank is filled and before any oil is combusted. The owner or operator of the affected facility shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.
- [40 C.F.R. 60.46c(d), (d)(1) & (2), Subpart Dc]
- c. The monitoring requirements of Conditions 64.3.a and 64.3.b shall not apply to affected facilities subject to Condition 64.1.c where the owner or operator of the affected facility seeks to demonstrate compliance with the SO<sub>2</sub> standards based on fuel supplier certification, as described under Condition 66.5.c, as applicable.
- [40 C.F.R. 60.46c(e), Subpart Dc]

## 65. NSPS Subpart Dc PM Standards.

- 65.1. **PM Emission and Opacity Standards.** The PM and opacity standards under Conditions 65.1.a and 65.1.b apply at all times, except during periods of startup, shutdown, or malfunction.

[40 C.F.R. 60.43c, 43c(d), Subpart Dc]

- a. On and after the date on which the initial performance test is completed or required to be completed under Condition 52, whichever date comes first, no owner or operator of an affected facility that combusts oil and has a heat input capacity of 30 MMBtu/hr or greater shall cause to be discharged into the atmosphere from that affected facility any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

[18 AAC 50.040(a)(2)(D)]  
[40 C.F.R. 60.43c(e), Subpart Dc]

- b. On and after the date on which the initial performance test is completed or is required to be completed under Condition 52, whichever date comes first, no owner or operator of an affected facility that commences construction, reconstruction, or modification after February 28, 2005, and that combusts oil and has a heat input capacity of 30 MMBtu/hr or greater shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 0.030 lb/MMBtu heat input, except as provided in Condition 65.1.b(i).

- (i) An owner or operator of an affected facility that commences construction, reconstruction, or modification after February 28, 2005, and that combusts only oil that contains no more than 0.50 weight percent sulfur and not using a post-combustion technology (except a wet scrubber) to reduce PM or SO<sub>2</sub> emissions is not subject to the PM limit in Condition 65.1.b.

[40 C.F.R. 60.43c(e), (e)(4), Subpart Dc]

- 65.2. **Compliance and performance test methods and procedures.** The owner or operator of an affected facility subject to the PM and/or opacity standards under Condition 65.1 shall conduct an initial performance test as required under Condition 52, and shall conduct subsequent performance tests as requested by the Administrator, to determine compliance with the standards using the following procedures and reference methods.

[40 C.F.R. 60.45c(a), Subpart Dc]

- a. Method 9 of appendix A-4 shall be used for determining the opacity of stack emissions.

[40 C.F.R. 60.45c(a)(8), Subpart Dc]

- b. The owner or operator of an affected facility seeking to demonstrate compliance under Condition 65.1.b(i) shall follow the applicable procedures under Condition 66.5.c.

[40 C.F.R. 60.45c(d), Subpart Dc]

65.3. **Monitoring.** The owner or operator of an affected facility subject to an opacity standard in Condition 65.1.a that is not required to use a COMS due to Condition 65.3.d that elects not to use a COMS shall conduct a performance test using Method 9 of appendix A-4 and the procedures in 40 C.F.R. 60.11 to demonstrate compliance with the applicable limit in Condition 65.1 by April 29, 2011, within 45 days of stopping use of an existing COMS, or within 180 days after initial startup of the facility, whichever is later, and shall comply with either Conditions 65.3.a, 65.3.b, or 65.3.c. The observation period for Method 9 of appendix A-4 performance tests may be reduced from 3 hours to 60 minutes if all 6-minute averages are less than 10 percent and all individual 15-second observations are less than or equal to 20 percent during the initial 60 minutes of observation.

[18 AAC 50.040(a)(2)(D),]  
[40 C.F.R. 60.47c(a), Subpart Dc]

a. Except as provided in Conditions 65.3.b or 65.3.c, the owner or operator shall conduct subsequent Method 9 performance tests using the procedures in Condition 65.3 according to the applicable schedule in Conditions 65.3.a(i) through 65.3.a(iv), as determined by the most recent Method 9 performance test results.

[40 C.F.R. 60.47c(a)(1)(i – iv), Subpart Dc]

- (i) If no visible emissions are observed, a subsequent Method 9 performance test must be completed within 12 calendar months from the date that the most recent performance test was conducted;
- (ii) If visible emissions are observed but the maximum six-minute average opacity is less than or equal to 5 percent, a subsequent Method 9 performance test must be completed within 6 calendar months from the date that the most recent performance test was conducted;
- (iii) If the maximum six-minute average opacity is greater than 5 percent but less than or equal to 10 percent, a subsequent Method 9 performance test must be completed within 3 calendar months from the date that the most recent performance test was conducted; or
- (iv) If the maximum six-minute average opacity is greater than 10 percent, a subsequent Method 9 performance test must be completed within 45 calendar days from the date that the most recent performance test was conducted.

b. If the maximum six-minute opacity is less than 10 percent during the most recent Method 9 performance test, the Permittee may, as an alternative to performing subsequent Method 9 performance tests, elect to perform subsequent monitoring using Method 22 of appendix A-7 according to the procedures specified in Conditions 65.3.b(i) and 65.3.b(ii).

[40 C.F.R. 60.47c(a)(2), Subpart Dc]

- (i) The owner or operator shall conduct 10 minute observations (during normal operation) each operating day the affected facility fires fuel for which an opacity standard is applicable using Method 22 of appendix A-7 and demonstrate that the sum of the occurrences of any visible emissions is not in excess of 5 percent of the observation period (i.e., 30 seconds per 10 minute period).

[40 C.F.R. 60.47c(a)(2)(i), Subpart Dc]

- (A) If the sum of the occurrence of any visible emissions is greater than 30 seconds during the initial 10 minute observation, immediately conduct a 30 minute observation.
- (B) If the sum of the occurrence of visible emissions is greater than 5 percent of the observation period ( i.e., 90 seconds per 30 minute period) the owner or operator shall either document and adjust the operation of the facility and
  - (1) demonstrate within 24 hours that the sum of the occurrence of visible emissions is equal to or less than 5 percent during a 30 minute observation (i.e., 90 seconds) or
  - (2) conduct a new Method 9 performance test using the procedures in Condition 65.3 within 45 calendar days according to the requirements in Condition 65.2.a.

- (ii) If no visible emissions are observed for 10 operating days during which an opacity standard is applicable, observations can be reduced to once every 7 operating days during which an opacity standard is applicable. If any visible emissions are observed, daily observations shall be resumed.

[40 C.F.R. 60.47c(a)(2)(ii), Subpart Dc]

- c. If the maximum six-minute opacity is less than 10 percent during the most recent Method 9 performance test, the Permittee may, as an alternative to performing subsequent Method 9 performance tests, elect to perform subsequent monitoring using a digital opacity compliance system according to a site-specific monitoring plan approved by the Administrator. The observations shall be similar, but not necessarily identical, to the requirements in Condition 65.3.b.

[40 C.F.R. 60.47c(a)(3), Subpart Dc]

- d. Owners and operators of an affected facilities that burn only distillate oil that contains no more than 0.5 weight percent sulfur and that do not use a post-combustion technology to reduce SO<sub>2</sub> or PM emissions and that are subject to an opacity standard in Condition 65.1.a are not required to operate a COMS if they follow the applicable procedures in Condition 66.5.c.

[40 C.F.R. 60.47c(c), Subpart Dc]

## 66. NSPS Subpart Dc Reporting and Recordkeeping Requirements.

66.1. **Notification.** The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction and actual startup, as provided by Condition 47. This notification shall include:

[18 AAC 50.040(a)(2)(D)]  
[40 C.F.R. 60.48c(a), (a)(1) & (3), Subpart Dc]

- a. The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.
- b. The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.

66.2. **Performance Test Reporting.** The owner or operator of each affected facility subject to the SO<sub>2</sub> emission limits of Condition 64.1 or the PM or opacity limits of Condition 65.1, shall submit to the Administrator the performance test data from the initial and any subsequent performance tests.

[40 C.F.R. 60.48c(b), Subpart Dc]

66.3. In addition to the applicable requirements in Condition 47, the owner or operator of an affected facility subject to the opacity limits in Condition 65.1.a shall submit excess emission reports for any excess emissions from the affected facility that occur during the reporting period and maintain records according to the requirements specified in Conditions 66.3.a through 66.3.c, as applicable to the visible emissions monitoring method used.

[18 AAC 50.040(a)(2)(D)]  
[40 C.F.R. 60.48c(c), Subpart Dc]

a. For each performance test conducted using Method 9, the owner or operator shall keep the records including the information specified in Conditions 66.3.a(i) through 66.3.a(iii).

- (i) Dates and time intervals of all opacity observation periods;
- (ii) Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and
- (iii) Copies of all visible emission observer opacity field data sheets.

[40 C.F.R. 60.48c(c)(1), Subpart Dc]

b. For each performance test conducted using Method 22 of appendix A-4, the owner or operator shall keep the records including the information specified in Conditions 66.3.b(i) through 66.3.b(iv).

- (i) Dates and time intervals of all visible emissions observation periods;
- (ii) Name and affiliation for each visible emission observer participating in the performance test;

- (iii) Copies of all visible emission observer opacity field data sheets; and
- (iv) Documentation of any adjustments made and the time the adjustments were completed to the affected facility operation by the owner or operator to demonstrate compliance with the applicable monitoring requirements.

[40 C.F.R. 60.48c(c)(2), Subpart Dc]

- c. For each digital opacity compliance system, the owner or operator shall maintain records and submit reports according to the requirements specified in the site-specific monitoring plan approved by the Administrator.

[40 C.F.R. 60.48c(c)(3), Subpart Dc]

- 66.4. The owner or operator of each affected facility subject to the SO<sub>2</sub> emission limits and fuel oil sulfur limits under Condition 64.1 shall submit reports to the Administrator.

[40 C.F.R. 60.48c(d), Subpart Dc]

- 66.5. The owner or operator of each affected facility subject to the SO<sub>2</sub> emission limits and fuel oil sulfur limits under Condition 64.1 shall keep records and submit reports as required under Condition 66.3, including the following information, as applicable.

[40 C.F.R. 60.48c(e), Subpart Dc]

- a. Calendar dates covered in the reporting period.
- b. If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under Condition 66.5.c. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.

[40 C.F.R. 60.48c(e)(1) & (11), Subpart Dc]

- c. Fuel supplier certification shall include the following information:
  - (i) the name of the oil supplier;
  - (ii) a statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 C.F.R. 60.41c; and
  - (iii) the sulfur content or maximum sulfur content of the oil.

[40 C.F.R. 60.48c(f), (f)(1), Subpart Dc]

- 66.6. **Fuel Consumption Recordkeeping.** Except as provided under Condition 66.6.a, the owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day.

- a. As an alternative to meeting the requirement of Condition 66.6, the owner or operator of an affected facility that combusts only fuels using fuel certification in Condition 66.5.c to demonstrate compliance with the SO<sub>2</sub> standard may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

[40 C.F.R. 60.48c(g), (g)(1) & (2), Subpart Dc]

- 66.7. All records required under NSPS Subpart Dc shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

[40 C.F.R. 60.48c(i), Subpart Dc]

- 66.8. The reporting period for the reports required under this subpart is each six-month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30<sup>th</sup> day following the end of the reporting period.

[40 C.F.R. 60.48c(j), Subpart Dc]

**NSPS Subpart III<sup>14</sup> – Compression Ignition Internal Combustion Engines (CI ICE), EU IDs 19A, 24A, 28A, 30A, 32A, 33, 35A-37A, 50, 55A, 56, 63-70B, 72-75, 77-80, 82-84, 116, 118A, 119, 124, 125, 129-132**

- 67. NSPS Subpart III Applicability and General Compliance Requirements.** For EU IDs 19A, 24A, 28A, 30A, 32A, 33, 35A-37A, 50, 55A, 56, 63-70B, 72-75, 77-80, 82-84, 116, 118A, 119, 124, 125, 129-132 listed in Table A, the Permittee shall comply with the applicable requirements for stationary CI ICE whose construction<sup>15</sup> commence after July 11, 2005, where the stationary CI ICE are manufactured after April 1, 2006 (for engines EU IDs 19A, 24A, 28A, 30A, 32A, 33, 50, 55A, 56, 63-70B, 72-75, 77-80, 82-84, 116, 118A, 119, 124, 125, and 129-132) and after July 1, 2006 (for the fire pump engines, EU IDs 35A- 37A).

- 67.1. For EU IDs 19A, 24A, 28A, 30A, 32A, 33, 35A-37A, 50, 55A, 56, 63-70B, 72-75, 77-80, 82-84, 116, 118A, 119, 124, 125, and 129-132, the Permittee shall comply with the applicable provisions of 40 C.F.R. 60 Subpart A as specified in Table 8 to Subpart III, and applicable provisions of Subpart III as specified in Conditions 68 through 73.

[18 AAC 50.040(a)(2)(OO) & (j)(4) & 50.326(j)]

[40 C.F.R. 71.6(a)(1)]

[40 C.F.R. 60.4200(a)(2), 60.4218 and Table 8, Subpart III]

- 68. National Security Exemption (NSE).** For each of EU IDs 65B – 70B, the Permittee shall ensure that a permanent label is affixed to the engine with the following information:

- 68.1. The label heading “EMISSION CONTROL INFORMATION”.

<sup>14</sup> The provisions of NSPS Subpart III listed in Conditions 67 through 74 are current as amended through August 30, 2024. Should EPA promulgate revisions to this subpart, the Permittee shall be subject to the revised final provisions as promulgated and not the superseded provisions summarized in these conditions.

<sup>15</sup> For the purposes of NSPS Subpart III, the date that construction commences is the date the engine is ordered by the owner or operator as defined in 40 C.F.R. 60.4200(a).

- 68.2. Engine displacement, family identification, and model year of the engine/equipment (as applicable), or whom to contact for further information.
- 68.3. The statement: “THIS (engine, equipment, vehicle, etc.) HAS AN EXEMPTION FOR NATIONAL SECURITY UNDER 40 C.F.R. 1068.225.”

[40 C.F.R. 60.4200(d), Subpart III]  
[40 C.F.R. 1068.225(e), Subpart C]

- 69. NSPS Subpart III GAPCP.** Except as permitted under Condition 72.1, the Permittee shall operate and maintain EU IDs 19A, 24A, 28A, 30A, 32A, 33, 35A – 37A, 50, 55A, 56, 63 – 64B, 72-75, 77-80, 82-84, 116, 118A, 119, 124, 125, and 129-132 and control device according to the manufacturer's written instructions, may change only those emission-related settings that are permitted by the manufacturer, and shall meet the requirements of Condition 71 and the applicable requirements of 40 C.F.R. 1068. In addition, the Permittee shall operate and maintain EU IDs 19A, 24A, 28A, 30A, 32A, 33, 35A – 37A, 50, 55A, 56, 63 – 64B, 72-75, 77-80, 82-84, 116, 118A, 119, 124, 125, and 129-132 that achieves the emissions standards as required in Condition 71 over the entire life of the engine.

[40 C.F.R. 60.4206, 60.4209, and 60.4211(a), Subpart III]

- 70. NSPS Subpart III Fuel Requirements.** For EU IDs 19A, 24A, 28A, 30A, 32A, 33, 35A – 37A, 50, 55A, 56, 63 – 64B, 72-75, 77-80, 82-84, 116, 118A, 119, 124, 125, and 129-132, the Permittee must use diesel fuel that meets the requirements of 40 C.F.R. 1090.305 for nonroad diesel:

[18 AAC 50.040(a)(2)(OO) & (j); & 50.326(j)]  
[40 C.F.R. 71.6(a)(1)]  
[40 C.F.R. 60.4207(b), Subpart III]  
[40 C.F.R. 1090.305, Subpart D]

- 70.1. A maximum sulfur content of 15 parts per million; and
- 70.2. A minimum cetane index of 40, or a maximum aromatic content of 35 volume percent.

- 71. NSPS Subpart III Emission Standards.** The Permittee shall comply with the following emission standards:

[18 AAC 50.040(a)(2)(OO) & (j)(4) & 50.326(j)]  
[40 C.F.R. 71.6(a)(1)]

- 71.1. Exhaust emissions from EU IDs 75 and 82 – 84 (pre-2007 model year stationary CI ICE with a displacement of less than 10 liters per cylinder) shall not exceed the following applicable exhaust emission standards for CI ICE in Table 1 to Subpart III of Part 60 for all pollutants, for the same displacement and maximum engine power, as follows:
- a. 1.3 g/kW-hr (or 1.0 g/Hp-hr) for (NMHC);
  - b. 9.2 g/kW-hr (or 6.9 g/hp-hr) for NO<sub>x</sub>;
  - c. 11.4 g/kW-hr (or 8.5 g/Hp-hr) for CO; and
  - d. 0.54 g/kW-hr (or 0.40 g/Hp-hr) for PM.

[40 C.F.R. 60.4204(a) & 4205(a), Subpart III]  
[40 C.F.R. 60 Table 1, Subpart III]

71.2. Exhaust emissions from EU ID 19A (post-2011 model year non-emergency stationary CI ICE with a maximum engine power greater than 2,237 kW and a displacement of less than 10 liters per cylinder) shall not exceed the following applicable exhaust emission standards (Tier 4 emission factors) for new CI ICE in 40 C.F.R. 1039.101 for all pollutants, for the same displacement and maximum engine power, as follows:

- a. 0.19 g/kW-hr (or 0.14 g/Hp-hr) for Non-methane hydrocarbons (NMHC);
- b. 0.67 g/kW-hr (or 0.5 g/hp-hr) for NO<sub>x</sub>;
- c. 3.5 g/kW-hr (or 2.6 g/Hp-hr) for CO; and
- d. 0.03 g/kW-hr (or 0.023 g/Hp-hr) for PM.

[40 C.F.R. 60.4204(b) & 60.4201(c), Subpart III]  
[40 C.F.R. 1039.101, Table 1]

71.3. Exhaust emissions from EU IDs 118A and 119 (post-2007 model year emergency stationary CI ICE with a maximum engine power between 19 and 37 kW and a displacement of less than 10 liters per cylinder) shall not exceed the following applicable exhaust emission standards for CI ICE in Table 2 to Subpart III of Part 60 for all pollutants, for the same displacement and maximum engine power, as follows:

- a. 7.5 g/kW-hr (or 5.6 g/Hp-hr) for NMHC + NO<sub>x</sub>;
- b. 5.5 g/kW-hr (or 4.1 g/Hp-hr) for CO; and
- c. 0.30 g/kW-hr (or 0.22 g/Hp-hr) for PM.

[40 C.F.R. 60.4205(b) & 60.4202(a)(1)(ii), Subpart III]  
[40 C.F.R. 60 Table 2, Subpart III]

71.4. Exhaust emissions from EU IDs 55A, 124, and 125 (post-2007 model year emergency stationary CI ICE with a maximum engine power between 37 and 75 kW and a displacement of less than 10 liters per cylinder) shall not exceed the following applicable exhaust emission standards (Tier 3 emission factors) for new nonroad CI engines in 40 C.F.R. 1039 Appendix I for all pollutants, for the same displacement and maximum engine powers, as follows:

- a. 4.7 g/kW-hr (or 3.5 g/Hp-hr) for NMHC + NO<sub>x</sub>;
- b. 5.0 g/kW-hr (or 3.8 g/Hp-hr) for CO; and
- c. 0.40 g/kW-hr (or 0.3 g/Hp-hr) for PM.

[40 C.F.R. 60.4205(b) & 60.4202(a)(2), Subpart III]  
[40 C.F.R. 1039 Appendix I, Table 3]

71.5. Exhaust emissions from EU IDs 28A, 33, 56, 64A, 64B, 78, 116, 129, and 131 (post-2007 model year emergency stationary CI ICE with a maximum engine power between 75 and 130 kW and a displacement of less than 10 liters per cylinder) shall not exceed the following applicable exhaust emission standards (Tier 3 emission factors) for new nonroad CI engines in 40 C.F.R. 1039 Appendix I for all pollutants, for the same displacement and maximum engine power, as follows:

- a. 4.0 g/kW-hr (or 3.0 g/Hp-hr) for NMHC + NO<sub>x</sub>;
- b. 5.0 g/kW-hr (or 3.8 g/Hp-hr) for CO; and
- c. 0.30 g/kW-hr (or 0.23 g/Hp-hr) for PM.

[40 C.F.R. 60.4205(b) & 60.4202(a)(2), Subpart III]  
[40 C.F.R. 1039 Appendix I, Table 3]

71.6. Exhaust emissions from EU IDs 24A, 30A, 32A, 50, 63, 72, 73, 74, 77, 79, 80, 130, and 132 (post-2007 emergency stationary CI ICE with a maximum engine power greater than 130 kW and a displacement of less than 10 liters per cylinder) shall not exceed the following applicable exhaust emission standards (Tier 3 emission factors) for new nonroad CI engines in 40 C.F.R. 1039 Appendix I for all pollutants, for the same displacement and maximum engine power, as follows:

- a. 4.0 g/kW-hr (or 3.0 g/Hp-hr) for NMHC + NO<sub>x</sub>;
- b. 3.5 g/kW-hr (or 2.6 g/Hp-hr) for CO; and
- c. 0.20 g/kW-hr (or 0.15 g/Hp-hr) for PM.

[40 C.F.R. 60.4205(b) & 60.4202(a)(2), Subpart III]  
[40 C.F.R. 1039 Appendix I, Table 3]

71.7. Exhaust emissions from EU ID 35A, 36A, and 37A (stationary fire pump CI ICE with a displacement of less than 30 liters per cylinder) shall not exceed the following applicable exhaust emission standards:

- a. 4.0 g/kW-hr (or 3.5 g/Hp-hr) for NMHC + NO<sub>x</sub>;
- b. 3.5 g/kW-hr (or 2.6 g/Hp-hr) for CO; and
- c. 0.54 g/kW-hr (or 0.40 g/Hp-hr) for PM.

[40 C.F.R. 60.4205(c) & Table 4, Subpart III]

**72. NSPS Subpart III Monitoring and Recordkeeping.** The Permittee shall comply with the following:

[18 AAC 50.040(a)(2)(OO) & (j)(4) & 50.326(j)]  
[40 C.F.R. 71.6(a)(3)(i) & (ii) & (c)(6)]

72.1. If the Permittee does not install, configure, operate, and maintain EU IDs 19A, 24A, 28A, 30A, 32A, 33, 35A – 37A, 50, 55A, 56, 63 – 64B, 72-75, 77-80, 82-84, 116, 118A, 119, 124, 125, and 129-132 and control devices according to the manufacturer's emission-related written instructions as required in Condition 68, or changes emission-related settings in a way that is not permitted by the manufacturer, the Permittee shall demonstrate compliance as follows:

a. For EU IDs 19A, 24A, 28A, 30A, 32A, 33, 35A – 37A, 50, 55A, 56, 63 – 64B, 72-75, 77-80, 82-84, 116, 118A, 119, 124, 125, and 129-132:

- (i) 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.
- (ii) In addition, 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.

[40 C.F.R. 60.4211(g)(1)-(3), Subpart III]

b. For EU IDs 19A, 24A, 72, 79, 80, and 132 (units with maximum engine power greater than 500 hp):

- (i) 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; and

[40 C.F.R. 60.4211(g)(3), Subpart III]

- (ii) Conduct performance tests and meet the not-to-exceed (NTE) standards in accordance with the applicable requirements indicated in 40 C.F.R. 60.4212(a) and (c).

[40 C.F.R. 60.4204(d), 60.4205(e) and 60.4212(a) & (c), Subpart III]

72.2. For EU IDs 19A, 24A, 28A, 30A, 32A, 33, 35A – 37A, 50, 55A, 56, 63 – 64B, 72-74, 77-80, 116, 118A, 119, 124, 125, and 129-132, demonstrate compliance with the emission standards by purchasing an engine certified to the applicable emission standards in Conditions 71.1 through 71.7. The engines must be installed and configured according to the manufacturer's specifications, except as permitted in Condition 72.1.

- a. For EU ID 19A equipped with a diesel particulate filter to comply with the emission standards in Condition 71.2, the diesel particulate filter must be installed with a backpressure monitor that notifies the Permittee when the high backpressure limit of the engine is approached. Keep records of any corrective action taken after the backpressure monitor has notified the Permittee that the high backpressure limit of the engine is approached.

[40 C.F.R. 60.4209, 60.4211(c), & 60.4214(c), Subpart III]

- 72.3. For EU ID 75 and 82-84, demonstrate compliance with the emission standards by keeping records of engine manufacturer data indicating compliance with the applicable emission standards in Condition 71.7.

[40 C.F.R. 60.4209 and 60.4211(b)(3), Subpart III]

- 72.4. For EU IDs 24A, 28A, 30A, 32A, 33, 35A – 37A, 50, 55A, 56, 63 – 64B, 72-75, 77-80, 116, 118A, 119, 124, 125, and 129-132, the Permittee shall comply with the following requirements for emergency stationary CI ICE under Subpart III:

- a. Operate EU IDs 24A, 28A, 30A, 32A, 33, 35A – 37A, 50, 55A, 56, 63 – 64B, 72-75, 77-80, 116, 118A, 119, 124, 125, and 129-132 according to the requirements in Conditions 72.4.a(i) through 72.4.a(iii). In order for the engine to be considered an emergency stationary ICE, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in Conditions 72.4.a(i) through 72.4.a(iii), is prohibited. If the Permittee does not operate the engine according to the requirements in Conditions 72.4.a(i) through 72.4.a(iii), the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.
  - (i) There is no time limit on the use of emergency stationary ICE in emergency situations.
  - (ii) The Permittee may operate EU IDs 24A, 28A, 30A, 32A, 33, 35A – 37A, 50, 55A, 56, 63 – 64B, 72-75, 77-80, 116, 118A, 119, 124, 125, and 129-132 for the purpose specified in Conditions 72.4.a(ii)(A) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by Condition 72.4.a(iii) counts as part of the 100 hours per calendar year allowed by this Condition 72.4.a(ii).

(A) EU IDs 24A, 28A, 30A, 32A, 33, 35A – 37A, 50, 55A, 56, 63 – 64B, 72-75, 77-80, 116, 118A, 119, 124, 125, and 129-132 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 Permittee 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 Permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

(iii) EU IDs 24A, 28A, 30A, 32A, 33, 35A – 37A, 50, 55A, 56, 63 – 64B, 72-75, 77-80, 116, 118A, 119, 124, 125, and 129-132 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 provided in Condition 72.4.a(ii). 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.

[40 C.F.R. 60.4209 and 60.4211(f)(1) – (3), Subpart III]

72.5. For EU IDs 24A, 28A, 30A, 32A, 33, 35A – 37A, 50, 55A, 56, 63 – 64B, 72-75, 77-80, 116, 118A, 119, 124, 125, and 129-132, the Permittee shall comply with the following:

- a. If an emergency stationary CI ICE does not meet the standards applicable to non-emergency engines, the Permittee must
  - (i) Install a non-resettable hour meter prior to startup of the engine; and
  - (ii) Keep records of the operation for the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The Permittee must record the time of operation of the engine and the reason the engine was in operation during that time.

[40 C.F.R. 60.4209(a), 60.4214(b), Subpart III]

**73. NSPS Subpart III Reporting.** The Permittee shall report as follows:

- 73.1. A summary of the results of performance tests conducted under Conditions 72.1.a and 72.1.b, as applicable,
- 73.2. Report in accordance with Condition 137 if any of the requirements in Conditions 67 through 74 was not met.

[18 AAC 50.040 (j)(4) & 50.326(j)]

[40 C.F.R. 71.6(a)(3)(iii) & (c)(6)]

**74. NSPS Subpart IIII Deadline for Importing or Installing Stationary CI ICE in Previous Model Years.** The Permittee shall comply with the following:

[18 AAC 50.040(a)(2)(OO) & (j)(4) & 50.326(j)]

[40 C.F.R. 71.6(a)(1)]

[40 C.F.R. 60.4200(a)(4), 60.4208(a) – (i), & 60.4216(e), Subpart IIII]

74.1. The Permittee shall not install stationary CI ICE units in previous (2007 – 2017) model years after the dates and as specified in 40 C.F.R. 60.4208(a) – (g).

[40 C.F.R. 60.4208(a) - (g), Subpart IIII]

74.2. In addition to the requirements specified in 40 C.F.R. 60.4201, 60.4202, 60.4204, and 60.4205, the Permittee shall not import stationary CI ICE with a displacement of less than 30 liters per cylinder that do not meet the applicable requirements and after the dates specified in 40 C.F.R. 60.4208(a) – (g).

[40 C.F.R. 60.4208(h), Subpart IIII]

74.3. The requirements of Condition 74 do not apply to 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.

[40 C.F.R. 60.4208(i), Subpart IIII]

**NSPS Subpart OOO – Nonmetallic Mineral Processing Plants, EU IDs 86 – 103**

**75. NSPS Subpart OOO Applicability.** For EU IDs 86-103, listed in Table A, the Permittee shall comply with the applicable requirements for nonmetallic mineral processing plants whose construction, modification, or reconstruction commences after August 31, 1983.

75.1. Comply with the applicable provisions of 40 C.F.R. Subpart A as specified in Table 1 to Subpart OOO.

[18 AAC 50.040(j) & 50.326(j)]

[40 C.F.R. 71.6(a)(1)]

[40 C.F.R. 60.670(a)(1) & 670(e), Subpart OOO]

**76. NSPS Subpart OOO Standard for Particulate Matter (PM).** The Permittee shall meet the fugitive emission limits and compliance requirements in Table 3 of 40 C.F.R. 60 Subpart OOO as follows:

76.1. For units that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008, comply with an opacity limit of:

a. 10 percent for grinding mills, screening operations, bucket elevators, transfer points on belt conveyers, bagging operations, storage bins, enclosed truck or railcar loading stations; and

b. 15 percent for crushers at which a capture system is not used.

76.2. For units that commences construction, modification, or reconstruction on or after April 22, 2008, comply with an opacity limit of:

- a. 7 percent for grinding mills, screening operations, bucket elevators, transfer points on belt conveyers, bagging operations, storage bins, enclosed truck or railcar loading stations; and
  - b. 12 percent for crushers at which a capture system is not used.
- 76.3. The requirements in Table 3 of 40 C.F.R. 60 Subpart OOO apply for fugitive emissions from affected facilities without capture systems and for fugitive emissions escaping capture systems.
- 76.4. Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of 40 C.F.R. 60 Subpart OOO.

[40 C.F.R. 60.672(b) & (d), Table 3, Subpart OOO]  
[18 AAC 50.040(j)(4) & 50.326(j)]  
[40 C.F.R. 71.6(a)(1)]

**77. NSPS Subpart OOO Monitoring of Operations.** The Permittee shall demonstrate compliance with the opacity limits in Condition 76 as follows:

- 77.1. For units complying with Condition 76.1:
- a. Conduct an initial performance test according to 40 C.F.R. 60.11 and Condition 77.3.
- 77.2. For units complying with Condition 76.2 that use wet suppression to control emissions:
- a. Conduct an initial performance test according to 40 C.F.R. 60.11 and Condition 77.3; and
  - b. Conduct periodic inspections of water sprays according to Conditions 77.2.c and 78.
  - c. perform monthly periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression system. The Permittee must initiate corrective action within 24 hours and complete corrective action as expediently as practical if the Permittee finds that water is not flowing properly during an inspection of the water spray nozzles. The Permittee must record each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken, in the logbook required under Condition 78.

[40 C.F.R. 60. Table 3, Subpart OOO]  
[40 C.F.R. 60.674(b), Subpart OOO]

- 77.3. In determining compliance with the particulate matter standards in Condition 76, the owner or operator shall use Method 9 of appendix A-4 and the procedures in 40 C.F.R. 60.11, with the following additions:

[40 C.F.R. 60.675(c)(1), Subpart OOO]

- a. The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).

- b. The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun (Method 9 of appendix A-4, Section 2.1) must be followed.
- c. For affected facilities using wet dust suppression for particulate matter control, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not considered a visible emissions. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible.

77.4. When determining compliance with the fugitive emissions standard for any affected facilities described in Condition 76, the duration of the Method 9 observations must be 30 minutes (five 6-minute averages). Compliance with the applicable fugitive emission limits in Condition 76 must be based on the average of the five 6-minute averages.

[40 C.F.R. 60.675(c)(3), Subpart 000]

77.5. The owner or operator may use the following as alternatives to the reference methods and procedures specified in Condition 77.3:

- a. For the method and procedure of Condition 77.3, if emissions from two or more facilities continuously interfere so that the opacity of fugitive emissions from an individual affected facility cannot be read, either of the following procedures may be used:
  - (i) Use for the combined emission stream the highest fugitive opacity standard applicable to any of the individual affected facilities contributing to the emission stream.
  - (ii) Separate the emissions so that the opacity of emissions from each affected facility can be read.
- b. A single visible emission observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions are met:
  - (i) No more than three emission points may be read concurrently.
  - (ii) All three emission points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points.
  - (iii) If an opacity reading for any of the three emission points equals or exceeds the applicable standard, then the observer must stop taking readings for the other two points and continue reading just that single point.

[40 C.F.R. 60.675(e), (e)(1) & (2), Subpart 000]

77.6. For performance tests involving only Method 9 testing, the owner or operator may reduce the 30-day advance notification of performance test in Conditions 47.5 and 52.4 to a 7-day advance notification.

[40 C.F.R. 60.675(g), Subpart OOO]

**78. NSPS Subpart OOO Recordkeeping.** Owners or operators of affected facilities for which construction, modification, or reconstruction commenced on or after April 22, 2008, must record each periodic inspection required under Condition 77.2, including dates and any corrective actions taken, in a logbook (in written or electronic format). The owner or operator must keep the logbook onsite and make hard or electronic copies (whichever is requested) of the logbook available to the Administrator upon request.

[40 C.F.R. 60.676(b)(1), Subpart OOO]

**79. NSPS Subpart OOO Reporting.** The Permittee shall report as follows:

79.1. The owner or operator of any affected facility shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in Condition 76, including reports of opacity observations made using Method 9 to demonstrate compliance with Conditions 76.1 and 76.2.

[40 C.F.R. 60.676(f), Subpart OOO]

79.2. Report any excess emissions, in accordance with Condition 137, whenever the emission limits of Condition 76 are exceeded.

[18 AAC 50.040(j) & 50.326(j)]  
[40 C.F.R. 71.6(a)(3)(i)]

### **NSPS Subpart Y – Coal Preparation and Processing Equipment, EU IDs 110A, 110B, 111**

**80. NSPS Subpart Y Applicability.** For EU IDs 110A, 110B, and 111 listed in Table A, the Permittee shall comply with the applicable requirements for affected facilities in coal preparation and processing plants that process more than 200 tons of coal per day, where the sandwich belt conveyer was constructed after October 27, 1974 and before April 28, 2008 (EU ID 110A), the segment crusher was reconstructed after April 28, 2008 (EU ID 110B), and the coal tripper system and any open coal storage pile was constructed after May 27, 2009 (EU ID 111).

[40 C.F.R. 60.250(a) – (d), Subpart Y]  
[18 AAC 50.040(j) & 50.326(j)]  
[40 C.F.R. 71.6(a)(1)]

**81. NSPS Subpart Y Fugitive Coal Dust Emissions Control Plan.** For an open coal storage pile constructed, reconstructed, or modified after May 27, 2009, the Permittee must prepare and operate in accordance with a submitted fugitive coal dust emissions control plan that is appropriate for the site conditions as specified in Conditions 81.1 through 81.6.

[40 C.F.R. 60.254(c), Subpart Y]

81.1. The fugitive coal dust emissions control plan must identify and describe the control measures the Permittee will use to minimize fugitive coal dust emissions from each open storage pile.

- 81.2. For open coal storage piles, the fugitive coal dust emissions control plan must require that one or more of the following control measures be used to minimize to the greatest extent practicable fugitive coal dust: Locating the source inside a partial enclosure, installing and operating a water spray or fogging system, applying appropriate chemical dust suppression agents on the source (where the provisions of Condition 81.6 are met), use of a wind barrier, compaction, or use of a vegetative cover. The owner or operator must select, for inclusion in the fugitive coal dust emissions control plan, the control measure or measures listed in this Condition that are most appropriate for site conditions. The plan must also explain how the measure or measures selected are applicable and appropriate for site conditions. In addition, the plan must be revised as needed to reflect any changing conditions at the source.
- 81.3. Any Permittee that is required to have a fugitive coal dust emissions control plan may petition the Administrator to approve, for inclusion in the plan for the affected facilities, alternative control measures other than those specified in Condition 81.2 as specified in Conditions 81.3.a through 81.3.d.
- a. The petition must include a description of the alternative control measures, a copy of the fugitive coal dust emissions control plan for the affected facility that includes the alternative control measures, and information sufficient for EPA to evaluate the demonstrations required by Condition 81.3.b.
  - b. The Permittee must either demonstrate that the fugitive coal dust emissions control plan that includes the alternative control measures will provide equivalent overall environmental protection or demonstrate that it is either economically or technically infeasible for the affected facility to use the control measures specifically identified in Condition 81.2.
  - c. While the petition is pending, the Permittee must comply with the fugitive coal dust emissions control plan including the alternative control measures submitted with the petition. Operation in accordance with the plan submitted with the petition shall be deemed to constitute compliance with the requirement to operate in accordance with a fugitive coal dust emissions control plan that contains one of the control measures specifically identified in Condition 81.2 while the petition is pending.
  - d. If the petition is approved by the Administrator, the alternative control measures will be approved for inclusion in the fugitive coal dust emissions control plan for the affected facility. In lieu of amending this subpart, a letter will be sent to the facility describing the specific control measures approved. The facility shall make any such letters and the applicable fugitive coal dust emissions control plan available to the public. If the Administrator determines it is appropriate, the conditions and requirements of the letter can be reviewed and changed at any point.
- 81.4. The Permittee must submit the fugitive coal dust emissions control plan to the Administrator or delegated authority as specified in Conditions 81.4.a and 81.4.b.

- a. The plan must be submitted to the Administrator or delegated authority prior to startup of the new, reconstructed, or modified affected facility, or 30 days after the effective date of this rule, whichever is later.
  - b. The plan must be revised as needed to reflect any changing conditions at the source. Such revisions must be dated and submitted to the Administrator or delegated authority before a source can operate pursuant to those revisions. The Administrator or delegated authority may also object to such revisions as specified in Condition 81.5.
- 81.5. The Administrator or delegated authority may object to the fugitive coal dust emissions control plan as specified in Conditions 81.5.a and 81.5.b.
- a. The Administrator or delegated authority may object to any fugitive coal dust emissions control plan that it has determined does not meet the requirements of Conditions 81.1 and 81.2.
  - b. If an objection is raised, the Permittee, within 30 days from receipt of the object, must submit a revised fugitive coal dust emissions control plan to the Administrator or delegated authority. The owner or operator must operate in accordance with the revised fugitive coal dust emissions control plan. The Administrator or delegated authority retain the right, under Condition 81.5, to object to the revised control plan if it determines the plan does not meet the requirements of Conditions 81.1 and 81.2.
- 81.6. Where appropriate chemical dust suppression agents are selected by the Permittee as a control measure to minimize fugitive coal dust emissions,
- a. Only chemical dust suppressants with Occupational Safety and Health Administration (OSHA)-compliant material safety data sheets (MSDS) are to be allowed;
  - b. The MSDS must be included in the fugitive coal dust emissions control plan; and
  - c. The Permittee must consider and document in the fugitive coal dust emissions control plan the site-specific impacts associated with the use of such chemical dust suppressants.

[40 C.F.R. 60.254(c)(1) – (6), Subpart Y]

- 82. NSPS Subpart Y Opacity and Particulate Matter (PM) Standards.** The Permittee shall comply with the opacity and PM standards from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, as follows:

[40 C.F.R. 60.254, Subpart Y]  
[18 AAC 50.040(a)(2)(T) & (j); 50.326(j)]  
[40 C.F.R. 71.6(a)(1)]

- 82.1. On an after the date on which the performance test is conducted or required to be completed under Condition 52, whichever date comes first, the Permittee shall not cause to be discharged into the atmosphere from EU ID 110A, gases which exhibit 20 percent opacity or greater.

[40 C.F.R. 60.254(a), Subpart Y]

- 82.2. On an after the date on which the performance test is conducted or required to be completed under Condition 52, whichever date comes first, the Permittee must meet the requirements in Conditions 82.2.a through 82.2.c, as applicable for EU IDs 110B and 111.

[40 C.F.R. 60.254(b), (b)(1)-(3), Subpart Y]

- a. Except as provided in Condition 82.2.c, the Permittee must not cause to be discharged into the atmosphere from the affected facility any gases which exhibit 10 percent opacity or greater.
- b. For EU ID 111, the Permittee must not cause to be discharged into the atmosphere from any mechanical vent on an affected facility gases which contain PM in excess of 0.023 grams/dry standard cubic meter (g/dscm) (0.010 gr/dscf).
- c. Equipment used in the loading, unloading, and conveying operations of open storage piles are not subject to the opacity limitations of Condition 82.2.a.

### **83. NSPS Subpart Y Compliance Demonstration.**

[40 C.F.R. 60.255(a) & (b), Subpart Y]

- 83.1. For EU ID 110A, the Permittee shall conduct all performance tests required by Condition 52 to demonstrate compliance with the applicable emission standards using the methods identified in Condition 84.

- 83.2. For EU IDs 110B and 111, the Permittee shall conduct performance tests according to the requirements of Condition 52 and the methods identified in Condition 84 to demonstrate compliance with the applicable emission standards as specified in Conditions 83.2.a and 83.2.c.

- a. For each affected facility subject to a PM emission standard, an initial performance test must be performed. Thereafter, a new performance test must be conducted according to the requirements in Conditions 83.2.a(i) through 83.2.a(iii), except as specified in Condition 83.2.b.

[40 C.F.R. 60.255(b)(1), (b)(1)(i) – (iii), Subpart Y]

- (i) If the results of the most recent performance test demonstrate that emissions from the affected facility are greater than 50 percent of the applicable emissions standard, a new performance test must be conducted within 12 calendar months of the date that the previous performance test was required to be completed.

- (ii) If the results of the most recent performance test demonstrate that emissions from the affected facility are 50 percent or less of the applicable emissions standard, a new performance test must be conducted within 24 calendar months of the date that the previous performance test was required to be completed.
  - (iii) An owner or operator of an affected facility that has not operated for the 60 calendar days prior to the due date of a performance test is not required to perform the subsequent performance test until 30 calendar days after the next operating day.
- b. As an alternative to the requirements of Conditions 83.2.a for EU ID 111, the EPA has approved a waiver such that demonstration of compliance by one of the six bin vents identified collectively as EU ID 111 shall assure compliance of any untested units, provided the requirements in Conditions 83.2.b(i) through 83.2.b(v) are met:
- (i) The results of each performance test from each bin vent remain below 50 percent of the applicable PM standard in NSPS Y (Condition 82.2.b).
  - (ii) The units (EU ID 111) remain at Eielson Air Force Base and continue to be maintained according to manufacturer's recommendations.
  - (iii) At least one unit is tested within 24 calendar months of the date that the previous performance test was required to be completed.
  - (iv) If none of the units has operated for the 60 calendar days prior to the due date of a performance test, the next performance test is not required until 30 calendar days after the next operating day of any unit.
  - (v) After any three consecutive performance tests, all six units shall have been tested for PM according to the requirements of 40 C.F.R. 60.255.  
[40 C.F.R. 60.8(b)(4), Subpart A]  
[USEPA Region 10 NSPS Subpart Y Testing Waiver Letter, 09/9/2019]
- c. For each affected facility subject to an opacity standard, an initial performance test must be performed. Thereafter, a new performance test must be conducted according to the requirements in Conditions 83.2.c(i) through 83.2.c(ii), as applicable.  
[40 C.F.R. 60.255(b)(2), (b)(2)(i) & (ii), Subpart Y]
- (i) If any 6-minute average opacity reading in the most recent performance test exceeds half the applicable opacity limit, a new performance test must be conducted within 90 operating days of the date that the previous performance test was required to be completed.
  - (ii) If all 6-minute average opacity readings in the most recent performance test are equal to or less than half the applicable opacity limit, a new performance test must be conducted within 12 calendar months of the date that the previous performance test was required to be completed.

- 83.3. If EU ID 110B is enclosed in a building, and emissions from the building do not exceed any of the standards in Condition 82 that apply to the affected facility, then EU ID 110B shall be deemed to be in compliance with such standards.

[40 C.F.R. 60.255(c), Subpart Y]

- 83.4. Should either EU IDs 110B or 111 subject to a PM emission standard use a control device with a design controlled potential PM emissions rate of 1.1 tons per year or less, the controlled unit is exempted from the requirements of Conditions 83.2.a(i) and 83.2.a(ii) provided that the Permittee meets all of the conditions specified in Conditions 83.4.a through 83.4.c.

- a. PM emissions, as determined by the most recent performance test, are less than or equal to the applicable limit,
- b. The control device manufacturer's recommended maintenance procedures are followed, and
- c. All 6-minute average opacity readings from the most recent performance test are equal to or less than half the applicable opacity limit.

[40 C.F.R. 60.255(d), Subpart Y]

- 84. NSPS Subpart Y Test Methods and Procedures.** The Permittee must determine compliance with the applicable opacity standards as specified in Conditions 84.1 through 84.3.

[40 C.F.R. 60.257(a), (a)(1) – (3), Subpart Y]

- 84.1. Method 9 of appendix A-4 tests and the procedures in 40 C.F.R. 60.11 must be used to determine opacity, with the exceptions specified in Conditions 84.1.a and 84.1.b.

- a. The duration of the Method 9 of appendix A-4 performance test shall be 1 hour (ten 6-minute averages).
- b. If, during the initial 30 minutes of the observation of a Method 9 test, all of the 6-minute average opacity readings are less than or equal to half the applicable opacity limit, then the observation period may be reduced from 1 hour to 30 minutes.

- 84.2. To determine opacity for fugitive coal dust emissions sources, the additional requirements specified in Conditions 84.2.a through 84.2.c must be used.

- a. The minimum distance between the observer and the emission source shall be 5.0 meters (16 feet), and the sun shall be oriented in the 140-degree sector of the back.
- b. The observer shall select a position that minimizes interference from other fugitive coal dust emissions sources and make observations such that the line of vision is approximately perpendicular to the plume and wind direction.

- c. The observer shall make opacity observations at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. Water vapor is not considered a visible emission.
- 84.3. A visible emissions observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions specified in Conditions 84.3.a through 84.3.c are met.
- a. No more than three emissions points may be read concurrently.
  - b. All three emissions points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points.
  - c. If an opacity reading for any one of the three emissions points is within 5 percent opacity from the applicable standard (excluding readings of zero opacity), then the observer must stop taking readings for the other two points and continue reading just that single point.
- 84.4. Additional visible emissions observations after the initial observation shall be conducted within 12 months of the previous observation.
- 85. NSPS Subpart Y Recordkeeping.** For EU IDs 110B and 111, the Permittee shall maintain a logbook (written or electronic) on-site and make it available upon request. The logbook shall record the following:
- [40 C.F.R. 60.258(a), (a)(1) – (6) & (10), Subpart Y]
- 85.1. The manufacturer’s recommended maintenance procedures and the date and time of any maintenance and inspection activities and the results of those activities. Any variance from manufacturer recommendation, if any, shall be noted.
  - 85.2. The date and time of periodic coal preparation and processing plant visual observations, noting those sources with visible emissions along with corrective actions taken to reduce visible emissions. Results from the actions shall be noted.
  - 85.3. The amount and type of coal processed each calendar month.
  - 85.4. The amount of chemical stabilizer or water purchased for use in the coal preparation and processing plant.
  - 85.5. Monthly certification that the dust suppressant systems were operational when any coal was processed and that manufacturer’s recommendations were followed for all control systems. Any variance form the manufacturer’s recommendations, if any, shall be noted.

- 85.6. Monthly certification that the fugitive coal dust emissions control plan was implemented as described<sup>16</sup>. Any variance from the plan, if any, shall be noted. A copy of the applicable fugitive coal dust emissions control plan and any letters from the Administrator providing approval of any alternative control measures shall be maintained with the logbook. Any actions, e.g., objections, to the plan and any actions relative to the alternative control measures, e.g., approvals, shall be noted in the logbook as well.
- 85.7. During a performance test of control equipment other than a wet scrubber, and each operating day thereafter, the owner or operator shall record the measurements of the reagent injection flow rate, as applicable.

**86. NSPS Subpart Y Reporting.** The Permittee shall submit reports as follows:

[18 AAC 50.040(j) & 50.326(j)]  
[40 C.F.R. 71.6(a)(1) & (a)(3)(iii)]

- 86.1. Submit an excess emission report semiannually as required under Condition 49 and Condition 137 for all 6-minute average opacities that exceed the applicable standard.

[40 C.F.R. 60.258(b), (b)(3), Subpart Y]

- 86.2. The Permittee shall submit the results of initial performance tests to the Administrator or delegated authority, consistent with the provisions of Condition 52. The Permittee who elects to comply with the reduced performance testing provisions of Conditions 83.3 or 83.4 shall include in the performance test report identification of each affected facility that will be subject to the reduced testing. The Permittee electing to comply with Condition 83.4 shall also include information which demonstrates that the control devices are identical.

[40 C.F.R. 60.258(c), Subpart Y]

- 86.3. After July 1, 2011, within 60 days after the date of completing each performance evaluation conducted to demonstrate compliance with Conditions 80 through 85, the Permittee must submit the test data to EPA by successfully entering the data electronically into EPA's WebFIRE data base available at <http://cfpub.epa.gov/oarweb/index.cfm?action=fire.main>. For performance tests that cannot be entered into WebFIRE (i.e., Method 9 opacity performance tests) the Permittee must mail a summary copy to United States Environmental Protection Agency; Energy Strategies Group; 109 TW Alexander DR; mail code: D243-01; RTP, NC 27711.

[40 C.F.R. 60.258(d), Subpart Y]

---

<sup>16</sup> Certification of fugitive coal dust emissions control plan is only required if coal pile is reconstructed or modified.

## 40 C.F.R. Part 63 National Emission Standards for Hazardous Air Pollutants (NESHAP)

### NESHAP Subpart A – General Provisions

**87. NESHAP Subpart A Applicability.** The Permittee shall comply with the applicable requirements of 40 C.F.R. 63 Subpart A in accordance with the provisions for applicability of Subpart A in

- 87.1. Table 8 to NESHAP Subpart ZZZZ for EU IDs 20-23A, 25, 26, 29, 31, 34, 38-41, 43-49, 51-54, 59, 60, 62, 71, 76, 112-115, 117, and 120-122 listed in Table A;
- 87.2. Table 3 to NESHAP Subpart CCCCC for EU IDs 126-128 listed in Table A; and
- 87.3. Table 8 to Subpart JJJJJ for EU IDs 1-4, 1A, 2A, 4A, 5A, 6A, and 7-16 listed in Table A.

[18 AAC 50.040(c)(1), (23), (35), & (39), 50.040(j)(4) and 50.326(j)]  
[40 C.F.R. 71.6(a)(1) & (a)(3)]  
[40 C.F.R. 63.1-63.15, Subpart A]  
[40 C.F.R. 63.6665 & Table 8, Subpart ZZZZ]  
[40 C.F.R. 63.11130 & Table 3, Subpart CCCCC]  
[40 C.F.R. 63.11235 & Table 8, Subpart JJJJJ]

### NESHAP Subpart ZZZZ<sup>17</sup> – Reciprocating Internal Combustion Engines

**88. NESHAP Subpart ZZZZ Applicability.** The Permittee shall comply with applicable requirements for existing<sup>18</sup> (EU IDs 20-23A, 25, 26, 29, 31, 34, 38-41, 43-49, 51-54, 59, 60, 62, 71, 76, 112-115, 117, 120, and 122) and new<sup>19</sup> (EU IDs 19A, 24A, 28A, 30A, 32A, 33, 35A-37A, 50, 55A, 56, 63-70B, 72-75, 77-80, 82-84, 116, 118A, 119, 124, 125, and 129-132) stationary reciprocating internal combustion engines (RICE) located at an area source of hazardous air pollutant (HAP) emissions.

[18 AAC 50.040(c)(23) & (j)(4) and 50.326(j)]  
40 C.F.R. 71.6((a)(1)  
[40 C.F.R. 63.6585(a), 63.6590(a)(1)(iii), (a)(2)(iii), & (c)(1), Subpart ZZZZ]

- 88.1. For EU IDs 20-23A, 26, 31, 34, 51-54, 71, 112-115, and 117, existing stationary RICE units, the Permittee shall comply with Conditions 89 and 90 as applicable.  
[40 C.F.R. 63.6603(a), Subpart ZZZZ]
- 88.2. For EU IDs 19A, 24A, 28A, 30A, 32A, 33, 35A-37A, 50, 55A, 56, 63-70B, 72-75, 77-80, 82-84, 116, 118A, 119, 124, 125, and 129-132, new stationary RICE units, the Permittee shall meet the requirements of 40 C.F.R. 63 Subpart ZZZZ by meeting the requirements of 40 C.F.R. 60 Subpart III in Conditions 67 through 74. No further requirements apply for such engines under 40 C.F.R. 63.

[40 C.F.R. 63.6590(c)(1), Subpart ZZZZ]

<sup>17</sup> The provisions of NESHAP Subpart ZZZZ listed in Conditions 88 through 90 are current as amended through August 30, 2024. Should EPA promulgate revisions to this subpart, the Permittee shall be subject to the revised final provisions as promulgated and not the superseded provisions summarized in these conditions.

<sup>18</sup> In accordance with 40 C.F.R. 63.6590(a)(1)(iii), a stationary RICE located at an area source of HAP emissions is “existing” if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

<sup>19</sup> In accordance with 40 C.F.R. 63.6590(a)(2)(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.

- 88.3. For EU IDs 25, 29, 38-41, 43-49, 59, 60, 62, 76, 120, and 122, existing commercial or institutional stationary RICE units located at an area source of HAP emissions that do not operate for the purpose specified in Condition 90.7.c(i), the Permittee must operate the units according to the provisions specified in Condition 90.7. If any of these units does not comply with Condition 90.7, then it is not considered to be an emergency stationary RICE and will need to meet all applicable requirements for none-emergency engines. No further requirements apply for such engines under 40 C.F.R. 63.

[40 C.F.R. 63.6585(f), (f)(2) & (3), Subpart ZZZZ]

*NESHAP Subpart ZZZZ Requirements for Existing Non-Emergency RICE*

89. For EU IDs 20 through 23A, the Permittee shall comply with the following emission limits, operating limits, and other requirements at all times:

[40 C.F.R. 63.6605(a), Subpart ZZZZ]

- 89.1. Except during periods of startup, comply with the following emission limits:

- a. Limit concentration of CO in the stationary RICE exhaust to 23 parts per million by volume, dry basis (ppmvd) at 15 percent oxygen (O<sub>2</sub>); or
- b. Reduce CO emissions by 70 percent or more.

[40 C.F.R. 63.6603(a) and Table 2d (Item 3), Subpart ZZZZ]

- 89.2. Except during periods of startup, comply with the following applicable operating limits:

- 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,<sup>20</sup> or
- c. Comply with any operating limitations approved by the Administrator.

[40 C.F.R. 63.6603(a) and Table 2b (Item 2 or 3) of Subpart ZZZZ]

- 89.3. The Permittee shall use diesel fuel that meets the requirements of 40 C.F.R. 1090.305 for nonroad diesel fuel.

[40 C.F.R. 63.6604(a), Subpart ZZZZ]

- 89.4. **Performance Testing.** The Permittee shall comply as follows:

- a. Conduct subsequent performance tests every 8,760 hours or 3 years, whichever comes first.<sup>21</sup>

---

<sup>20</sup> Sources can petition the Administrator pursuant to the requirements of 40 C.F.R. 63.8(f) for a different temperature range.

<sup>21</sup> Per 40 C.F.R. 63.6620(b), the Permittee is not required to start up a non-operational stationary RICE subject to performance testing solely to conduct the performance test. The performance test can be conducted when the engine is next started up.

[40 C.F.R. 63.6615, 66.6620(a), (b), & Table 3 item 4 of Subpart ZZZZ]

- (i) Conduct performance tests according to the applicable procedures set out in 40 C.F.R. 63.6620. Compliance with the numerical emission limitations is based on the results of testing the average of three 1-hour runs.

[40 C.F.R. 63.6620(d) – (i) & Table 4, Subpart ZZZZ]

#### 89.5. **Monitoring, Installation, Collection, Operation, and Maintenance.**

- a. If the Permittee is required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of 40 C.F.R. 63 Subpart ZZZZ, the Permittee must install, operate, and maintain each CPMS according to the requirements in 40 C.F.R. 63.6625(b)(1) through (6).

[40 C.F.R. 63.6625(b), Subpart ZZZZ]

- b. For EU IDs 20 through 23A, comply with either Conditions 89.5.b(i) or 89.5.b(ii). The Permittee 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.

- (i) Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or

- (ii) 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.

[40 C.F.R. 63.6625(g), Subpart ZZZZ]

- c. Minimize the time spent at idle during startup and minimize the startup time to a period needed for appropriate and safe loading, not to exceed 30 minutes.

[40 C.F.R. 63.6625(h) & Table 2d, Subpart ZZZZ]

#### 89.6. **Continuous Compliance.** Monitor and collect data according to Conditions 89.6.a and 89.6.b.

- a. Except for monitor malfunctions, associated reports, required performance evaluations, and required quality assurance or control activities, 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.

- b. The Permittee 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. The Permittee must, however, use all the valid data collected during all other periods.

[40 C.F.R. 63.6635, Subpart ZZZZ]

89.7. Demonstrate continuous compliance with each emission limitation, operating limitation, and other applicable requirements in Conditions 89.1 and 89.2 according to methods specified in Table 6 of 40 C.F.R. 63 Subpart ZZZZ.

[40 C.F.R. 63.6640(a) & Table 6 of Subpart ZZZZ]

- a. Conduct performance tests according to Condition 89.4 for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that emissions remain at or below the CO or formaldehyde concentration limit;
- b. Collect the catalyst inlet temperature data according to Condition 89.5.a;
- c. Reduce these data to 4-hour rolling averages;
- d. Maintain the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature;
- e. Measure the pressure drop across the catalyst once per month and demonstrate that the pressure drop across the catalyst is within the operating limitation established during the performance test.

[Table 6, Item 10 of Subpart ZZZZ]

- f. If the Permittee changes the catalyst, the Permittee must reestablish the values of the operating parameters measured during the initial performance test. When the Permittee reestablishes the values of your operating parameters, they must also conduct a performance test to demonstrate that they are meeting the required emission limitation applicable to EU IDs 20 through 23A.

[40 C.F.R. 63.6640(b), Subpart ZZZZ]

89.8. At all times operate and maintain EU IDs 20 through 23A, 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 EU IDs 20 through 23A.

[40 C.F.R. 63.6605(b), Subpart ZZZZ]

[40 C.F.R. 63.4(a), Subpart A]

89.9. **Test Notifications.**

- a. Notify EPA Region 10 and the Department in writing of the intent to conduct a performance test (e.g., the test required under Condition 89.4 and any subsequent performance tests) at least 60 days before the performance test is scheduled to begin as required in 40 C.F.R. 63.7(b)(1). Notification under this condition satisfies the 10-day notification requirement of Condition 130.
- b. If after providing the notice required under Condition 89.9.a there is a delay in conducting the scheduled performance test due to unforeseeable circumstances beyond the Permittee's control, the Permittee must notify EPA Region 10 and the Department as soon as practicable prior to the scheduled performance test date and specify the date when the performance test is rescheduled as required in 40 C.F.R. 63.7(b)(2).

[40 C.F.R. 63.6645(a) & (g), 63.6665 & Table 8, Subpart ZZZZ]  
[40 C.F.R. 63.7(b)(1) and (2), 40 C.F.R. 63.9(e), Subpart A]

- c. Test Plans. When conducting a performance test, develop a site-specific test plan for submittal to the Department as required under Condition 129. Upon request, also submit the plan to the Administrator for approval, in accordance with the requirements of 40 C.F.R. 63.7(c)(1) through (4).

[40 C.F.R. 63.6645(a), 63.6665 & Table 8, Subpart ZZZZ]  
[40 C.F.R. 63.7(c), Subpart A]

- d. Performance Test Reports. Submit to EPA Region 10 and the Department the results of the performance test required under Condition 89.2 and any subsequent performance tests, before the close of business on the 60<sup>th</sup> day following completion of the performance test according to 40 C.F.R. 63.9(h)(2), 63.9(k), and 63.10(d)(2).

[40 C.F.R. 63.6620(j), 63.6645(a) & (h), 63.6665 & Table 8, Subpart ZZZZ]  
[40 C.F.R. 63.9(k), (h)(2), 63.10(d)(2), Subpart A]

**89.10. NESHAP Subpart ZZZZ Recordkeeping.** The Permittee shall:

- a. For EU IDs 20 through 23A complying with the emission and operating limitations, keep the records described in Conditions 89.10.a(i) through 89.10.a(v).
  - (i) A copy of each notification and report submitted to comply with this subpart, including all documentation supporting any Initial Notification of Compliance Status submitted, according to the requirement in 40 C.F.R. 63.10(b)(2)(xiv).
  - (ii) Records of the occurrence and duration (in hours) of each malfunction of operation (e.g. process equipment) or the air pollution control and monitoring equipment.
  - (iii) Records of performance tests and performance evaluations as required in 40 C.F.R. 63.10(b)(2)(viii).
  - (iv) Records of all required maintenance performed on the air pollution control and monitoring equipment.

- (v) Records of actions taken during periods of malfunction to minimize emissions in accordance with Condition 89.8, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.  
[40 C.F.R. 63.6655(a), (a)(1) – (5), Subpart ZZZZ]
- b. For each CPMS, keep the records listed in Conditions 89.10.b(i) through 89.10.b(iii).
  - (i) Records described in 40 C.F.R. 63.10(b)(2)(vi) through (xi).
  - (ii) Previous (i.e., superseded) versions of the performance evaluation plan as required in 40 C.F.R. 63.8(d)(3).
  - (iii) Requests for alternatives to the relative accuracy test for CPMS as required in 40 C.F.R. 63.8(f)(6)(i), if applicable.  
[40 C.F.R. 63.6655(b), (b)(1) – (3), Subpart ZZZZ]
- c. Keep the records required in Table 6 to 40 C.F.R. 63 Subpart ZZZZ to show continuous compliance with each applicable emission or operating limitation.  
[40 C.F.R. 63.6655(d), Subpart ZZZZ]
- d. Keep records in a form suitable and readily available for expeditious inspection and review, 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 pertaining to the applicable requirements in 40 C.F.R. 63 Subpart ZZZZ. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site.

[40 C.F.R. 63.6660, Subpart ZZZZ]

[40 C.F.R. 63.10(b)(1), Subpart A]

**89.11. NESHAP Subpart ZZZZ Reporting.** The Permittee shall:

- a. All requests, reports, application, submittals, and other communications to the Administrator shall be submitted to EPA Region 10 and the Department. If the Department requires a submittal that contains all the information required in an application, notification, request, report, statement, or other communication, the Permittee may send EPA Region 10 a copy of that submittal to satisfy the requirements for that communication.  
[40 C.F.R. 63.13, Subpart A]
- b. Include in the operating report required by Condition 138 a report of all deviations from the limitations in Conditions 89.1 through 89.7 and of each instance in which an applicable requirement in 40 C.F.R. 63, Subpart A (Table 8 to Subpart ZZZZ) was not met.

[40 C.F.R. 63.6640(b) & (e) & 6650(f), Subpart ZZZZ]

- c. Submit each compliance report as required in Table 7 to 40 C.F.R. 63 Subpart ZZZZ. The Compliance report must contain the information in paragraphs 40 C.F.R. 63.6650(c)(1) through (c)(8). Beginning on February 26, 2025, the semiannual and annual compliance report must be submitted according to 40 C.F.R. 63.6650(i). Only those elements required under Subpart ZZZZ are required to be submitted according to 40 C.F.R. 63.6650(i).

[40 C.F.R. 63.6650(a), 63.6650(c), & Table 7 of Subpart ZZZZ]  
[40 C.F.R. 63.9(h), Subpart A]

- (i) Unless the Administrator has approved a different schedule for submission of reports under 40 C.F.R. 63.10(a), submit each report by the date in Table 7 to 40 C.F.R. 63 Subpart ZZZZ and according to the requirements in paragraphs 40 C.F.R. 63.6650(b)(1) through (b)(9).

[40 C.F.R. 63.6650(b) & Table 7 of Subpart ZZZZ]

- (ii) For each deviation from an emission or operating limitations that occurs for a stationary RICE not using a continuous monitoring system (CMS) to comply with the emission or operating limitations in 40 C.F.R. 63 Subpart ZZZZ, the Compliance report must contain the information in paragraphs 40 C.F.R. 63.6650(c)(1) through (c)(8) and the information in paragraphs 40 C.F.R. 63.6650(d)(1) and (d)(2).

[40 C.F.R. 63.6650(d), Subpart ZZZZ]

*NESHAP Subpart ZZZZ Requirements for Existing Emergency RICE*

90. For EU IDs 26, 31, 34, 51-54, 71, 112-115, and 117, the Permittee shall comply with the following operating limits and other requirements at all times:

[18 AAC 50.040(c)(23) & (j)(4) and 50.326(j)]  
[40 C.F.R. 71.6(a)(1) & (3)(i)]  
[40 C.F.R. 63.6605(a), Subpart ZZZZ]

- 90.1. At all times, operate and maintain EU IDs 26, 31, 34, 51-54, 71, 112-115, and 117, 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 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 EU IDs 26, 31, 34, 51-54, 71, 112-115, and 117.

[40 C.F.R. 63.6605(b), Subpart ZZZZ]

90.2. **NESHAP Subpart ZZZZ Maintenance Requirements for Emergency<sup>22</sup> CI RICE.** For EU IDs 26, 31, 34, 51-54, 71, 112-115, and 117 except during periods of startup, the Permittee shall meet the following requirements:

- a. Change oil and filter every 500 hours of operation or within 1 year + 30 days of the previous change, whichever comes first, except as allowed by Condition 90.3;
- b. Inspect air cleaner every 1,000 hours of operation or within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary; and
- c. Inspect all hoses and belts every 500 hours of operation or within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary.

[40 C.F.R. 63.6603(a) & Table 2d (item 4), Subpart ZZZZ]

90.3. The Permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirements in Condition 90.2.a, as described below:

- a. The oil analysis must be performed at the same frequency specified for changing the oil and filter in Conditions 90.2.a.
- b. 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:
  - (i) Total Base Number is less than 30 percent of the Total Base Number of the oil when new;
  - (ii) viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or
  - (iii) percent water content (by volume) is greater than 0.5.
- c. If all of the condemning limits in Conditions 90.3.b(i) through 90.3.b(iii) are not exceeded, the Permittee is not required to change the oil and filter.
- d. If any of the limits in Conditions 90.3.b(i) through 90.3.b(iii) are exceeded, the Permittee must change the oil and filter within 2 business days of receiving the results of the analysis.

---

<sup>22</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 Condition 90.2, 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.

- (i) If the engine is not in operation when the results of the analysis are received, the Permittee must change the oil and filter within 2 business days or before commencing operation, whichever is later.
  - e. The analysis program must be part of the maintenance plan for the engine.  
[40 C.F.R. 63.6625(i) and Table 2d (Footnote 1), Subpart ZZZZ]
- 90.4. Operate and maintain the stationary RICE and after-treatment control device (if any) according to either:
  - a. the manufacturer's emission-related written instructions for operation and maintenance; or
  - b. a maintenance plan developed by the Permittee which must provide, to the extent practicable, for the maintenance and operation of the engine(s) in a manner consistent with good air pollution control practice for minimizing emissions.  
[40 C.F.R. 63.6625(e)(3), 63.6640(a), & Table 6 (item 9), Subpart ZZZZ]
- 90.5. 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.  
[40 C.F.R. 63.6625(h) and Table 2d, Subpart ZZZZ]
- 90.6. For emergency units EU IDs 26, 31, 34, 51-54, 71, 112-115, and 117, monitor each emissions unit using a non-resettable hour meter at all times that the emissions unit is operating except for monitor malfunctions, associated repairs, and required quality assurance or control activities.  
[40 C.F.R. 63.6625(f) & 63.6635(b), Subpart ZZZZ]
- 90.7. For emergency units EU IDs 26, 31, 34, 51-54, 71, 112-115, and 117, operate the emergency stationary RICE according to the requirements in Conditions 90.7.a through 90.7.c. In order for the engine to be considered an emergency stationary RICE under 40 C.F.R. 63 Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in Conditions 90.7.a through 90.7.c, is prohibited. If you do not operate the engine according to the requirements in Conditions 90.7.a through 90.7.c, the engine will not be considered an emergency engine under Subpart ZZZZ and must meet all requirements for non-emergency engines.  
[40 C.F.R. 63.6640(f), Subpart ZZZZ]
  - a. There is no time limit on the use of emergency stationary RICE in emergency situations.
  - b. You may operate your emergency stationary RICE for the purpose specified in Condition 90.7.b(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by Condition 90.7.c counts as part of the 100 hours per calendar year allowed by this Condition 90.7.b.

- (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.
- c. 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 provided in Condition 90.7.b. Except as provided in Condition 90.7.c(i), 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.
- (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 Permittee 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 Permittee.

90.8. **NESHAP Subpart ZZZZ Recordkeeping Requirements for Emergency CI RICE.** The Permittee shall keep records, as follows:

[18 AAC 50.040(c)(23) & (j)(4) and 50.326(j)]  
[40 C.F.R. 71.6(a) (3)(ii)]

- a. Keep records of the maintenance conducted on EU IDs 26, 31, 34, 51-54, 71, 112-115, and 117 in order to demonstrate that the stationary RICE and after-treatment control device (if any) are operated and maintained according to the maintenance plan. These records must include, at a minimum: oil and filter change dates and corresponding hour on the hour meter; inspection and replacement dates for air cleaners, hoses, and belts; and records of other emission-related repairs and maintenance performed.  
[40 C.F.R. 63.6655(e), Subpart ZZZZ]
- b. If electing to utilize the oil analysis program described in Condition 90.3, keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil and filter changes for the engine.  
[40 C.F.R. 63.6625(i), Subpart ZZZZ]
- c. Keep records in a form suitable and readily available for expeditious review. Keep each record 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 40 C.F.R. 63.10(b)(1), except that all records may be retained off site.  
[40 C.F.R. 63.6660 & Table 8, Subpart ZZZZ]  
[40 C.F.R. 63.10(b)(1), Subpart A]
- d. Keep records of the hours of operations that are recorded through the non-resettable hour meter, including:
  - (i) The number of hours spent for emergency operation and what classified the operation as an emergency; and
  - (ii) The number of hours spent for non-emergency operation.
  - (iii) If the engine is used for the purpose specified in Condition 90.7.c(i), keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.  
[40 C.F.R. 63.6655(f), (f)(2), Subpart ZZZZ]

90.9. **NESHAP Subpart ZZZZ Reporting Requirements for Emergency CI RICE.** The Permittee shall report, as follows:

[18 AAC 50.040(c)(23) & (j)(4) and 50.326(j)]  
[40 C.F.R. 71.6(a)(3)(iii) & (c)(6)]

- a. All requests, reports, application, submittals, and other communication to the Administrator shall be submitted to EPA Region 10 and the Department. If the Department requires a notice that contains all the information required in an application, notification, request, report, statement, or other communication, the Permittee may send EPA Region 10 a copy of the notice to satisfy the requirements for that communication.

[40 C.F.R. 63.10(d) and 63.13, Subpart A]

- b. Include in the operating report required by Condition 138 a report of all deviations as defined in 40 C.F.R. 63.6675 and of each instance in which an applicable requirement in 40 C.F.R. 63, Subpart A (Table 8 to Subpart ZZZZ) was not met. Beginning on February 26, 2025, the semiannual and annual compliance report required in Table 7 to Subpart ZZZZ must be submitted according to 40 C.F.R. 63.6650(i). Only those elements required under Subpart ZZZZ are required to be submitted according to 40 C.F.R. 63.6650(i).

[40 C.F.R. 63.6640(e) and 63.6650(f) & (i), Subpart ZZZZ]

### NESHAP Subpart CCCCCC<sup>23</sup> – Gasoline Dispensing Facilities

- 91. NESHAP Subpart CCCCCC Applicability.** For gasoline storage tanks EU IDs 126, 127, and 128 listed in Table A, and for gasoline cargo tanks during delivery of product to the affected emissions units, the Permittee shall comply with the applicable requirements for existing gas dispensing facilities located at an area source of HAP emissions with a monthly combined throughput of 10,000 gallons or more.

[40 C.F.R. 63.1111(a), (c), & (h), Subpart CCCCCC]  
[18 AAC 50.040(c) & (j); & 50.326(j)]  
[40 C.F.R. 71.6(a)(1)]

- 91.1. **Affected emission sources.** The emission sources to which Conditions 92 through 95 applies are gasoline storage tanks EU IDs 126, 127, and 128 and associated equipment components in vapor or liquid gasoline service at new, reconstructed, or existing gasoline dispensing facilities that meet the criteria specified in Condition 91. Pressure/Vacuum vents on gasoline storage tanks and the equipment necessary to unload product from cargo tanks into the storage tanks at gasoline dispensing facilities are covered emission sources. The equipment used for the refueling of motor vehicles are not covered emission sources.

[40 C.F.R. 63.1112(a), Subpart CCCCCC]

- 91.2. **Exceedance of monthly throughput threshold.** For EU IDs 126, 127, and 128:

- a. If the combined throughput ever exceeds 100,000 gallons or more per month, EU IDs 126, 127, and 128 will become and remain subject to the requirements for 40 C.F.R. 63.11118, even if the combined throughput later falls below 100,000 gallons per month.

[40 C.F.R. 63.1111(i), Subpart CCCCCC]

---

<sup>23</sup> The provisions of NESHAP Subpart CCCCCC listed in Conditions 91 through 95 are current as amended through January 18, 2021. Should EPA promulgate revisions to this subpart, the Permittee shall be subject to the revised final provisions as promulgated and not the superseded provisions summarized in these conditions.

- b. If EU IDs 126, 127, and 128 become subject to the control requirements for C.F.R. 63.11118 because of an increase in the monthly throughput, as specified in Condition 91.2.a, comply with the standards no later than 3 years after the units become subject to the control requirements.

[40 C.F.R. 63.11113(c), Subpart CCCCCC]

**92. NESHAP Subpart CCCCCC General Duties.** The Permittee must comply with the requirements of Conditions 92.1 and 92.2.

92.1. At all times, operate and maintain EU IDs 126, 127, and 128, 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.

92.2. Keep applicable records and submit reports as specified in Conditions 94 and 95.

[40 C.F.R. 63.11115, 11115(a) & (b), Subpart CCCCCC]

**93. NESHAP Subpart CCCCCC Operating Requirements.**

93.1. 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. Measured to be taken include, but are not limited to, the following :

- a. Minimize gasoline spills ;
- b. Clean up spills as expeditiously as practicable ;
- c. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use ;
- d. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

93.2. Only load gasoline into storage tanks by utilizing submerged filling, as specified in Conditions 93.2.a, 93.2.b, or 93.2.c. The applicable distances in Conditions 93.2.a and 93.2.b 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.

- a. Submerged fill pipes installed on or before November 9, 2006, must be no more than 12 inches from the bottom of the tank.
- b. Submerged fill pipes installed after November 9, 2006, must be no more than 6 inches from the bottom of the tank.

- c. Submerged fill pipes not meeting the specifications of Conditions 93.2.a or 93.2.b are allowed if the Permittee 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.

[40 C.F.R. 63.11117(b), Subpart CCCCCC]

- 93.3. The Permittee must have records available within 24 hours of a request by the Administrator to document the gasoline throughput.

[40 C.F.R. 63.11117(d), Subpart CCCCCC]

**94. NESHAP Subpart CCCCCC Recordkeeping Requirements.** The Permittee shall keep records as specified in Conditions 94.1 and 94.2.

- 94.1. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

- 94.2. Records of actions taken during periods of malfunction to minimize emissions in accordance with Condition 92.1, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

[40 C.F.R. 63.11125(d), Subpart CCCCCC]

**95. NESHAP Subpart CCCCCC Reporting Requirements.** The Permittee 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 the Permittee during a malfunction of an affected source to minimize emissions in accordance with Condition 92.1, including actions taken to correct a malfunction. No report is necessary for a calendar year in which no malfunctions occurred.

[40 C.F.R. 63.11126, Subpart CCCCCC]

**NESHAP Subpart JJJJJJ<sup>24</sup> – Industrial, Commercial, and Institutional (ICI) Boilers**

**96. NESHAP Subpart JJJJJJ Applicability.** For EU IDs 1-4, 1A, 2A, 4A, 5A, 6A, and 7-16 listed in Table A, the Permittee shall comply with applicable requirements of NESHAP Subpart JJJJJJ for existing<sup>25</sup> (EU IDs 1-4, and 7-12) and new<sup>26</sup> (EU IDs 1A, 2A, 4A, 5A, 6A, and 13-16) industrial boilers located at an area source of HAP emissions.

[18 AAC 50.040(c)(39) & (j) and 50.326(j)]

[40 C.F.R. 71.6(a)(1)]

[40 C.F.R. 63.11193, 63.11194(a)(1) & (2), Subpart JJJJJJ]

---

<sup>24</sup> The provisions of NESHAP Subpart JJJJJJ listed in Conditions 96 through 103 are current as amended through July 2, 2018. Should EPA promulgate revisions to this subpart, the Permittee shall be subject to the revised final provisions as promulgated and not the superseded provisions summarized in these conditions.

<sup>25</sup> In accordance with 40 C.F.R. 63.11194(b), an affected source is an existing source if construction or reconstruction of the affected source commenced on or before June 4, 2010.

<sup>26</sup> In accordance with 40 C.F.R. 63.11194(c), an affected source is a new source if construction commenced after June 4, 2010.

**97. NESHAP Subpart JJJJJ General Requirements.** At all times, the Permittee shall operate and maintain EU IDs 1-4, 1A, 2A, 4A, 5A, 6A, and 7-16, 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 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.

[18 AAC 50.040(c)(39) & (j) & 50.326(j)]  
[40 C.F.R. 71.6(a)(1)]  
[40 C.F.R. 63.11205(a), Subpart JJJJJ]

97.1. For EU IDs 1-4, 1A, 2A, 4A, 5A, 6A, 15, and 16, demonstrate compliance with all applicable emission limits using performance stack testing, fuel analysis, or a CMS, including a CEMS, a COMS, or a CPMS, where applicable. The Permittee may demonstrate compliance with the applicable mercury emission limit using fuel analysis if the emission rate calculated according to Condition 99.6 is less than the applicable emission limit. Otherwise, demonstrate compliance using stack testing.

[40 C.F.R. 63.11205(b), Subpart JJJJJ]

97.2. If the Permittee demonstrates compliance with any applicable emission limit through performance stack testing and subsequent compliance with operating limits (including the use of CPMS), with a CEMS, or with a COMS, they must develop a site-specific monitoring plan according to the requirements in Conditions 97.2.a through 97.2.c for the use of any CEMS, COMS, or CPMS. This requirement also applies if the Permittee petitions the EPA Administrator for alternative monitoring parameters under 40 C.F.R. 63.8(f).

- a. For each CMS required in Conditions 97.1 and 97.2 (including CEMS, COMS, or CPMS), the Permittee must develop, and submit to the Administrator for approval upon request, a site-specific monitoring plan that address Conditions 97.2.a(i) through 97.2.a(vi). Submit this site-specific monitoring plan, if requested, at least 60 days before initial performance evaluation of a CMS. This requirement to develop and submit a site-specific monitoring plan does not apply to affected sources with existing CEMS or COMS operated according to the performance specifications under 40 C.F.R. appendix B and that meet the requirements of Condition 100.5.
  - (i) Installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);
  - (ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and

- (iii) Performance evaluation procedures and acceptance criteria (e.g., calibrations).
  - (iv) Ongoing operation and maintenance procedures in accordance with the general requirements of 40 C.F.R. 63.8(c)(1)(ii), (c)(3), and (c)94(ii);
  - (v) Ongoing data quality assurance procedures in accordance with the general requirements of 40 C.F.R. 63.8(d); and
  - (vi) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of 40 C.F.R. 63.10(c) (as applicable in Table 8 of 40 C.F.R. 63 Subpart JJJJJ), (e)(1), and (e)(2)(i).
- b. Conduct a performance evaluation of each CMS in accordance with the site-specific monitoring plan.
  - c. Operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.

[40 C.F.R. 63.11205(c), Subpart JJJJJ]

**98. NESHAP Subpart JJJJJ Standards.**

98.1. For EU IDs 1-4, 1A, 2A, 4A, 5A, 6A, 15, and 16, comply with the following emission limits:

- a. For EU IDs 1-4,
  - (i) limit mercury emissions to 2.2E-05 lb/MMBtu of heat input; and
  - (ii) limit CO emissions to 420 ppmvd corrected to 3 percent O<sub>2</sub> (3-run average or 10-day rolling average).

[40 C.F.R. 63.11201(a) & Table 1 item 6, Subpart JJJJJ]

- b. For EU IDs 1A, 2A, 4A, 5A, and 6A,
  - (i) limit filterable PM to 3.0E-02 lb/MMBtu of heat input;
  - (ii) limit mercury emissions to 2.2E-05 lb/MMBtu of heat input; and
  - (iii) limit CO emissions to 420 ppmvd corrected to 3 percent O<sub>2</sub> (3-run average or 10-day rolling average).

[40 C.F.R. 63.11201(a) & Table 1 item 1, Subpart JJJJJ]

- c. For EU IDs 15 and 16,
  - (i) limit filterable PM to 3.0E-02 lb/MMBtu of heat input.

[40 C.F.R. 63.11201(a) & Table 1 item 5, Subpart JJJJJ]

98.2. For EU IDs 1-4, 1A, 2A, 4A,5A,6A, and 7-16, comply with each applicable work practice standard, emission reduction measure, and management practice specified in Conditions 98.2.a through 98.2.d.

[40 C.F.R. 63.11201(b)]

- a. For EU IDs 1-4, 1A, 2A, 4A, 5A, 6A, 7, 8, 15, and 16, minimize the boiler's startup and shutdown periods and conduct startups and shutdowns according to the manufacturer's recommended procedures. If manufacturer's recommended procedures are not available, follow recommended procedures for a unit of similar design for which manufacturer's recommended procedures are available.

[Table 2 Item 1, to NESHAP, Subpart JJJJJ]

- b. For EU IDs 7, 8, 11, and 12, conduct an initial tune-up as specified in Condition 99.6.b, and conduct a tune-up of the boiler biennially as specified in Condition 100.4.

[Table 2 Item 4, to NESHAP, Subpart JJJJJ]

- c. For EU IDs 13-16, conduct a tune-up of the boiler biennially as specified in Condition 100.4.

[Table 2 Item 5, to NESHAP, Subpart JJJJJ]

- d. For EU IDs 9 and 10, conduct an initial tune-up as specified in Condition 99.6.b, and conduct a tune-up of the boiler every 5 years as specified in Condition 100.4.

[Table 2 Item 12, to NESHAP, Subpart JJJJJ]

- 98.3. For EU IDs 1-4, 1A, 2A, 4A, 5A, 6A, 15, and 16 demonstrating compliance with emission limits under Condition 98.1, comply with each applicable operating limit specified in Conditions 98.3.a through 98.3.c.

[40 C.F.R. 63.11201(c), Subpart JJJJJ]

- a. For EU IDs 1A, 2A, 4A, 5A, and 6A using fabric filter control to demonstrate compliance, maintain opacity to less than or equal to 10 percent opacity (daily block average).

[Table 3 Item 1, to NESHAP, Subpart JJJJJ]

- b. For EU IDs 1-4, 1A, 2A, 4A, 5A, 6A, 15, and 16 using performance stack testing to demonstrate compliance,
  - (i) Maintain the operating load of each unit such that it does not exceed 110 percent of the average operating load recorded during the most recent performance test.

[Table 3 Item 7, to NESHAP, Subpart JJJJJ]

- c. For EU IDs 1-4 using an oxygen analyzer system to demonstrate compliance,

- (i) Maintain the 30-day rolling average oxygen level at or above the minimum oxygen level. This requirement does not apply to units that install an oxygen trim system since these units will set the trim system to the level specified in 40 C.F.R. 63.11224(a)(7).

[Table 3 Item 8, to NESHAP, Subpart JJJJJ]

- 98.4. The standards in Conditions 98.1 through 98.3 apply at all times the affected boiler is operating, except during periods of startup and shutdown, during which time the Permittee must comply only with the requirements in Condition 98.2.

[40 C.F.R. 63.11201(d)]

**99. NESHAP Subpart JJJJJ Initial Compliance Requirements.** The Permittee shall demonstrate initial compliance as follows:

[18 AAC 50.040(j) and 50.326(j)]  
[40 C.F.R. 71.6(a)(3)(i)]

- 99.1. For EU IDs 1A, 2A, 4A, 15, and 16, demonstrate initial compliance with each emission limit specified in Condition 98.1 by either conducting performance (stack) tests, as applicable, according to Condition 99.5 and Table 4 to 40 C.F.R. 63, Subpart JJJJJ or, for mercury, conducting fuel analyses, as applicable, according to Condition 99.6 and Table 5 to 40 C.F.R. 63, Subpart JJJJJ.

[40 C.F.R. 63.11210(a)]

- 99.2. For EU IDs 1A, 2A, 4A, 15, and 16, demonstrate initial compliance with the applicable emission limits within 180 days after startup of the source.

[40 C.F.R. 63.11210(d)]

- 99.3. EU IDs 15 and 16 are not required to complete an initial performance tune-up, but are required to complete the applicable biennial or 5-year tune-up as specified in Condition 100.4 no later than 25 months or 61 months, respectively, after the initial startup of the new affected source.

[40 C.F.R. 63.11210(g)]

- 99.4. For EU IDs 1A, 2A, 4A, 15, and 16, initial compliance requirements include conducting performance tests according to 99.5, establishing operating limits according to Condition 100.3, and conducting CMS performance evaluations according to Condition 100.5.

[40 C.F.R. 63.11211(a), Subpart JJJJJ]

- 99.5. **Performance Tests Stack Tests & Procedures.** For EU IDs 1-4, 1A, 2A, 4A, 5A, 6A, 15, and 16:

- a. Conduct all performance tests according to 40 C.F.R. 63.7(c), (d), (f), and (h). Develop a site-specific test plan according to the requirements in 40 C.F.R. 63.7(c).

- b. Conduct each stack test according to the requirements in Table 4 to 40 C.F.R. 63 Subpart JJJJJ. Boilers that use a CEMS for CO are exempt from the initial CO performance testing in Table 4 to 40 C.F.R. 63 Subpart JJJJJ and the oxygen concentration operating limit requirement specified in Condition 98.3.
- c. Conduct performance stack tests at the representative operating load conditions while burning the type of fuel that has the highest emissions potential for each regulated pollutant, and demonstrate initial compliance and establish operating limits based on these performance stack tests. For subcategories with more than one emission limit, these requirements could result in the need to conduct more than one performance stack test. Following each performance stack test and until the next performance stack test, comply with the operating limit for operating load conditions specified in Condition 98.3.
- d. Conduct a minimum of three separate test runs for each performance stack test required, as specified in 40 C.F.R. 63.7(e)(3) and in accordance with the provisions in Table 4 to 40 C.F.R. 63 Subpart JJJJJ.
- e. To determine compliance with the emission limits, use the F-Factor methodology and equations in sections 12.2 and 12.3 of EPA Method 19 of appendix A-7 to convert the measured PM concentrations and the measured mercury concentrations that result from the performance test to pounds per million Btu heat input emission rates.

[40 C.F.R. 63.11212, 11212(a) – (e), Subpart JJJJJ]

99.6. If the Permittee elects to demonstrate compliance with an applicable mercury emission limit through fuel analysis, conduct fuel analyses according to Condition 99.6.a and follow the procedures in Conditions 99.6.b and 99.6.c.

- a. Conduct fuel analyses according to the procedures in Conditions 99.6.a(i) and 99.6.a(ii) and Table 5 to 40 C.F.R. 63 Subpart JJJJJ, as applicable. Conduct fuel analyses only for fuels and units that are subject to emission limits for mercury in Condition 98.1.
  - (i) At a minimum, obtain three composite fuel samples for each fuel type according to the procedures in Table 5 to 40 C.F.R. 63 Subpart JJJJJ. Each composite sample must consist of a minimum of three samples collected at approximately equal intervals during a test run period.
  - (ii) Determine the concentration of mercury in the fuel in units of pounds per million Btu of each composite sample for each fuel type according to the procedures in Table 5 to 40 C.F.R. 63 Subpart JJJJJ.

[40 C.F.R. 63.11213(a)-(c) & Table 5, Subpart JJJJJ]

- b. Determine the 90<sup>th</sup> percentile confidence level fuel mercury concentration of the composite samples analyzed for each fuel type using Condition 99.6.b(i).

(i)  $P_{90} = \text{mean} + (SD * t)$

where:

- (A)  $P_{90}$  = 90<sup>th</sup> percentile confidence level mercury concentration, in lb/MMBtu.
  - (B) mean = Arithmetic average of the fuel mercury concentration in the fuel samples analyzed according to Condition 99.6.a, in units of lb/MMBtu.
  - (C) SD = Standard deviation of the mercury concentration in the fuel samples analyzed according to Condition 99.6.a, in units of lb/MMBtu
  - (D) t = t distribution critical value for 90<sup>th</sup> percentile (0.1) probability for the appropriate degrees of freedom (number of samples minus one) as obtained from a Distribution Critical Value Table.
- c. To demonstrate compliance with the applicable mercury emission limit, the emission rate calculated for the boiler using Condition 99.6.b(i) must be less than the applicable mercury emission limit.

[40 C.F.R. 63.11211(c), (c)(2) & (3), Subpart JJJJJ]

99.7. For EU IDs 7-16, conduct a performance tune-up according to Condition 99.3, as applicable, and Condition 100.4.b. Submit a signed statement in the Notification of Compliance Status report that indicates that the Permittee conducted an initial tune-up of the boiler.

[40 C.F.R. 63.11214(b)]

99.8. For EU IDs 1-4, 1A, 2A, 4A, 5A, 6A, 15, and 16 subject to Condition 98.1, minimize the boiler's startup and shutdown periods following the manufacturer's recommended procedures, if available. If manufacturer's recommended procedures are not available, follow recommended procedures for a unit of similar design for which manufacturer's recommended procedures are available. Submit a signed statement in the Notification of Compliance Status report that indicates that startups and shutdowns were conducted according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available.

[40 C.F.R. 63.11214(d), 63.11223(g)]

**100. NESHAP Subpart JJJJJ Continuous Compliance Requirements.** For EU IDs 1-4, 1A, 2A, 4A, 5A, 6A, and 7-16, the Permittee shall demonstrate continuous compliance with the work practice and management practice standards in Conditions 98.1 - 98.3 as follows:

100.1. For EU IDs 1-4, 1A, 2A, 4A, 5A, 6A, 7, 8, 15, and 16, boilers rated at heat input capacity of 10 million British thermal units per hour or greater, conduct all applicable performance (stack) tests according to Condition 99.5 on a triennial basis, except as specified in Conditions 100.1.a through 100.1.c. Triennial performance tests must be completed no more than 37 months after the previous performance test.

[40 C.F.R. 63.11220(a)]

- a. For EU IDs 5A and 6A, comply with the provisions as specified in Conditions 100.1.a(i) and 100.1.a(ii).
  - (i) If performance tests results show that PM emissions are equal to or less than half of the PM emission limit, the Permittee may choose to conduct performance tests for PM every fifth year. Each such performance test must be conducted no more than 61 months after the previous performance test.
  - (ii) If performance test results show that PM emissions are greater than half of the PM emission limit, conduct subsequent performance tests on a triennial basis as specified in Condition 100.1.

[40 C.F.R. 63.11220(b), (b)(2) & (b)(4), Subpart JJJJJ]

- b. For EU IDs 1A, 2A, 4A, 15, and 16, when demonstrating initial compliance with the PM emission limit, if the boiler's performance test results show that PM emissions are equal to or less than half of the PM emission limit, the Permittee may choose to conduct performance tests for PM every fifth year, but must continue to comply with all applicable operating limits and monitoring requirements and must comply with the provisions as specified in Conditions 100.1.b(i) through 100.1.b(iii).
  - (i) Each such performance test must be conducted no more than 61 months after the previous performance test.
  - (ii) If the Permittee intends to burn a new type of fuel other than ultra-low-sulfur liquid fuel or gaseous fuels, conduct a performance test within 60 days of burning the new fuel type.
  - (iii) If performance test results show that PM emissions are greater than half of the PM emission limit, conduct subsequent performance tests on a triennial basis as specified in Condition 100.1.

[40 C.F.R. 63.11220(c), Subpart JJJJJ]

- c. For EU IDs 1-4, 1A, 2A, 4A, 5A, and 6A, when demonstrating compliance with the mercury emission limit based on fuel analysis, conduct a fuel analysis according to Condition 99.6 as specified in Conditions 100.1.c(i) through 100.1.c(iii).

- (i) For EU IDs 1-4, 5A, and 6A, if fuel analysis results show that the mercury constituents in the fuel are equal to or less than half of the mercury emission limit, the Permittee may choose to conduct fuel analysis sampling for mercury every 12 months.
- (ii) For EU IDs 1A, 2A, and 4A, when demonstrating initial compliance with the mercury emission limit, if the mercury constituents in the fuel are measured to be equal to or less than half of the mercury emission limit, the Permittee may choose to conduct fuel analysis sampling for mercury every 12 months, but must continue to comply with all applicable operating limits and monitoring requirements.
- (iii) When demonstrating compliance with the mercury emission limit, if the mercury constituents in the fuel are greater than half of the mercury emission limit, conduct quarterly sampling.

[40 C.F.R. 63.11220(d), (d)(1)(ii), (d)(2), & (d)(3), Subpart JJJJJ]

- 100.2. For EU IDs 1-4, 1A, 2A, 4A, 5A, 6A, 15, and 16, monitor and collect data according to Conditions 100.2.a through 100.2.c and the site-specific monitoring plan required by Condition 97.2.
- a. Operate the monitoring system and collect data at all required intervals at all times the affected source is operating and compliance is required, except for periods of monitoring system malfunctions or out-of-control periods, repairs, associated with monitoring system malfunctions or out-of-control periods, and required monitoring system quality assurance or quality control activities including, as applicable, calibration checks, required zero and span adjustments, and scheduled CMS maintenance as defined in your site-specific monitoring plan. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. The Permittee is required to complete monitoring system repairs in response to monitoring system malfunctions or out-of-control periods and to return the monitoring system to operation as expeditiously as practicable.
  - b. The Permittee may not use data collected during periods of startup and shutdown, monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods, or required monitoring system quality assurance or quality control activities in calculations used to report emissions or operating levels. Any such periods must be reported according to the requirements in 103. The Permittee must use all the data collected during all other periods in assessing the operation of the control device and associated control system.

- c. Except for periods of monitoring system malfunctions or monitoring system out-of-control periods, repairs associated with monitoring system malfunctions or monitoring system out-of-control periods, and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks, required zero and span adjustments, and scheduled CMS maintenance as defined in the site-specific monitoring plan), failure to collect required data is a deviation of the monitoring requirements.

[40 C.F.R. 63.11221, Subpart JJJJJ]

100.3. Demonstrate continuous compliance with each emission limit and operating limit in Conditions 98.1 and 98.3 that applies to EU IDs 1-4, 1A, 2A, 4A, 5A, 6A, 15, and 16 according to the methods specified in Table 7 to 40 C.F.R. 63, Subpart JJJJJ and to Conditions 100.3.a through 100.3.c.

[40 C.F.R. 63.11222(a)]

- a. Following the date on which the initial compliance demonstration is completed or is required to be completed under 40 C.F.R. 63.7, whichever date comes first, the Permittee must continuously monitor the operating parameters. Operation above the established maximum, below the established minimum, or outside the allowable range of the operating limits specified in Condition 100.3 constitutes a deviation from the operating limits established, except during performance tests conducted to determine compliance with the emission and operating limits or to establish new operating limits. Operating limits are confirmed or reestablished during performance tests.
- b. If a boiler has an applicable mercury or PM emission limit, keep records of the type and amount of all fuels burned in each boiler during the reporting period. If a boiler has an applicable mercury emission limit, demonstrate that all fuel types burned would result in lower emissions of mercury than the applicable emission limit (if compliance is demonstrated through fuel analysis), or result in lower fuel input of mercury than the maximum values calculated during the last performance stack test (if compliance is demonstrated through performance stack testing).

[40 C.F.R. 63.11222(a)(1) & (2), Subpart JJJJJ]

- c. Report each instance in which boilers did not meet each applicable emission limit and operating limit in Conditions 98.1 and 98.3. These instances are deviations from the emission limits in 40 C.F.R. 63, Subpart JJJJJ. These deviations must be reported according to the requirements in Condition 103.

[40 C.F.R. 63.11222(b)]

100.4. Performance Tune-ups.

- a. For boilers subject to the work practice standard or the management practices of a tune-up, conduct a performance tune-up according to Condition 100.4.b and keep records as required in Condition 102 to demonstrate continuous compliance. Conduct the tune-up while burning the type of fuel that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up.

[40 C.F.R. 63.11223(a)]

- b. Except as specified in Conditions 100.4.c and 100.4.d, The Permittee must conduct a tune-up of the boiler biennially to demonstrate continuous compliance as specified in Conditions 100.4.b(i) through 100.4.b(vii). Each biennial tune-up must be conducted no more than 25 months after the previous tune-up. For a new or reconstructed boiler, the first biennial tune-up must be no later than 25 months after the initial startup of the new or reconstructed boiler.

[40 C.F.R. 63.11223(b)]

- (i) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may delay the burner inspection until the next scheduled unit shutdown, but you must inspect each burner at least once every 36 months).
- (ii) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
- (iii) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (The Permittee may delay the inspection until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection).
- (iv) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO<sub>x</sub> requirement to which the unit is subject.
- (v) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.
- (vi) Maintain onsite and submit, if requested by EPA or the Department, a report containing the information in Conditions 100.4.b(vi)(A) through 100.4.b(vi)(C).
- (A) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler.

- (B) A description of any corrective actions taken as a part of the tune-up of the boiler.
  - (C) The type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.
- (vii) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup.
- [40 C.F.R. 63.11223 (b)(1) through (7)]
- c. For boilers with an oxygen trim system that maintains an optimum air-to-fuel ratio that would otherwise be subject to a biennial tune-up, conduct a tune-up of the boiler every 5 years as specified Conditions 100.4.b(i) - 100.4.b(vii). Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up. For a new or reconstructed boiler with an oxygen trim system, the first 5-year tune-up must be no later than 61 months after the initial startup. The Permittee may delay the burner inspection specified in Condition 100.4.b(i) and inspection of the system controlling the air-to-fuel ratio specified in Condition 100.4.b(iii) of until the next scheduled unit shutdown, but must inspect each burner and system controlling the air-to-fuel ratio at least once every 72 months.
- [40 C.F.R. 63.11223(c)]
- d. For EU IDs 9 and 10, conduct a tune-up every five years as specified in Conditions 100.4.b(i) - 100.4.b(vii). Each five-year tune-up must be conducted no more than 61 months after the previous tune-up. The Permittee may delay the burner inspection until the next scheduled unit shutdown, but must inspect each burner and system controlling the air-to-fuel ratio at least once every 72 months.

[40 C.F.R. 63.11223(e)]

#### 100.5. Monitoring, Installation, Operation, and Maintenance Requirements.

[40 C.F.R. 63.11224, Subpart JJJJJ]

- a. For boilers subject to a CO emission limit in Condition 98.1, the Permittee must either install, operate, and maintain a CEMS for CO and oxygen according to the procedures in 40 C.F.R. 63.11224(a)(1) through (6), or install, calibrate, operate, and maintain an oxygen analyzer system, according to the manufacturer's recommendations and 40 C.F.R. 63.11224(a)(7) and Condition 100.5.d, as applicable, by startup of the affected source. Where a certified CO CEMS is used, the CO level shall be monitored at the outlet of the boiler, after any add-on controls or flue gas recirculation system and before release to the atmosphere. Boilers that use a CO CEMS are exempt from the initial CO performance testing and oxygen concentration operating limit requirements specified in Condition 99.4. Oxygen monitors and oxygen trim systems must be installed to monitor oxygen in the boiler flue gas, boiler firebox, or other appropriate intermediate location.

[40 C.F.R. 63.11224(a), Subpart JJJJJ]

- b. If using a control device to comply with the emission limits specified in Condition 98.1, maintain each operating limit in Condition 98.3 that applies to the boiler as specified in Table 7 to 40 C.F.R. 63 Subpart JJJJJ. If the Permittee uses a control device not covered in Condition 98.3, or wishes to establish and monitor an alternative operating limit and alternative monitoring parameters, the Permittee must apply to the USEPA Administrator for approval of alternative monitoring under 40 C.F.R. 63.8(f).

[40 C.F.R. 63.11224(b), Subpart JJJJJ]

- c. If the Permittee demonstrates compliance with any applicable emission limit through stack testing and subsequent compliance with operating limits, the Permittee must develop a site-specific monitoring plan according to the requirements in Conditions 100.5.c(i) through 100.5.c(iv). This requirement also applies if the Permittee petitions the EPA Administrator for alternative monitoring parameters under 40 C.F.R. 63.8(f).

- (i) For each CMS required in this section, the Permittee must develop, and submit to the EPA Administrator for approval upon request, a site-specific monitoring plan that addresses Conditions 100.5.c(i)(A) through 100.5.c(i)(C). Submit this site-specific monitoring plan (if requested) at least 60 days before the initial performance evaluation of the CMS.

- (A) Installation of the CMS sampling probe or other interface at a measurement location relative to each affected unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device).
- (B) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems.
- (C) Performance evaluation procedures and acceptance criteria (e.g., calibrations).

- (ii) In the site-specific monitoring plan, the Permittee must also address Conditions 100.5.c(ii)(A) through 100.5.c(ii)(C).
  - (A) Ongoing operation and maintenance procedures in accordance with the general requirements of 40 C.F.R. 63.8(c)(1), (3), and (4)(ii).
  - (B) Ongoing data quality assurance procedures in accordance with the general requirements of 40 C.F.R. 63.8(d).
  - (C) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of 40 C.F.R. 63.10(c), (e)(1), and (e)(2)(i).
- (iii) The Permittee must conduct a performance evaluation of each CMS in accordance with the site-specific monitoring plan.
- (iv) The Permittee must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.
- d. For boilers with an operating limit that requires the use of a CMS, the Permittee must install, operate, and maintain each CPMS according to the procedures in 40 C.F.R. 63.11224(d)(1) through (4).
- e. If the Permittee has an applicable opacity operating limit under Condition 98.3, the Permittee must install, operate, certify and maintain each COMS according to the procedures in 40 C.F.R. 63.11224(e)(1) through (8) by startup of the affected source.

[40 C.F.R. 63.11224(c) – (e), Subpart JJJJJJ]

**101. NESHAP Subpart JJJJJJ Notification Requirements.** For EU IDs 1A-4A, 15, and 16, the Permittee must submit to the Department and EPA the following notifications:

[18 AAC 50.040(j) & 50.326(j)]

[40 C.F.R. 71.6(c)(3)(iii)]

[40 C.F.R. 63.11225(a), Subpart JJJJJJ]

101.1. **Notification of Compliance Status.** Submit the Notification of Compliance Status upon startup of affected boilers, except as specified in Conditions 101.2 and 101.4.

[40 C.F.R. 63.11225(a)(1)]

101.2. An Initial Notification must be submitted within 120 days after the source becomes subject to the standard.

[40 C.F.R. 63.11225(a)(2)]

101.3. If the Permittee is required to conduct a performance stack test, submit a Notification of Intent to conduct a performance test at least 60 days before the performance stack test is scheduled to begin.

[40 C.F.R. 63.11225(a)(3)]

101.4. If the Permittee must conduct a performance stack test, submit the Notice of Compliance Status within 60 days of completing the performance stack test. The Permittee must submit the Notification of Compliance Status in accordance with Conditions 101.4.a and 101.4.e. The Notification of Compliance Status must include the information and certification(s) of compliance in Conditions 101.4.a through 101.4.d as applicable, and signed by a responsible official.

[40 C.F.R. 63.11225(a)(4)]

- a. The Permittee must submit the information required in 40 C.F.R. 63.9(h)(2), except the information listed in 40 C.F.R. 63.9(h)(2)(i)(B), (D), (E), and (F). If the Permittee conducts any performance tests or CMS performance evaluations, submit that data as specified in 40 C.F.R. 63.11225(e). If the Permittee conducts any opacity or visible emission observations, or other monitoring procedures or methods, submit that data to the Administrator at the appropriate address listed in §63.13.
- b. “The facility complies with the requirements in 40 C.F.R. 63.11214 to conduct an initial tune-up of the boiler”.
- c. “This facility has had an energy assessment performed according to 40 C.F.R. 63.11214(c)”.
- d. For units that do not qualify for a statutory exemption as provided in Section 129(g)(1) of the Clean Air Act: “No secondary materials that are solid waste were combusted in any affected unit.”
- e. The notification must be submitted electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) ([www.epa.gov/cdx](http://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 Notification of Compliance Status must be submitted to the EPA at the appropriate address listed in 40 C.F.R. 63.13.

[40 C.F.R. 63.11225(a)(4)(i) through (vi)]

101.5. If using data from a previously conducted emission test to serve as documentation of conformance with the emission standards and operating limits of this subpart, include in the Notification of Compliance Status the date of the test and a summary of the results, not a complete test report, relative to this subpart.

[40 C.F.R. 63.11225(a)(5)]

**102. NESHAP Subpart JJJJJJ Recordkeeping Requirements.** For EU IDs 1-4, 1A, 2A, 4A, 5A, 6A, and 7-16, the Permittee shall keep records as follows:

[18 AAC 50.040(j) & 50.326(j)]

[40 C.F.R. 71.6(c)(3)(ii)]

102.1. The Permittee must maintain the records specified in Conditions 102.1.a through 102.1.f.

[40 C.F.R. 63.11225(c)(1)]

- a. As required in 40 C.F.R. 63.10(b)(2)(xiv), the Permittee must keep a copy of each notification and report submitted to comply with NESHAP Subpart JJJJJ and all documentation supporting any Initial Notification or Notification of Compliance Status that the Permittee submitted.  
[40 C.F.R. 63.11225(c)(1)]
- b. The Permittee must keep records to document conformance with the work practices and management practices, as specified in Conditions 102.1.b(i) and 102.1.b(iii).  
[40 C.F.R. 63.11225(c)(2)]
- (i) Records must identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned.  
[40 C.F.R. 63.11225(c)(2)(i)]
- (ii) For each boiler required to conduct an energy assessment, the Permittee must keep a copy of the energy assessment report.  
[40 C.F.R. 63.11225(c)(2)(iii)]
- (iii) For each boiler subject to an emission limit in Condition 98.1, the Permittee must also keep records of monthly fuel use by each boiler, including the type(s) of fuel and amount(s) used.  
[40 C.F.R. 63.11225(c)(2)(iv)]
- c. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation that were done to demonstrate compliance with the mercury emission limits. Supporting documentation should include results of any fuel analyses. The Permittee can use the results from one fuel analysis for multiple boilers provided they are all burning the same fuel type.  
[40 C.F.R. 63.11225(c)(3)]
- d. Records of the occurrence and duration of each malfunction of the boiler, or of the associated air pollution control and monitoring equipment.  
[40 C.F.R. 63.11225(c)(4)]
- e. Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in Condition 98.1, including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.  
[40 C.F.R. 63.11225(c)(5)]
- f. The Permittee must keep the records of all inspection and monitoring data required by Conditions 100.2 and 100.3, and the information identified in Conditions 102.1.f(i) – (vi) for each required inspection or monitoring.  
[40 C.F.R. 63.11225(c)(6)]

- (i) The date, place and time of the monitoring event
- (ii) Person conducting the monitoring.
- (iii) Technique or method used.
- (iv) Operating conditions during the activity.
- (v) Results, including the date, time, and duration of the period from the time the monitoring indicated a problem to the time that monitoring indicated proper operation.
- (vi) Maintenance or corrective action taken (if applicable).

102.2. Records must be in a form suitable and readily available for expeditious review. The Permittee must keep each record for 5 years following the date of each recorded action. The Permittee must keep each record on-site or be accessible from a central location by computer or other means that instantly provide access at the site for at least 2 years after the date of each recorded action. The Permittee may keep the records off site for the remaining 3 years.

[40 C.F.R. 63.11225(d)]

**103. NESHAP Subpart JJJJJJ Reporting Requirements.** For EU IDs 1-4, 1A, 2A, 4A, 5A, 6A, and 7-16, the Permittee shall report, as follows:

[18 AAC 50.040(j) & 50.326(j)]  
[40 C.F.R. 71.6(c)(3)(iii)]

103.1. The Permittee must prepare, by March 1 of each year, and submit to the Department upon request, an annual compliance certification report for the previous calendar year containing the information specified in Condition 103.1.a-d. For boilers (EU IDs 7-14) that are subject only to a requirement to conduct a biennial or 5-year tune-up according to Condition 100.3.a and not subject to emission limits or operating limits, the Permittee may prepare only a biennial or 5-year compliance report as specified in Conditions 103.1.a and 103.1.b.

[40 C.F.R. 63.11225(b)]

- a. Company name and address;
- b. Statement by a responsible official, with the official's name, title, phone number, email address, and signature, 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 NESHAP Subpart JJJJJJ. The notification must include the following certification(s) of compliance, as applicable, and be signed by a responsible official:

[40 C.F.R. 63.11225(b)(1) and (2)]

- (i) "This facility complies with the requirements in §63.11223 to conduct a biennial or 5-year tune-up, as applicable, of each boiler."

- (ii) For units that do not qualify for a statutory exemption as provided in Section 129(g)(1) of the Clean Air Act: “No secondary materials that are solid waste were combusted in any affected unit.”
- (iii) “This facility complies with the requirement in §§63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available.”

[40 C.F.R. 63.11225(b)(2)(i)-(iii)]

- c. If the source experiences any deviations from the applicable requirements during the reporting period, include a description of deviations, the time periods during which the deviations occurred, and the corrective actions taken.

[40 C.F.R. 63.11225(b)(3)]

- d. The total fuel use by each affected boiler subject to an emission limit, for each calendar month within the reporting period

[40 C.F.R. 63.11225(b)(4)]

103.2. Within 60 days after the date of completing each performance test as required by 40 C.F.R. 63, Subpart JJJJJ, submit the results of the performance tests, including any associated fuel analyses, to EPA's WebFIRE database by using CEDRI that is accessed through EPA's CDX ([www.epa.gov/cdx](http://www.epa.gov/cdx)).

[40 C.F.R. 63.11225(e)(1), Subpart JJJJJ]

103.3. Within 60 days after the date of completing each CEMS performance evaluation, submit the results of the performance evaluation to EPA's WebFIRE database by using CEDRI that is accessed through EPA's CDX ([www.epa.gov/cdx](http://www.epa.gov/cdx)).

[40 C.F.R. 63.11225(e)(2), Subpart JJJJJ]

#### **40 C.F.R. Part 61 National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart A – General Provisions & Subpart M – Asbestos**

**104.** The Permittee shall comply with the applicable requirements set forth in 40 C.F.R. 61.145, 61.150, and 61.152 of Subpart M, and the applicable sections set forth in 40 C.F.R. 61, Subpart A and Appendix A.

[18 AAC 50.040(b)(1) & (2)(F), & 50.326(j)]  
[40 C.F.R. 61, Subparts A & M, and Appendix A]

#### **40 C.F.R. Part 64 Compliance Assurance Monitoring (CAM) Requirements**

**105. CAM Requirements.** The Permittee shall maintain and comply with the continuous monitoring scheme developed for EU IDs 1-4, 5A, and 6A to assure compliance with Conditions 39.1 and 39.2.

[40 C.F.R. 64.6(c)(3)]

105.1. **CAM Indicators.** The Permittee shall monitor exhaust opacity and differential pressure for each baghouse.

[40 C.F.R. 64.6(c)(1)(i)]

105.2. **Monitoring for Indicator Excursions.**

a. For each baghouse, the Permittee shall monitor opacity with a COMS every ten seconds and record the average opacity for each successive and discrete one minute block average; Opacity that remains at 12% or greater for a one minute block average time period shall trigger operators to check differential pressure.

b. For each baghouse, the Permittee shall continuously electronically monitor and daily manually record differential pressure across the baghouse; control room operators shall monitor real time differential pressure readings at least once every hour. Differential pressure less than 2 or greater than 8 inches of water observed during this hourly monitoring shall trigger operators to check exhaust opacity.

[40 C.F.R. 64.6(c)(1)(ii) & (iii)]

c. For each baghouse, the cleaning cycle setpoint selected by operators shall be recorded and shall not exceed 8 inches of water column. Differential pressure greater than 8 inches of water that does **not** initiate a cleaning cycle shall indicate an excursions from normal operating conditions.

d. For each baghouse, a 1 minute average exhaust opacity of 12% or greater **in conjunction with** a differential pressure less than 2 inches of water or greater than 8 inches of water shall indicate an excursion from normal operating conditions.

[40 C.F.R. 64.6(c)(2)]

105.3. **Corrective Action.** Each excursion from normal operating conditions shall trigger an investigation; corrective action shall be taken to return the baghouse to its normal or usual operating conditions as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

[40 C.F.R. 64.7(d)(1)]

105.4. **CAM Plan Recordkeeping and Reporting.** For each baghouse, keep records of the time and cause of all excursions outside the range of normal operating conditions and any corrective action taken as a result of the event that cause the excursion. Include these records with the Facility Operating Report required by Condition 138.

[40 C.F.R. 64.9(a) & (b)]

105.5. **Quality Improvement Plan.** For each emission unit subject to CAM, if the accumulated duration of excursions during a 12-month rolling time period exceeds 5 percent of the operating time for the unit, the Permittee shall prepare a Quality Improvement Plan in accordance with 40 C.F.R. 64.8(b). Submit this plan to the Department within 90 days of the time its development is triggered.

[40 C.F.R. 64.8(a)]

105.6. **Emission Limit Compliance and Exceedance Reporting.** Observed normal operating conditions, as referenced in Condition 105.2, shall not excuse the Permittee from complying with emission limits stated elsewhere in this permit. For EU IDs 1 – 4 and 1A, 2A, 4A, 5A, and 6A, an exceedance of any emissions limit (such as the state grain loading standard or opacity standard) shall be reported as an excess emission as required under Condition 137 whether or not values outside of CAM plan normal operating conditions are observed.

[40 C.F.R. 64.8(e)]  
[18 AAC 50.040(k) & 50.326(j)]  
[40 C.F.R. 71.6(a)(3) & (c)(6)]

#### 40 C.F.R. Part 82 Protection of Stratospheric Ozone

106. **Subpart F – Recycling and Emissions Reduction.** The Permittee shall comply with the applicable standards for recycling and emission reduction of refrigerants set forth in 40 C.F.R. 82, Subpart F.

[18 AAC 50.040(d) & 50.326(j)]  
[40 C.F.R. 82, Subpart F]

107. **Subpart G – Significant New Alternatives.** The Permittee shall comply with the applicable prohibitions set out in 40 C.F.R. 82.174 (Protection of Stratospheric Ozone Subpart G – Significant New Alternatives Policy Program).

[18 AAC 50.040(d) & 50.326(j)]  
[40 C.F.R. 82.174(b) through (d), Subpart G]

108. **Subpart H – Halons Emissions Reduction.** The Permittee shall comply with the applicable prohibitions set out in 40 C.F.R. 82.270 (Protection of Stratospheric Ozone Subpart H – Halon Emission Reduction).

[18 AAC 50.040(d) & 50.326(j)]  
[40 C.F.R. 82.270(b) through (f), Subpart H]

#### NESHAP Applicability Determination Requirements

109. The Permittee shall determine rule applicability and designation of affected sources under National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories (40 C.F.R. 63) in accordance with the procedures described in 40 C.F.R. 63.1(b).

109.1. If an owner or operator of a stationary source who is in the relevant source category determines that the source is not subject to a relevant standard or other requirement established under 40 C.F.R. 63, the owner or operator must keep a record as specified in 40 C.F.R. 63.10(b)(3).

109.2. If a source becomes affected by an applicable subpart of 40 C.F.R. 63, the owner or operator shall comply with such standard by the compliance date established by the Administrator in the applicable subpart, in accordance with 40 C.F.R. 63.6(c).

109.3. After the effective date of any relevant standard promulgated by the Administrator under this part, an owner or operator who constructs a new affected source that is not major-emitting or reconstructs an affected source that is not major-emitting that is subject to such standard, or reconstructs a source such that the source becomes an affected source subject to the standard, must notify the Administrator and the Department of the intended construction or reconstruction. The notification must be submitted in accordance with the procedures in 40 C.F.R. 63.9(b).

[18 AAC 50.040(c)(1), 50.040(j), & 50.326(j)]

[40 C.F.R. 71.6(a)(3)(ii)]

[40 C.F.R. 63.1(b), 63.5(b)(4), 63.6(c)(1), 63.9(b), & 63.10(b)(3), Subpart A]

## ***Section 7. General Conditions***

### **Standard Terms and Conditions**

**110.** Each permit term and condition is independent of the permit as a whole and remains valid regardless of a challenge to any other part of the permit.

[18 AAC 50.326(j)(3) and 50.345(a) & (e)]

**111.** The permit may be modified, reopened, revoked and reissued, or terminated for cause. A request by the Permittee for modification, revocation and re-issuance, or termination or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

[18 AAC 50.326(j)(3) and 50.345(a) & (f)]

**112.** The permit does not convey any property rights of any sort, nor any exclusive privilege.

[18 AAC 50.326(j)(3) and 50.345(a) & (g)]

**113. Administration Fees.** The Permittee shall pay to the Department all assessed permit administration fees. Administration fee rates are set out in 18 AAC 50.400-403.

[18 AAC 50.326(j)(1), 50.400, and 50.403]  
[AS 37.10.052(b) and AS 46.14.240]

**114. Assessable Emissions.** For each period from July 1 through the following June 30, the Permittee shall pay to the Department an annual emission fee based on the stationary source's assessable emissions, as determined by the Department under 18 AAC 50.410. The Department will assess fees per ton of each air pollutant that the stationary source emits or has the potential to emit. The quantity for which fees will be assessed is the lesser of the stationary source's:

114.1. potential to emit of 1,593.52 TPY; or

114.2. projected annual rate of emissions, in TPY, based upon actual annual emissions for the most recent calendar year, or another 12-month period approved in writing by the Department, when demonstrated by credible evidence of actual emissions, based upon the most representative information available from one or more of the following methods:

- a. an enforceable test method described in 18 AAC 50.220;
- b. material balance calculations;
- c. emission factors from EPA's publication AP-42, Vol. I, adopted by reference in 18 AAC 50.035; or
- d. other methods and calculations approved by the Department, including appropriate vendor-provided emissions factors when sufficient documentation is provided.

[18 AAC 50.040(j)(4), 50.035, 50.326(j)(1) & (3), 50.346(b)(1), 50.410, & 50.420]

**115. Assessable Emission Estimates.** The Permittee shall comply as follows:

115.1. No later than March 31 of each year, the Permittee may submit an estimate of the stationary source's assessable emissions as determined in Condition 114.2. Submit actual emissions estimates in accordance with the submission instructions on the Department's Standard Permit Conditions web page at <http://dec.alaska.gov/air/air-permit/standard-conditions/standard-condition-i-submission-instructions/>.

115.2. The Permittee shall include with the assessable emissions report all of the assumptions and calculations used to estimate the assessable emissions in sufficient detail so the Department can verify the estimates.

115.3. If no estimate is submitted on or before March 31 of each year, emission fees for the next fiscal year will be based on the potential to emit in Condition 114.1.

[18 AAC 50.040(j)(4), 50.326(j)(1) & (3), 50.346(b)(1), 50.410, & 50.420]

**116. Good Air Pollution Control Practice (GAPCP).** The Permittee shall do the following for EU IDs 17, 18, and 81:

116.1. Perform regular maintenance considering the manufacturer's or the operator's maintenance procedures;

116.2. Keep records of any maintenance that would have a significant effect on emissions; the records may be kept in electronic format; and

116.3. Keep a copy of either the manufacturer's or the operator's maintenance procedures.

[18 AAC 50.326(j)(3) and 50.346(b)(5)]

**117. Dilution.** The Permittee shall not dilute emissions with air to comply with this permit. Monitoring shall consist of an annual certification that the Permittee does not dilute emissions to comply with this permit.

[18 AAC 50.045(a)]

**118. Reasonable Precautions to Prevent Fugitive Dust.** A person who causes or permits bulk materials to be handled, transported, or stored, or who engages in an industrial activity or construction project shall take reasonable precautions to prevent particulate matter from being emitted into the ambient air.

118.1. The Permittee shall keep records of

a. complaints received by the Permittee and complaints received by the Department and conveyed to the Permittee; and

b. any additional precautions that are taken

(i) to address complaints described in Condition 118.1.a or to address the results of Department inspections that found potential problems; and

(ii) to prevent future dust problems.

118.2. The Permittee shall report according to Condition 120.3.

[18 AAC 50.045(d), 50.326(j)(3), and 50.346(c)]

**119. Stack Injection.** The Permittee shall not release materials other than process emissions, products of combustion, or materials introduced to control pollutant emissions from a stack at a stationary source constructed or modified after November 1, 1982, except as authorized by a construction permit, Title V permit, or air quality control permit issued before October 1, 2004.

[18 AAC 50.055(g)]

**120. Air Pollution Prohibited.** No person may permit any emission which is injurious to human health or welfare, animal or plant life, or property, or which would unreasonably interfere with the enjoyment of life or property.

[18 AAC 50.040(j)(4), 50.110, 50.326(j)(3), and 50.346(a)]  
[40 C.F.R. 71.6(a)(3)]

**120.1. Monitoring.** The Permittee shall monitor as follows:

- a. As soon as practicable after becoming aware of a complaint that is attributable to emissions from the stationary source, the Permittee shall investigate the complaint to identify emissions that the Permittee believes have caused or are causing a violation of Condition 120.
- b. The Permittee shall initiate and complete corrective action necessary to eliminate any violation identified by a complaint or investigation as soon as practicable if
  - (i) after an investigation because of a complaint or other reason, the Permittee believes that emissions from the stationary source have caused or are causing a violation of Condition 120; or
  - (ii) the Department notifies the Permittee that it has found a violation of Condition 120.

**120.2. Recordkeeping.** The Permittee shall keep records of

- a. the date, time, and nature of all emissions complaints received;
- b. the name of the person or persons that complained, if known;
- c. a summary of any investigation, including reasons the Permittee does or does not believe the emissions have caused a violation of Condition 120; and
- d. any corrective actions taken or planned for complaints attributable to emissions from the stationary source.

**120.3. Reporting.** The Permittee shall report as follows:

- a. With each stationary source operating report under Condition 138, the Permittee shall include a brief summary report which must include the following for the period covered by the report:
  - (i) the number of complaints received;

- (ii) the number of times the Permittee or the Department found corrective action necessary;
  - (iii) the number of times action was taken on a complaint within 24 hours; and
  - (iv) the status of corrective actions the Permittee or Department found necessary that were not taken within 24 hours.
- b. The Permittee shall notify the Department of a complaint that is attributable to emissions from the stationary source within 24 hours after receiving the complaint, unless the Permittee has initiated corrective action within 24 hours of receiving the complaint.
  - c. If emissions present a potential threat to human health or safety, the Permittee shall report any such emissions according to Condition 137.

**121. Technology-Based Emission Standard.** If an unavoidable emergency, malfunction (as defined in 18 AAC 50.235(d)), or non-routine repair (as defined in 18 AAC 50.990(64)), causes emissions in excess of a technology-based emission standard<sup>27</sup> listed in Conditions 20, 58, 64.1, 65.1, 71, 76, 82, 89.1, 98.1, and 106 (refrigerants), the Permittee shall

121.1. take all reasonable steps to minimize levels of emissions that exceed the standard; and

121.2. report in accordance with Condition 137.1.b; the report must include information on the steps taken to mitigate emissions and corrective measures taken or to be taken.

[18 AAC 50.235(a), 50.326(j)(4), & 50.040(j)(4)]  
[40 C.F.R. 71.6(c)(6)]

### Open Burning Requirements

**122. Open Burning.** If the Permittee conducts open burning at this stationary source, the Permittee shall comply with the requirements of 18 AAC 50.065. The Permittee shall comply as follows:

122.1. Keep written records to demonstrate that the Permittee complies with the limitations in this condition and the requirements of 18 AAC 50.065. Upon request by the Department, submit copies of the records; and

122.2. Include this condition in the annual certification required under Condition 140.

[18 AAC 50.065, 50.040(j), and 50.326(j)]  
[40 C.F.R. 71.6(a)(3)]

---

<sup>27</sup> As defined in 18 AAC 50.990(106), the term “*technology-based emission standard*” means a best available control technology (BACT) standard; a lowest achievable emission rate (LAER) standard; a maximum achievable control technology (MACT) standard established under 40 C.F.R. 63, Subpart B, adopted by reference in 18 AAC 50.040(c); a standard adopted by reference in 18 AAC 50.040(a) or (c); and any other similar standard for which the stringency of the standard is based on determinations of what is technologically feasible, considering relevant factors.

## ***Section 8. General Source Testing and Monitoring Requirements***

**123. Requested Source Tests.** In addition to any source testing explicitly required by the permit, the Permittee shall conduct source testing as requested by the Department to determine compliance with applicable permit requirements.

[18 AAC 50.220(a) and 50.345(a) & (k)]

**124. Operating Conditions.** Unless otherwise specified by an applicable requirement or test method, the Permittee shall conduct source testing

[18 AAC 50.220(b)]

124.1. at a point or points that characterize the actual discharge into the ambient air; and

124.2. at the maximum rated burning or operating capacity of the emissions unit or another rate determined by the Department to characterize the actual discharge into the ambient air.

**125. Reference Test Methods.** The Permittee shall use the following test methods when conducting source testing for compliance with this permit:

125.1. Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(a) must be conducted in accordance with the methods and procedures specified in 40 C.F.R. 60.

[18 AAC 50.040(a) and 50.220(c)(1)(A)]  
[40 C.F.R. 60]

125.2. Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(b) must be conducted in accordance with the methods and procedures specified in 40 C.F.R. 61.

[18 AAC 50.040(b) and 50.220(c)(1)(B)]  
[40 C.F.R. 61]

125.3. Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(c) must be conducted in accordance with the source test methods and procedures specified in 40 C.F.R. 63.

[18 AAC 50.040(c) and 50.220(c)(1)(C)]  
[40 C.F.R. 63]

125.4. Source testing for the reduction in visibility through the exhaust effluent must be conducted in accordance with the procedures set out in Reference Method 9. The Permittee may use the form in Section 13 to record data.

[18 AAC 50.030 and 50.220(c)(1)(D)]

125.5. Source testing for emissions of total particulate matter, sulfur compounds, nitrogen compounds, carbon monoxide, lead, volatile organic compounds, fluorides, sulfuric acid mist, municipal waste combustor organics, metals, and acid gases must be conducted in accordance with the methods and procedures specified in 40 C.F.R. 60, Appendix A.

[18 AAC 50.040(a)(3) and 50.220(c)(1)(E)]  
[40 C.F.R. 60, Appendix A]

125.6. Source testing for emissions of PM<sub>10</sub> and PM<sub>2.5</sub> must be conducted in accordance with the procedures specified in 40 C.F.R. 51, Appendix M, Methods 201 or 201A and 202.

[18 AAC 50.035(b)(2) & 50.220(c)(1)(F)]  
[40 C.F.R. 51, Appendix M]

125.7. Source testing for emissions of any pollutant may be determined using an alternative method approved by the Department in accordance with 40 C.F.R. 63 Appendix A, Method 301.

[18 AAC 50.040(c)(32) & 50.220(c)(2)]  
[40 C.F.R. 63, Appendix A, Method 301]

**126. Excess Air Requirements.** To determine compliance with this permit, standard exhaust gas volumes must include only the volume of gases formed from the theoretical combustion of the fuel, plus the excess air volume normal for the specific emissions unit type, corrected to standard conditions (dry gas at 68° F and an absolute pressure of 760 millimeters of mercury).

[18 AAC 50.220(c)(3) and 50.990(102)]

**127. Test Exemption.** The Permittee is not required to comply with Conditions 129, 130 and 131 when the exhaust is observed for visible emissions by Method 9 Plan (Condition 2.3) or Smoke/No Smoke Plan (Condition 2.4).

[18 AAC 50.345(a)]

**128. Test Deadline Extension.** The Permittee may request an extension to a source test deadline established by the Department. The Permittee may delay a source test beyond the original deadline only if the extension is approved in writing by the Department's appropriate division director or designee.

[18 AAC 50.345(a) & (l)]

**129. Test Plans.** Except as provided in Condition 127, before conducting any source tests, the Permittee shall submit a plan to the Department. The plan must include the methods and procedures to be used for sampling, testing, and quality assurance and must specify how the emissions unit will operate during the test and how the Permittee will document that operation. The Permittee shall submit a complete plan within 60 days after receiving a request under Condition 123 and at least 30 days before the scheduled date of any test unless the Department agrees in writing to some other time period. Retesting may be done without resubmitting the plan.

[18 AAC 50.345(a) & (m)]

**130. Test Notification.** Except as provided in Condition 127, at least 10 days before conducting a source test, the Permittee shall give the Department written notice of the date and the time the source test will begin.

[18 AAC 50.345(a) & (n)]

**131. Test Reports.** Except as provided in Condition 127, within 60 days after completing a source test, the Permittee shall submit one certified copy of the results in the format set out in the *Source Test Report Outline*, adopted by reference in 18 AAC 50.030. The Permittee shall certify the results in the manner set out in Condition 134. If requested in writing by the Department, the Permittee must provide preliminary results in a shorter period of time specified by the Department.

[18 AAC 50.345(a) & (o)]

**132. Particulate Matter Calculations.** In source testing for compliance with the particulate matter standards in Conditions 9, 34.2, and 39, the three-hour average is determined using the average of three one-hour test runs. The source test must account for those emissions caused by soot blowing, grate cleaning, or other routine maintenance activities by ensuring that at least one test run includes the emissions caused by the routine maintenance activity and is conducted under conditions that lead to representative emissions from that activity. The emissions must be quantified using the following equation:

$$E = E_M \left[ (A+B) \times \frac{S}{R \times A} \right] + E_{NM} \left[ \frac{(R-S)}{R} - \frac{BS}{R \times A} \right]$$

Where:

- E = the total particulate matter emissions of the emissions unit in grains per dry standard cubic foot (gr/dscf)
- $E_M$  = the particulate matter emissions in gr/dscf measured during the test that included the routine maintenance activity
- $E_{NM}$  = the arithmetic average of particulate matter emissions in gr/dscf measured by the test runs that did not include the routine maintenance activity
- A = the period of routine maintenance activity occurring during the test run that included routine maintenance activity, expressed to the nearest hundredth of an hour
- B = the total period of the test run, less A
- R = the maximum period of emissions unit operation per 24 hours, expressed to the nearest hundredth of an hour
- S = the maximum period of routine maintenance activity per 24 hours, expressed to the nearest hundredth of an hour

[18 AAC 50.220(f)]

## ***Section 9. General Recordkeeping and Reporting Requirements***

### **Recordkeeping Requirements**

**133.** The Permittee shall keep all records required by this permit for at least five years after the date of collection, including:

133.1. Copies of all reports and certifications submitted pursuant to this section of the permit; and

133.2. Records of all monitoring required by this permit, and information about the monitoring including

- a. the date, place, and time of sampling or measurements;
- b. the date(s) analyses were performed;
- c. the company or entity that performed the analyses;
- d. the analytical techniques or methods used;
- e. the results of such analyses; and
- f. the operating conditions as existing at the time of sampling or measurement.

[18 AAC 50.040(a)(1) & (j)(4) and 50.326(j)]  
[40 C.F.R 60.7(f), Subpart A, 40 C.F.R 71.6(a)(3)(ii)(A) & (B)]

### **Reporting Requirements**

**134. Certification.** The Permittee shall certify any permit application, report, affirmation, or compliance certification submitted to the Department and required under the permit by including the signature of a responsible official for the permitted stationary source following the statement: *“Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.”* Excess emission reports must be certified either upon submittal or with an operating report required for the same reporting period. All other reports and other documents must be certified upon submittal.

134.1. The Department may accept an electronic signature on an electronic application or other electronic record required by the Department if the person providing the electronic signature

- a. uses a security procedure, as defined in AS 09.80.190, that the Department has approved; and
- b. accepts or agrees to be bound by an electronic record executed or adopted with that signature.

[18 AAC 50.205, 50.326(j)(3), 50.345(a) & (j), & 50.346(b)(10)]

**135. Submittals.** Unless otherwise directed by the Department or this permit, the Permittee shall submit to the Department one certified copy of reports, compliance certifications, and/or other submittals required by this permit. The Permittee may submit the documents electronically or by hard copy.

135.1. Submit the certified copy of reports, compliance certifications, and/or other submittals in accordance with the submission instructions on the Department's Standard Permit Conditions web page at <http://dec.alaska.gov/air/air-permit/standard-conditions/standard-condition-xvii-submission-instructions/>.

135.2. Should the Permittee's responsible official be unable to certify submittals via the AOS, Standard Permit Condition XVII allows for an alternative submission method. The Permittee shall submit the certified copy of reports, compliance certifications, and/or other submittals electronically under a cover letter to the DEC.AQ.Airreports@alaska.gov Air Reports email or by hard copy.

[18 AAC 50.326(j)(3) & 50.346(b)(10)]

**136. Information Requests.** The Permittee shall furnish to the Department, within a reasonable time, any information the Department requests in writing to determine whether cause exists to modify, revoke and reissue, or terminate the permit or to determine compliance with the permit. Upon request, the Permittee shall furnish to the Department copies of records required to be kept by the permit. The Department may require the Permittee to furnish copies of those records directly to the Federal Administrator.

[18 AAC 50.345(a) & (i), 50.200, & 50.326(a) & (j)]  
[40 C.F.R. 71.5(a)(2) & 71.6(a)(3)]

**137. Excess Emissions and Permit Deviation Reports.** The Permittee shall report excess emissions and permit deviations as follows:

137.1. **Excess Emissions Reporting.** Except as provided in Condition 120, the Permittee shall report all emissions or operations that exceed emissions standards or limits of this permit as follows:

- a. In accordance with 18 AAC 50.240(c), as soon as possible, report
  - (i) excess emissions that present a potential threat to human health or safety; and
  - (ii) excess emissions that the Permittee believes to be unavoidable.
- b. In accordance with 18 AAC 50.235(a), within two working days after the event commenced or was discovered, report an unavoidable emergency, malfunction, or nonroutine repair that causes emissions in excess of a technology-based emission standard.
- c. If a continuous or recurring excess emissions is not corrected within 48 hours of discovery, report within 72 hours of discovery unless the Department provides written permission to report under Condition 137.1.d.

- d. Report all other excess emissions not described in Conditions 137.1.a, 137.1.b, and 137.1.c within 30 days after the end of the month during which the excess emissions occurred or as part of the next routine operating report in Condition 138 for excess emissions that occurred during the period covered by the report, whichever is sooner.
- e. If requested by the Department, the Permittee shall provide a more detailed written report to follow up on an excess emissions report.

[18 AAC 50.235(a)(2), 50.240(c), 50.326(j)(3), & 50.346(b)(2)]

**137.2. Permit Deviations Reporting.** For permit deviations that are not “excess emissions,” as defined under 18 AAC 50.990:

- a. Report according to the required deadline for failure to monitor, as specified in other applicable conditions of this permit (Conditions 4.3.b and 12.4.b).
- b. Report all other permit deviations within 30 days after the end of the month during which the deviation occurred or as part of the next routine operating report in Condition 138 for permit deviations that occurred during the period covered by the report, whichever is sooner.

[18 AAC 50.326(j)(3) & 50.346(b)(2)]

**137.3. Reporting Instructions.** When reporting either excess emissions or permit deviations, the Permittee shall report using the Department’s online form for all such submittals, beginning no later than September 7, 2023. The form can be found at the Division of Air Quality’s Air Online Services (AOS) system webpage <http://dec.alaska.gov/applications/air/airtoolsweb> using the Permittee Portal option. Alternatively, upon written Department approval, the Permittee may submit the form contained in Section 16 of this permit. The Permittee must provide all information called for by the form that is used. Submit the report in accordance with the submission instructions on the Department’s Standard Permit Conditions webpage found at <http://dec.alaska.gov/air/air-permit/standard-conditions/standard-conditions-iii-and-iv-submission-instructions/>.

[18 AAC 50.235(a)(2), 50.240(c), 50.326(j)(3), 50.346(b)(2) & (3), and 50.270(a), (b), & (c)]

- a. Upon written Department approval, a person may submit required records or information using methods other than the method required in Condition 137.3. Approval under this subsection is temporary and does not remain effective for more than one calendar year without the Department's written extension of the approval. For alternative submittal of Excess Emissions and Permit Deviation Reports, the Permittee shall submit the form contained in Section 16 of this permit as specified in Condition 135.2.

[18 AAC 50.270(b)]

**138. Operating Reports.** During the life of this permit<sup>28</sup>, the Permittee shall submit to the Department an operating report in accordance with Conditions 134 and 135 by August 1 for the period January 1 to June 30 of the current year and by February 1 for the period July 1 to December 31 of the previous year.

138.1. The operating report must include all information required to be in operating reports by other conditions of this permit, for the period covered by the report.

138.2. When excess emissions or permit deviations that occurred during the reporting period are not included with the operating report under Condition 138.1, the Permittee shall identify

- a. the date of the excess emissions or permit deviation;
- b. the equipment involved;
- c. the permit condition affected;
- d. a description of the excess emissions or permit deviation; and
- e. any corrective action or preventive measures taken and the date(s) of such actions; or

138.3. when excess emissions or permit deviation reports have already been reported under Condition 137 during the period covered by the operating report, the Permittee shall either

- a. include a copy of those excess emissions or permit deviation reports with the operating report; or
- b. cite the date(s) of those reports.

138.4. The operating report must include, for the period covered by the report, a listing of emissions monitored under Conditions 2.3.e, 2.4.c, 10.2, and 13.1 which trigger additional testing or monitoring, whether or not the emissions monitored exceed an emission standard. The Permittee shall include in the report

- a. the date of the emissions;
- b. the equipment involved;
- c. the permit condition affected; and
- d. the monitoring result which triggered the additional monitoring.

---

<sup>28</sup> *Life of this permit* is defined as the permit effective dates, including any periods of reporting obligations that extend beyond the permit effective dates. For example, if a permit expires prior to the end of a calendar year, there is still a reporting obligation to provide operating reports for the periods when the permit was in effect.

138.5. **Transition from expired to renewed permit.** For the first period of this renewed operating permit, also provide the previous permit's operating report elements covering that partial period immediately preceding the effective date of this renewed permit.

[18 AAC 50.346(b)(6) & 50.326(j)]  
[40 C.F.R. 71.6(a)(3)(iii)(A)]

**139. Regional Haze Visibility Protection Area.** The Permittee shall comply as follows:

139.1. Maintain onsite for 10 years, records of any maintenance to any significant emissions unit that is not an insignificant emissions unit under 18 AAC 50.326(d) – (i), that has or may have an effect on any emission that affects visibility of Class I areas, including critical maintenance that has occurred or is planned to occur, including all schedules, practices, and maintenance records for each significant emissions unit and control device according to the manufacturer's emission-related written instructions.

139.2. For EU IDs 1A, 2A, 4A, 15, 16, 23A, 24A, 28A, 30A, 32A, 35A – 37A, 55A, 65B – 69A, 70B, 72, 79, 118A, and 130 – 132, include a best estimate of the projected equipment life of the significant emissions unit, if known, in the first operating report required in Condition 138 after the emissions unit is installed.

[18 AAC 50.265(4)(B) & 50.326(j)]  
[40 C.F.R. 71.6(a)(3)(iii)(A)]

**140. Annual Compliance Certification.** Each year by March 31, the Permittee shall compile and submit to the Department an annual compliance certification report according to Condition 135.

140.1. Certify the compliance status of the stationary source over the preceding calendar year consistent with the monitoring required by this permit, as follows:

- a. identify each term or condition set forth in Section 3 through Section 11, that is the basis of the certification;
- b. briefly describe each method used to determine the compliance status;
- c. state whether compliance is intermittent or continuous; and
- d. identify each deviation and take it into account in the compliance certification.

140.2. **Transition from expired to renewed permit.** For the first period of this renewed operating permit, also provide the previous permit's annual compliance certification report elements covering that partial period immediately preceding the effective date of this renewed permit.

140.3. In addition, submit a copy of the report directly to the Clean Air Act Compliance Manager, US EPA Region 10, ATTN: Air Toxics and Enforcement Section, Mail Stop: 20-C04, 1200 Sixth Avenue, Suite 155, Seattle, WA 98101-3188.

[18 AAC 50.205, 50.345(a) & (j), & 50.326(j)]  
[40 C.F.R. 71.6(c)(5)]

**141. Emission Inventory Reporting.** The Permittee shall submit to the Department reports of actual emissions for the previous calendar year, by emissions unit, of CO, NH<sub>3</sub>, NO<sub>x</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, VOC, and lead (Pb) and lead compounds, as follows:

- 141.1. **Every-year inventory.** Each year by April 30, if the stationary source's potential to emit (PTE) for the previous calendar year equals or exceeds:
- a. 250 TPY of NH<sub>3</sub>, PM<sub>10</sub>, PM<sub>2.5</sub> or VOC; or
  - b. 2,500 TPY of CO, NO<sub>x</sub>, or SO<sub>2</sub>.
- 141.2. **Triennial inventory.** Every third year by April 30, if the stationary source's PTE for the previous calendar year does not meet any of the emission thresholds in Condition 141.1.
- 141.3. For reporting under Condition 141.2, the Permittee shall report the annual emissions and the required data elements under Condition 141.4 every third year for the previous calendar year as scheduled by the EPA.<sup>29</sup>
- 141.4. For each emissions unit and the stationary source, include in the report the required data elements<sup>30</sup> contained within the form included in the Emission Inventory Instructions available at the Department's AOS system on the Point Source Emission Inventory webpage at <http://dec.alaska.gov/Applications/Air/airtoolsweb/PointSourceEmissionInventory>.
- 141.5. Submit the report in accordance with the submission instructions on the Department's Standard Permit Conditions webpage at <http://dec.alaska.gov/air/air-permit/standard-conditions/standard-conditions-xv-and-xvi-submission-instructions/>.

[18 AAC 50.040(j)(4), 50.200, 50.275, 50.326(j)(3), & 50.346(b)(8)]  
[40 C.F.R. 51.15, 51.30(a)(1) & (b)(1), and Appendix A to 40 C.F.R. 51 Subpart A]

**142. Consistency of Reporting Methodologies.** Regardless of permit classification, as of September 7, 2022, all stationary sources operating in the state shall report actual emissions to the Department, either upon request or to meet individual permit requirements, in order for the state to meet federal reporting requirements under 40 C.F.R. Part 51, Subpart A.

- 142.1. For the purposes of reporting actual or assessable emissions required under Condition 141 and Condition 142, the Permittee shall use consistent pollutant-specific emission factors and calculation methods for all reporting requirements for the stationary source.

[18 AAC 50.040(j)(4), 50.200, 50.275, 50.326(j)(3), & 50.346(b)(8)]  
[40 C.F.R. 51.15, 51.30(a)(1) & (b)(1), and Appendix A to 40 C.F.R. 51 Subpart A]

---

<sup>29</sup> The calendar years for which reports are required are based on the triennial reporting schedule in 40 C.F.R. 51.30(b)(1), which requires states to report emissions data to the EPA for inventory years 2011, 2014, 2017, 2020, and every 3rd year thereafter. Therefore, the Department requires Permittees to report emissions data for the same inventory years by April 30 of the following year (e.g., triennial emission inventory report for 2020 is due April 30, 2021, triennial emission inventory report for 2023 is due April 30, 2024, etc.).

<sup>30</sup> The required data elements to be reported to the EPA are outlined in 40 C.F.R. 51.15 and Tables 2a and 2b to Appendix A of 40 C.F.R. 51 Subpart A.

**143. NSPS and NESHAP Reports.** The Permittee shall comply with the following:

143.1. **Reports:** Except for previously submitted reports and federal reports and notices submitted through EPA's Central Data Exchange (CDX) and Compliance and Emissions Data Reporting Interface (CEDRI) online reporting system, attach to the operating report required by Condition 138 for the period covered by the report, a copy of any NSPS and NESHAP reports submitted to the U.S. Environmental Protection Agency (EPA) Region 10. For reports previously submitted to ADEC or submitted through CDX/CEDRI, state in the operating report the date and a brief description of each of the online reports submitted during the reporting period.

143.2. **Waivers:** Upon request by the Department, provide a written copy of any EPA-granted alternative monitoring requirement, custom monitoring schedule or waiver of the federal emission standards, recordkeeping, monitoring, performance testing, or reporting requirements. The Permittee shall keep a copy of each U.S. EPA-issued monitoring waiver or custom monitoring schedule with the permit.

[18 AAC 50.040(j)(4) and 50.326(j)(4)]  
[40 C.F.R. 60.13, 63.10(d) & (f) and 40 C.F.R. 71.6(c)(6)]

**144. Federal Electronic Reporting Allowance:** Effective September 25, 2024, the Permittee may electronically submit in an acceptable digital format reports, notifications, or other required submission types in certain 40 C.F.R. 59, 60, 61, 62, and 63 Subparts that do not already have electronic reporting requirements (i.e., paper reports, notifications, or other submission types), via the CEDRI on the EPA's CDX, or to another EPA managed electronic document receiving system that may be designated for the receipt of specified submissions in the future.

144.1. Additionally, performance test reports that do not already have Cross-Media Electronic Reporting Rule (CROMERR) compliant electronic reporting requirements may utilize the Electronic Reporting Tool (ERT) (see <https://www.epa.gov/electronicreporting-air-emissions/electronicreporting-tool-ert>) to submit those reports to CEDRI in the form of an ERT submission package.

144.2. When a report, notification, or other submission type submitted under this new electronic submission option contains confidential business information (CBI), a file with the CBI omitted or redacted must be submitted to the CEDRI system and a separate, complete submission containing the claimed CBI information must be submitted through the described CBI submission process.

[18 AAC 50.040(j)(4) and 50.326(j)(4)]  
[40 C.F.R. 71.6(c)(6)]  
[40 C.F.R. 3.2(a)(2), Cross-Media Electronic Reporting; 89 Fed. Reg. 78300 (September 25, 2024)]

## ***Section 10. Permit Changes and Renewal***

**145. Permit Applications and Submittals.** The Permittee shall comply with the following requirements for submitting application information to the EPA:

- 145.1. The Permittee shall provide a copy of each application for modification or renewal of this permit, including any compliance plan, or application addenda, at the time the application or addendum is submitted to the Department;
- 145.2. The information shall be submitted, as follows: (1) to the EPA's CDX and CEDRI online reporting system accessible via [cdx.epa.gov](http://cdx.epa.gov), or (2) as an email attachment to the EPA's air permits mailbox ([R10\\_Air\\_Permits@epa.gov](mailto:R10_Air_Permits@epa.gov)), or (3) as a hardcopy by mail (only if absolutely necessary) to the Part 70 Operating Permit Program, US EPA Region 10, Air Permits and Toxics Branch, Mail Stop: 15-H13, 1200 Sixth Avenue, Suite 155, Seattle, WA 98101-3188, listed in order of EPA's preference;
- 145.3. To the extent practicable, the Permittee shall provide to EPA applications in portable document format (pdf), MS Word format (.doc), or other computer-readable format compatible with EPA's national database management system; and
- 145.4. The Permittee shall maintain records as necessary to demonstrate compliance with this condition.

[18 AAC 50.040(j)(7), 50.326(a) & (j)(3), and 50.346(b)(7)]  
[40 C.F.R. 71.10(d)(1)]

**146. Emissions Trading.** No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in the permit.

[18 AAC 50.040(j)(4) and 50.326(j)(4)]  
[40 C.F.R. 71.6(a)(8)]

**147. Off Permit Changes.** The Permittee may make changes that are not addressed or prohibited by this permit other than those subject to the requirements of 40 C.F.R. Parts 72 through 78 or those that are modifications under any provision of Title I of the Act to be made without a permit revision, provided that the following requirements are met:

- 147.1. Each such change shall meet all applicable requirements and shall not violate any existing permit term or condition;
- 147.2. Provide contemporaneous written notice to EPA and the Department of each such change, except for changes that qualify as insignificant under 18 AAC 50.326(d) – (i). Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change;
- 147.3. The change shall not qualify for the shield under 40 C.F.R. 71.6(f); and

147.4. The Permittee shall keep a record describing changes made at the stationary source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.

[18 AAC 50.040(j)(4) and 50.326(j)(4)]  
[40 C.F.R. 71.6(a)(12)]

**148. Operational Flexibility.** The Permittee may make CAA Section 502(b)(10)<sup>31</sup> changes within the permitted stationary source without requiring a permit revision if the changes are not modifications under any provision of Title I of the Act and the changes do not exceed the emissions allowable under this permit (whether expressed therein as a rate of emissions or in terms of total emissions).

148.1. The Permittee shall provide EPA and the Department with a written notification no less than seven days in advance of the proposed change.

148.2. For each such change, the notification required by Condition 148.1 shall include a brief description of the change within the permitted stationary source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.

148.3. The permit shield described in 40 C.F.R. 71.6(f) shall not apply to any change made pursuant to Condition 148.

[18 AAC 50.040(j)(4) and 50.326(j)(4)]  
[40 C.F.R. 71.6(a)(13)]

**149. Permit Renewal.** To renew this permit, the Permittee shall submit to the Department and to EPA an application under 18 AAC 50.326 no sooner than **<18 months before the expiration date of this permit>** and no later than **<6 months before the expiration date of this permit>**, according to the submittal instructions in Conditions 135 and 145. The renewal application shall be complete before the permit expiration date listed on the cover page of this permit. Permit expiration terminates the stationary source's right to operate unless a timely and complete renewal application has been submitted consistent with 40 C.F.R. 71.7(b) and 71.5(a)(1)(iii).

[18 AAC 50.040(j)(3) and 50.326(c) & (j)(2)]  
[40 C.F.R. 71.5(a)(1)(iii) and 71.7(b) & (c)(1)(ii)]

---

<sup>31</sup> As defined in 40 C.F.R. 71.2, CAA Section 502(b)(10) changes are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

## ***Section 11. Compliance Requirements***

### **General Compliance Requirements**

**150.** Compliance with permit terms and conditions is considered to be compliance with those requirements that are

150.1. included and specifically identified in the permit; or

150.2. determined in writing in the permit to be inapplicable.

[18 AAC 50.326(j)(3) and 50.345(a) & (b)]

**151.** The Permittee must comply with each permit term and condition. Noncompliance with a permit term or condition constitutes a violation of AS 46.14, 18 AAC 50, and, except for those terms or conditions designated in the permit as not federally enforceable, the Clean Air Act, and is grounds for

151.1. an enforcement action;

151.2. permit termination, revocation and reissuance, or modification in accordance with AS 46.14.280; or

151.3. denial of an operating permit renewal application.

[18 AAC 50.040(j), 50.326(j) & 50.345(a) & (c)]

**152.** For applicable requirements with which the stationary source is in compliance, the Permittee shall continue to comply with such requirements.

[18 AAC 50.040(j)(3) & (4) and 50.326(j)]  
[40 C.F.R. 71.6(c)(3) and 71.5(c)(8)(iii)(A)]

**153.** It is not a defense in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with a permit term or condition.

[18 AAC 50.326(j)(3) and 50.345(a) & (d)]

**154.** The Permittee shall allow the Department or an inspector authorized by the Department, upon presentation of credentials and at reasonable times with the consent of the owner or operator, to

154.1. enter upon the premises where a source subject to the permit is located or where records required by the permit are kept;

154.2. have access to and copy any records required by the permit;

154.3. inspect any stationary source, equipment, practices, or operations regulated by or referenced in the permit; and

154.4. sample or monitor substances or parameters to assure compliance with the permit or other applicable requirements.

[18 AAC 50.326(j)(3) and 50.345(a) & (h)]

## **Compliance Schedule**

- 155.** For applicable requirements that will become effective during the permit term, the Permittee shall meet such requirements on a timely basis.

[18 AAC 50.040(j) and 50.326(j)]  
[40 C.F.R. 71.6(c)(3) and 71.5(c)(8)(iii)(B)]

**Section 12. Permit As Shield from Inapplicable Requirements**

In accordance with AS 46.14.290, and based on information supplied in the permit application, this section of the permit contains the requirements determined by the Department not to be applicable to the stationary source.

**156.** Nothing in this permit shall alter or affect the following:

156.1. The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that section; or

156.2. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance.

[18 AAC 50.040(j)(4) and 50.326(j)]  
 [40 C.F.R. 71.6(f)(3)(i) & (ii)]

**157.** Table E identifies the emissions units that are not subject to the specified requirements at the time of permit issuance. If any of the requirements listed in Table E becomes applicable during the permit term, the Permittee shall comply with such requirements on a timely basis including, but not limited to, providing appropriate notification to EPA, obtaining a construction permit and/or an operating permit revision.

[18 AAC 50.040(j)(4) and 50.326(j)]  
 [40 C.F.R. 71.6(f)(1)(ii)]

**Table E - Permit Shields Granted**

<b>EU ID</b>	<b>Non-Applicable Requirements</b>	<b>Reason for Non-Applicability</b>
1-4, 1A, 2A, 4A, 5A, 6A	40 C.F.R. 63, Subpart UUUUU	40 C.F.R. 63 Subpart UUUUU applies to Electric Generating Units (EGUs) that produce electricity for sale. Eielson AFB does not produce electricity for sale.
1-4	NESHAP Subpart JJJJJ Compliance Dates in 40 C.F.R. 63.11196(a)(1-3) for Work Practices, Management Practices, Emission Limits, and Energy Assessment;  Initial Compliance Requirements and Dates in 63.11210(a)-(c) and 63.11211(a)	The rule sets a compliance date of 3/21/2014. The EPA granted a 1-year extension to EAFB with these provisions on 8/29/2013 (and amendment on 3/17/2014).  Eielson completed demonstration of compliance with these requirements prior to the 3/21/2015 extended deadline.
1-4	NESHAP Subpart JJJJJ Energy Assessment in 40 C.F.R. 63.11201(b), 63.11210(c), 63.11214(c), and Table 2(16)	Energy assessment was completed in March 2013 and included in the Notification of Compliance Status.
1-4	NESHAP Subpart JJJJJ Tune-up Requirements in 40 C.F.R. 63.11201(b), 63.11223(b-c), and Table 2(2) and (14)	Tune-ups are not required for EU IDs 1-4 because this work practice standard does not apply to existing coal-fired boilers with heat input capacity of greater than 10 MMBtu/hr. Note: The EPA letters in Eielson AFB Title V Renewal Application 2025 Addendum Attachment B1-2 include a tune-up requirement for EU IDs 1-4 that no longer applies.
5A, 6A	NESHAP Subpart JJJJJ Initial Compliance Deadline in 40 C.F.R. 63.11196(c)	Eielson AFB fulfilled the NESHAP Subpart JJJJJ initial compliance requirements for EU IDs 5A and 6A upon startup of the boilers (initial PM source test which

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
	Initial Compliance Requirements and Dates in 63.11210(a), (d), and 63.11211(a)	established steam operating limits and initial performance evaluation of CO and O2 CEMS).
7, 8, 15, 16	<p>NSPS Subpart Dc requirements: SO<sub>2</sub> standard in 40 C.F.R. 60.42c(a), (b), (c), (e), (f), &amp; (g)</p> <p>Compliance for SO<sub>2</sub> in 40 C.F.R. 60.442c(a), (b), (c), (e), (f), (g), (i), &amp; (j)</p> <p>Monitoring for SO<sub>2</sub> in 40 C.F.R. 60.46c(a), (b), (c), (d), &amp; (f)</p> <p>Reporting and recordkeeping requirements in 40 C.F.R. 60.48c(c)</p>	EU IDs 7, 8, 15, and 16 are not subject to the SO <sub>2</sub> standard requirements referenced because these units only combust distillate oil.
7, 8, 15, 16	<p>NSPS Subpart Dc requirements: PM Standard in 40 C.F.R. 60.43c(a) &amp; (b)</p> <p>Compliance for PM in 40 C.F.R. 60.45c(a), (1)-(6), &amp; (b)</p> <p>Emission monitoring for PM in 40 C.F.R. 60.47c</p> <p>Reporting and recordkeeping requirements in 40 C.F.R. 60.48c(c)</p>	EU IDs 7, 8, 15, and 16 are not subject to the PM standard requirements reference because these units only combust distillate oil.
7, 8, 15, 16	NSPS Subpart A General Provisions: Performance test requirements in 40 C.F.R. 60.7(c) and 60.8	40 C.F.R. 60.7(c) is not applicable because Eielson AFB is not required to install a continuous monitoring system or monitoring device under NSPS Subpart Dc. 60.8 is not applicable because no initial stack test is required (opacity observations are covered under 40 C.F.R. 60.11).
9, 10, 11, 12, 13, 14	40 C.F.R. 60, Subpart Dc	EU IDs 9, 10, 11, 12, 13, and 14 have heat input capacities less than 10 MMBtu/hr
9, 10	40 C.F.R. 63 Subpart JJJJJ: 63.11201(b), Table 2, Item 4 & 63.11223(b).	EU IDs 9 and 10 are oil-fired boilers with heat input capacities less than 5 MMBtu/hr.
9, 10, 11, 12	NESHAP Subpart JJJJJ Compliance Dates for Work Practices in 63.11196(a)(1) and 63.11210(c)	The compliance date for meeting work practices for EU IDs 9, 10, 11, and 12 was March 21, 2014. For both of these boilers, the initial tune-up was completed in 2013 and included in the Notification of Compliance Status.
13, 14	NESHAP Subpart JJJJJ Compliance Dates for Work Practices in 63.11196(c), and 63.11210(g)	For both EU IDs 13 and 14, an initial tune-up was completed in 2013 and included in the Notification of Compliance Status.
17, 18	SPC XI: Sulfur Compounds Standard	EU IDs 17 and 18 are gas-fired. They do not combust liquid fuel.
20-22, 23A	40 C.F.R. 60, Subpart IIII	These units commenced construction before the 11 July 2005 applicability date.
25, 29, 38-41, 43-49, 59, 60, 62, 76, 120-122	NESHAP Subpart ZZZZ requirements	Condition 88.3 classifies this engine as an existing institutional or commercial emergency stationary RICE, which allows it to be exempt from NESHAP Subpart ZZZZ requirements as long as a) the operating hour limits in 40 C.F.R. 63.6640(f) are not exceeded, and b)

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
		the engine does not operate for the purpose specified in 63.6640(f)(4)(ii).
65B-70B	NSPS Subpart III requirements: 40 C.F.R. 60.4205(b) and 4202(a)(2), 60.4206, 60.4207(b), 60.4209(a), 60.4211(a), (c), (f), & (g)(1), 60.4214(b)	National Security Exemption as allowed by 40 C.F.R. 60.4200(d).
126-128	40 C.F.R. 60. Subpart Kb	EU IDs 126 – 128 (gasoline fuel storage tanks) are exempt from Subpart Kb under 40 C.F.R. 60.110b(d)(4) that exempts storage vessels at bulk gasoline plants. The gasoline throughput at Eielson AFB is less than 75,700 liters per day, so it is a bulk gasoline plant.
110B	NSPS Subpart Y PM Standard in 40 C.F.R. 60.254(b)(2) NSPS Subpart Y PM Source Test Requirements in 40 C.F.R. 60.255(b)(1), 257(a) & (b)(1 – 5)	40 C.F.R. 60.254(b)(2) states that “The owner or operator must not cause to be discharged into the atmosphere from any mechanical vent on an affected facility gases which contain particulate matter in excess of 0.023 g/dscm (0.010 gr/dscf).” Mechanical vent is defined in 40 C.F.R. 60.251(l) as, “any vent that uses a powered mechanical drive (machine) to induce air flow.” The coal processing system including the segment crusher (EU ID 110B) is operated in an enclosed building, without a stack or vent. Because there is no discharge into the atmosphere from a mechanical vent, the PM standard in 40 C.F.R. 60.254(b)(2) does not apply to EU ID 110B.
5A, 6A air pollution control system	NSPS Subpart OOO	The milling systems, storage bins, and vents handling sodium bicarbonate associated with the air pollution control system on EU IDs 5A and 6A are NOT affected facilities under NSPS Subpart OOO, as determined by EPA on 9 August 2013 (See Eielson AFB Title V Renewal Application 2025 Addendum Attachment C5-1). In summary, the sodium bicarbonate (baking soda) used in the air pollution device at EAFB is not a naturally occurring mineral compound and therefore not a nonmetallic mineral compound subject to Subpart OOO.
Incinerator	NSPS Subpart EEEE	Incinerator exempt from 40 C.F.R. 60 Subpart EEEE – Standards of Performance for Other Solid Waste Incineration Units (OSWI) for Which Construction is Commenced on or After June 16, 2006. Exclusion in 40 C.F.R. 60.2887(p) states that an incineration unit is excluded if it is owned or operated by a government to destroy only prohibited goods such as agricultural food products that cannot be transported in the country. See Off Permit Change Notification for Smart Ash Incinerator dated 17 August 2015 in Eielson AFB Title V Renewal Application 2025 Addendum Attachment A4-1.

EU ID	Non-Applicable Requirements	Reason for Non-Applicability
Source-Wide	18 AAC 50.015(b)(3)	Eielson AFB is not located geographically within the Fairbanks or North Pole urban areas and is not within the PM-2.5 nonattainment classification area.
Source-Wide	18 AAC 50.015(d)(2)	Eielson AFB is not located geographically within the Fairbanks or North Pole urban areas and is not within the CO maintenance classification area.
Source-Wide	40 C.F.R. 82.158	Eielson AFB does not manufacture or import recycling and recovery equipment intended for use during the maintenance, service, or repair of appliances.
Source-Wide	NSPS Subpart Kb	With the exception of EU IDs 126 – 128, the fuel storage tanks at Eielson AFB with a storage capacity of between 75 cubic meters and 151 cubic meters store liquids with maximum true vapor pressure less than 15 Kpa; and with a storage capacity of greater than 151 cubic meters store liquids with a maximum true vapor pressure less than 3.5 kPa.
Source-Wide	NESHAP Subpart GG	NESHAP Subpart GG no longer applies because EAFB is no longer a HAP Major source. See Eielson AFB Title V Renewal Application 2025 Addendum Attachment E3-1 for a notification letter submitted to the EPA on August 7, 223 regarding EAFB’s reclassification as an area source and the resulting change in NESHAP Subpart GG applicability. This change affects the surface coating, solvent cleaning and other activities at EAFB’s Corrosion Control Facility in Building 1348 and other aircraft and missile maintenance shops.
Source-Wide	NESHAP Subpart P P P P P	USAF operated several jet engines test cells, however Subpart P P P P P applies only at major sources of HAPs under 40 C.F.R. 63.9285.
Source-Wide	NESHAP Subpart H H H H H H	USAF operates aerospace rework facilities that conduct paint stripping and miscellaneous surface coating while refurbishing or repairing aircraft. NESHAPS Subpart H H H H H H exempts these operations at DoD facilities under 40 C.F.R. 63.11169(d)(1).
--	Permit No. AQ0264TVP03	Army Air Force Exchange Service, Defense Commissary Agency, Anderson Elementary School, Crawford Elementary School, Ben Eielson Jr./Sr. High School, and the Alaska Air National Guard are exempt from all requirements of Permit No. AQ0264TVP03 per the 2 August 1996 EPA Memo “Major Source Determinations for Military Installations under the Air Toxics, New Source Review, and Title V Operating Permit Programs of the Clean Air Act.” The entities are located on EAFB but are not considered to be support facilities to the primary activities of the base or under common control of the USAF. Therefore they are not included in the emission unit inventory or conditions of the Title V Permit.

## Section 13. Visible Emissions Forms

### VISIBLE EMISSIONS OBSERVATION FORM

This form is designed to be used in conjunction with EPA Method 9, “Visual Determination of the Opacity of Emissions from Stationary Sources.” Temporal changes in emission color, plume water droplet content, background color, sky conditions, observer position, etc. should be noted in the comments section adjacent to each minute of readings. Any information not dealt with elsewhere on the form should be noted under Additional Information. Following are brief descriptions of the type of information that needs to be entered on the form. For a more detailed discussion of each part of the form, refer to “Instructions for Use of Visible Emission Observation Form” (a copy is available in <https://www3.epa.gov/ttnemc01/methods/webinar8.pdf>).

- Source Name: full company name, parent company or division or subsidiary information, if necessary.
- Address: street (not mailing or home office) address of facility where visible emissions observation is being made.
- Phone (Key Contact): number for appropriate contact.
- Stationary Source ID Number: number from NEDS, agency file, etc.
- Process Equipment, Operating Mode: brief description of process equipment (include type of facility) and operating rate, % capacity, and/or mode (e.g., charging, tapping, shutdown).
- Control Equipment, Operating Mode: specify type of control device(s) and % utilization, control efficiency.
- Describe Emission Point: for identification purposes, stack or emission point appearance, location, and geometry; and whether emissions are confined (have a specifically designed outlet) or unconfined (fugitive).
- Height Above Ground Level: stack or emission point height relative to ground level; can use engineering drawings, Abney level, or clinometer.
- Height Relative to Observer: indicate height of emission point relative to the observation point.
- Distance from Observer: distance to emission point; can use rangefinder or map.
- Direction from Observer: direction plume is traveling from observer.
- Describe Emissions and Color: include physical characteristics, plume behavior (e.g., looping, lacy, condensing, fumigating, secondary particle formation, distance plume visible, etc.), and color of emissions (gray, brown, white, red, black, etc.). Note color changes in comments section.
- Visible Water Vapor Present?: check “yes” if visible water vapor is present.
- If Present, note in the Comments column whether the Plume is “attached” if water droplet plume forms prior to exiting stack, and “detached” if water droplet plume forms after exiting stack.
- Point in Plume at Which Opacity was Determined: describe physical location in plume where readings were made (e.g., 1 ft above stack exit or 10 ft. after dissipation of water plume).
- Describe Plume Background: object plume is read against, include texture and atmospheric conditions (e.g., hazy).
- Background Color: sky blue, gray-white, new leaf green, etc.
- Sky Conditions: indicate color of clouds and cloud cover by percentage or by description (clear, scattered, broken, overcast).
- Wind Speed: record wind speed; can use Beaufort wind scale or hand-held anemometer to estimate.
- Wind Direction From: direction from which wind is blowing; can use compass to estimate to eight points.
- Ambient Temperature: in degrees Fahrenheit or Celsius.
- Wet Bulb Temperature: can be measured using a sling psychrometer
- RH Percent: relative humidity measured using a sling psychrometer; use local US Weather Bureau measurements only if nearby.
- Source Layout Sketch: include wind direction, sun position, associated stacks, roads, and other landmarks to fully identify location of emission point and observer position.
- Draw North Arrow: to determine, point line of sight in direction of emission point, place compass beside circle, and draw in arrow parallel to compass needle.
- Sun’s Location: point line of sight in direction of emission point, move pen upright along sun location line, mark location of sun when pen’s shadow crosses the observer’s position.
- Observation Date: date observations conducted.
- Start Time, End Time: beginning and end times of observation period (e.g., 1635 or 4:35 p.m.).
- Data Set: percent opacity to nearest 5%; enter from left to right starting in left column. Use a second (third, etc.) form, if readings continue beyond 30 minutes. Use dash (-) for readings not made; explain in adjacent comments section.
- Comments: note changing observation conditions, plume characteristics, and/or reasons for missed readings.
- Range of Opacity: note highest and lowest opacity number.
- Observer’s Name: print in full.
- Observer’s Signature, Date: sign and date after performing VE observation.
- Observer’s Affiliation: observer’s employer.
- Certifying Organization, Certified By, Date: name of “smoke school,” certifying observer, and date of most recent certification.

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION AIR PERMITS PROGRAM - VISIBLE EMISSIONS OBSERVATION FORM							Page No.
Stationary Source Name	Type of Emission Unit		Observation Date	Start Time	End Time		
Emission Unit Location			Sec	0	15	30	45
			Min				Comments
City	State	Zip	1				
Phone # (Key Contact)	Stationary Source ID Number		2				
Process Equipment	Operating Mode		3				
Control Equipment	Operating Mode		4				
Describe Emission Point/Location			5				
Height above ground level	Height relative to observer	Clinometer Reading	6				
Distance From Observer	Direction From Observer		7				
Start	End	Start	End	8			
Describe Emissions & Color			9				
Start	End		10				
Visible Water Vapor Present? If yes, determine approximate distance from the stack exit to where the plume was read			11				
No	Yes		12				
Point in Plume at Which Opacity Was Determined			13				
Describe Plume Background		Background Color	14				
Start	Start		15				
End	End		16				
Sky Conditions:			17				
Start	End		18				
Wind Speed	Wind Direction From		19				
Start	End	Start	End	20			
Ambient Temperature	Wet Bulb Temp	RH percent		21			
SOURCE LAYOUT SKETCH: 1 Stack or Point Being Read 2 Wind Direction From 3 Observer Location 4 Sun Location 5 North Arrow 6 Other Stacks			22				
			23				
			24				
			25				
			26				
			27				
			28				
			29				
Additional Information:			30				
			Range of Opacity:		Maximum		
			Minimum				
I have received a copy of these opacity observations			Print Observer's Name				
Print Name:			Observer's Signature				Date
Signature:							Observer's Affiliation:
Title			Certifying Organization:				Date
Date			Certified By:				Date
<b>Data Reduction:</b>							
Duration of Observation Period (minutes):			Duration Required by Permit (minutes):				
Number of Observations:			Highest Six-Minute Average Opacity (%):				
Number of Observations exceeding 20%:			Highest 18-Consecutive -Minute Average Opacity %(engines and turbines only)				
In compliance with six-minute opacity limit? (Yes or No)							
<b>Average Opacity Summary:</b>							
Set Number	Time		Opacity		Comments		
	Start	End	Sum	Average			

### Section 14. SO<sub>2</sub> Material Balance Calculation

If a fuel shipment contains more than 0.75 percent sulfur by weight, calculate the three-hour exhaust concentration of SO<sub>2</sub> using the following equations:

A.  $= 31,200 \times (\text{wt}\%S_{\text{fuel}}) = 31,200 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

B.  $= 0.148 \times (\text{wt}\%S_{\text{fuel}}) = 0.148 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

C.  $= 0.396 \times (\text{wt}\%C_{\text{fuel}}) = 0.396 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

D.  $= 0.933 \times (\text{wt}\%H_{\text{fuel}}) = 0.933 \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

E.  $= B + C + D = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

F.  $= 20.9 - (\text{vol}\%_{\text{dry}}O_{2, \text{exhaust}}) = 20.9 - \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

G.  $= (\text{vol}\%_{\text{dry}}O_{2, \text{exhaust}}) \div F = \underline{\hspace{2cm}} \div \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

H.  $= 1 + G = 1 + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

I.  $= E \times H = \underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

**SO<sub>2</sub> concentration**  $= A \div I = \underline{\hspace{2cm}} \div \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$  ppm

The **wt%S<sub>fuel</sub>**, **wt%C<sub>fuel</sub>**, and **wt%H<sub>fuel</sub>** are equal to the weight percents of sulfur, carbon, and hydrogen, respectively, in the fuel. These percentages should total 100%.

The fuel weight percent of sulfur (**wt%S<sub>fuel</sub>**) is obtained pursuant to Condition 18.1.a(ii) or Condition 18.1.b. The fuel weight percents of carbon and hydrogen are obtained from the fuel refiner.

The volume percent of oxygen in the exhaust (**vol%<sub>dry</sub>O<sub>2, exhaust</sub>**) is obtained from oxygen meters, manufacturer's data, or from the most recent analysis under 40 C.F.R. 60, Appendix A-2, Method 3, adopted by reference in 18 AAC 50.040(a), at the same emissions unit load used in the calculation.

Enter all of the data in percentages without dividing the percentages by 100. For example, if **wt%S<sub>fuel</sub>** = 1.0%, then enter 1.0 into the equations not 0.01 and if **vol%<sub>dry</sub>O<sub>2, exhaust</sub>** = 3.00%, then enter 3.00, not 0.03.

[18 AAC 50.346(c)]



**Section 16. Notification Form<sup>32</sup>**

Eielson Air Force Base

Stationary Source Name

United States Air Force

Company Name

AQ0264TVP03

Air Quality Permit Number.

**When did you discover the Excess Emissions/Permit Deviation?**

Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

Time: \_\_\_\_ : \_\_\_\_

**When did the event/deviation occur?**

Begin: Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

Time: \_\_\_\_ : \_\_\_\_ (please use 24-hr clock)

End: Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

Time: \_\_\_\_ : \_\_\_\_ (please use 24-hr clock)

**What was the duration of the event/deviation?** \_\_\_\_ : \_\_\_\_ (hrs:min) or \_\_\_\_ days

(total # of hrs, min, or days, if intermittent then include only the duration of the actual emissions/deviation)

**Reason for Notification** (Please check only 1 box and go to the corresponding section.):

Excess Emissions - Complete Section 1 and Certify

Note: All "excess emissions" are also "permit deviations." However, use only Section 1 for events that involve excess emissions.

Deviation from Permit Conditions - Complete Section 2 and Certify

Note: Use only Section 2 for permit deviations that do not involve excess emissions.

Deviation from COBC<sup>33</sup>, CO<sup>34</sup>, or Settlement Agreement - Complete Section 2 and Certify

<sup>32</sup> Revised as of July 22, 2020.

<sup>33</sup> Compliance Order By Consent

<sup>34</sup> Compliance Order

### Section 1. Excess Emissions

(a) **Was the exceedance**  Intermittent or  Continuous

(b) **Cause of Event** (Check one that applies. Complete a separate form for each event, as applicable.):

- Start Up/Shut Down
- Control Equipment Failure
- Bad fuel/coal/gas
- Other \_\_\_\_\_
- Natural Cause (weather/earthquake/flood)
- Scheduled Maintenance/Equipment Adjustments
- Upset Condition

(c) **Description**

Describe briefly what happened and the cause. Include the parameters/operating conditions exceeded, limits, monitoring data and exceedance. Attach supporting information if necessary.

(d) **Emissions Units (EU) Involved:**

Identify the emissions units involved in the event, using the same identification number and name as in the permit. Identify each emission standard potentially exceeded during the event and the exceedance.

EU ID	EU Name	Permit Condition /Limit Exceeded /Potential Exceedance

(e) **Type of Incident:** (Please check all that apply and provide the value requested, if any):

Opacity \_\_\_\_\_%

Venting \_\_\_\_\_(gas/scf)

Control Equipment Down

Fugitive Emissions

Emission Limit Exceeded

Marine Vessel Opacity

Flaring

Other: \_\_\_\_\_

(f) **Corrective Actions:**

Describe actions taken to restore the system to normal operation and to minimize or eliminate chances of a recurrence. Attach supporting information if necessary.

(g) **Unavoidable Emissions:**

Do you intend to assert that these excess emissions were unavoidable?

YES

NO

Do you intend to assert the affirmative defense of 18 AAC 50.235?

YES

NO

**Certify Report (go to end of form)**

### Section 2. Permit Deviations

(a) **Permit Deviation Type:** (Check all boxes that apply per event. Complete a separate form for each event, as applicable.)

- Emissions Unit-Specific Requirements
- Stationary Source-Wide Specific Requirements
- Monitoring/Recordkeeping/Reporting Requirements
- General Source Test Requirements
- Compliance Certification Requirements
- Standard/Generally Applicable Requirements
- Insignificant Emissions Unit Requirements
- Other: \_\_\_\_\_

(b) **Emissions Units (EU) Involved:**

Identify the emissions units involved in the event, using the same identification number and name as in the permit. List the corresponding permit condition and the deviation.

EU ID	EU Name	Permit Condition /Potential Deviation

(c) **Description of Potential Deviation:**

Describe briefly what happened and the cause. Include the parameters/operating conditions and the potential deviation. Attach supporting information if necessary.

**(d) Corrective Actions:**

Describe actions taken to correct the deviation or potential deviation and to prevent future recurrence. Attach supporting information if necessary.

**Certification:**

**Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.**

Printed Name: \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_

Signature: \_\_\_\_\_ Phone number \_\_\_\_\_

***NOTE:*** *This document must be certified in accordance with 18 AAC 50.345(j). Read and sign the certification in the bottom of the form above. (See Condition 134.)*

Excess Emissions and Permit Deviations must be submitted through the AOS Permittee Portal at <http://dec.alaska.gov/applications/air/airtoolsweb/>.

This Notification Form may only be used to satisfy the reporting requirements if the Department has approved alternative reporting options in writing prior to submittal.

[18 AAC 50.346(b)(3)]