KEEP PERMIT AT SITE **CONTROL NO. B- 05219**

State of Maryland

Lawrence J. Hogan, Jr.
Governor

Boyd K. Rutherford
Lieutenant Governor

Ben Grumbles
Secretary

DEPARTMENT OF THE ENVIRONMENT

Air and Radiation Management Administration
1800 Washington Boulevard, Suite 720
Baltimore, MD 21230

[ ] Construction Permit

[X] Part 70 Operating Permit

PERMIT NO. 24-017-0040

DATE ISSUED August 1, 2016

PERMIT FEE To be paid in accordance with COMAR 26.11.02.19B

EXPIRATION DATE April 30, 2021

LEGAL OWNER & ADDRESS

Commanding Officer
Naval Support Activity South Potomac
6509 Sampson Road, Suite 217
Dahlgren, Virginia 22448-5108
Attn: Mr. Daniel Carawan, Air Program Manager
Environmental Division NSFIH

SITE

Naval Support Facility Indian Head
3972 Ward Road, Suite 101
Indian Head, MD 20640-5157
Charles County
AI#1788

SOURCE DESCRIPTION

Military Facility.

This source is subject to the conditions described on the attached pages.

Program Manager

Director, Air and Radiation Management Administration

PART 70 OPERATING PERMIT 24-017-0040
NAVAL SUPPORT FACILITY, INDIAN HEAD – AI# 1788
3972 WARD ROAD, INDIAN HEAD, MD 20640
FACT SHEET

I. BACKGROUND

A. Naval Support Facility – Indian Head
3972 Ward Road, Suite 101
Indian Head, MD 20640 - Charles County

B. Description:

Indian Head's mission is to ensure operational readiness of U.S. and Allied forces by providing full-spectrum technical capabilities necessary to rapidly transition any energetics product from concept through production, to operational deployment. Indian Head capabilities include energetics research, development, modeling and simulation, engineering, manufacturing technology, production, test and evaluation and fleet/operations support. The facility also has the capability of full-scale manufacture of ordnance and assembly of weapons systems, including torpedo warheads and fuel for torpedoes used in fleet operations.

The facility also includes a multifaceted casting and loading plant, an extrusion plant with finishing facilities, and manufacturing facilities for nitroglycerine, nitrate esters, and components to produce propellants and explosives. The facility also produces low vulnerability tank ammunition and gun propellant.

The Maryland Department of the Environment (the "Department") received an application from the Naval Support Activity South Potomac on January 8, 2014 and amendments to application received February 25, 2014 for the installation of a decentralized (nodal) energy production system [NES] consisting of one 4.5-MW natural gas fired combustion turbine (CT), one 29.5 MM Btu heat recovery steam generator (HRSG), seventeen natural gas fired boilers, and five emergency diesel generators to be located at the Naval Support Facility– Indian Head, Indian Head, MD 20640-5157. The plant was designated as the nodal energy system [NES] under MILCON P-222 ***{See Facility Inventory List – to identify all [NES] equipment}***.

The NES replaced the capacity of the Goddard Steam Plant, which included the shutdown of the three 208 MM Btu/hr (Coal/ No.6 fuel oil fired) boilers. Also, one 43 MM Btu/hr auxiliary boiler and three diesel generators were removed from service.

NES Status Summary

The Combined Heat and Power Plant {CT & HRSG} portion of the NES was installed March 2015, initial start-up in July 2015. Initial stack testing while firing natural gas was completed January 27, 2016. Testing while firing No. 2 fuel oil has not been completed; it was rescheduled due to operational problems. The SNP-2 boilers were installed March 2015 and initial startup in April 2015. Emission testing is scheduled to be completed in April 2016. Test reports shall be submitted when testing is completed. Installation for the remaining NES boilers is pending. All pending installations are identified in the Facility Inventory List as "TBD".

C. SIC Code(s): **2892 & 3483**

D. Part 70 Operating Permit Applicability:

The major source threshold for triggering Title V permitting requirements in Charles County, where Indian Head is located is 25 tons per year for NO_X and VOC, 10 tons per year for a single Hazardous Air Pollutant (HAP), 25 tons per year or more of any combination of HAPs, and 100 tons per year for any other criteria pollutant. Indian Head's actual emissions were greater than the major source thresholds for NO_X and SO_X. As a result Indian Head is required to obtain a Title V (Part 70 Operating Permit) under COMAR 26.11.03.01.

The Department received a renewal Part 70 permit application from Indian Head on May 02, 2014. An administrative completeness review was conducted and the application was deemed to be administratively complete. A completeness determination letter was sent to the Indian Head on June 19, 2014.

The following table summarizes the actual emissions from the Indian Head Facility based on its Emissions Certification Reports.

Premises-wide Certified Emissions: (Ref: NSF Indian Head's Annual Emissions Certification Reports)

	NO_X (TPY)	**SO_X (TPY)**	**PM_{10} (TPY)**	**$PM_{2.5}$ (TPY)**	**CO (TPY)**	**VOC (TPY)**	**Total HAPs (TPY)**
2014	62.6	283.7	30.3	9.6	14	6.7	5.2
2013	99.1	499.6	58.4	16	23.5	7.3	6.8
2012	133.5	617.5	80.4	44	9.2	23	9.7
2011	130.0	510.0	80.3	42	10.1	25	11.3
2010	126.2	393.1	18.0	4.8	10.4	25	15.1
2009	127.0	447.5	29.0	0.3	13.3	41	0.3

E. Applicable NSPS and MACT Regulations:

1. Indian Head is subject to the following National Standards of Performance ("NSPS') under 40 CFR 60:

   (a) **Subpart Dc** – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units;

   (b) **Subpart KKKK** – Standards of Performance for Stationary Combustion Turbines

2. Indian Head is subject to the following National Emission Standards for Hazardous Air Pollutants ("MACTs") under 40 CFR 63:

   (a) **Subpart JJJJJJ**—National Emissions Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources;

   (b) **Subpart ZZZZ** – Standards for Reciprocating Internal Combustion Engines (RICE)

   (c) **Subpart T** –Standards for Halogenated Solvent Cleaning; and

   (d**) Subpart GG** – National Emission Standards for Aerospace Manufacturing and Rework Facilities.

   Note: Subpart YYYY—National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines applies to stationary combustion turbines located at a

major source of HAP emissions and would not apply to CTs at an area source. Indian Head was considered a Major Source of HAPs until the decommissioning of the coal fired Goddard Steam Plant in 2015. Indian Head is now considered an Area Source of HAPs.

F. Compliance Assurance Monitoring (CAM)

Compliance Assurance Monitoring (CAM) is intended to provide a reasonable assurance of compliance with applicable requirements under the Clean Air Act for large emission units that rely on air pollution control (APC) equipment to achieve compliance. The CAM approach establishes monitoring for the purpose of: (1) documenting continued operation of the control measures within ranges of specified indicators of performance (such as emissions, control device parameters, and process parameters) that are designed to provide a reasonable assurance of compliance with applicable requirements; (2) indicating any excursions from these ranges; and (3) responding to the data so that the cause or causes of the excursions are corrected. In order for a unit to be subject to CAM, the unit must be located at a major source, be subject to an emission limitation or standard; use a control device to achieve compliance; have pre-control emissions of at least 100% of the major source amount; and must not otherwise be exempt from CAM. Applicability determinations are made on a pollutant-by-pollutant basis for each emissions unit.

NSF – Indian Head had identified the Goddard Steam Plant Boilers (GSP) Units Nos. 1, 2, & 3, coal/No. 6 fuel oil fired boilers as being subject to CAM requirements. However, since the submittal of the Title V renewal application the GSP has been decommissioned and is being demolished. Its capacity has been replaced by the new NES, which includes a dual (NG- primary /No. 2 oil fired – backup) CHP plant. The NSF Indian Head, including the new NES CHP Plant, **is not** subject to CAM, because the CHP does not use a control device to achieve compliance with an emission limitation or standard.

G. Greenhouse Gas (GHG) Emissions

The NSF – Indian Head emits the following greenhouse gases (GHGs) related to Clean Air Act requirements: carbon dioxide, methane, and nitrous oxide. These GHGs originate from various fuel-burning or combustion processes at the facility, including emissions from boilers, internal combustion engines, and combustion turbine generator at the new NES CHP Plant. Since the Indian Head facility has not submitted an Emission Certification since installing the new NES, no actual emissions of GHGs are available. However the following table was submitted as part of the NES permit to construct application and shows the projected Potential-to-Emit (PTE) emissions for GHGs as well as the projected net emissions change for the facility.

Pollutant	Potential to Emit (ton/yr): New Emission Units [A]					Emissions Increase [B]	NSR Threshold
	CTG-1	HRSG-1	Boilers	Generators	Insignifs	(ton/yr)	(ton/yr)
CO_2	35,109	33,784	109,416	2,389	3,215	183,914	75,000

Pollutant	Contemporaneous Increases [D]	Contemporaneous Decreases [E]	Net Emissions Change (NEC) [F]	NSR Threshold	NEC exceeds Threshold?
	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	
CO_2	57.75	153,973	29,998	75,000	NO

H. Equipment removed since previous renewal of the Part 70:
Boiler FBE-712-E2 (Reg. no. 4-0106) has been dismantled; the unit is inoperable and there are no plans to operate in the future. Emergency diesel generators FBE -1920-E1, E-2, and E-3 (Reg.9-0064) were removed from services.

The above-ground storage tanks Tank-658-E1 (51-K gal AST) and Tank-658-E2 **(**12-K gal AST**)** are not in operation and are scheduled to be demolished. Gasoline UST (Tanks 510-E1 & E-2) have been removed and replaced with a Gasoline AST.

Note: Though permitted as part of the Agile Chemical Facility's permit to construct, the Denitration part of the process (Reg. Nos. -9-0152 Spent Acid Denitration – Bldg: 3043 and -9-0153- Spent Acid Mixing and Holding) was not and shall not be constructed. Indian Head submitted a summary of the status of the De-Nitration Plant, including which piece of equipment that shall not be installed and indicating which permit-to-construct conditions are no longer valid due to removal of the de-nitrating processes. {Ref.: Email to Michael Hassan, MDE-ARMA dated Tuesday March 8, 2016 entitled "Confirmation of Status of De-Nitration Plant for Indian Head".

II. EMISSION UNIT IDENTIFICATION

The Indian Head Division has identified the following emission units at the facility as being subject to the Title V permitting requirements and having applicable requirements.

Emissions Unit Number	***MDE Registration Number***	Emissions Unit Name and Description	Date of Installation
COMBINED HEAT & POWER PLANT [NES]			
FBE-PNP-E1	*017-0040 -5-0019*	53 MM Btu/hr (4.5-MW) Centaur 50 dual (NG/No.2 fuel oil) fired combustion turbine (CT) generator e/w Dry SoLoNo$_x$® Injectors	March 2015
FBE-PNP-E2	*017-0040 -5-0020*	29.5 MM Btu/hr dual (NG/No.2 fuel oil) fired heat recovery steam generator (HRSG)	March 2015
AUXILIARY STEAM PLANT			
FBE-712-E1	4-0081	43-MM BTU/hr Johnson No. 2 fuel oil fired boiler, which is used to supplement steam generation of the NES CHP plant.	1978
FBE-712-E3	4-0241	97 MM Btu/hr Nebraska B-601 E, No. 2 fuel oil fired boiler	Jan. 2014/ Aug. 2015
EG-1920A-E1 **[NES]**	9-0166	2,500-kW (3674-Bhp) MTU Emergency Diesel Generators (EDG)	Aug. 2015
EG1920B-E1 **[NES]**	9-0166	2,500-kW (3674-Bhp) MTU Emergency Diesel Generators (EDG)	Aug. 2015
STEAM B [NES]			
FBE-SB-1-E1	5-0021	38 MM Btu (900-hp) Hurst/Power Flame NG Fired Steam Boiler	TBD
FBE-SB-2-E1	5-0022	38 MM Btu (900-hp) Hurst/Power Flame NG	TBD

Emissions Unit Number	***MDE Registration Number***	Emissions Unit Name and Description	Date of Installation
		Fired Steam Boiler	
EG-SB1-E1	9-0169	450-kW Cummins Emergency Diesel Generator	TBD
PNP-1-Strauss [NES]			
FBE-PNP-1-E1	5-0023	31.54 MM Btu (750-hp) Hurst Power Flame dual(NG /No.2 oil) fired boiler	Aug. 2015
EG-PNP-1-E1	9-0167	1,000-kW (1495-Bhp) Cummins Emergency Diesel Generator	Aug. 2015
SNP-2 [NES]			
FBE-SNP-2-E1	5-0024	20.9 MM Btu (500-hp) Hurst Power Flame NG fired boiler	Aug. 2015
FBE-SNP-2-E2	5-0025	20.9 MM Btu (500-hp) Hurst Power Flame NG fired boiler	Aug. 2015
SNP-6 [NES]			
FBE-SNP-6-E1	5-0026	16.7 MM Btu (400-hp) Hurst Power Flame NG fired boilers	Aug. 2015
FBE-SNP-6-E2	5-0026	16.7 MM Btu (400-hp) Hurst Power Flame NG fired boilers	Aug. 2015
SNP-4 [NES]			
FBE-SNP-4-E1	5-0027	14.7 MM Btu (350-hp) Hurst Power Flame NG fired boiler	Aug. 2015
FBE-SNP-4-E2	5-0028	14.7 MM Btu (350-hp) Hurst Power Flame NG fired boiler	Aug. 2015
SNP-7 [NES]			
FBE-SNP-7-E1	5-0029	10.5 MM Btu (250-hp) Hurst Power Flame (Euro Series) NG fired boiler	Aug. 2015
FBE-SNP-7-E2	5-0030	10.5 MM Btu (250-hp) Hurst Power Flame (Euro Series) NG fired boiler	Aug. 2015
SNP-1 [NES]			
FBE-SNP-1-E1	5-0031	8.5 MM Btu (200-hp) Hurst Power Flame (Euro Series) NG boilers	Aug. 2015
FBE-SNP-1-E2	5-0031	8.5 MM Btu (200-hp) Hurst Power Flame (Euro Series) NG boilers	Aug. 2015
SNP-3 [NES]			
FBE-SNP-3-E1	5-0032	8.5 MM Btu (200-hp) Hurst Power Flame (Euro Series) NG boilers	Aug. 2015
FBE-SNP-3-E2	5-0032	8.5 MM Btu (200-hp) Hurst Power Flame (Euro Series) NG boilers	Aug. 2015
SNP-8 [NES]			
FBE-SNP-8-E1	5-0033	5.3 MM Btu (125-hp) Hurst Power Flame (Euro Series) NG boilers	Aug. 2015
FBE-SNP-8-E2	5-0033	5.3 MM Btu (125-hp) Hurst Power Flame (Euro Series) NG boilers	Aug. 2015

Emissions Unit Number	***MDE Registration Number***	Emissions Unit Name and Description	Date of Installation
MARINE BARRACKS – BLDG 901			
FBE-901-1-E1	5-0035	14.3 mm Btu/hr(350-HP) Cleaver Brooks (NG/No.2 fuel) fired boiler	Aug. 2015
FBE-901-2-E1	5-0036	14.3 mm Btu/hr(350-HP) Cleaver Brooks (NG/No.2 fuel) fired boiler	Aug. 2015
MISC. DIESEL ENGINES/ GENERATORS & BOILERS			
FBE 3157-E1	5-0011	1 MM BTU/hr. Fulton propane-fired boiler - ESTL Complex - (Bldg P-166)	March 2012
FBE-900-E1	9-0122	750 kW Detroit Diesel emergency generator- Bldg 900	March 2005
FBE-901-E1	9-0143	500-hp/410-kW Caterpillar model 6134 NSPS emergency diesel generator – Bldg. 901	October 2009
EG-3123-E1	9-0168	450-kW Emergency Diesel Generator	August 2015
GASOLINE STORAGE TANKS			
TANK-510-E3	9-0174	12,000-gallon above ground storage tank which stores gasoline. The tank is connected to a gasoline dispensing unit e/w Stage I & II vapor recovery	Sept. 2015
PAINTING			
PAINT-588-E1	6-0099	Paint booth that is located in building 588 and used for touch-up painting. Control equipment: Filters with a 97.5% control efficiency for Particulate Matter.	1944
PAINT-1134-E1	6-0099	Paint booth in building 1134, which is used to coat weapons systems and simulators. Control Equipment: Filter with 96% control efficiency for Particulate Matter.	1973
PAINT-1134-E3	6-0099	Automatic Paint gun cleaner, which uses paint thinner to clean the paint guns after use.	1995
PAINT-717-E10	6-0099	Paint booth, which is used to coat ordnance items. Control Equipment: Filter with 90% control efficiency for Particulate Matter and an 80% control efficiency for VOC.	1995
PAINT-717-E11	6-0099	Automatic Paint spray gun cleaner in building 717.	1995
PAINT-1866-E3	6-0099	Paint spray booth in Building 1866, which is used for coating ordnance items. Control Equipment: Activated Carbon filters 18% control efficiency for Particulate Matter, and 95% control efficiency for VOCs.	1996
PAINT-1866-E4	6-0099	Automatic paint gun cleaning in building 1866.	1996

Emissions Unit Number	***MDE Registration Number***	Emissions Unit Name and Description	Date of Installation
PAINT-0693-E5		Paint spray booth, which is used as an environmental box. Control Equipment: Filter with 90% control efficiency for Particulate Matter.	1997
PAINT-720-E1	6-0099 & 6-0116 N - 2003	Paint booth in building 720, which is used to coat ordnance items. Control Equipment: Filters with 99% control efficiency for Particulate Matter, and 60 % control efficiency for VOC.	2000
PAINT-720-E2	6-0099	Automatic paint gun cleaning.	1995
PAINT-730-E3 & E-4	6-0116	BRACON Paint Spray Booth - (EP - 4) - Bldg 730 - for Ordnance Coating e/w 3-Stage Filtration - NESHAP compliant	Dec. 2011
PAINT-1913-E4	6-0116 N	Paint booth in Bldg. 1913 for the CAD/PAD Manufacturing and Rework Facility	2003
MISCELLANEOUS PROCESSES			
INC-1770-E1	2-0004	Industrial waste processor which is located in building 1770 and is fired by two #2 fuel oil burners manufactured by L&L Special Furnace. Control Equipment**: BCE Cyclone (5CL-152-DT-52)** with a control efficiency of 99% and a capture efficiency of 100% for particulate matter. This unit also has a bag-house attached to it, INC-1770-E1. Control Equipment: Dry Scrubber & BCE Baghouse (R12W-54-3X) for emissions control, which is used on the industrial waste processor. This unit has a control efficiency of 99% and a capture efficiency of 100%.	1993/ **Mar. 2014**
EXPLOSIVE AND PROPELLANT MFG. PROCESSES			
EXPL-808-E2	6-0101	Apply end washers, spiral wrap and end sleeves. Solvent is used to adhere tape to the grains. The solvent air-dries (cures) following applications of the end washers and spiral wrap.	1951
EXPL-874-E2	6-0101	Apply end washers, spiral wrap and end sleeves. Solvent is used to adhere tape to the grains. The solvent air-dries (cures) following applications of the end washers and spiral wrap.	1969
EXPL-729-E1	6-0101	Five Drying ovens, which take the solvent and water, wet energetic material and dry them into a	1991

Emissions Unit Number	***MDE Registration Number***	Emissions Unit Name and Description	Date of Installation
		usable product.	
EXPL-728-E3	6-0101	Used to dry energetic materials.	1953
EXPL-214-E1	6-0101	Propellant drying: Trays of propellant grains produced in the LOVA Plant are dried in heated bays.	Pre-1991
EXPL-216-E1	6-0101	Propellant drying: Trays of propellant grains produced in the LOVA Plant are dried in heated bays.	Pre-1991
EXPL-218-E1	6-0101	Propellant drying: Trays of propellant grains produced in the LOVA Plant are dried in heated bays.	Pre-1991
EXPL-219-E1	6-0101	Propellant drying: Trays of propellant grains produced in the LOVA Plant are dried in heated bays.	Pre-1991
EXPL-220-E1	6-0101	Propellant drying: Trays of propellant grains produced in the LOVA Plant are dried in heated bays.	Pre-1991
EXPL-326-E1	6-0101	Propellant drying: Trays of propellant grains produced in the LOVA Plant are dried in heated bays.	Pre-1991
EXPL-327-E1	6-0101	Propellant drying: Trays of propellant grains produced in the LOVA Plant are dried in heated bays.	Pre-1991
EXPL-1028-E1	6-0101	Strainer, propellant mix produced in the LOVA plant is blocked, strained, and re-blocked. This process takes propellant dough and produces propellant strands and scrap propellant.	1960
EXPL-1029-E1	6-0101	Strainer, propellant mix produced in the LOVA plant is blocked, strained, and re-blocked. This process takes propellant dough and produces propellant strands and scrap propellant.	1960
EXPL-1031-E1	6-0101	Vertical extrusion press, this unit takes propellant mix produced in the LOVA plant and presses it into extruded strands and propellant scrap.	1965
EXPL-1033-E1	6-0101	Vertical extrusion press, this unit takes propellant mix produced in the LOVA plant and presses it into extruded strands and propellant scrap.	1965
EXPL-1430-E1	6-0101	Grinding and dryer, grind energetic materials to desired particle size prior to further processing. Control Equipment: Inline Filter, with a control efficiency of 98% for Particulate Matter. HEPA filter, with a control efficiency of 95% for Particulate Matter. Baghouse with 99.6% control efficiency for Particulate matter. Condenser for	1987

Emissions Unit Number	***MDE Registration Number***	Emissions Unit Name and Description	Date of Installation
		Particulate Matter control.	
EXPL-0786-E3	6-0101	Biazzi Nitration Equipment uses a nitrator, separators, and washers, which are used to synthesize nitrate esters. Control Equipment: Cyclone Separator, with a control efficiency of 80%.	1953
EXPL-213-E1	6-0101	Propellant curing	1918
EXPL-332-E1	6-0101	Propellant curing	1918
EXPL-335-E1	6-0101	Propellant curing	1918
MIXERS			
MIXER-1024-E1	6-0098	150-gallon sigma mixer - mixes energetic ingredients, solvents, and inert ingredients to develop energetics. Control Equipment: Thermal/Catalytic Oxidizer, which has a capture efficiency of 100%. (For use during Nitramine Processing only).	1970 1997
MIXER-530-E1	6-0098	Mix ingredients and solvent then extracted. The result is a mixed product.	1968
MIXER-530-E2	6-0098	High-Shear Mixer, which mixes energetic material and solvent to form energetic material.	1972
MIXER-1122-E1	6-0098	150-Gallon Mixer, which mixes propylene glycol solution and mix ingredients to form propellants and explosives. Control Equipment: Carbon filters with a control efficiency of 99.9%. Industrial Grade HEPA filters which have a control efficiency of 99.97, pre-filters with a control efficiency of 30%, particulate filters with a control efficiency of 98% and a condenser with a control efficiency of 96%.	1996
MIXER-1122-E2	6-0098	Solvent cleanup Control Equipment: Carbon Filters with a control efficiency of 99.9%, HEPA filter with a control efficiency of 99.97% and a pre-filter with a control efficiency of 30%.	1996
MIXER-1866-E1	6-0098	40-gallon mixer, which mixes ingredients for liner mixes.	1996
MIXER-1881-E1	6-0098	420-gallon mixer, which mixes ingredients, liquid and bulk solid ingredients to make explosives and propellants. Control Equipment: Activated charcoal filter, pre-filter, bag filters with a control efficiency of	1996

Emissions Unit Number	***MDE Registration Number***	Emissions Unit Name and Description	Date of Installation
		98%, cartridge filters with a control efficiency of 98%, condenser system with a control efficiency of 80% and a vacuum pump oil and mist eliminator.	
MIXER-3069-E1	6-0018 M	Propellant Mixing, Twin Screw Extruder	2003
BRACON P002 EXPLOSIVES MFG/QA-QC PROCESSES			
EXPL-727-E1	7-0014	BRACON Molding Powder Processing	Dec. 2011
EXPL-727-E2	7-0015	BRACON Melt Cast Explosives Operation	Dec. 2011
EXPL-727-E3	7-0016	BRACON Explosives Removal Operation	Dec. 2011
AGILE CHEMICAL FACILITY			
EXPL-786-E7	-9-0151	Nitration: Raw Materials Prep & Storage	Feb. 2016
EXPL-786-E8	-7-0018	Nitration Process	Feb. 2016
EXPL-1464-E1	-7-0017	Nitration: Product Formulation, Transport, Holding, & Sampling.	Feb. 2016
EXPL-790-E1	-9-0153	Denitration: Spent Acid Mixing and Holding	Feb. 2016

III. OVERVIEW OF THE PART 70 PERMIT

Section I of the Part 70 Permit contains a brief description of the facility and an inventory list of the emissions units for which applicable requirements are identified in Section IV of the permit.

Section II of the Part 70 Permit contains the general requirements that relate to administrative permit actions. This section includes the procedures for renewing, amending, reopening, and transferring permits, the relationship to permits to construct and approvals, and the general duty to provide information and to comply with all applicable requirements.

Section III of the Part 70 Permit contains the general requirements for testing, record keeping and reporting; and requirements that affect the facility as a whole, such as open burning, air pollution episodes, particulate matter from construction and demolition activities, asbestos provisions, ozone depleting substance provisions, general conformity, and acid rain permit. This section includes the requirement to report excess emissions and deviations, to submit an annual emissions certification report and an annual compliance certification report, and results of sampling and testing.

Section IV of the Part 70 Permit identifies the emissions standards, emissions limitations, operational limitations, and work practices applicable to each emissions unit located at the facility. For each standard, limitation, and work practice, the permit identifies the basis upon which the Permittee will demonstrate compliance. The basis will include testing, monitoring, record keeping, and reporting requirements. The demonstration may include one or more of these methods.

Section V of the Part 70 Permit contains a list of insignificant activities. These activities emit very small quantities of regulated air pollutants and do not require a permit to construct or registration with the Department. For insignificant activities that are subject to a requirement under the Clean Air Act, the requirement is listed under the activity.

Section VI of the Part 70 Permit contains State-only enforceable requirements. Upon issuance of the Part 70 Permit, the Part 70 Permit supercedes the facility's current State Permit to Operate. Section VI identifies requirements that are not based on the Clean Air Act, but solely on Maryland air pollution regulations. These requirements generally relate to the prevention of nuisances and implementation of Maryland's Air Toxics Program.

IV. REGULATORY REVIEW/TECHNICAL REVIEW/COMPLIANCE METHODOLOGY

Applicable Standards and Limitations

1. **Emission Units: NES Combined Heat & Power Plant**
   FBE-PNP-E1 (Reg. No. 5-0019): 53 MM Btu/hr (4.5-MW) Centaur 50 dual (NG/No.2 fuel oil) combustion turbine (CT) generator e/w Dry SoLoNoX® Injectors; and equipped with a
   FBE-PNP-E2 (Reg. No. 5-0020): 29.5 MM Btu/hr dual (NG/No.2 fuel oil) fired heat recovery steam generator (HRSG)

   A. Control of Visible Emissions
   COMAR 26.11.09.05 A - Visible Emissions – Fuel Burning Equipment.
   "(1) Areas I, II, V, and VI. In Areas I, II, V, and VI, a person may not cause or permit the discharge of emissions from any fuel burning equipment, other than water in an uncombined form, which is greater than 20 percent opacity."

   "(3) Exceptions. Section A(1) and (2) of this regulation do not apply to emissions during load changing, soot blowing, startup, or adjustments or occasional cleaning of control equipment if:
   (a) The visible emissions are not greater than 40 percent opacity; and

   (b) The visible emissions do not occur for more than 6 consecutive minutes in any sixty minute period."

Compliance Demonstration (VE)
The Permittee is required to implement a preventative maintenance plan and maintain on site an operations manual and records of maintenance performed that relate to combustion performance. The Permittee is required to maintain a preventative maintenance plan, operations manual and records of maintenance performed that relates to combustion performance and shall maintain logs of any visible emissions observations performed. **[Authority: COMAR 26.11.03.06C]**

B. Control of Sulfur Oxides
COMAR 26.11.09.07 – Control of Sulfur Oxides from Fuel Burning Equipment.
"A. Sulfur Content Limitations for Fuel. "A person may not burn, sell, or make available for sale any fuel with a sulfur content by weight in excess of or which otherwise exceeds the following limitations: (1) In Areas I, II, V, and VI: (c) Distillate fuel oils, 0.3 percent.."

"C. Request for Analyses. "Any person offering to sell or deliver fuel or any person responsible for equipment in which fuel or process gas is burned, upon request, shall submit to the Department or control officer such analyses of fuel or process gas as may be required to determine compliance with this regulation."

Note: Since the COMAR requirement is less stringent than the NSPS Subpart KKKK Sulfur Control requirements for CTs, the NSPS requirement shall apply.

40 CFR 60, Subpart KKKK--Standards of Performance for Stationary Combustion Turbines

§60.4325 What emission limits must I meet for NO_X if my turbine burns both natural gas and distillate oil (or some other combination of fuels)?

You must meet the emission limits specified in Table 1 to this subpart. If your total heat input is greater than or equal to 50 percent natural gas, you must meet the corresponding limit for a natural gas-fired turbine when you are burning that fuel. Similarly, when your total heat input is greater than 50 percent distillate oil and fuels other than natural gas, you must meet the corresponding limit for distillate oil and fuels other than natural gas for the duration of the time that you burn that particular fuel.

§ 60.4330 What emission limits must I meet for sulfur dioxide (SO_2)?

(a) If your turbine is located in a continental area, you must comply with either paragraph (a)(1) or (a)(2) of this section:

(i) You must not cause to be discharged into the atmosphere from the subject stationary combustion turbine any gases which contain SO_2 in excess of **110 nanograms per Joule (ng/J) (0.90 pounds per megawatt-hour (lb/MWh)) gross output**, **or**

(ii) You must not burn in the subject stationary combustion turbine any fuel, which contains total potential sulfur emissions in excess of **26 ng SO_2/J (0.060 lb SO_2 /MM Btu) heat input**. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement."

Note: The Permittee may satisfy this requirement by meeting the fuel oil ***sulfur content limitation of*** **0.05% by weight** as specified in a current valid purchase contract, tariff sheet or transportation contract for the fuel per **40 CFR § 60.4365 (a)**.

Compliance Demonstration(SO_X)

The Permittee has opted to use periodic monitoring of sulfur content of the fuel as stipulated under 40 CFR § 60.4360 & § 60.4365.

(1) Sulfur Content Monitoring - The Permittee shall determine sulfur content of the combustion turbines fuel in accordance with § 60.4360 that states:

"You must monitor the total sulfur content of the fuel being fired in the turbine, except as provided in Sec. 60.4365. The sulfur content of the fuel must be determined using total sulfur methods described in Sec. 60.4415. Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than half the applicable limit, ASTM D4084, D4810, D5504, or D6228, or Gas Processors Association Standard 2377 (all of which are incorporated by reference, see Sec. 60.17, which measure the major sulfur compounds, may be used."

(2) Exemption from Fuel Sulfur Content Monitoring

§60.4365 How can I be exempted from monitoring the total sulfur content of the fuel?

You may elect not to monitor the total sulfur content of the fuel combusted in the turbine, if the fuel is demonstrated not to exceed potential sulfur emissions of 26 ng SO_2/J ***(0.060 lb SO_2/MMBtu)*** heat input for units located in continental areas…. You must use one of the following sources of information to make the required demonstration:

(a) The fuel quality characteristics ***in a current, valid purchase contract, tariff sheet or transportation contract for the fuel***, specifying that the maximum total sulfur content for oil use in continental areas ***is 0.05 weight percent (500 ppmw) or less…***, the ***total sulfur content for natural gas use in continental areas is 20 grains of sulfur or less per 100 standard cubic feet …*** and has potential sulfur emissions of less than less than ***26 ng SO_2/J (0.060 lb SO_2/MMBtu) heat input*** for continental areas…; or

(b) Representative fuel sampling data which show that the sulfur content of the fuel does not exceed 26 ng SO_2/J (0.060 lb SO_2/MMBtu) heat input for continental areas ….

[Authority: 40 CFR 60, Subpart KKKK]

(3) Frequency of Sulfur Content Monitoring
The frequency of determining the sulfur content of the fuel must be as follows:

(a) Fuel oil. For fuel oil, use one of the total sulfur sampling options and the associated sampling frequency described in sections 2.2.3, 2.2.4.1, 2.2.4.2, and 2.2.4.3 of appendix D to part 75 of this chapter (i.e., flow proportional sampling, daily sampling, sampling from the unit's storage tank after each addition of fuel to the tank, or sampling each delivery prior to combining it with fuel oil already in the intended storage tank).

(b) Gaseous fuel. If you elect not to demonstrate sulfur content using options in §60.4365, and the fuel is supplied without intermediate bulk storage, the sulfur content value of the gaseous fuel must be determined and recorded once per unit operating day.

(4) **COMAR 26.11.09.07 C**. - Request for Analyses. Any person offering to sell or deliver fuel or any person responsible for equipment in which fuel or process gas is burned, upon request, shall submit to the Department or control officer such analyses of fuel or process gas as may be required to determine compliance with this regulation.

(5) The Permittee shall obtain a certification from the supplier stating that the fuel oil burned complies with the sulfur limitations for distillate fuel oil, as stated in COMAR 26.11.09.07A(2). Certification may include the following:

(a)A fuel supplier certification consisting of the name of the oil supplier and a statement from the oil supplier that the oil complies with specifications for No. 2 fuel oil; or

(b)A record of fuel analysis by the Maryland State Comptroller's Office; and

(c)A certified statement signed by the authorized representative of the Facility, stating that the records of fuel supplier certifications submitted represent all of the fuel oil combusted during the quarter.

[Authority: 40 CFR 60, Subpart KKKK & PTC #017-0040-5-0019 & -5-0020]

(6) The Permittee shall maintain records and results of fuel sulfur content monitoring, fuel oil certifications or statements indicating that the fuel oil used complies with the limitation on sulfur content. **[Authority: COMAR 26.11.03.06C]**

"(a) For each affected unit required to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content under this subpart, you must submit reports of excess emissions and monitor downtime, in accordance with Sec. 60.7(c). Excess emissions must be reported for all periods of unit operation, including start-up, shutdown, and malfunction."

"(b) For each affected unit that performs performance tests in accordance with Sec. 60.4340(a), you must submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test."

(7) **§60.4385 How are excess emissions and monitoring downtime defined for SO_2?**
If you choose the option to monitor the sulfur content of the fuel, excess emissions and monitoring downtime are defined as follows:

(a) For samples of gaseous fuel and for oil samples obtained using daily sampling, flow proportional sampling, or sampling from the unit's storage tank, an excess emission occurs each unit operating hour included in the period beginning on the date and hour of any sample for which the sulfur content of the fuel being fired in the combustion turbine exceeds the applicable limit and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit.

(b) If the option to sample each delivery of fuel oil has been selected, you must immediately switch to one of the other oil sampling options (i.e., daily sampling, flow proportional sampling, or sampling from the unit's storage tank) if the sulfur content of a delivery exceeds 0.05 weight percent. You must continue to use one of the other sampling options until all of the oil from the delivery has been combusted, and you must evaluate excess emissions according to paragraph (a) of this section. When all of the fuel from the delivery has been burned, you may resume using the as-delivered sampling option.

(c) A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour of a required sample, if invalid results are obtained. The period of monitor downtime ends on the date and hour of the next valid sample. **[Authority: 40 CFR 60, Subpart KKKK]**

C. Control of Nitrogen Oxides

40 CFR 60, Subpart KKKK, § 60.4320 - NO_X Standard

Table 1: Subpart KKKK of Part 60. Nitrogen Oxide Emission Limits for New Stationary Combustion Turbines. **NO_X emissions from each stationary combustion turbine shall not exceed the following:**

Combustion turbine type	Combustion turbine heat input at peak load (HHV)	NO_X emission standard
New turbine firing natural gas	> 50 MMBtu/hr and ≤ 850 MMBtu/hr	**25 ppm at 15 percent O_2** or 150 ng/J of useful output **(1.2 lb/MWh).**
New turbine firing fuels other than natural gas	> 50 MMBtu/hr and ≤ 850 MMBtu/hr	**74 ppm at 15 percent O_2** or 460 ng/J of useful output **(3.6 lb/MWh)**.
Heat recovery units operating independent of the combustion turbine	All sizes	**54 ppm at 15 percent** O_2 or 110 ng/J of useful output **(0.86 lb/MWh).**

[NO_X RACT]
COMAR 26.11.09.08G. Control of NO_X Emissions for Major Stationary Sources. "Requirements for Fuel-Burning Equipment with a Capacity Factor of 15 Percent or Less, and Combustion Turbines with a Capacity Factor Greater than 15 Percent.

{Condition G(1) below applies to Fuel-Burning Equipment with a Capacity Factor of 15 Percent or Less,
(1) A person who owns or operates fuel-burning equipment with a capacity factor (as defined in 40 CFR Part 72.2) of 15 percent or less shall:

(a) Provide certification of the capacity factor of the equipment to the Department in writing;

(b) For fuel-burning equipment that operates more than 500 hours during a calendar year, perform a combustion analysis and optimize combustion at least once annually;

(c) Maintain the results of the combustion analysis at the site for at least 2 years and make these results available to the Department and the EPA upon request;

(d) Require each operator of an installation, except combustion turbines, to attend operator training programs at least once every 3 years, on combustion optimization that are sponsored by the Department, the EPA, or equipment vendors; and

(e) Maintain a record of training program attendance for each operator

{Condition G(2) below applies only to the combustion turbine – FBE-PNP-E1}
(2) A person who owns or operates a combustion turbine with a capacity factor greater than 15 percent shall meet an hourly average NO_X emission rate of not more than 42 ppm when burning gas or 65 ppm when burning fuel oil (dry volume at 15 percent oxygen) or meet applicable Prevention of Significant Deterioration limits, whichever is more restrictive.

Note: The federal requirements under 40 CFR Subpart KKKK are more stringent than the State requirements and therefore take precedence over COMAR 26.11.09.08G.

{COMAR 26.11.09.08E applies to the HRSG - FBE-PNP-E2}

COMAR 26.11.09.08 E. Requirements for Fuel-Burning Equipment with a Rated Heat Input capacity of 100 MMBtu Per Hour or Less. A person who owns or operates fuel-burning equipment with a rated heat input capacity of 100 MMBtu per hour or less shall:

(1) Submit to the Department an identification of each affected installation, the rated heat input capacity of each installation, and the type of fuel burned in each;

(2) Perform a combustion analysis for each installation at least once each year and optimize combustion based on the analysis;

(3) Maintain the results of the combustion analysis at the site for at least 2 years and make this data available to the Department and the EPA upon request;

(4) Once every 3 years, require each operator of the installation to attend operator training programs on combustion optimization that are sponsored by the Department, the EPA, or equipment vendors; and

(5) Prepare and maintain a record of training program attendance for each operator at the site, and make these records available to the Department upon request.

Compliance Demonstration (NO_X)

§60.4400 How do I conduct the initial and subsequent performance tests, regarding NO_X?

(a) You **must conduct an initial performance test**, as required in §60.8. **Subsequent NO_X performance tests shall be conducted on an annual basis (no more than 14 calendar months following the previous performance test)**.

(1) There are two general methodologies that you may use to conduct the performance tests. For each test run:

(i) Measure the NO_X concentration (in parts per million (ppm)), using EPA Method 7E or EPA Method 20 in appendix A of this part. For units complying with the output based standard, concurrently measure the stack gas flow rate, using EPA Methods 1 and 2 in appendix A of this part, and measure and record the electrical and thermal output from the unit. Then, use the following equation to calculate the NO_X emission rate:

(Equation 5)

$$E = \frac{1.194 \times 10^{-7} * (NO_x)_c * Q_{std}}{P}$$

Where:

$E = NO_X$ emission rate, in lb/MWh

1.194×10^{-7} = conversion constant, in lb/dscf-ppm

$(NO_X)_c$ = average NO_X concentration for the run, in ppm

Q_{std} = stack gas volumetric flow rate, in dscf/hr

P = gross electrical and mechanical energy output of the combustion turbine, in MW (for simple-cycle operation), for combined-cycle operation, the sum of all electrical and mechanical output from the combustion and steam turbines, or, for combined heat and power operation, the sum of all electrical and mechanical output from the combustion and steam turbines plus all useful recovered thermal output not used for additional electric or mechanical generation, in MW, calculated according to §60.4350(f)(2); or

(ii) Measure the NO_X and diluent gas concentrations, using either EPA Methods 7E and 3A, or EPA Method 20 in appendix A of this part. Concurrently measure the heat input to the unit, using a fuel flowmeter (or flowmeters), and measure the electrical and thermal output of the unit. Use EPA Method 19 in appendix A of this part to calculate the NO_X emission rate in lb/MMBtu. Then, use Equations 1 and, if necessary, 2 and 3 in §60.4350(f) to calculate the NO_X emission rate in lb/MWh.

(2) Sampling traverse points for NO_X and (if applicable) diluent gas are to be selected following EPA Method 20 or EPA Method 1 (non-particulate procedures), and sampled for equal time intervals. The sampling must be performed with a traversing single-hole probe, or, if feasible, with a stationary multi-hole probe that samples each of the points sequentially. Alternatively, a multi-hole probe designed and documented to sample equal volumes from each hole may be used to sample simultaneously at the required points.

(3) Notwithstanding paragraph (a)(2) of this section, you may test at fewer points than are specified in EPA Method 1 or EPA Method 20 in appendix A of this part if the following conditions are met:

(i) You may perform a stratification test for NO_X and diluent pursuant to
(A) [Reserved], or

(B) The procedures specified in section 6.5.6.1(a) through (e) of appendix A of part 75 of this chapter.

(iii) Once the stratification sampling is completed, you may use the following alternative sample point selection criteria for the performance test:

(B) For turbines with a NO_X standard greater than 15 ppm @ 15% O_2, you may sample at a single point, located at least 1 meter from the stack wall or at the stack centroid if each of the individual traverse point NO_X concentrations is within ±5 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than ±3ppm or ±0.3 percent CO_2 (or O_2) from the mean for all traverse points; or

(b) The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. You may perform testing at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. You must conduct three separate test runs for each performance test. The minimum time per run is 20 minutes.

(1) If the stationary combustion turbine combusts both oil and gas as primary or backup fuels, separate performance testing is required for each fuel.

(2) For a combined cycle and CHP turbine systems with supplemental heat (duct burner), you must measure the total NO_X emissions after the duct burner rather than directly after the turbine. The duct burner must be in operation during the performance test.

(4) Compliance with the applicable emission limit in §60.4320 must be demonstrated at each tested load level. Compliance is achieved if the three-run arithmetic average NO_X emission rate at each tested level meets the applicable emission limit in §60.4320.

(5) If you elect to install a CEMS, the performance evaluation of the CEMS may either be conducted separately or (as described in §60.4405) as part of the initial performance test of the affected unit.

(6) The ambient temperature must be greater than 0°F during the performance test.
[Authority: 40 CFR 60, Subpart KKKK & PTC #017-0040-5-0019 & -5-0020]

§60.4340 How do I demonstrate continuous compliance for NO_X if I do not use water or steam injection?

(a) If you are not using water or steam injection to control NO_X emissions, **you must perform annual performance tests in accordance with §60.4400 to demonstrate continuous compliance**. If the NO_X emission result from the performance test is less than or equal to 75 percent of the NO_X emission limit for the turbine, you may reduce the frequency of subsequent performance tests to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75 percent of the NO_X emission limit for the turbine, you must resume annual performance tests.

(b) As an alternative, you may install, calibrate, maintain and operate one of the following continuous monitoring systems:

(1) Continuous emission monitoring as described in §§60.4335(b) and 60.4345, or

(2) Continuous parameter monitoring as follows:

(ii) For any lean premix stationary combustion turbine, you must continuously monitor the appropriate parameters to determine whether the unit is operating in low-NO_X mode.

Parametric Monitoring

§60.4410 How do I establish a valid parameter range if I have chosen to continuously monitor parameters?

If you have chosen to monitor combustion parameters or parameters indicative of proper operation of NOX emission controls in accordance with §60.4340, the appropriate parameters must be continuously monitored and recorded during each run of the initial performance test, to establish acceptable operating ranges, for purposes of the parameter monitoring plan for the affected unit, as specified in §60.4355.

[Authority: 40 CFR 60, Subpart KKKK & PTC #017-0040-5-0019 & -5-0020]

[Periodic Testing]
If the Permittee decides to perform parametric monitoring as an alternative to conducting annual testing as allowed for under §60.4340 (b), after the initial compliance test required under 40 CFR § 60.8, the owner or operator shall as a minimum, conduct an performance stack test for NOx for each CT unit, at least once every 5 years or at least once during the term of the operating permit. The Permittee shall conduct performance test for NOx in accordance with the methodologies specified in 40 CFR §§ 60.4340 & 60.4400.
[**Authority: COMAR 26.11.01.04]**

The Permittee shall maintain records and results of any tests performed in compliance with testing as required under 40 CFR § 60.8 and 40 CFR 60, Subpart KKKK and any other testing required under this permit.

The Permittee shall maintain a copy of the parametric monitoring plan in accordance with § 60.4355 and records of pilot fuel valve position and report any incidence of "Minimum Pilot Mode" = OFF to indicate potential NOx exceedances, in accordance with the plan.
[Authority: 40 CFR 60, Subpart KKKK & COMAR 26.11.03.06C]

The Permittee shall maintain records of all maintenance preformed that relates to combustion performance, and records of all performance testing conducted
[COMAR 26.11.03.06C]

Reporting under § 60.4375:
"(b) For each affected unit that performs performance tests in accordance with Sec. 60.4340(a), you must submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test."

§60.4380 How are excess emissions and monitor downtime defined for NOX?
For the purpose of reports required under §60.7(c), periods of excess emissions and monitor downtime that must be reported are defined as follows:

(c) For turbines required to monitor combustion parameters or parameters that document proper operation of the NOX emission controls:

(1) An excess emission is a 4-hour rolling unit operating hour average in which any monitored parameter does not achieve the target value or is outside the acceptable range defined in the parameter monitoring plan for the unit.

(2) A period of monitor downtime is a unit operating hour in which any of the required parametric data are either not recorded or are invalid.
[Authority: 40 CFR 60, Subpart KKKK]

[NO_X RACT] applies only to the HRSG - FBE-PNP-E2
The Permittee shall:
(1) Provide certification of the capacity factor of the equipment to the Department in writing;

(2) For fuel-burning equipment that operates more than 500 hours during a calendar year; perform a

combustion analysis and optimize combustion at least once annually;

(3) Submit to the Department an identification of each affected installation, the rated heat input capacity of each installation, and the type of fuel burned in each unit.

(4) Maintain the results of the combustion analysis at the site for at least 2 years and make this data available to the Department and the EPA upon request;

(5) Once every 3 years, require each operator of the installation to attend operator training programs on combustion optimization that are sponsored by the Department, the EPA, or equipment vendors; and

(6) Prepare and maintain a record of training program attendance for each operator at the site, and make these records available to the Department upon request
[Authority COMAR 26.11.09.08 G & E]

D. Operational Limitations (OL)

(1) The Solar Centaur 50 combustion turbine (CT) and HRSG shall fire only natural gas as the primary fuel and distillate fuel oil – as a backup stand-by fuel in the combustion turbine and heat recovery steam generator (HRSG) .

(2) General Compliance Requirements - Sec. 60.4333
"You must operate and maintain your stationary combustion turbine, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction."

[Authority: PTC #017-0040-5-0019 & -5-0020 and 40 CFR 60, Subpart KKKK]

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2. Emission Units: Auxiliary Steam Plant
FBE-712-E1 (Reg. #4-0081) 43 MM Btu/hr, No. 2 fuel oil fired "limited-use" boiler
FBE-712-E3 (Reg. #4-0241) 97 MM Btu/hr, No. 2 fuel oil fired (NSPS) "limited-use" boiler

{**Note:** PTC to convert unit FBE-712-E3 from temporary unit to a permanent "limited-use" auxiliary unit (017-0040-4-0241) was issued in August 2015. FBE-712-E1 has historically operated on a very limited basis, only a few days for each of the past 5 years. After discussion and concurrence with Indian Head, FBE-712-E1 shall also be designated for "limited –use".}

Note: NSPS Applicability - The requirements of 40 CFR 60 Subpart Dc does not apply to FBE-712-E1 because it was installed prior to the applicability date of June 9, 1989.

APPLICABLE STANDARDS and LIMITATIONS

A. Control of Visible Emissions:
COMAR 26.11.09.05A(1) - *Visible Emissions. Fuel Burning Equipment***.** Areas I, II, V, and VI, a person may not cause or permit the discharge of emissions from any fuel burning equipment other than water in an uncombined form, which is greater than 20 percent opacity.

COMAR 26.11.09.05A(3) - *Exceptions*: Section A(1) and (2) of this regulation do not apply to emissions during load changing, soot blowing, startup, or adjustments or occasional cleaning of control equipment if: (i) The visible emissions are not greater than 40 percent opacity; and (ii) The visible emissions do not occur for more than 6 consecutive minutes in any sixty-minute period.

***C**ompliance Demonstration (VE)*

In order to demonstrate compliance the Permittee shall maintain an operation manual and preventive maintenance plan, logs of maintenance performed that relates to combustion performance, and perform the prescribed visible emission observations. The Permittee shall maintain a log of the visible emission observations and make it available to the Department's representative upon request.

The Permittee shall verify that there are no visible emissions when burning No. 2 fuel oil. The Permittee shall perform a visual observation for a 6-minute period, once every 168 hours of operation or at a minimum once per calendar year.

The Permittee shall perform the following, if visible emissions are observed:

(1) Inspect combustion control system and boiler operations,
(2) Perform all necessary adjustments and/or repairs to the boiler within 48 hours, so that visible emissions are eliminated;
(3) Document in writing the results of the inspections, adjustments and/or repairs to the boiler; and
(4) After 48 hours, if the required adjustments and/or repairs had not eliminated the visible emissions, perform Method 9 observations once daily for 18 minutes until corrective actions have eliminated the visible emissions.

The Permittee shall report incidents of visible emissions in accordance with permit condition 4, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviations". **[Authority: COMAR 26.11.03.06C]**

B. Control of Sulfur Oxides:

{(1) Applies to NSPS Boiler only - FBE-712-E3 (Reg. #4-0241)}

(1) **40 CFR 60, Subpart Dc, §60.42c**

"(d) On and after the date on which the initial performance test is completed or required to be completed under §60.8, …, 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[*(1)]. The percent reduction requirements are not applicable to affected facilities under this paragraph."

[*(1)] **Note:** Because COMAR 26.11.09.07A(2)(b) fuel sulfur content limitation is more stringent, it supersedes the fuel sulfur content specified under 40 CFR 60, Subpart Dc, §60.42c., see citation of COMAR 26.11.09.07A, below.

"(g) Except as provided in paragraph (h) of this section, compliance with the percent reduction requirements, fuel oil sulfur limits, and emission limits of this section shall be determined on a 30-day rolling average basis."

"(h) For affected facilities listed under paragraphs (h)(1), (2), or (3) of this section, compliance with the emission limits or fuel oil sulfur limits under this section may be determined based on a certification from the fuel supplier, as described under §60.48c(f), as applicable. (1) Distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 MM Btu/hr)."

"(i) The SO2 emission limits, fuel oil sulfur limits, and percent reduction requirements under this section apply at all times, including periods of startup, shutdown, and malfunction."

(2) **COMAR 26.11.09.07A:** A person may not burn, sell, or make available for sale any fuel with sulfur content by weight in excess of or which otherwise exceeds the following limitations: (1) In Areas I, II, V, and VI: (c) **Distillate fuel oils, 0.3 percent**.

Compliance Demonstration (Sulfur):

(1) The Permittee shall obtain a certification of sulfur content from the supplier for the fuel oil. The Permittee shall maintain records of the fuel oil certifications indicating that the oil complies with the limitations on sulfur content. Certification may include:
(i)a fuel supplier certification consisting of the name of the oil supplier and a statement from the oil supplier that the oil complies with specifications for distillate fuel oil; or

(ii) a record of fuel analysis by the Maryland State Comptroller's Office.

(iii)The Permittee shall report fuel supplier certification to the Department upon request. **[Authority: COMAR 26.11.09.07A(2)(b) & COMAR 26.11.03.06C]**

The Permittee shall retain fuel supplier certifications stating that the fuel oil is in compliance with the limitation on the sulfur content of the fuel oil as specified by regulation **[Authority: COMAR 26.11.09.07C].**

The Permittee shall maintain records of the quantity and types of fuel burned. **[Authority: COMAR 26.11.02.19C(1)(c)]**

{(2) Applies to NSPS Boiler only - FBE-712-E3 (Reg. #4-0241)}

(2) **§ 60.48c Reporting and recordkeeping requirements.**
"**(d)** The owner or operator of each affected facility subject to the SO_2 emission limits, **fuel oil sulfur limits**, or percent reduction requirements under §60.42c shall submit reports to the Administrator."

"**(e)** The owner or operator of each affected facility subject to the SO_2 emission limits, fuel oil sulfur limits, or percent reduction requirements under §60.42c shall keep records and submit reports as required under paragraph (d) of this section, including the following information, as applicable.

(1) Calendar dates covered in the reporting period.

(2) Each 30-day average SO_2 emission rate (ng/J or lb/MMBtu), or 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.

(3) Each 30-day average percent of potential SO_2 emission rate calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of the corrective actions taken.

(11) If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under paragraph (f)(1), (2), (3), or (4) of this section, as applicable. 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."

"**(f) Fuel supplier certification** shall include the following information:
(2) For distillate oil:

(i) The name of the oil supplier;

(ii) The location of the oil when the sample was drawn for analysis to determine the sulfur content of the oil, specifically including whether the oil was sampled as delivered to the affected facility, or whether the sample was drawn from oil in storage at the oil supplier's or oil refiner's facility, or other location;

(iii) The sulfur content of the oil from which the shipment came (or of the shipment itself); and

(iv) The method used to determine the sulfur content of the oil."

"**(g)(1)** Except as provided under paragraphs (g)(2) and (g)(3) of this section, the owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day.

(2) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in §60.48c(f) to demonstrate compliance with the SO_2 standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month."

"(i) All records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record."

"(j) 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 30th day following the end of the reporting period."

C. Control of Nitrogen Oxides:

COMAR 26.11.09.08G. ***Control of NOx Emissions for Major Stationary Sources (NOx RACT)***. "***Requirements for Fuel-Burning Equipment with a Capacity Factor of 15 Percent or Less***, and Combustion Turbines with a Capacity Factor Greater than 15 Percent.

(1) A person who owns or operates fuel-burning equipment with a capacity factor (as defined in 40 CFR Part 72.2) of 15 percent or less shall:

(a) Provide certification of the capacity factor of the equipment to the Department in writing;

(b) For fuel-burning equipment that operates more than 500 hours during a calendar year, perform a combustion analysis and optimize combustion at least once annually;

(c) Maintain the results of the combustion analysis at the site for at least 2 years and make these results available to the Department and the EPA upon request;

(d) Require each operator of an installation, except combustion turbines, to attend operator training programs at least once every 3 years, on combustion optimization that are sponsored by the Department(*), the EPA, or equipment vendors; and

(e) Maintain a record of training program attendance for each operator at the site, and make these records available to the Department upon request."

[40CFR72.2] *Capacity factor* means either: (1) the ratio of a unit's actual annual electric output (expressed in MWe-hr) to the unit's nameplate capacity times 8760 hours, or (2) the ratio of a unit's annual heat input (in million British thermal units or equivalent units of measure) to the unit's maximum design heat input (in million British thermal units per hour or equivalent units of measure) times 8,760 hours.

(*)**Note:** A Department approved Permittee's in-house training program can also satisfy the requirement of a Department sponsored operator training program of COMAR 26.11.09.08G.

COMAR 26.11.09.08K(3)-*NO_X RACT Reporting Requirements*- states that boilers subject to specific NO_X control requirements shall maintain annual fuel use records on site for not less than 3 years, and make those records available to the Department upon request. Under COMAR 26.11.03.06C(6) and the General Recordkeeping Requirements of the Title V operating permit, all records are required to be maintained for at least five years and made available to the Department upon request. Therefore, COMAR 26.11.09.08K(3) is superseded and shall not be included in the operating permit.

Compliance Demonstration (NO_X)

The Permittee shall perform a combustion analysis for each installation at least once each year and optimize combustion based on the analysis.
[Authority: COMAR 26.11.09.08(E) (2)]

The Permittee shall: (1) Maintain the results of the combustion analysis at the site and make this data available to the Department and the EPA upon request; (2) Prepare and maintain a record of training program attendance for each operator at the site, and (3) Maintain records certifying the

capacity factor of the boilers and shall make these records available to the Department upon request. **[Authority: COMAR 26.11.09.08(G)(1)]**

The Permittee shall submit to the Department an identification of each affected installation, the rated heat input capacity of each installation, the type of fuel burned in each. The Permittee shall maintain annual fuel use records and hour of operation on site for not less than 5 years, and make those records available to the Department upon request.
[Authority: COMAR 26.11.09.08(G) & COMAR 26.11.09.08K(3)]

D. Operational Limitations (OL)

The Permittee shall fire only No. 2 fuel oil unless the Permittee applies for and receives an approval or permit from the Department to burn alternate fuels.

In order to meet the definition of a "limited-use boiler" under Subpart JJJJJJ, the Permittee shall operate the auxiliary boilers at an annual capacity factor of less than or equal to 10 percent.
[Authority: 40 CFR §63.11237 & PTC 017-0040-4-0241]

Compliance Demonstration (OL)

The Permittee shall monitor and log the dates and hours of operation for each boiler as well as the monthly amounts of fuel used. The Permittee shall determine the annual capacity factor for each boiler and maintain a copy the verification of each boiler's capacity factor on site and shall make this record available to the Department upon request.
[Authority: COMAR 26.11.03.06 C]

2.a Emission Units: Auxiliary Steam Plant - (Area Source Boiler MACT – Limited-Use Units) 40 CFR Part 63, Subpart JJJJJJ – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

§63.11237 What definitions apply to this subpart?

"***Limited-use boiler*** means any boiler that burns any amount of solid or liquid fuels and has a federally enforceable average annual capacity factor of no more than 10 percent."

{Note: PTC to convert unit FBE-712-E3 from temporary unit to a permanent "limited-use" auxiliary unit was issued in August of 2015. FBE-712-E1 has historically operated on a very limited basis, only a few days for each of the past 5 years. It shall also be designated as a "limited –use" unit.}

§ 63.11196 What are my compliance dates?
(c) If you start up a ***new*** affected source after ***May 20, 2011***, you must achieve compliance with the provisions of this subpart upon startup of your affected source.

§ 63.11201 What standards must I meet?
(b) You must comply with each work practice standard, emission reduction measure, and management practice specified in Table 2 to this subpart that applies to your boiler. An energy

assessment completed on or after January 1, 2008 that meets or is amended to meet the energy assessment requirements in Table 2 to this subpart satisfies the energy assessment requirement. A facility that operates under an energy management program established through energy management systems compatible with ISO 50001, that includes the affected units, also satisfies the energy assessment requirement.

(d) These standards apply at all times the affected boiler is operating, except during periods of startup and shutdown as defined in § 63.11237, during which time you must comply only with Table 2 to this subpart.

Table 2 to Subpart JJJJJJ of Part 63—Work Practice Standards, Emission Reduction Measures, and Management Practices
As stated in § 63.11201, you must comply with the following applicable work practice standards, emission reduction measures, and management practices:

Your boiler is in this subcategory. . .	**You must meet the following. . .**
{Applies to FBE-712-E1} **10**. ***Existing*** limited-use boilers	Conduct an initial tune-up as specified in §63.11214, and conduct a ***tune-up of the boiler every 5 years as*** specified in §63.11223.
{Applies to FBE-712-E3} **11.** ***New*** limited-use boilers	Conduct a ***tune-up of the boiler every 5 years*** as specified in §63.11223.

§ 63.11210 What are my initial compliance requirements and by what date must I conduct them?

{(c) Applies to FBE-712-E1}

(c) For ***existing*** affected boilers that have applicable work practice standards, management practices, or emission reduction measures, you must demonstrate initial compliance no later than the compliance date that is specified in § 63.11196 and according to the applicable provisions in § 63.7(a)(2), except as provided in paragraph (j) of this section.

{(f) Applies to FBE-712-E3}

(f) For ***new*** or reconstructed affected boilers that have applicable work practice standards or management practices, you are not required to complete an initial performance tune-up, but you are required to complete the applicable biennial or 5-year tune-up as specified in §63.11223 no later than 25 months or 61 months, respectively, after the initial startup of the new or reconstructed affected source.

§ 63.11223 How do I demonstrate continuous compliance with the work practice and management practice standards?

(a) For affected sources subject to the work practice standard or the management practices of a tune-up, you must conduct a performance tune-up according to paragraph (b) of this section and keep records as required in § 63.11225(c) to demonstrate continuous compliance. You must conduct the tune-up while burning the type of fuel (or fuels in the case of boilers that routinely burn two types of fuels at the same time) that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up.

(b) Except as specified in paragraphs (c) through (f) of this section, you must conduct a tune-up of the boiler biennially to demonstrate continuous compliance as specified in paragraphs (b)(1) through (7) of this section. 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

§63.11214 How do I demonstrate initial compliance with the work practice standard, emission reduction measures, and management practice?

(b) If you own or operate an … ***existing or new oil-fired boiler***, you must conduct a performance tune-up according to §63.11223(b) and you must submit a signed statement in the Notification of Compliance Status report that indicates that you conducted a tune-up of the boiler.

(c) If you own or operate an existing affected boiler with a heat input capacity of 10 million Btu per hour or greater, you must submit a signed certification in the Notification of Compliance Status report that an energy assessment of the boiler and its energy use systems was completed according to Table 2 to this subpart and is an accurate depiction of your facility.

§63.11223 How do I demonstrate continuous compliance with the work practice and management practice standards?

(f) ***Limited-use boilers*** must conduct a ***tune-up every 5 years*** as specified in paragraphs (b)(1) through (7) of this section. Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up. For a new or reconstructed limited-use boiler, the first 5-year tune-up must be no later than 61 months after the initial startup. You may delay the burner inspection specified in paragraph (b)(1) of this section and inspection of the system controlling the air-to-fuel ratio specified in paragraph (b)(3) of this section until the next scheduled unit shutdown, but you must inspect each burner and system controlling the air-to-fuel ratio at least once every 72 months. ***Limited-use boilers <u>are not</u>*** subject to the *emission limits in Table 1* to this subpart, *the energy assessment requirements in Table 2* to this subpart, or *the operating limits in Table 3* to this subpart.

§63.11205 What are my general requirements for complying with this subpart?

(a) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

<u>Record Keeping Requirements</u>

1. The Permittee must keep a copy of each notification and report that is submitted to comply with 40 CFR Part 63, Subpart JJJJJJ and all documentation supporting any Initial Notification or Notification of Compliance Status that is submitted as required in 40 CFR §63.10(b)(2)(xiv).

[Authority: 40 CFR §63.11225(c)(1)]

2. The Permittee must keep records to document conformance with the work practices, emission reduction measures, and management practices required by 40 CFR §63.11214 as follows:

a. 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.

b. Records documenting the fuel type(s) used monthly by each boiler, including, but not limited to, a description of the fuel and the total fuel usage amount with units of measure.

[Authority 40 CFR §63.11225(c)(2)]

3. The Permittee must keep records of the occurrence and duration of each malfunction of the boiler or of associated air pollution control equipment and monitoring equipment. **[Authority: 40 CFR §63.11225(c)(4)]**

4. The Permittee must keep records of actions taken during periods of malfunctions to minimize emissions in accordance with the general duty to minimize emissions in 40 CFR §63.11205(a), including corrective actions to restore the malfunctioning boiler to its normal or usual manner of operation. **[Authority: 40 CFR §63.11225(c)(5)]**

5. The Permittee must keep the records in a form suitable and readily available for expeditious review. Each record must be kept for five (5) years following the date of each recorded action. The records must remain on site for at least two (2) years after the date of each recorded action. **[Authority: 40 CFR §63.11225(d)]**

Reporting Requirements

1. The Permittee must submit all applicable notifications in 40 CFR §63.7(b), §63.8(e), §63.9(b) through (e), and §63.9(g) and (h).
[Authority: 40 CFR §63.11225(a)(1)]

2. The Permittee must submit the Notification of Compliance Status in accordance with 40 CFR §63.9(h) no later than 120 days after the applicable compliance date specified in 40 CFR §63.11196. In addition to the information required in 40 CFR §63.9(h)(2), your notification must include the following certifications of compliance, as applicable, and signed by a responsible official:

a. "This facility complies with the requirements in §63.11214 to conduct an initial tune-up of the boiler."

[40 CFR §63.11225(a)(4)(i), and (4)(ii), 40 CFR §63.11214(b) and 40 CFR §63.11214(c)]

3. For boilers that are subject only to a requirement to conduct a biennial or 5-year tune-up according to §63.11223(a) and not subject to emission limits or operating limits, you may prepare only a biennial or 5-year compliance report as specified in paragraphs (b)(1) and (2) of this section.. The compliance report must contain the following information:

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 this subpart. Your notification must include the following certification(s) of compliance, as applicable, and signed by a responsible official:
(i) "This facility complies with the requirements in §63.11223 to conduct a biennial or 5-year tune-up, as applicable, of each boiler."
(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

c. If the source experiences any deviations from the applicable requirements during the reporting period, include a description of deviations, time periods during which the deviations occurred, and the corrective actions taken.
[Authority: 40 CFR §63.11225(b)(1) through (3)]

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3. <u>Emissions Unit Number(s)</u>: NSPS BOILERS
[NES]
FBE-SB-E1: (5-0021) -38 MM Btu (900-hp) Hurst/Power Flame NG Fired Steam Boiler
FBE-SB-E2: (5-0022) -38 MM Btu (900-hp) Hurst/Power Flame NG Fired Steam Boiler
FBE-PNP-1-E1: (5-0023) – 31.5 MM Btu (750-hp) Hurst Power Flame dual (NG /No.2 oil) fired boiler
FBE-SNP-2-E1: (5-0024) - 20.9 MM Btu (500-hp) Hurst Power Flame NG fired boiler
FBE-SNP-2-E2: (5-0025) - 20.9 MM Btu (500-hp) Hurst Power Flame NG fired boiler
FBE-SNP-6-E1: (5-0026) - 16.7 MM Btu (400-hp) Hurst Power Flame NG fired boilers
FBE-SNP-6-E2: (5-0026) - 16.7 MM Btu (400-hp) Hurst Power Flame NG fired boilers
FBE-SNP-4-E1: (5-0027) - 14.7 MM Btu (350-hp) Hurst Power Flame NG fired boiler
FBE-SNP-4-E2: (5-0028) - 14.7 MM Btu (350-hp) Hurst Power Flame NG fired boiler
FBE-SNP-7-E1: (5-0029) - 10.5 MM Btu (250-hp) Hurst Power Flame NG fired boiler
FBE-SNP-7-E2: (5-0030) - 10.5 MM Btu (250-hp) Hurst Power Flame NG fired boiler

[901- Marine Barracks]
FBE-901-E1 & E2: (5-0035 & -5-0036) - Two-(2) 14.3 MM Btu/hr (350-hp) Cleaver Brooks dual (NG - primary/No. 2 fuel oil - backup) fired boilers
Note: Because Indian Head boilers fire N.G and/or fire No. 2 fuel oil only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel they ***are exempt*** from the ***Area Source Boiler MACT*** Part 63 Subpart JJJJJJ **[Ref. 40 CFR §63.11237]**

APPLICABLE STANDARDS and LIMITATIONS

<u>Control of Visible Emissions (VE):</u>

(1) **COMAR 26.11.09.05(A)(1)**: Areas I, II, V, and VI, a person may not cause or permit the discharge of emissions from any fuel burning equipment other than water in an uncombined form, which is greater than 20 percent opacity.

(2) **COMAR 26.11.09.05A(3)** Exceptions.
Section A(1) and (2) of this regulation do not apply to emissions during load changing, soot blowing, startup, or adjustments or occasional cleaning of control equipment if:

(i) The visible emissions are not greater than 40 percent opacity; and

(ii) The visible emissions do not occur for more than 6 consecutive minutes in any sixty-minute period.

***C**ompliance Demonstration (VE)*

(1) The Permittee shall properly operate and maintain the boilers in a manner to prevent visible emissions **[Authority: COMAR 26.11.03.06C]**.

(2) The Permittee shall verify that there are no visible emissions when burning No. 2 fuel oil. The Permittee shall perform a visual observation for a 6-minute period, once every 168 hours of operation or at a minimum once per calendar year.

{Condition (3) below applies to the Strauss Boiler EU# PNP-1-B-1}

(3) The Permittee shall conduct a Method 22 at least once each day that the Hurst Boiler (EN: PNP-1-B-1) is firing No. 2 fuel oil. The Permittee shall perform the annual combustion analysis while operating on No. 2 fuel oil

(4) The Permittee shall perform the following, if visible emissions are observed:

(a) Inspect combustion control system and boiler operations,

(b) Perform all necessary adjustments and/or repairs to the boiler within 48 hours, so that visible emissions are eliminated;

(c) Document in writing the results of the inspections, adjustments and/or repairs to the boiler; and

(d) After 48 hours, if the required adjustments and/or repairs have not eliminated the visible emissions, perform Method 9 observations once daily for 18 minutes until corrective actions have reduced the visible emissions to less than 20 percent opacity.

Control of Sulfur Oxides:

Note: {§ 60.42c, § 60.44c, and § 60.46c below, applies to FBE-PNP-1-E1: (5-0023) & FBE-901-E1 & -E2: Marine Barracks boilers due to their oil firing capability}

(1) § 60.42c Standard for sulfur dioxide (SO_2).

"(d) On and after the date on which the initial performance test is completed or required to be completed under §60.8,…; 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[*(1)]. The percent reduction requirements are not applicable to affected facilities under this paragraph."

"(g) Except as provided in paragraph (h) of this section, compliance with the percent reduction requirements, fuel oil sulfur limits, and emission limits of this section shall be determined on a 30-day rolling average basis."

"(h) For affected facilities listed under paragraphs (h)(1), (2), or (3) of this section, compliance with the emission limits or fuel oil sulfur limits under this section may be determined based

on a certification from the fuel supplier, as described under §60.48c(f), as applicable. (1) Distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 MMBtu/hr)."

"(i) The SO_2 emission limits, fuel oil sulfur limits, and percent reduction requirements under this section apply at all times, including periods of startup, shutdown, and malfunction."

*(1) **Note:**Because COMAR 26.11.09.07A(2)(b) fuel sulfur content limitation is more stringent, it supersedes the fuel sulfur content specified under 40 CFR 60, Subpart Dc, §60.42c., see Condition B(2), below.

B(2) **COMAR 26.11.09.07** – *Control* ***of Sulfur Oxides from Fuel Burning Equipment***.
"A. Sulfur Content Limitations for Fuel. A person may not burn, sell, or make available for sale any fuel with a sulfur content by weight in excess of or which otherwise exceeds the following limitations: (1) In Areas I, II, V, and VI: **(c) Distillate fuel oils, 0.3 percent**.

"C. Request for Analyses. "Any person offering to sell or deliver fuel or any person responsible for equipment in which fuel or process gas is burned, upon request, shall submit to the Department or control officer such analyses of fuel or process gas as may be required to determine compliance with this regulation."

Compliance Demonstration (Sulfur)

The Permittee shall obtain a certification of sulfur content from the supplier for the fuel oil.

The Permittee shall maintain records of the fuel oil certifications indicating that the oil complies with the limitations on sulfur content. Certification may include:

(i) a fuel supplier certification consisting of the name of the oil supplier and a statement from the oil supplier that the oil complies with specifications for distillate fuel oil; or

(ii) a record of fuel analysis by the Maryland State Comptroller's Office.

(iii) The Permittee shall report fuel supplier certification to the Department upon request.

The Permittee shall report fuel supplier certifications to the Department upon request.
[Authority: COMAR 26.11.09.07A(2)(b) & COMAR 26.11.09.07C]

Control of Nitrogen Oxides:

COMAR 26.11.09.08B(5) - Operator Training.

(a) For purposes of this regulation, the equipment operator to be trained may be the person who maintains the equipment and makes the necessary adjustments for efficient operation.

(b) The operator training course sponsored by the Department shall include an in-house training course that is approved by the Department.

COMAR 26.11.09.08 E. Requirements for Fuel-Burning Equipment with a ***Rated Heat Input Capacity of 100 Million Btu Per Hour or Less.*** A person who owns or operates fuel-burning equipment with a rated heat input capacity of 100 Million Btu per hour or less shall:

(1) Submit to the Department an identification of each affected installation, the rated heat input

capacity of each installation, and the type of fuel burned in each;

(2) Perform a combustion analysis for each installation at least once each year and optimize combustion based on the analysis;

(3) Maintain the results of the combustion analysis at the site for at least 2 years and make this data available to the Department and the EPA upon request;

(4) Once every 3 years, require each operator of the installation to attend operator training programs on combustion optimization that are sponsored by the Department, the EPA, or equipment vendors; and

(5) Prepare and maintain a record of training program attendance for each operator at the site, and make these records available to the Department upon request.

Note: Combustion analysis shall be conducted using both fuels (Natural gas/No. 2 fuel oil) that are allowed to be fired in the unit. **[Authority: COMAR 26.11.03.06C]**

Compliance Demonstration (NO_X)

The Permittee shall perform a combustion analysis for each installation at least once each year and optimize combustion based on the analysis.
[Authority: COMAR 26.11.09.08(E) (2)]

Record Keeping Requirements
The Permittee shall:
(1) Maintain the results of the combustion analysis at the site and make this data available to the Department and the EPA upon request; and

(2) Prepare and maintain a record of training program attendance for each operator at the site, and make these records available to the Department upon request; and

(3) Maintain records of the capacity factor for the equipment in writing and make these records available to the Department upon request.
[Authority: COMAR 26.11.09.08(E)]

Reporting Requirements
The Permittee shall:
(1) Submit to the Department an identification of each affected installation, the rated heat input capacity of each installation, and the type of fuel burned in each;

(2) Maintain the results of the combustion analysis for at least 5 years and shall make this data available to the Department and the EPA upon request;

(3) Prepare and maintain a record of training program attendance for each operator at the site, and make these records available to the Department upon request.

(4) Maintain annual fuel use records on site for not less than 3 years, and make these records available to the Department upon request.
[Authority: COMAR 26.11.09.08(E) & COMAR 26.11.09.08K(3)]

Operational Limitations:

{Note: Applies to the NES NSPS boilers, except for FBE-PNP-E1, FBE-901-E1, and FBE-901-E2 which may fire No.2 fuel oil as a stand-by back-up fuel}

The Permittee shall combust only natural gas as the primary fuel, unless the Permittee applies for and receives an approval or permit from the Department to burn alternate fuels.
[Authority: COMAR 26.11.02.09A & PTC 017-0040-5-0021 thru. -5-0033]

Compliance Demonstration (OL)

The Permittee shall monitor and log the monthly amounts and type of fuel used for each boiler.
[Authority: COMAR 26.11.03.06 C]

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4. Emissions Unit Number(s): MISCELLANEOUS SMALL BOILERS

FBE 3157-E1- ESTL Complex - Reg. No. 5-0011: 1 MM BTU/hr. Fulton propane-fired boiler

{NES Boilers}
FBE-SNP-1-E1: (5-0031) - 8.5 MM Btu (200-hp) Hurst Power Flame NG fired boiler
FBE-SNP-1-E2: (5-0031) - 8.5 MM Btu (200-hp) Hurst Power Flame NG fired boiler
FBE-SNP-3-E1: (5-0032) - 8.5 MM Btu (200-hp) Hurst Power Flame NG fired boiler
FBE-SNP-3-E2: (5-0032) - 8.5 MM Btu (200-hp) Hurst Power Flame NG fired boiler
FBE-SNP-8-E1: (5-0033) - 5.3 MM Btu (125-hp) Hurst Power Flame NG fired boiler
FBE-SNP-8-E2: (5-0033) - 5.3 MM Btu (125-hp) Hurst Power Flame NG fired boiler

Note: Because these boilers fire only N.G they ***are exempt from the Area Source Boiler MACT*** Part 63 Subpart JJJJJJ **[Ref. 40 CFR §63.11237]**

APPLICABLE STANDARDS and LIMITATIONS

Control of Visible Emissions

COMAR 26.11.09.05 A. – Visible Emissions.

A. Fuel Burning Equipment.

"(1) Areas I, II, V, and VI. In Areas I, II, V, and VI, a person may not cause or permit the discharge of emissions from any fuel burning equipment, other than water in an uncombined form, which is greater than 20 percent opacity."

"(3) Exceptions. Section A(1) and (2) of this regulation do not apply to emissions during load changing, soot blowing, startup, or adjustments or occasional cleaning of control equipment if:

(a) The visible emissions are not greater than 40 percent opacity; and

(b) The visible emissions do not occur for more than 6 consecutive minutes in any sixty minute period."

Compliance Demonstration (VE)

The Permittee shall keep the equipment in good working order and properly maintained as to assure compliance with the visible emissions requirements. The Permittee shall maintain records of the results of visual emissions observations for a period of at least 5 years. The Permittee shall report incidents of visible emissions in accordance with Permit Condition 4, Section III, "Report of Excess

Emissions and Deviations." **[Authority: COMAR 26.11.03.06C]**

Control of Sulfur Oxides

COMAR 26.11.09.07A(2) – Control of Sulfur Oxides from fuel burning equipment. "A person may not burn, sell, or make available for sale any fuel with a sulfur content by weight in excess of or which otherwise exceeds the following limitations: In Areas III and IV: **(b) Distillate fuel oil, 0.3 percent.**"

Compliance Demonstration (Sulfur)

The Permittee shall obtain fuel supplier certifications stating that the fuel oil is in compliance with the sulfur content in the fuel limitation. The Permittee shall retain fuel supplier certifications stating that the fuel oil is in compliance with the sulfur content in the fuel limitation for at least 5 years. The Permittee shall submit fuel certification reports if requested by the Department

[**Authority: COMAR 26.11.03.06C]**

Control of Nitrogen Oxides

COMAR 26.11.09.08B(5) - Operator Training.

(a) For purposes of this regulation, the equipment operator to be trained may be the person who maintains the equipment and makes the necessary adjustments for efficient operation.

(b) The operator training course sponsored by the Department shall include an in-house training course that is approved by the Department.

COMAR 26.11.09.08 E. Requirements for Fuel-Burning Equipment with a ***Rated Heat Input Capacity of 100 Million Btu Per Hour or Less.*** A person who owns or operates fuel-burning equipment with a rated heat input capacity of 100 Million Btu per hour or less shall:

(1) Submit to the Department an identification of each affected installation, the rated heat input capacity of each installation, and the type of fuel burned in each;

(2) Perform a combustion analysis for each installation at least once each year and optimize combustion based on the analysis;

(3) Maintain the results of the combustion analysis at the site for at least 2 years and make this data available to the Department and the EPA upon request;

(4) Once every 3 years, require each operator of the installation to attend operator training programs on combustion optimization that are sponsored by the Department, the EPA, or equipment vendors; and

(5) Prepare and maintain a record of training program attendance for each operator at the site, and make these records available to the Department upon request.

Compliance Demonstration (NO_X)

The Permittee shall perform a combustion analysis for each installation at least once each year and optimize combustion based on the analysis.
[Authority: COMAR 26.11.09.08(E)(2)]

The Permittee shall:

(1) Maintain the results of the combustion analysis at the site and make this data available to the Department and the EPA upon request; and

(2) Prepare and maintain a record of training program attendance for each operator at the site, and make these records available to the Department upon request; and

(3) Maintain records of the capacity factor for the equipment in writing and make these records available to the Department upon request.

[Authority: COMAR 26.11.09.08(E)]

The Permittee shall perform the combustion analysis using each fuel (Natural gas and/or Propane) that is allowed to be fired in the boilers.

[Authority: COMAR 26.11.03.06C]

The Permittee shall:

(1) Submit to the Department an identification of each affected installation, the rated heat input capacity of each installation, and the type of fuel burned in each;

(2) Maintain the results of the combustion analysis for at least 5 years and shall make this data available to the Department and the EPA upon request;

(3) Prepare and maintain a record of training program attendance for each operator at the site, and make these records available to the Department upon request.

(4) Maintain annual fuel use records on site for not less than 3 years, and make these records available to the Department upon request.

[Authority: COMAR 26.11.09.08(E) & COMAR 26.11.09.08K(3)]

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5. Emission Units – Emergency Diesel Generators (EDGs)

[NES]

EG1920A-E1 & EG 1920B-E1: (Reg. No. 9-0166)**:** Two-(2) 2,500-kW (3674-Bhp) MTU Emergency Diesel Generators {NSPS IIII}

EG-PNP-1-E1 (Reg. No. 9-0167) 1,000-kW (1495-BhP) Cummins {NSPS IIII}EDG

EG3123-E1: (Reg. No. 9-0168) 600-kW (804-bhp) Cummins {NSPS IIII}EDG

EGSB1-E1: (Reg. No. 9-0169) 450-kW (603-Bhp) Cummins{NSPS IIII} EDG

[Ref: Nodal Energy System (NES) EDG PTC No. 017-0040-9-0166 through -9-0169]

FBE-901-E1 (Reg. 9-0143) **–** 500-hp/410-kW Caterpillar NSPS EDG

Note: The Permittee shall satisfy the requirements of 40 CFR, Part 63, Subpart ZZZZ by meeting the requirements of 40 CFR, Part 60, Subpart IIII for the NSPS emergency generators. No further requirements apply to the emergency generator under 40 CFR, Part 63, Subpart ZZZZ. [Reference: 40 CFR §63.6590(c)(1)]

FBE-900-E1 (Reg. 9-0122) **–** 750 kW Detroit Diesel EDG- ***Non-NSPS Unit(*)***

(*)Note: NSPS Subpart IIII requirements listed below do not apply to this unit; the RICE MACT Requirements for FBE-900-E1 are included under Table IV-5a.

APPLICABLE STANDARDS and LIMITATIONS

A. Control of Visible Emissions:

COMAR 26.11.09.05(E): Stationary Internal Combustion Engine Powered Equipment:
"(2) Emissions During Idle Mode. A person may not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity."

"(3) Emissions During Operating Mode. A person may not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity."

"(4) Exceptions.
"(a) Section E(2) does not apply for a period of 2 consecutive minutes after a period of idling of 15 consecutive minutes for the purpose of clearing the exhaust system.

"(b) Section E(2) does not apply to emissions resulting directly from cold engine start-up and warm-up for the following maximum periods:
(i) Engines that are idled continuously when not in service: 30 minutes;
(ii) All other engines: 15 minutes."

(c) Section E(2) and (3) does not apply while maintenance, repair, or testing is being performed by qualified

Compliance Demonstration
The Permittee shall properly operate and maintain the generators in accordance with the engines manufacturer's recommendations and in a manner to assure compliance with the visible emissions standards. The Permittee shall maintain an operations manual and a preventive maintenance plan, and a log of maintenance performed that relates to combustion performance.
[Authority: Periodic Monitoring - COMAR 26.11.03.06C]

B. Control of Sulfur Oxides:

40 CFR Part 60 Subpart IIII NSPS for Stationary Compression Ignition Internal Combustion Engines:

(1) Fuel Requirements for Owners and Operators
Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder must comply with the diesel fuel standards of §60.4207(b) which limit the ***maximum sulfur content of the fuel to 15 ppm*** [Ref. § 80.510 (b)(1)(i)];

COMAR 26.11.09.07A. Sulfur Content Limitations for Fuel.
"A person may not burn, sell, or make available for sale any fuel with a sulfur content by weight in excess of or which otherwise exceeds the following limitations: (1) In Areas I, II, V, and VI: (c) Distillate fuel oils, 0.3 percent**."**

Note: Since the fuel sulfur limitation under 40 CFR Part 60, Subpart IIII is more stringent than the COMAR limitation the Permittee must comply must comply with the fuel standards of §60.4207 which limit the maximum sulfur content of the fuel to 15 ppm.

Compliance Demonstration:
The Permittee shall obtain a certification from the fuel supplier indicating that the oil complies with the limitation on the sulfur content of fuel oil. The Permittee shall retain fuel supplier certifications of sulfur content in fuel. The Permittee shall report fuel supplier certifications to the Department upon request.
[Authority: Periodic Monitoring - COMAR 26.11.03.06C]

For any NSPS emergency diesel engine the Permittee shall for each fuel delivery obtain from the fuel supplier a fuel supplier certification consisting of the name of the oil supplier, the date of delivery, the amount of fuel delivered, and a statement from the fuel supplier that the diesel fuel oil complies with the specifications of 40 CFR §80.510. The Permittee shall maintain the required records on site for at least five (5) years
[Authority: 40 CFR Part 60, Subpart IIII & PTC No. 017-0040-9-0166 through -9-0169]

The Permittee shall maintain records of the quantity and types of fuel burned. The Permittee shall retain fuel supplier certifications stating that the fuel oil is in compliance with this regulation
[**Authority: COMAR 26.11.02.19C(1)(c)] & COMAR 26.11.09.07C].**

C. Control of Nitrogen Oxides:

COMAR 26.11.09.08(A)(1) - *NO_X RACT***:** This regulation applies to a person who owns or operates an installation that causes emissions of NO_x and is located at premises that have total potential to emit:
(b) 50 tons or more per year of NO_x and is located in Calvert, Charles, Frederick, Montgomery, or Price George's counties…

COMAR 26.11.09.08G. Requirements for Fuel-Burning Equipment with a Capacity Factor of 15 Percent or Less, and Combustion Turbines with a Capacity Factor Greater than 15 Percent.

"(1) A person who owns or operates fuel-burning equipment with a capacity factor (as defined in 40 CFR Part 72.2) of 15 percent or less shall:

(a) Provide certification of the capacity factor of the equipment to the Department in writing;

(b) For fuel-burning equipment that operates more than 500 hours during a calendar year, perform a combustion analysis and optimize combustion at least once annually;

(c) Maintain the results of the combustion analysis at the site for at least 2 years and make these results available to the Department and the EPA upon request;

(d) Require each operator of an installation, except combustion turbines, to attend operator training programs at least once every 3 years, on combustion optimization that are sponsored by the Department, the EPA, or equipment vendors; and

(e) Maintain a record of training program attendance for each operator at the site, and make these records available to the Department upon request."

COMAR 26.11.09.08B(5) - Operator Training.
"(a) for the purpose of COMAR 26.11.09.08, the equipment operator to be trained may be the person who maintains the equipment and makes the necessary adjustments for efficient operation; and

(b) that the operator training course sponsored by the Department shall include an in-house training course that is approved by the Department."

***Compliance Demonstration*:**
The Permittee shall perform a combustion analysis for each unit at least once each year and optimize combustion based on the analysis. Optimization shall include inspection and adjustment of engine timing, fuel injection and engine operation specifications. Engine inspections, tuning, and adjustments shall be performed by a qualified mechanic and in accordance with the engines manufacturer's recommendations. Once every three years, the Permittee shall attend EPA approved operator training programs, and to prepare and maintain a record of the training program attendance for each operator at the site and make available to the Department and the EPA upon request.

D. Operational Limitations (OL)**:**

(1) Except as otherwise provided in this part, the emergency diesel generator shall be operated in accordance with specifications included in the application and any operating procedures recommended by equipment vendors unless the Permittee obtains from the Department written authorization for alternative operating procedures.

(2) The Permittee must operate and maintain an NSPS emergency diesel generator and control devices according to the manufacturer's written instructions or according to procedures developed by the owner or operator that are approved by the manufacturer. Additionally the Permittee may change only those settings that are permitted by the manufacturer. The Permittee must also meet the requirements of 40 CFR part 89, part 1039 for model year 2011 or later, part 94 and/or part 1068, as they may apply to an owner or operator [Ref: §60.4211(a)].

(3) Beginning October 1, 2010, owners and operators (the Permittee) of a stationary source CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must purchase diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel. [Ref: §60.4207(b)].

(4) In accordance with 40 CFR §60.4211(f), as owner/operator of an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs (f)(1) through (3) of this section. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation and maintenance and testing is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (3) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

(f)(1) There is no time limit on the use of emergency stationary ICE in emergency situations.

(f)(2)(i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

[Authority: 40 CFR Part 60, Subpart IIII & PTC No. 017-0040-9-0166 through -9-0169].

Compliance Demonstration:

(1) The Permittee shall the following maintain records on site for at least five (5) years and they shall be made available to the Department upon request:

(a) The operating hours for each generator,

(b) Monthly records of fuel use,

(c) Reason for generator operation (i.e., maintenance or operational testing, power outage, etc.), and

(d) A copy of the generator's and operations and maintenance manual, and records of maintenance and repair performed.

[Authority: COMAR 26.11.09.08(E)(1) & COMAR 26.11.09.08K(3) & PTC No. 017-0040-9-0166 through -9-0169]

(2) The Permittee shall maintain on site for the life of the source the following records for the emergency diesel engine(s):

(a) Documentation of the manufacture date of the diesel engine, if manufactured prior to April 1, 2006 and the manufacturer model year of the diesel engine;

(b) The installation date of each emergency diesel engine; and

(c) The certifications of compliance or manufacturer engine test data required by 40 CFR §60.4211 and §60.4214(b).

(d) For any NSPS emergency diesel engine the Permittee shall for each fuel delivery obtain from the fuel supplier a fuel supplier certification consisting of the name of the oil supplier, the date of delivery, the amount of fuel delivered, and a statement from the fuel supplier that the diesel fuel oil complies with the specifications of 40 CFR §80.510. The Permittee shall maintain the required records on site for at least five (5) years.

[Authority: 40 CFR Part 60, Subpart IIII & PTC No. 017-0040-9-0166 through -9-0169]

5a. Emissions Unit Number(s); Premises-wide "Area Source" RICE MACT
FBE-900-E1 (Reg. 9-0122) **–** 750 kW Detroit Diesel EDG**-** ***Non-NSPS Unit***

APPLICABLE STANDARDS and LIMITATIONS
National Emissions Standards for Hazardous Air Pollutants (NESHAP) promulgated **under 40 CFR 63**, **Subparts** A and **ZZZZ for Reciprocating Internal Combustion Engines**, including but not limited to the following:

§63.6590 What parts of my plant does this subpart cover?
This subpart applies to each affected source.
(a) Affected source. An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.
(1) Existing stationary RICE. (iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

§63.6595 - When do I have to comply with this subpart?
(a) *Affected sources.* (1)" ….. If you have … **an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than May 3, 2013.** …..".

§63.6603 - What emission limitations and operating limitations must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?
Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.
(a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 1b and Table 2b to this subpart that apply to you.

Table 2d to Subpart ZZZZ of Part 63—Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions
As stated in §§63.6603 and 63.6640, you must comply with the following requirements for existing stationary RICE located at *area sources* of HAP emissions:

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
4. Emergency stationary CI RICE and black start stationary CI RICE.[2]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[1]	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and	

	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	

[1]Sources have the option to utilize an oil analysis program as described in §63.6625(i) in order to extend the specified oil change requirement in Table 2d of this subpart.

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

§63.6605 - What are my general requirements for complying with this subpart?
"(a) You must be in compliance with the emission limitations and operating limitations in this subpart that apply to you at all times.
(b) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source."

Compliance Demonstration:
§63.6625 - What are my monitoring, installation, collection, operation, and maintenance requirements?
"(e) If you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:
(3) An **existing emergency** or black start stationary RICE located at an area source of HAP emissions."

"(f) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or **an existing emergency stationary RICE located at an area source of HAP emissions,** you must install a non-resettable hour meter if one is not already installed."

"(h) If you operate a new, reconstructed, or **existing stationary engine**, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply.
(i) If you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to this subpart or in items 1 or 4 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in

Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine."

§63.6640 - How do I demonstrate continuous compliance with the emission limitations and operating limitations?

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

(b) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

"(f) *Requirements for emergency stationary RICE.* (1) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that was installed on or after June 12, 2006, or **an existing emergency stationary RICE located at an area source of HAP emissions**, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1)(i) through (iii) of this section. Any operation other than emergency operation, maintenance and testing is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1)(i) through (iii) of this section, the engine will not be considered an emergency engine under this subpart and will need to meet all requirements for non-emergency engines.

(i) There is no time limit on the use of emergency stationary RICE in emergency situations.

(ii) You may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The 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 year.

Note: Engines that operate in non-emergency situations are considered "load sharing units" under COMAR 26.11.36 Distributive Generation, and must satisfy the requirements of COMAR 26.11.36.03.

§63.6655 - What records must I keep?
"(e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE;
(2) An existing stationary emergency RICE.
(3) An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart."

"(f) If you own or operate any of the stationary RICE in paragraphs (f)(1) or (2) of this section, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.
(2) An existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines."

"Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable." **[**Footnote 2 of Table 2d]

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6. Emission Unit (s): Tank # 510-E-3 - (12- K gal AST) for ***storage of gasoline***. The tank is equipped with Stage I vapor recovery and piped to gasoline dispensing units to refuel vehicles.

APPLICABLE STANDARDS and LIMITATIONS

A. Control of Volatile Organic Compounds (VOCs):

(1) COMAR 26.11.13.04 – Loading Operations.

"C Small Storage Tanks.

(1) Applicability. This section applies to a person who owns or operates:
(a) A gasoline storage tank that has a tank capacity greater than 2,000 gallons but less than 40,000 gallons; or
(b) A gasoline tank truck used to transfer gasoline into a storage tank that is listed in Sec. C(1)(a) of this regulation.

(2) Stage I Vapor Recovery. An owner or operator of a gasoline tank truck or an owner or operator of a stationary storage tank subject to this regulation may not cause or permit gasoline to be loaded into a stationary tank unless the loading system is equipped with a vapor balance line that is properly installed, maintained and used."

"D. General Standards.
A person may not cause or permit a gasoline or VOC having a TVP of 1.5 psia (10.3 kilonewtons/square meter) or greater to be loaded into any truck, railroad tank car, or other contrivance unless the:
(1) Loading connections on the vapor lines are equipped with fittings that have no leaks and that automatically and immediately close upon

disconnection to prevent release of gasoline or VOC from these fittings; and
(2) Equipment is maintained and operated in a manner to prevent avoidable liquid leaks during loading and unloading operations."

(2) COMAR 26.11.24.02 - Stage II Vapor Recovery at Gasoline Dispensing Facilities - Applicability, Exemptions, and Effective Date.

"A. This chapter applies in Baltimore City and Anne Arundel , Baltimore, Calvert, Carroll, Cecil, ***Charles***, Frederick, Harford, Howard, Montgomery, and Prince George's Counties."

"B. A gasoline dispensing facility exempted under Sec. C of this regulation is subject only to the record-keeping and reporting requirement of Regulation .07D of this chapter."

"C. The provisions of this chapter do not apply to:

(1) The owner or operator of an existing gasoline dispensing facility with a monthly gasoline throughput of less than 10,000 gallons;

(2) The owner or operator of any new gasoline dispensing facility that has a total gasoline storage tank capacity of less than 2,000 gallon; or

(3) An existing independent small business gasoline marketer whose monthly gasoline throughput during calendar years 1990 and 1991 was less than 50,000 gallons."

(3) **COMAR 26.11.24.03 – General Requirements**

(E) "An operator may not use or allow the use of defective equipment associated with the transfer of gasoline from a stationary gasoline storage tank to motor vehicle fuel tanks."

(F) "The operator may not install or use a replacement part in an approved system unless that part has been certified by CARB or approved by the Department for the approved system."

(G) "The owner shall ensure that all underground piping is installed in accordance with the Department's requirements related to underground storage tanks, which are set forth in COMAR 26.10.03."

(H) "Gasoline storage tanks serving a gasoline dispensing facility that is subject to this chapter shall be equipped with a properly designed and installed pressure and vacuum valve with minimum pressure and vacuum settings as specified in the CARB Executive Order for that system."

(4) COMAR 26.11.24.03-1 Decommissioning of the Stage II Vapor Recovery System.

"A. Notwithstanding Regulation .03A of this chapter, an owner or operator of a gasoline dispensing facility or system of gasoline dispensing facilities that installed approved Stage II vapor recovery systems:

(1) May decommission Stage II vapor recovery systems in accordance with §B of this regulation after October1, 2016; or
(2) May decommission Stage II vapor recovery systems in accordance with §B of this regulation where a gasoline dispensing facility undergoes a major modification after the effective date of this regulation."

"B. An owner or operator of a gasoline dispensing facility that decommissions a Stage II vapor recovery system shall perform the decommissioning of the Stage II vapor recovery system in accordance with the "Recommended Practices for Installation and Testing of Vapor Recovery Systems at Vehicle Refueling Sites" of the Petroleum Equipment Institute, Section 14, 2009 and COMAR 26.10.10."

Compliance Demonstration
{Stage I Monitoring}
Once a month during a delivery, the Permittee shall visually inspect all components on the premises for leaks and retain a record of these leak inspections. If leaks are detected, corrective action shall be as follows:

(1) Take immediate action to repair all observed VOC leaks that can be repaired with 48 hours; and
(2) Repair all other leaking components not later than 15 days after the leak is discovered. If a replacement part is needed, the part shall be ordered within 3 days after discovery of the leak, and the leak shall be repaired within 48 hours after receiving the part.

The Permittee shall maintain records of all inspections and submit records to the Department upon request **[Authority: COMAR 26.11.03.06C]**

{Stage II Testing}
COMAR 26.11.24.04(A) - Testing Requirements for Stage II Stations - Except as provided in §§E and F of this regulation, an *owner or operator of a gasoline dispensing facility* subject to this chapter which operates Stage II Vapor Recovery systems shall perform the following CARB approved tests.

(1) A leak test in accordance with the Vapor Recovery Test Procedure TP-201.3 referenced in Regulation .01-1B(1) of this chapter;
(2) An air to liquid volume ratio test in accordance with the Vapor Recovery Test Procedure TP-201.5 referenced in Regulation .01-1B(2) of this chapter.
(3) A dynamic pressure performance test in accordance with the Vapor Recovery Test Procedure TP-201.4 referenced in Regulation .01-1B(3) of this chapter;
(4) A vapor return line vacuum integrity test for the Healy Model 400 ORVR System in accordance with Executive Order G-70-186, Exhibit 4 referenced in Regulation .01-1B(4) of this chapter; and
(5) A vapor return line vacuum integrity test for the Healy Model 600 System in accordance with Executive Order G-70-165 Exhibit 4 referenced in Regulation .01-1B(5) of this chapter.

(6) A leak rate and cracking pressure test in accordance with TP-201.1E referenced in Regulation .01-1B(6).
(7) A tie tank test in accordance with TP-201.3C as referenced in Regulation .01-1B(7).

COMAR 26.11.24.04A-1. Testing Requirements for Decommissioned Stations and New

Stations Installed after the effective date of this regulation that did not Install Stage II.
Except as provided in §§E and F of this regulation, an owner or operator of a gasoline dispensing facility subject to this chapter who does not operate a Stage II Vapor Recovery system shall perform the testing requirements of §A(1), (6), and (7) of this regulation
[Ref.: Maryland Register, Volume 42, Issue 18, Friday, September 4, 2015]

COMAR 26.11.24.04(B) - Testing Requirements - The leak and liquid blockage tests required in §A of this regulation shall be performed on each approved system before the gasoline dispensing facility is initially used to refuel motor vehicles, or by the applicable dates in Regulation .03 of this chapter, whichever occurs later.

COMAR 26.11.24.04(C) - Testing Requirements - Stage II Vapor Recovery System
(1) An owner of a Stage II vapor recovery system subject to this chapter shall repeat the required tests:
  (a) In accordance with the test schedule in §C(2) of this regulation; and
  (b) Upon replacement of 75 percent or more of an approved system.

(2) Test Schedule.

{Record Keeping & Reporting}
(1) The Permittee shall maintain records of all inspections and submit records to the Department upon request.
[Authority: COMAR 26.11.03.06C]

(2) COMAR 26.11.24.07. Recording keeping and Reporting Requirements.

"D. An owner or operator of a gasoline dispensing facility exempted according to Regulation .02C of this chapter shall create and maintain records on gasoline throughput and tank sizes and make the records available to the Department upon request."
[Authority: COMAR 26.11.24.07(D) & COMAR 26.11.03.06C]

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7. Emission Units: (Reg. # 6-0099 & 6-0116) - Various paint spray booths and associated equipment primarily used for aerospace or miscellaneous metal parts coating.
PAINT Nos. –588-E1, 1134-E1, 1134-E3 (misc. metal parts), 717-E10, 717-E11 (Ordnance), 1866-E3 & E4 (Ordnance), 0693-E5, 720- E1 & E2 (Ordnance), PAINT-730-E3 & E4 (BRACON Ordnance), and 1913-E4 (CAD/PAD – misc. metal parts).

APPLICABLE STANDARDS and LIMITATIONS

A. Control of Volatile Organic Compounds (VOCs)
(1) **COMAR 26.11.19.08 A.- Metal Parts and Products Coating.**
Definitions. In this regulation, the following terms have the meanings indicated:

(Note: Following listing of definitions is not complete, for complete citing, see the regulation @ http://www.dsd.state.md.us/COMAR/)

(1) "Adhesion promoter" means a thin coating applied to a substrate to:

(a) Promote wetting; and

(b) Form a chemical bond with the subsequently applied material.

(2) Air-dried coating means a coating that is cured at a temperature below 90°C (194°F).

(3) Baked coating means a coating that is cured at a temperature at or above 90°C (194°F).

(4) Camouflage coating means a coating used, principally by the military, to conceal equipment from detection.

(9) Extreme performance coating means a coating used on a metal surface where the coated surface is, in its intended use, subject to the following:

(a) Chronic exposure to corrosive, caustic or acidic agents, chemicals, chemical fumes, chemical mixtures or solution;

(b) Repeated exposure to temperatures in excess of 250°F;

(c) A temperature of at least 400°F during normal use; or

(d) Repeated heavy abrasion, including mechanical wear and repeated scrubbing with industrial grade solvents, cleansers or scouring agents.

(10) Heat-resistant coating means a coating that must withstand a temperature of at least 400°F during normal use.

(11) High performance architectural coating means a coating used to protect architectural subsections and which meets the requirements of the American Architectural Manufacturer′s Association publication number AAMA 2604-05 (Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels) or 2605-05 (Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels).

(12) High temperature coating means a coating that is certified to withstand a temperature of 1000°F for 24 hours.

(15) Metal Parts and Products Coating.

(a) "Metal parts and products coating" means coating the surface of any metal part or product which will be assembled with other metal, wood, fabric, plastic, or glass parts.

(b) Metal parts and products coating does not include metal furniture coatings.

(16) Metallic coating means a coating which contains more than 5 grams of metal particles per liter of coating, as applied.

(17) Military specification coating means a coating which has a formulation approved by a United States Military Agency for use on military equipment.

(24) Repair coating means a coating used to re-coat portions of a previously coated product which has sustained mechanical damage to the coating following normal coating operations.

(29) Stencil coating means an ink or a coating which is rolled or brushed onto a template or stamp in order to add identifying letters and/or numbers to metal parts and products.

(30) Touch-up coating means a coating used to cover minor coating imperfections appearing after the main coating operation.

C. Applicability and Exemptions.

(1) This regulation applies to a person who owns or operates:
(b) A metal parts and products coating operation at a premises where the total VOC emissions from all metal parts and products surface coating operations (including emissions from related cleaning activities), exceed 15 pounds (6.8 kilograms) per day.

(2) This regulation does not apply to:
(g) Cold and Vapor Degreasing subject to COMAR 26.11.19.09;
(j) Aerospace coating subject to COMAR 26.11.19.13-1;

(3) This regulation does not apply to repair or touch-up coatings when applied using a hand-held, pressurized, non-refillable container which expels coatings from the container in a finely divided spray when a valve on the container is depressed.

D. Emission Standards.
(1) A person subject to this regulation may not exceed the applicable VOC emission standards (expressed in terms of mass of VOC per volume of coating excluding water and exempt compounds, as applied) of the following table when applying a metal furniture coating:

Coating Type	Baked		Air-Dried	
	Lbs/gal	Kg/l	Lbs/gal	Kg/l
General, one-component	2.3	0.275	2.3	0.275
General, multi-component	2.3	0.275	2.8	0.340
Extreme performance	3.0	0.360	3.5	0.420
Metallic	3.5	0.420	3.5	0.420
Pretreatment	3.5	0.420	3.5	0.420
Solar absorbent	3.0	0.360	3.5	0.420
Extreme high gloss	3.0	0.360	2.8	0.340

(2) A person subject to this regulation may not exceed the applicable VOC emission standards (expressed in terms of mass of VOC per volume of coating excluding water and exempt compounds, as applied) of the following table when applying a metal parts and products coating:

Coating Type	Baked		Air-Dried	
	Lbs/gal	Kg/l	Lbs/gal	Kg/l
General, one-component	2.3	0.275	2.8	0.340
General, multi-component	2.3	0.275	2.8	0.340
Adhesion promoter	4.0	0.479	4.0	0.479
Prefabricated architectural one component and multi-component	2.3	0.280	3.5	0.420
Military specification	2.3	0.280	2.8	0.340
Extreme high-gloss; extreme performance; heat-resistant; high performance architectural; repair coating; solar absorbent; or touch up coating	3.0	0.360	3.5	0.420
Camouflage, electric-insulating varnish; etching filler; high temperature; metallic; mold-seal; pan backing; pretreatment; silicone release and vacuum-metalizing	3.5	0.420	2.8	0.420

E. Application Methods.

(1) Except as provided in §E(2) of this regulation, a person subject to the requirements of this regulation shall use the following application methods:

(a) Electrostatic application;

(b) HVLP spray;

(c) Flow coat;

(d) Roller coat;

(e) Dip coat including electro-deposition;

(f) Brush coat; or

(g) A coating application method capable of achieving a transfer efficiency equivalent to or better than the efficiency achieved by HVLP spraying.

(2) The application requirements of §E(1) of this regulation do not apply to the following coating operations:

(a) Repair coatings;

(b) Touch-up coatings;

(c) Coatings applied to create a textured finish; or

(d) Robotic application of heavy-duty engine coatings.

(2) **COMAR 26.11.19.13-1 - Aerospace Coating Operations.**

"A. Applicability and Exemptions.

1) This regulation applies to an aerospace coating operation at a premises where the *total actual VOC emissions from all aerospace coating operations is 20 pounds or more per day*.

2) The standards in §C(2) of this regulation do not apply to tooling and touch up and repair operations.

3) A person subject to the standards in §C(2) of this regulation may comply with those standards by using an air pollution control device (see Regulation .02B(2)(b) of this chapter).

C. General Requirements for Aerospace Coating Operations.

1) Except as provided in §C(3) of this regulation, a person who owns or operates an aerospace coating operation subject to this regulation may not cause or permit the discharge of VOC into the atmosphere unless the standards in §C(2) of this regulation are met.

2) Aerospace Coating Operation Standards.

a) Standards for Topcoats, Primers and Milling Maskants Maximum Allowable VOC in Pounds Per Gallon (Kilograms Per Liter) of Coating Applied (Minus Water):

Coating Types	Pounds/Gallon (Kilograms/Liter)
Topcoats	3.5 (0.42)
Self-priming topcoat	3.5 (0.42)
Primers	2.9 (0.35)
Chemical Milling Maskants	1.3 (0.16)

b) Standards for Specialty Coatings.

Coating	Pounds/Gallon (Kilograms/Liter)
Ablative Coating	5.0 (600)
Adhesion Promoter	7.42 (890)
Adhesive Bonding Primers: Cured at 250F or below	7.09 (850)
Adhesive Bonding Primers: Cured above 250F	8.59 (1030)
Antichafe Coating	5.50(660)
Bearing Coating	5.17 (620)
Bonding Maskant	10.26 (1,230)
Caulking and Smoothing Com pounds	7.09 (850)
Chemical Agent-Resistant Coating	4.58 (550)
Clear Coating	6.00 (720)
Commercial Exterior Aerodynamic Structure Primer	5.42 (650)
Commercial Interior Adhesive	6.34 (760)

Compatible Substrate Primer	6.50 (780)
Corrosion Prevention Compound	5.92 (710)
Critical Use and Line Sealer Maskant	8.51 (1,020)
Cryogenic Flexible Primer	5.38 (645)
Cryoprotective Coating	5.00 (600)
Cyanoacrylate Adhesive	8.51 (1,020)
Dry Lubricative Material	7.34 (880)
Electric or Radiation-Effect Coating	6.67 (800)
Electrostatic Discharge and Electromagnetic Interference (EMI) Coating	6.67 (800)
Elevated-Temperature Skydrol- Resistant Commercial Primer	6.17 (740)
Epoxy Polyamide Topcoat	5.50 (660)
Fire-Resistant (interior) Coating	6.67 (800)
Flexible Primer	5.34 (640)
Flight-Test Coatings Missile or Single Use Aircraft	3.50 (420)
Flight-Test Coatings All Other	7.0 (840)
Fuel Tank Adhesive	5.17 (620)
Fuel-Tank Coating	6.00 (720)
High-Temperature Coating	7.09 (850)
Insulation Covering	6.17 (740)
Intermediate Release Coating	6.25 (750)
Lacquer	6.9 (830)
Metallized Epoxy Coating	6.17 (740)
Mold Release	6.50 (780)
Nonstructural Adhesive	3.00 (360)
Optical Antireflective Coating	6.25 (750)
Part Marking Coating	7.09 (850)
Rain Erosion-Resistant Coating	7.09 (850)
Rocket Motor Bonding Adhesive	7.42 (890)
Rocket Motor Nozzle Coating	5.50 (660)
Rubber-Based Adhesive	7.09 (850)
Scale Inhibitor	7.34 (880)
Screen Print Ink	7.00 (840)
Sealants: Extrudable/Rollable/Brushable Sealant	2.33 (280)
Sprayable Sealant	5.0 (600)
Seal Coat Maskant	10.26 (1,230)
Silicone Insulation Material	7.09 (850)
Solid Film Lubricant	7.34 (880)
Specialized Function Coating	7.42 (890)
Structural Autoclavable Adhesive	0.50 (60)
Structural Nonautoclavable Adhesive	7.09 (850)
Temporary Protective Coating	2.67 (320)
Thermal Control Coating	6.67 (800)
Wet Fastener Installation Coating	5.63 (675)
Wing Coating	7.09 (850)

3) A person subject to this regulation may exceed the specialty coating standards in §C(2)(b) of this regulation if the total VOC emissions from all specialty coatings that exceed the standard in §C(2)(b) of this regulation do not exceed 20 pounds on any day.

4) A person who owns or operates an aerospace coating operation subject to this regulation shall comply with the primer and topcoat applications operations, chemical milling maskant operations, and the test methods and coating averaging procedures specified in 40 Code of Federal Regulations (CFR) §§63.745(a)—(e), 63.747(a)—(e), and 63.750(e)—(h), (i), (o), and (p), which are incorporated by reference.

5) Cleanup Requirements. A person who owns or operates an aerospace coating operation shall:

(a) Store all waste materials containing VOC, including cloth or paper, in closed containers;

(b) Maintain lids on surface preparation and cleanup materials when not in use; and

(c) Use enclosed containers or VOC recycling equipment to clean spray gun equipment.

(3) <u>40 CFR Part 63 – Subpart GG - National Emission Standards for Aerospace Manufacturing and Rework Facilities:</u>

63.741 ***Applicability and designation of affected sources.***

(a) This subpart applies to facilities that are engaged, either in part or in whole, in the manufacture or rework of commercial, civil, or military aerospace vehicles or components and that are major sources as defined in §63.2.

(f) This subpart does not contain control requirements for use of specialty coatings, adhesives, adhesive bonding primers, or sealants at aerospace facilities. It also does not regulate research and development, quality control, and laboratory testing activities, chemical milling, metal finishing, electrodeposition (except for electrodeposition of paints), composites processing (except for cleaning and coating of composite parts or components that become part of an aerospace vehicle or component as well as composite tooling that comes in contact with such composite parts or components prior to cure), electronic parts and assemblies (except for cleaning and top coating of completed assemblies), manufacture of aircraft transparencies, and wastewater operations at aerospace facilities. These requirements do not apply to the rework of aircraft or aircraft components if the holder of the Federal Aviation Administration (FAA) design approval, or the holder's licensee, is not actively manufacturing the aircraft or aircraft components. These requirements also do not apply to parts and assemblies not critical to the vehicle's structural integrity or flight performance. The requirements of this subpart also do not apply to primers, topcoats, chemical milling maskants, strippers, and cleaning solvents containing HAP and VOC at concentrations less than 0.1 percent for carcinogens or 1.0 percent for noncarcinogens, as determined from manufacturer's representations. Additional specific exemptions from regulatory coverage are set forth in paragraphs (e), (g), (h), (i) and (j) of this section

and §§63.742, 63.744(a)(1), (b), (e), 63.745(a), (f)(3), (g)(4), 63.746(a), (b)(5), 63.747(c)(3), and 63.749(d).

(g) The requirements for primers, topcoats, and chemical milling maskants in § 63.745 and § 63.747 do not apply to the use of low-volume coatings in these categories for which the annual total of each separate formulation used at a facility does not exceed 189 l (50 gal), and the combined annual total of all such primers, topcoats, and chemical milling maskants used at a facility does not exceed 757 l (200 gal). Primers and topcoats exempted under paragraph (f) of this section and under § 63.745(f)(3) and (g)(4) are not included in the 50 and 200 gal limits. Chemical milling maskants exempted under § 63.747(c)(3) are also not included in these limits.

§ 63.745 ***Standards: Primer and topcoat application operations*****.**

(a) Each owner or operator of a new or existing primer or topcoat application operation subject to this subpart shall comply with the requirements specified in paragraph (c) of this section for those coatings that are uncontrolled (no control device is used to reduce organic HAP emissions from the operation), and in paragraph (d) of this section for those coatings that are controlled (organic HAP emissions from the operation are reduced by the use of a control device). Aerospace equipment that is no longer operational, intended for public display, and not easily capable of being moved is exempt from the requirements of this section.

(b) Each owner or operator shall conduct the handling and transfer of primers and topcoats to or from containers, tanks, vats, vessels, and piping systems in such a manner that minimizes spills.

(c) *Uncontrolled coatings*—organic HAP and VOC content levels. Each owner or operator shall comply with the organic HAP and VOC content limits specified in paragraphs (c)(1) through (c)(4) of this section for those coatings that are uncontrolled.

(1) Organic HAP emissions from primers shall be limited to an organic HAP content level of no more than*: 540 g/L (4.5 lb/gal) of primer (less water),* as applied, for general aviation rework facilities;

(2) VOC emissions from primers shall be limited to a VOC content level of no more than: 540 g/L (4.5 lb/gal) of primer (less water and exempt solvents), as applied, for general aviation rework facilities;

(3) Organic HAP emissions from topcoats shall be limited to an organic HAP content level of no more than: 420 g/L (3.5 lb/gal) of coating (less water) as applied or 540 g/L (4.5 lb/gal) of coating (less water) as applied for general aviation rework facilities. Organic HAP emissions from self-priming topcoats shall be limited to an organic HAP content level of no more than: 420 g/L (3.5 lb/gal) of self-priming topcoat (less water) as applied or 540 g/L (4.5 lb/gal) of self-priming topcoat (less water) as applied for general aviation rework facilities.

(4) VOC emissions from topcoats shall be limited to a VOC content level of no more than: 420 g/L (3.5 lb/gal) of coating (less water and exempt solvents) as applied or 540 g/L (4.5 lb/gal) of coating (less water and exempt solvents) as applied for general aviation rework facilities. VOC emissions from self-priming topcoats shall be limited to a VOC content level of no more than: 420 g/L (3.5 lb/gal) of self-priming topcoat (less water and exempt solvents) as applied or 540 g/L (4.5 lb/gal) of self-priming topcoat (less water) as applied for general aviation rework facilities.

(d) *Controlled coatings* - control system requirements. Each control system shall reduce the operation's organic HAP and VOC emissions to the atmosphere by 81% or greater, taking into account capture and destruction or removal efficiencies, as determined using the procedures in §63.750(g) when a carbon adsorber is used and in §63.750(h) when a control device other than a carbon adsorber is used.

(e) *Compliance methods*. Compliance with the organic HAP and VOC content limits specified in paragraphs (c)(1) through (c)(4) of this section shall be accomplished by using the methods specified in paragraphs (e)(1) and (e)(2) of this section either by themselves or in conjunction with one another.

(1) Use primers and topcoats (including self-priming topcoats) with HAP and VOC content levels equal to or less than the limits specified in paragraphs (c)(1) through (c)(4) of this section; or

(2) Use the averaging provisions described in §63.743(d).

(f) *Application equipment*. Except as provided in paragraph (f)(3) of this section, each owner or operator of a new or existing primer or topcoat (including self-priming topcoat) application operation subject to this subpart in which any of the coatings contain organic HAP or VOC shall comply with the requirements specified in paragraphs (f)(1) and (f)(2) of this section.

(1) All primers and topcoats (including self-priming topcoats) shall be applied using one or more of the application techniques specified in paragraphs (f)(1)(i) through (f)(1)(ix) of this section.

(i) Flow/curtain coat application;

(ii) Dip coat application;

(iii) Roll coating;

(iv) Brush coating;

(v) Cotton-tipped swab application;

(vi) Electrodeposition (dip) coating;

(vii) High volume low pressure (HVLP) spraying;

(viii) Electrostatic spray application; or

(ix) Other coating application methods that achieve emission reductions equivalent to HVLP or electrostatic spray application methods, as determined according to the requirements in §63.750(i).

(2) All application devices used to apply primers or topcoats (including self-priming topcoats) shall be operated according to company procedures, local specified operating procedures, and/or the manufacturer's specifications, whichever is most stringent, at all times. Equipment modified by the facility shall maintain a transfer efficiency equivalent to HVLP and electrostatic spray application techniques.

(3) The following situations are exempt from the requirements of paragraph (f)(1) of this section:

(i) Any situation that normally requires the use of an airbrush or an extension on the spray gun to properly reach limited access spaces;

(ii) The application of coatings that contain fillers that adversely affect atomization with HVLP spray guns and that the permitting agency has determined cannot be applied by any of the application methods specified in paragraph (f)(1) of this section;

(iii) The application of coatings that normally have a dried film thickness of less than 0.0013 centimeter (0.0005 in.) and that the permitting agency has determined cannot be applied by any of the application methods specified in paragraph (f)(1) of this section;

(iv) The use of airbrush application methods for stenciling, lettering, and other identification markings;

(v) The use of hand-held spray can application methods; and

(vi) Touch-up and repair operations.

(g) *Inorganic HAP emissions*. Except as provided in paragraph (g)(4) of this section, each owner or operator of a new or existing primer or topcoat application operation subject to this subpart in which any of the coatings that are spray applied contain inorganic HAP, shall comply with the applicable requirements in paragraphs (g)(1) through (g)(3) of this section.

(1) Apply these coatings in a booth or hangar in which air flow is directed downward onto or across the part or assembly being coated and exhausted through one or more outlets.

(2) Control the air stream from this operation as follows:

(i) For existing sources, the owner or operator must choose one of the following:

(A) Before exhausting it to the atmosphere, pass the air stream through a dry particulate filter system certified using the methods described in §63.750(o) to meet or exceed the efficiency data points in Tables 1 and 2 of this section; or

Table 1_Two-Stage Arrestor; Liquid Phase
Challenge for Existing Sources

Filtration efficiency requirement, %	Aerodynamic particle size range, mm
>90	>5.7
>50	>4.1
>10	>2.2

Table 2_Two-Stage Arrestor; Solid Phase
Challenge for Existing Sources

Filtration efficiency requirement, %	Aerodynamic particle size range, mm
>90	>8.1
>50	>5.0
>10	>2.6

(B) Before exhausting it to the atmosphere, pass the air stream through a waterwash system that shall remain in operation during all coating application operations; or

(C) Before exhausting it to the atmosphere, pass the air stream through an air pollution control system that meets or exceeds the efficiency data points in Tables 1 and 2 of this section and is approved by the permitting authority.

(ii) For new sources, either:

(A) Before exhausting it to the atmosphere, pass the air stream through a dry particulate filter system certified using the methods described in §63.750(o) to meet or exceed the efficiency data points in Tables 3 and 4 of this section; or

Table 3_Three-Stage Arrestor; Liquid Phase Challenge for New Sources

Filtration efficiency requirement, %	Aerodynamic particle size range, mm
>95	>2.0
>80	>1.0
>65	>0.42

Table 4_Three-Stage Arrestor; Solid Phase Challenge for New Sources

Filtration efficiency requirement, %	Aerodynamic particle size range, mm
>95	>2.5
>85	>1.1
>75	>0.70

(B) Before exhausting it to the atmosphere, pass the air stream through an air pollution control system that meets or exceeds the efficiency data points in Tables 3 and 4 of this section and is approved by the permitting authority.

(iii) Owners or operators of new sources that have commenced construction or reconstruction after

June 6, 1994 but prior to October 29, 1996 may comply with the following requirements in lieu of the requirements in paragraph (g)(2)(ii) of this section:

(A) Pass the air stream through either a two-stage dry particulate filter system or a waterwash system before exhausting it to the atmosphere.

(B) If the primer or topcoat contains chromium or cadmium, control shall consist of a HEPA filter system, three-stage filter system, or other control system equivalent to the three stage filter system as approved by the permitting agency.

(iv) If a dry particulate filter system is used, the following requirements shall be met:

(A) Maintain the system in good working order;

(B) Install a differential pressure gauge across the filter banks;

(C) Continuously monitor the pressure drop across the filter and read and record the pressure drop once per shift; and

(D) Take corrective action when the pressure drop exceeds or falls below the filter manufacturer's recommended limit(s).

(v) If a conventional waterwash system is used, continuously monitor the water flow rate and read and record the water flow rate once per shift. If a pumpless system is used, continuously monitor the booth parameter(s) that indicate performance of the booth per the manufacturer's recommendations to maintain the booth within the acceptable operating efficiency range and read and record the parameters once per shift.

(3) If the pressure drop across the dry particulate filter system, as recorded pursuant to §63.752(d)(1), is outside the limit(s) specified by the filter manufacturer or in locally prepared operating procedures, shut down the operation immediately and take corrective action. If the water path in the waterwash system fails the visual continuity/flow characteristics check, or the water flow rate recorded pursuant to §63.752(d)(2) exceeds the limit(s) specified by the booth manufacturer or in locally prepared operating procedures, or the booth manufacturer's or locally prepared maintenance procedures for the filter or waterwash system have not been performed as scheduled, shut down the operation immediately and take corrective action. The operation shall not be resumed until the pressure drop or water flow rate is returned within the specified limit(s).

(4) The requirements of paragraphs (g)(1) through (g)(3) of this section do not apply to the following:

(i) Touch-up of scratched surfaces or damaged paint;

(ii) Hole daubing for fasteners;

(iii) Touch-up of trimmed edges;

(iv) Coating prior to joining dissimilar metal components;

(v) Stencil operations performed by brush or air brush;

(vi) Section joining;

(vii) Touch-up of bushings and other similar parts;

(viii) Sealant detackifying;

(ix) Painting parts in an area identified in a title V permit, where the permitting authority has determined that it is not technically feasible to paint the parts in a booth; and

(x) The use of hand-held spray can application methods.

[60 FR 45956, Sept. 1, 1996, as amended at 63 FR 15019, Mar. 27, 1998; 63 FR 46533, Sept. 1, 1998; 65 FR 76945, Dec. 8, 2000]

§ 63.747 ***Standards: Chemical milling maskant application operations*****.**

(c) Uncontrolled maskants—organic HAP and VOC content levels. Each owner or operator shall comply with the organic HAP and VOC content limits specified in paragraphs (c)(1) and (c)(2) of this section for each chemical milling maskant that is uncontrolled.
(1) Organic HAP emissions from chemical milling maskants shall be limited to organic HAP content levels of no more than 622 grams of organic HAP per liter (5.2 lb/gal) of Type I chemical milling maskant (less water) as applied, and no more than 160 grams of organic HAP per liter (1.3 lb/gal) of Type II chemical milling maskant (less water) as applied.

(2) VOC emissions from chemical milling maskants shall be limited to VOC content levels of no more than 622 grams of VOC per liter (5.2 lb/gal) of Type I chemical milling maskant (less water and exempt solvents) as applied, and no more than 160 grams of VOC per liter (1.3 lb/gal) of Type II chemical milling maskant (less water and exempt solvents) as applied.

(3) The requirements of paragraphs (c)(1) and (c)(2) of this section do not apply to the following:

(i) Touch-up of scratched surfaces or damaged maskant; and

(ii) Touch-up of trimmed edges.

(d) Controlled maskants—control system requirements. Each control system shall reduce the operation's organic HAP and VOC emissions to the atmosphere by 81% or greater, taking into account capture and destruction or removal efficiencies, as determined using the procedures in §63.750(g) when a carbon adsorber is used and in §63.750(h) when a control device other than a carbon adsorber is used.

(e) Compliance methods. Compliance with the organic HAP and VOC content limits specified in paragraphs (c)(1) and (c)(2) of this section may be accomplished by using the methods specified in paragraphs (e)(1) and (e)(2) of this section either by themselves or in conjunction with one another.

(1) Use chemical milling maskants with HAP and VOC content levels equal to or less than the limits specified in paragraphs (c)(1) and (c)(2) of this section.

(2) Use the averaging provisions described in §63.743(d).
[60 FR 45956, Sept. 1, 1996, as amended at 63 FR 15021, Mar. 27, 1998]
[Authority: 40 CFR Part 63 – Subpart GG]

B. Operational Limitations

(1) (General Operating Condition) - The Permittee shall maintain and operate the spray booths and associated equipment in accordance with the manufacturers recommendations, good operating practices, and in accordance with the facility's Operations Manual and Maintenances Plan.

(2) COMAR 26.11.19.02I -"Good Operating Practices, Equipment Cleanup, and VOC Storage" and COMAR 26.11.19.16. - "Control of VOC Equipment Leaks". (See 12. PREMISES-WIDE REQUIREMENTS - (VOC Emissions Control)

[Authority: COMAR 26.11.03.06C]

Compliance Demonstration

Monitoring Requirements

A. Control of Volatile Organic Compounds (VOCs)

(1) (Metal Parts and Products)

(a) The Permittee shall monitor and log the class of component (i.e., metals or aerospace, other, etc.) being coated, types of materials used and VOC contents.

(b) The Permittee shall determine the VOC contents using manufacturer's supplied data (i.e., MSD) or Method 24 of 40 CFR 60, Appendix A.

[Authority: COMAR 26.11.19.02D & COMAR 26.11.03.06C]

(2) (State Aerospace)
A person who owns or operates an aerospace coating operation subject to this regulation shall comply with the primer and topcoat applications operations, chemical milling maskant operations, and the test methods and coating averaging procedures specified in 40 Code of Federal Regulations (CFR) §§63.745(a)—(e), 63.747(a)—(e), and 63.750(e)—(h), (i), (o), and (p), which are incorporated by reference.
[Authority: COMAR 26.11.19.13-1]

(3) (NESHAP - Aerospace) - The Permittee shall comply with the requirements as stated in §63.750 - Test methods and procedures.

(NESHAP - Aerospace) – The Permittee shall comply with the requirements of §63.751 – Monitoring requirements, including but not limited to the following:

(a) Enclosed spray gun cleaners. Each owner or operator using an enclosed spray gun cleaner under §63.744(c)(1) shall visually inspect the seals and all other potential sources of leaks associated with each enclosed gun spray cleaner system at least once per month. Each inspection shall occur while the system is in operation.

(c) Dry particulate filter, HEPA filter, and waterwash systems—primer and topcoat application operations. (1) Each owner or operator using a dry particulate filter system to meet the requirements of §63.745(g)(2) shall, while primer or topcoat application operations are occurring, continuously monitor the pressure drop across the system and read and record the pressure drop once per shift following the recordkeeping requirements of §63.752(d).
[Authority: 40 CFR Part 63 – Subpart GG]

B. Operational Limitations

(1) (General Operation) - The Permittee shall visually inspect active spray booths and associated equipment once each calendar month for leaks and in accordance with the facility's operations and preventative maintenance manual. **[Authority: COMAR 26.11.03.06C]**

(2) The Permittee shall implement the good operating practices as specified in COMAR 26.11.19.02I -"Good Operating Practices, Equipment Cleanup, and VOC Storage" and COMAR 26.11.19.16 - "Control of VOC Equipment Leaks". (See 12). **[Authority: COMAR 26.11.03.06C]**

Record Keeping Requirements**:**

A. Control of Volatile Organic Compounds (VOCs)

(1) (Metal Parts and Products) - The Permittee shall maintain records of what is being painted, types of materials used, Material Safety Data sheets, the monthly records of the amounts of materials used, VOC content, and hours of operation of the spray booths. **[Authority: COMAR 26.11.03.06C].**

(2) (State COMAR – Aerospace)
The Permittee shall maintain records of what is being painted, types of materials used, Material Safety Data sheets, monthly records of the amounts of materials used, VOC content, (including calculations and/or procedures used to determine the VOC), and hours of operation of the spray booths. **[Authority: COMAR 26.11.03.06C & COMAR 26.11.19.13-1]**

(3) (NESHAP - Aerospace) –
The Permittee shall comply with the requirements of § 63.752 - Recordkeeping requirements, including but not limited to the following:

(a) *General*. Each owner or operator of a source subject to this subpart shall fulfill all recordkeeping requirements specified in §63.10 (a), (b), (d), and (f).

(b) *Cleaning operation.* Each owner or operator of a new or existing cleaning operation subject to this subpart shall record the information specified in paragraphs (b)(1) through (b)(5) of this section, as appropriate.

(1) The name, vapor pressure, and documentation showing the organic HAP constituents of each cleaning solvent used for affected cleaning operations at the facility.

(2) For each cleaning solvent used in hand-wipe cleaning operations that complies with the composition requirements specified in §63.744(b)(1) or for semi-aqueous cleaning solvents used for flush cleaning operations:

(i) The name of each cleaning solvent used;

(ii) All data and calculations that demonstrate that the cleaning solvent complies with one of the composition requirements; and

(iii) Annual records of the volume of each solvent used, as determined from facility purchase records or usage records.

(3) For each cleaning solvent used in hand-wipe cleaning operations that does not comply with the composition requirements in §63.744(b)(1), but does comply with the vapor pressure requirement in §63.744(b)(2):

(i) The name of each cleaning solvent used;

(ii) The composite vapor pressure of each cleaning solvent used;

(iii) All vapor pressure test results, if appropriate, data, and calculations used to determine the composite vapor pressure of each cleaning solvent; and

(iv) The amount (in gallons) of each cleaning solvent used each month at each operation.

(4) For each cleaning solvent used for the exempt hand-wipe cleaning operations specified in §63.744(e) that does not conform to the vapor pressure or composition requirements of §63.744(b):

(i) The identity and amount (in gallons) of each cleaning solvent used each month at each operation; and

(ii) A list of the processes set forth in §63.744(e) to which the cleaning operation applies.

(5) A record of all leaks from enclosed spray gun cleaners identified pursuant to §63.751(a) that includes for each leak found:

(i) Source identification;

(ii) Date leak was discovered; and

(iii) Date leak was repaired.

(c) *Primer and topcoat application operations*—organic HAP and VOC. Each owner or operator required to comply with the organic HAP and VOC content limits specified in §63.745(c) shall record the information specified in paragraphs (c)(1) through (c)(6) of this section, as appropriate.

(1) The name and VOC content as received and as applied of each primer and topcoat used at the facility.

(2) For uncontrolled primers and topcoats that meet the organic HAP and VOC content limits in §63.745(c)(1) through (c)(4) without averaging:

(i) The mass of organic HAP emitted per unit volume of coating as applied (less water) (Hi) and the mass of VOC emitted per unit volume of coating as applied (less water and exempt solvents) (Gi) for each coating formulation within each coating category used each month (as calculated using the procedures specified in §63.750(c) and (e));

(ii) All data, calculations, and test results (including EPA Method 24 results) used in determining the values of Hi and Gi; and

(iii) The volume (gal) of each coating formulation within each coating category used each month.

(3) For "low HAP content" uncontrolled primers with organic HAP content less than or equal to 250 g/l (2.1 lb/gal) less water as applied and VOC content less than or equal to 250 g/l (2.1 lb/gal) less water and exempt solvents as applied:

(i) Annual purchase records of the total volume of each primer purchased; and

(ii) All data, calculations, and test results (including EPA Method 24 results) used in determining the organic HAP and VOC content as applied. These records shall consist of the manufacturer's certification when the primer is applied as received, or the data and calculations used to determine Hi if not applied as received.

(4) For primers and topcoats complying with the organic HAP or VOC content level by averaging:

(i) The monthly volume-weighted average masses of organic HAP emitted per unit volume of coating as applied (less water) (Ha) and of VOC emitted per unit volume of coating as applied (less water and exempt solvents) (Ga) for all coatings (as determined by the procedures specified in §63.750(d) and (f)); and

(ii) All data, calculations, and test results (including EPA Method 24 results) used to determine the values of Ha and Ga.

(5) For primers and topcoats that are controlled by a control device other than a carbon adsorber:

(i) The overall control efficiency of the control system (as determined using the procedures specified in §63.750(h)) and all test results, data, and calculations used in determining the overall control efficiency;

(ii) If an incinerator other than a catalytic incinerator is used, continuous records of the firebox temperature recorded under §63.751(b)(9) and all calculated 3-hour averages of the firebox temperature; and

(iii) If a catalytic incinerator is used, continuous records of the temperature recorded under §63.751(b)(10) and all calculated 3-hour averages of the recorded temperatures.

(6) For primer and topcoats that are controlled by a carbon adsorber:

(i) The overall control efficiency of the control system (as determined using the procedures specified in §63.750(g)) and all test results, data, and calculations used in determining the overall control efficiency. The length of the rolling material balance period and all data and calculations used for determining this rolling period. The record of the certification of the accuracy of the device that measures the amount of HAP or VOC recovered; or

(ii) For nonregenerative carbon adsorbers, the overall control efficiency of the control system (as determined using the procedures specified in §63.750(g)) and all test results, data, and calculations used in determining the overall control efficiency. The record of the carbon replacement time established as the site-specific operating parameter to demonstrate compliance.

(d) *Primer and topcoat application operations*—inorganic HAP emissions.

(1) Each owner or operator complying with §63.745(g) for the control of inorganic HAP emissions from primer and topcoat application operations through the use of a dry particulate filter system or a HEPA filter system shall record the pressure drop across the operating system once each shift during which coating operations occur.

(f) *Chemical milling maskant application operations.*

Each owner or operator seeking to comply with the organic HAP and VOC content limits for the chemical milling maskant application operation, as specified in §63.747(c), or the control system requirements specified in §63.747(d), shall record the information specified in paragraphs (f)(1) through (f)(4) of this section, as appropriate.

(1) For uncontrolled chemical milling maskants that meet the organic HAP or VOC content limit without averaging:

(i) The mass of organic HAP emitted per unit volume of chemical milling maskant as applied (less water) (H_i) and the mass of VOC emitted per unit volume of chemical milling maskant as applied (less water and exempt solvents) (G_i) for each chemical milling maskant formulation used each month (as determined by the procedures specified in §63.750 (k) and (m));

(ii) All data, calculations, and test results (including EPA Method 24 results) used in determining the values of H_i and G_i; and

(iii) The volume (gal) of each chemical milling maskant formulation used each month.

(2) For chemical milling maskants complying with the organic HAP or VOC content level by averaging:

(i) The monthly volume-weighted average masses of organic HAP emitted per unit volume of chemical milling maskant as applied (less water) (H_a) and of VOC emitted per unit volume of chemical milling maskant as applied (less water and exempt solvents) (G_a) for all chemical milling maskants (as determined by the procedures specified in §63.750 (l) and (n)); and

(ii) All data, calculations, and test results (including EPA Method 24 results) used to determine the values of H_a and G_a.

(3) For chemical milling maskants that are controlled by a carbon adsorber:

(i) The overall control efficiency of the control system (as determined using the procedures specified in §63.750(g)) and all test results, data, and calculations used in determining the overall control efficiency. The length of the rolling material balance period and all data and calculations used for determining this rolling period. The record of the certification of the accuracy of the device that measures the amount of HAP or VOC recovered; or

(ii) For nonregenerative carbon adsorbers, the overall control efficiency of the control system (as determined using the procedures specified in §63.750(g)) and all test results, data, and calculations used in determining the overall control efficiency. The record of the carbon replacement time established as the site-specific operating parameter to demonstrate compliance.

(4) For chemical milling maskants that are controlled by a control device other than a carbon adsorber:

(i) The overall control efficiency of the control system (as determined using the procedures specified in §63.750(h)) and all test results, data, and calculations used in determining the overall control efficiency;

(ii) If an incinerator other than a catalytic incinerator is used, continuous records of the firebox temperature recorded under §63.751(b)(9) and all calculated 3-hour averages of the firebox temperature; and

(iii) If a catalytic incinerator is used, continuous records of the temperature recorded under §63.751(b)(10) and all calculated 3-hour averages of the recorded temperatures.

[60 FR 45956, Sept. 1, 1996, as amended at 63 FR 15023, Mar. 27, 1998; 63 FR 46534, Sept. 1, 1998]

[Authority: 40 CFR Part 63 – Subpart GG]

B. Operational Limitations

(General Operation) - The Permittee shall maintain an operations manual and preventive maintenance plan. The Permittee shall maintain a log of maintenance performed that relates emissions control and control equipment efficiency **[Authority: COMAR 26.11.03.06C].**

Reporting Requirements:

A. Control of Volatile Organic Compounds (VOCs)

(1) (Metal Parts and Products) – The Permittee shall maintain records required under Condition 6.4 (1), above and make them available to the Department upon request. **[Authority: COMAR 26.11.03.06C].**

(2) (State COMAR – Aerospace) – The Permittee shall maintain records required under Condition 6.4 (2), above and make them available to the Department upon request.**[Authority: COMAR 26.11.03.06C].**

(3) (NESHAP - Aerospace) – The Permittee shall comply with the requirements of §63.753 Reporting requirements.

(a)(1) Except as provided in paragraphs (a)(2) and (a)(3) of this section, each owner or operator subject to this subpart shall fulfill the requirements contained in §63.9(a) through (e) and (h) through (j), Notification requirements, and §63.10(a), (b), (d), and (f), Recordkeeping and reporting requirements, of the General Provisions, 40 CFR part 63, subpart A, and that the initial notification for existing sources required in §63.9(b)(2) shall be submitted not later than September 1, 1997.

(b) *Cleaning operation.* Each owner or operator of a cleaning operation subject to this subpart shall submit the following information:

(1) Semiannual reports occurring every 6 months from the date of the notification of compliance status that identify:

(i) Any instance where a noncompliant cleaning solvent is used for a non-exempt hand-wipe cleaning operation;

(ii) A list of any new cleaning solvents used for hand-wipe cleaning in the previous 6 months and, as appropriate, their composite vapor pressure or notification that they comply with the composition requirements specified in §63.744(b)(1);

(iii) Any instance where a noncompliant spray gun cleaning method is used;

(iv) Any instance where a leaking enclosed spray gun cleaner remains unrepaired and in use for more than 15 days; and

(v) If the operations have been in compliance for the semiannual period, a statement that the cleaning operations have been in compliance with the applicable standards. Sources shall also submit a statement of compliance signed by a responsible company official certifying that the facility is in compliance with all applicable requirements.

(c) *Primer and topcoat application operations.* Each owner or operator of a primer or topcoat application operation subject to this subpart shall submit the following information:

(1) Semiannual reports occurring every 6 months from the date of the notification of compliance status that identify:

(i) For primers and topcoats where compliance is not being achieved through the use of averaging or a control device, each value of H_i and G_i, as recorded under §63.752(c)(2)(i), that exceeds the applicable organic HAP or VOC content limit specified in §63.745(c);

(ii) For primers and topcoats where compliance is being achieved through the use of averaging, each value of H_a and G_a, as recorded under §63.752(c)(4)(i), that exceeds the applicable organic HAP or VOC content limit specified in §63.745(c);

(iii) If incinerators are used to comply with the standards, all periods when the 3-hour average combustion temperature(s) is (are) less than the average combustion temperature(s) established under §63.751(b) (11) or (12) during the most recent performance test during which compliance was demonstrated;

(iv) If a carbon adsorber is used;

(A) each rolling period when the overall control efficiency of the control system is calculated to be less than 81%, the initial material balance calculation, and any exceedances as demonstrated through the calculation; or,

(B) for nonregenerative carbon adsorbers, submit the design evaluation, the continuous monitoring system performance report, and any excess emissions as demonstrated through deviations of monitored values.

(v) For control devices other than an incinerator or carbon adsorber, each exceedance of the operating parameter(s) established for the control device under the initial performance test during which compliance was demonstrated;

(vi) All times when a primer or topcoat application operation was not immediately shut down when the pressure drop across a dry particulate filter or HEPA filter system, the water flow rate through a conventional waterwash system, or the recommended parameter(s) that indicate the booth performance for pumpless systems, as appropriate, was outside the limit(s) specified by the filter or booth manufacturer or in locally prepared operating procedures;

(vii) If the operations have been in compliance for the semiannual period, a statement that the operations have been in compliance with the applicable standards; and,

(2) Annual reports beginning 12 months after the date of the notification of compliance status listing the number of times the pressure drop or water flow rate for each dry filter or waterwash system, as applicable, was outside the limit(s) specified by the filter or booth manufacturer or in locally prepared operating procedures.

(e) *Chemical milling maskant application operation.* Each owner or operator of a chemical milling maskant application operation subject to this subpart shall submit semiannual reports occurring every 6 months from the date of the notification of compliance status that identify:

(1) For chemical milling maskants where compliance is not being achieved through the use of averaging or a control device, each value of H_i and G_i, as recorded under §63.752(f)(1)(i), that exceeds the applicable organic HAP or VOC content limit specified in §63.747(c);

(2) For chemical milling maskants where compliance is being achieved through the use of averaging, each value of H_a and G_a, as recorded under §63.752(f)(2)(i), that exceeds the applicable organic HAP or VOC content limit specified in §63.747(c);

(3) Where a control device is used,

(i) If incinerators are used to comply with the standards, all periods when the 3-hour average combustion temperature(s) is (are) less than the average combustion temperature(s) established under §63.751(b) (11) or (12) during the most recent performance test during which compliance was demonstrated;

(ii) If a carbon adsorber is used,

(A) Each rolling period when the overall control efficiency of the control system is calculated to be less than 81%, the initial material balance calculation, and any exceedances as demonstrated through the calculation; or,

(B) For nonregenerative carbon adsorbers, submit the design evaluation, the continuous monitoring system performance report, and any excess emissions as demonstrated through deviations of monitored values.

(iii) For control devices other than an incinerator or carbon adsorber, each exceedance of the operating parameter(s) established for the control device under the initial performance test during which compliance was demonstrated;

(4) All chemical milling maskants currently in use that were not listed in the notification of compliance status or any other subsequent semiannual report;

(5) Descriptions of any control devices currently in use that were not listed in the notification of compliance status or any subsequent report; and

(6) If the operations have been in compliance for the semiannual period, a statement that the chemical milling maskant application operation has been in compliance with the applicable standards.

[60 FR 45956, Sept. 1, 1996; 61 FR 4903, Feb. 9, 1996, as amended at 61 FR 66227, Dec. 17, 1996; 63 FR 15023, Mar. 27, 1998; 63 FR 46535, Sept. 1, 1998]
[Authority: 40 CFR Part 63 – Subpart GG]

B. Operational Limitations: {***See Condition A, above}***

8.0. Emission Unit(s): Industrial Waste Processor - INC-1770-E1 (Reg. # 6-0013 & 2-0004): Industrial waste processor which is located in building 1770 and is fired by two #2 fuel oil burners manufactured by L&L Special Furnace. This unit is equipped with a cyclone for control of particulate matter; additionally this unit has a dry scrubber and baghouse attached to it to control particulate and acid gas emissions. The unit is used to flash off explosive residue from metal parts and rocket engines, etc, in order for metal to be scrapped or recycled safely. The unit is also used to burn combustible materials, such as packaging, cardboard, and pallets, etc., which are minutely contaminated with explosive or energetic materials

APPLICABLE STANDARDS and LIMITATIONS

Note: This unit is not subject to 40 CFR 60 Subpart CCCC for Industrial Solid Waste Incineration Units, because it was constructed in 1993, prior to the applicability dates of November 30, 1999 and June 1, 2001, respectively.

A. Control of Visible Emissions

COMAR 26.11.08.04 - Control of Visible Emissions. - "A. In Areas I, II, V, and VI, the following apply: (1): Except as provided in Regulations .08 and .08-1 of this chapter, a person may not cause or permit the discharge of emissions from any incinerator, other than water in an uncombined form, which is greater than 20 percent opacity."

"C. Exceptions.
The requirements of §A and §B of this regulation do not apply to emissions during start-up, or adjustments or occasional cleaning of control equipment if:
(1) The visible emissions are not greater than 40 percent opacity; and
(2) The visible emissions do not occur for more than 6 consecutive minutes in any 60-minute period."

Compliance Demonstration

The Permittee shall perform an EPA Reference Method 22 once every 168 hours of operation, to determine if there are visible emissions. If there are visible emissions, then perform an EPA Method 9 for 18 minutes to determine the opacity. The Permittee shall maintain and follow an operations manual and preventive maintenance plan. The Permittee shall maintain a log of Methods 22 and 9 observations and any maintenance performed that relates to emissions control and control equipment efficiency
[Authority: COMAR 26.11.03.06C].

B. Control of Particulate Matter

COMAR 26.11.08.05 – Control of Particulate Matter.

"A. Requirements for Areas I, II, V, and VI.

(1) Calculations. Except as provided in Regulations .08 and .08-1 of this chapter, incinerator or hazardous waste incinerator emissions shall be adjusted to 12 percent carbon dioxide.

(3) Incinerators Constructed on or After January 17, 1972. Except as provided in Regulations .07, .08, and .08-1 of this chapter, a person may not cause or permit the discharge of particulate matter into the outdoor atmosphere from any incinerator constructed on or after January 17, 1972, to exceed 0.10 gr/SCFD (229 mg/dscm)."

Compliance Demonstration

The Permittee shall develop and maintain a preventative maintenance plan for the baghouse that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the timeframes established in the plan and shall maintain a log with records of the dates that maintenance was performed.

[Authority: COMAR 26.11.03.06C].

C. Operational Limitations

COMAR 26.11.08.09 - Incinerator Operator Training.

"A. Applicability.

This regulation applies to any person in this State who owns or operates an incinerator.

B. Certification and Operation.

A person may not operate or allow an incinerator to be operated unless the owner certifies to the Department on a form provided by the Department that the incinerator operator:

(1) Has completed an initial training course approved by the Department, which meets the requirements of §C, or D of this regulation;

(2) Annually, after initial certification, completes a review course approved by the Department; and

(3) Is present at all times whenever the incinerator is in operation.

C. Training Course for Operators of Special Medical Waste or Industrial Waste Incinerators.

(1) For any incinerator operator who operates a special medical waste incinerator or an industrial waste incinerator, the training course shall be the "Hospital Incinerator Operator Training Course" Volumes I—III (EPA-450/3-89-003, EPA-450/3-89-004, and EPA-450/3-89-010, respectively), Control Technology Center, March 1989, which is incorporated by reference, and "Operation and Maintenance of Hospital Medical Waste Incinerators" (EPA-450/3-89-002), Control Technology Center, March 1989, which is incorporated by reference.

(2) For the operator of any special medical waste incinerator or an industrial waste incinerator, completing a training course means:

(a) Completing an initial training course approved by the Department of at least 3 days (24 hours) duration; and

(b) Passing a written test approved by the Department.

(3) The certified operator shall, after initial training, complete and pass an annual review course approved by the Department of at least 1-day (8 hours) duration."

Compliance Demonstration
The Permittee shall maintain records verifying that all operators have received their initial Incinerator Operator Training and have in current affect their proper Incinerator operator certification. The Permittee shall log the type of charge (i.e., metals or combustibles), the date, the duration of charge and the temperature set point of the industrial waste processor. The Permittee shall develop and maintain a preventative maintenance plan for the baghouse that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the timeframes established in the plan and shall maintain a log with records of the dates that maintenance was performed. **[Authority: COMAR 26.11.03.06C]**.

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9. Explosive and Propellant Mfg. Process Emission Units:
Reg. # 6-0101 – (Explosive and Propellant Mfg. Process e/w, particulate filters, cyclone, condenser, and baghouse PM controls) (*Existing Equipment – Installed Prior to 1991*): EXPL – 808-E2, - 874-E2, - 728-E3, - 1028 E-1, - 1029 E1, -1031 E1, -1033 E1, -1430 E-1 -0786-E3, -859 E2, (-213-, -214-, -216-, -218-, & -332-, & -335-E1 (curing/extrusion)); EXPL-219-E1, -220-E1, -326-E1, & -327-E1. (*New Equipment – Installed After Jan. 1991*):EXPL-729-E1

Reg. # 6-0098; 6-0057; 6-0079; 6-0120; & 6-0118 – (Explosives & Propellant Mfg. Mixers e/w particulate filters, activated carbon filters, condenser, and thermal oxidizer for PM and VOC control) - (*Existing Equipment – Installed Prior to 1991*): Mixer -1024-E1 (in. 1970), -530-E1 (in 1968), & -530-E2 (in 1972).
(*New Equipment – Installed After Jan. 1991*): Mixer –1122-E1 & -E2, -1866-E1, -1881-E1, & -3069-E1
Thermal/Catalytic Oxidizer control of Mixer 1024-E1, added in 1997, for use during Nitramine Processing only. Note: Nitramine production is not currently in production at the facility.

APPLICABLE STANDARDS and LIMITATIONS

A. Control of Visible Emissions (VE):
COMAR 26.11.06.02(C)(1): In areas I, II, V, and VI a person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is greater than 20 percent opacity.

Compliance Demonstration
As part of implementation of the preventive maintenance plan and good operating practices, the Permittee shall perform preventive maintenance on emissions control devices, associated with this process,

including the line and cartridge filters, bag filters, vacuum condenser, and thermal oxidizer in accordance with manufacturer recommendations and/or in accordance with the preventive maintenance plan and good operating practices to assure they are operating properly

Note: The above method of monitoring was selected based on the nature of these operations, which are explosives and propellant manufacturing. Visible emissions observations would not be practical due to safety related issues related to personnel standing within the explosive arcs during process operation.

B. Control of Particulate Matter (PM)**:**
COMAR 26.11.06.03(B)(1): Areas I, II, V, and VI.
(1) Installations Constructed On or After January 17, 1972. A person may not cause or permit particulate matter to be discharged from any installation constructed on or after January 17, 1972 in excess of 0.05 gr/SCFD (115 kg/dscm).

(2) Installation constructed before January 17, 1972. A person may not cause or permit particulate matter to be discharged from any installation constructed before January 17, 1972 in excess of the values determined from Table 1. When the process weight per hour exceeds 60,000 pounds per hour, the maximum allowable weight discharged per hour will be determined by use of the following equation:

E=55.0P(0.11power)-40	E=11.79P(0.11power)-18.14
E= Maximum weight discharged	E= Maximum weight discharged
Per hour(lbs)	Per hour(kg)
P=process weight in tons	P=process weight in kilograms
Per hour	Per hour

Compliance Demonstration
As part of implementation of the preventive maintenance plan and good operating practices, the Permittee shall perform preventive maintenance on emissions control devices, associated with this process, including the line and cartridge filters, bag filters, and condenser in accordance with manufacturer recommendation and/or in accordance with the preventive maintenance plan and good operating practices to assure they are operating properly. **[Authority: COMAR 26.11.03.06C]**

Note: The above method of monitoring was selected based on the nature of these operations, which are explosives and propellant manufacturing. Visible emissions observations would not be practical due to safety related issues related to personnel standing within the explosive arcs during process operation.

C. Volatile Organic Compounds (VOCs):
COMAR 26.11.19(A): (1) This regulation applies to a person who owns or operates existing COMAR 26.11.19.25 - Control of Volatile Organic Compounds From Explosives and Propellant Manufacturing.
"A. Applicability.
(1) This regulation applies to a person who owns or operates existing equipment at a premises that has a potential to emit 25 tons or more of VOC per year from all explosives and propellant manufacturing equipment at the premises.

(2) Section C(2) of this regulation applies to a person who constructs, owns, or operates new equipment that has or will have total actual VOC emissions of 50 pounds or more per day.

B. Definitions.

(1) "Existing equipment" means explosives and propellant manufacturing equipment placed in operation before January 1, 1991.

(2) "Explosives and propellant manufacturing equipment" means process equipment used to preheat, grind, mix, blend, cure, dry, cut, press, extrude, or cast materials to produce energetic materials such as rocket fuels and gun propellants.

(3) "New equipment" means explosives and propellant manufacturing equipment placed in operation on or after January 1, 1991.

(4) "Nitramine propellant manufacturing equipment" means explosives and propellant manufacturing equipment used to mix, blend, dry, cut, press, or otherwise manufacture nitramine-based propellants such as low vulnerability ammunition.

C. General Requirements.

(1) A person who owns or operates existing explosives and propellant manufacturing equipment subject to this regulation shall:

(a) Install a VOC control device, having a VOC destruction or removal efficiency of 85 percent or more overall, on all active nitramine propellant mixing equipment that has a capacity of 150 gallons or more; and

(c) Implement the good operating practices within 30 days after approval by the Department.

(2) A person who constructs, owns, or operates new equipment subject to this regulation shall reduce emissions from the new equipment by 85 percent or more, overall."

Compliance Demonstration

As part of implementation of the preventive maintenance plan and good operating practices, the Permittee shall perform preventive maintenance on emissions control devices, associated with this process, including the carbon activated filters, vacuum condenser, and the thermal oxidizer in accordance with manufacturer recommendations and/or in accordance with the preventive maintenance plan and good operating practices to assure they are operating properly.

Note: The thermal/catalytic oxidizer is only used during the Nitramine production process to control emissions from Mixer 1024-E1. Though Nitramine production is not currently in production, it may occur in the future.

The Permittee shall maintain a copy of the preventive maintenance plan and a record of the dates of and description of maintenance activity performed. The Permittee shall maintain a log that includes the name

of the person conducting the inspection and the date on which the inspections are made, the findings of the inspection. The Permittee shall maintain records of the amounts of materials processed including the VOC content on site, and shall be made available to the Department upon request. The Permittee shall maintain records of the strip chart recordings of the thermal oxidizer and records of maintenance performed to baghouse, activated carbon and PM filters on site, and shall be made available to the Department upon request. **[Authority: COMAR 26.11.03.06C, & 26.11.19.25C]**

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10. BRACON P002 Explosives Mfg/QA-QC Processes

Emissions Unit Number(s)

EXPL-727-E1: Reg. No. 7-0014 - BRACON Molding Powder Processing
EXPL-727-E2: Reg. No. 7-0015 - BRACON Melt Cast Explosives Operation
EXPL-727-E3: Reg. No. 7-0016 - BRACON Explosives Removal Operation

APPLICABLE STANDARDS and LIMITATIONS

A. **Control of Visible Emissions - COMAR 26.11.06.02(C)(1**): Areas I, II, V, and V. "A person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is greater than 20 percent opacity."

Compliance Demonstration
As part of implementation of the preventive maintenance plan and good operating practices, the Permittee shall perform preventive maintenance on emissions control devices, associated with this process to assure they are operating properly. **[Authority: COMAR 26.11.03.06C]**

Note: The above method of monitoring was selected based on the nature of these operations, which are explosives and propellant manufacturing. Visible emissions observations would not be practical due to safety related issues related to personnel standing within the explosive arcs during process operation.

B. **Control of Particulate Emissions - COMAR 26.11.06.03(B)(1):** Areas II, V, VI, and I. "A person may not cause or permit particulate matter to be discharged from any installation constructed on or after January 17, 1972 in excess of 0.05 gr/SCFD (115 kg/dscm)"

Compliance Demonstration
As part of implementation of the preventive maintenance plan and good operating practices, the Permittee shall perform preventive maintenance on emissions control devices, associated with this process to assure they are operating properly. **[Authority: COMAR 26.11.03.06C]**

C. **Control of Volatile Organic Compound (VOC) Emissions - COMAR 26.11.19.02I**, which requires that the Permittee establish in writing and implement facility-wide "good operating practices" designed to minimize emissions of VOC. {See Premises-wide VOC Requirements of Section 12, for complete citation}

COMAR 26.11.19.16, which requires that the Permittee implement a VOC leak detection and repair program designed to minimize unintended emissions of VOC from

process equipment and components, e.g., in-process vessels, storage tanks, pumps, compressors, valves, flanges and other pipeline fittings, pressure relief valves, process drains, and open-ended pipes. {See Premises-wide VOC Requirements for complete citation}

COMAR 26.11.19.25 - Control of Volatile Organic Compounds from Explosives and Propellant Manufacturing.

"A. Applicability.

(1) This regulation applies to a person who owns or operates existing equipment at a premises that has a potential to emit 25 tons or more of VOC per year from all explosives and propellant manufacturing equipment at the premises.

(2) Section C(2) of this regulation applies to a person who constructs, owns, or operates new equipment that has or will have total actual VOC emissions of 50 pounds or more per day.

B. Definitions.

(1) "Existing equipment" means explosives and propellant manufacturing equipment placed in operation before January 1, 1991.

(2) "Explosives and propellant manufacturing equipment" means process equipment used to preheat, grind, mix, blend, cure, dry, cut, press, extrude, or cast materials to produce energetic materials such as rocket fuels and gun propellants.

(3) "New equipment" means explosives and propellant manufacturing equipment placed in operation on or after January 1, 1991.

(4) "Nitramine propellant manufacturing equipment" means explosives and propellant manufacturing equipment used to mix, blend, dry, cut, press, or otherwise manufacture nitramine-based propellants such as low vulnerability ammunition.

C. General Requirements.

(1) A person who owns or operates existing explosives and propellant manufacturing equipment subject to this regulation shall:

(a) Install a VOC control device, having a VOC destruction or removal efficiency of 85 percent or more overall, on all active nitramine propellant mixing equipment that has a capacity of 150 gallons or more; and

(c) Implement the good operating practices within 30 days after approval by the Department.

(2) A person who constructs, owns, or operates new equipment subject to this regulation shall reduce emissions from the new equipment by 85 percent

Compliance Demonstration
The Permittee shall maintain a Standard Operating Procedures (SOP) manual and preventive maintenance (PM) plan that includes all written descriptions of "good operating practices" designed to minimize emissions of VOC. As part of implementation of the preventive maintenance plan and good operating practices, the Permittee shall perform and keep a log of any preventive maintenance on emissions control devices including condensers, scrubbers, filters, etc., in accordance with manufacturer recommendations and/or in accordance with the preventive maintenance plan and good operating practices to assure they are operating properly.
[Authority: COMAR 26.11.03.06C & PTC # 017-0040-7-0014, -7-0015, -7-0016 & Authority: COMAR 26.11.03.06C]

D. **Operating Requirements.**
The vapor condensers and JM Microdyne venturi scrubbers used to control emissions from the Molding Powder Processing (Reg. #7-0014) and Melt Cast (Reg. #7-0015) operations shall be operated as indicated in the standard operating procedure (SOP) referenced in the PTC application, and the molding powder manufacturing shall not occur unless the scrubber(s) are in operation.
[Authority: Permit to Construct (PTC) # 017-0040-7-0014, -7-0015, -7-0016]

Compliance Demonstration
As part of implementation of the preventive maintenance plan and good operating practices, the Permittee shall perform preventive maintenance on emissions control devices associated with the BRACON Explosives Engineering Division and Quality Evaluation Division processes, including condensers, scrubbers, filters, etc., in accordance with manufacturer recommendations and/or in accordance with the preventive maintenance plan and good operating practices to assure they are operating properly.
[Authority: PTC No. 017-0040-7-0014, -0015, and -0016].

The Permittee shall also maintain records of material usage (monthly basis), including VOC content as determined by EPA Reference Method 24, or equivalent; the Material Safety Data sheets for materials used; and the operating schedule (hours/batch and no. of batches per month).
[Authority: COMAR 26.11.03.06C & PTC # 017-0040-7-0014, -7-0015, -7-0016]

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11. Agile Chemical Facility (ACF) Nitration Processes
Emissions Unit Number(s): 786-E7 & E8; and 1464-E1
(-9-0151) Nitration: Raw Materials Prep & Storage
(-7-0018) Nitration Process
(-7-0017) Nitration: Product Formulation, Transport, Holding, & Sampling.
(-9-0153) Denitration: Spent Acid Mixing and Holding
[Ref.: Permit to Construct (PTC) # 017-0040-7-0017, -7-0018, and 9-0151**]**

APPLICABLE STANDARDS and LIMITATIONS

A. Control of Visible Emissions
COMAR 26.11.06.02(C)(1): Areas I, II, V, and V. "A person may not cause or permit the discharge of emissions from any installation or building, other than water in

an uncombined form, which is greater than 20 percent opacity."

Compliance Demonstration (VE)

As part of implementation of the preventive maintenance plan and good operating practices, the Permittee shall perform preventive maintenance on emissions control devices associated with this process to assure they are operating properly. **[Authority: COMAR 26.11.03.06C]**

B. Control of Particulate

COMAR 26.11.06.03(B)(1): Areas II, V, VI, and I. "A person may not cause or permit particulate matter to be discharged from any installation constructed on or after January 17, 1972 in excess of 0.05 gr/SCFD (115 kg/dscm)"

Compliance Demonstration (PM)

As part of implementation of the preventive maintenance plan and good operating practices, the Permittee shall perform preventive maintenance on emissions control devices, associated with this process to assure they are operating properly. **[Authority: COMAR 26.11.03.06C]**

C. Control of Sulfur Oxides

COMAR 26.11.06.05: Sulfur Compounds from Other than Fuel-Burning Equipment.
"A. General Conditions. All calculations of emissions governed by this regulation shall be adjusted to standard conditions and 7 percent oxygen. "PPM" means parts per million by volume. "

"B. Areas I, II, V and VI.
(1) A person may not cause or permit the discharge into the atmosphere from installations other than fuel-burning equipment of gases containing more than 500 ppm of sulfur dioxide.

(2) A person may not cause or permit the discharge into the atmosphere from installations other than fuel-burning equipment of gases containing sulfuric acid, sulfur trioxide, or any combination of them greater than 35 milligrams per cubic meter reported as sulfuric acid."

Compliance Demonstration (SO_X)

The Permittee shall maintain a Standard Operating Procedures (SOP) manual and preventive maintenance (PM) plan that includes all written descriptions of "good operating practices" designed to minimize emissions of SO_X. As part of implementation of the preventive maintenance plan and good operating practices, the Permittee shall perform and keep a log of any preventive maintenance on emissions control devices including bubbler tanks and fume scrubber(s), etc., in accordance with manufacturer recommendations and/or in accordance with the preventive maintenance plan and good operating practices to assure they are operating properly.
[Authority: COMAR 26.11.03.06C]

Record Keeping

(1) SOP & PM plan, including all written descriptions of "good operating practices" designed to minimize emissions of SO_X.

(2) Log of any preventive maintenance on emissions control devices including bubbler tanks and fume scrubber(s), etc.

(3) Records of material usage (monthly basis) and/or operating schedule (hours/batch and no. of batches per month).

[Authority: COMAR 26.11.03.06C]

D. Control of VOC

(a) **COMAR 26.11.19.02I**, which requires that the Permittee establish in writing and implement facility-wide "good operating practices" designed to minimize emissions of VOC. {See Premises-wide VOC Requirements of Section 12, for complete citation}

(b) **COMAR 26.11.19.16**, which requires that the Permittee implement a VOC leak detection and repair program designed to minimize unintended emissions of VOC from process equipment and components, e.g., in-process vessels, storage tanks, pumps, compressors, valves, flanges and other pipeline fittings, pressure relief valves, process drains, and open-ended pipes. {See Premises-wide VOC Requirements of Section 12, for complete citation}

(c) **COMAR 26.11.19.25 - Control of Volatile Organic Compounds from Explosives and Propellant Manufacturing**.

"A. Applicability.

(1) This regulation applies to a person who owns or operates existing equipment at a premises that has a potential to emit 25 tons or more of VOC per year from all explosives and propellant manufacturing equipment at the premises.

(2) Section C(2) of this regulation applies to a person who constructs, owns, or operates new equipment that has or will have total actual VOC emissions of 50 pounds or more per day.

B. Definitions.

(1) "Existing equipment" means explosives and propellant manufacturing equipment placed in operation before January 1, 1991.

(2) "Explosives and propellant manufacturing equipment" means process equipment used to preheat, grind, mix, blend, cure, dry, cut, press, extrude, or cast materials to produce energetic materials such as rocket fuels and gun propellants.

(3) "New equipment" means explosives and propellant manufacturing equipment placed in operation on or after January 1, 1991.

(4) "Nitramine propellant manufacturing equipment" means explosives and propellant manufacturing equipment used to mix, blend, dry, cut, press, or otherwise manufacture nitramine-based propellants such as low vulnerability ammunition.

C. General Requirements.

(1) A person who owns or operates existing explosives and propellant manufacturing equipment subject to this regulation shall:

(a) Install a VOC control device, having a VOC destruction or removal efficiency of 85 percent or more overall, on all active nitramine propellant mixing equipment that has a capacity of 150 gallons or more; and

(c) Implement the good operating practices within 30 days after approval by the Department.

(2) A person who constructs, owns, or operates new equipment subject to this regulation shall reduce emissions from the new equipment by 85 percent

Note: Projected VOC emissions from the ACF are much less than 25 tons per year and/or 50 pound per day and therefore not expected to trigger the General Requirements of Condition C, above.
[Authority: PTC# 017-0040-7-0017, -7-0018, and 9-0151]

E. Operating Requirements
The various emissions controls, including bubbler tanks and scrubber(s) shall be operated as indicated in the application and/or in accordance with manufacturer's recommendations as in the facility's standard operating procedure (SOP)
[Authority : PTC# 017-0040-7-0017, -7-0018, and 9-0151]

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12. PREMISES-WIDE REQUIREMENTS - (VOC Emissions Control)

Emission Units: Any equipment or operation subject to this permit and to Chapter 19 Volatile Organic Compounds from Specific Processes.
[Refer to Tables: IV-7, IV-8, IV-10, IV-11, and IV-12.]

APPLICABLE STANDARDS and LIMITATIONS

A. COMAR 26.11.19.02I. - Good Operating Practices, Equipment Cleanup, and VOC Storage.

(1) Applicability. The requirements in this section apply to a person who owns or operates an installation that is subject to any requirement in this chapter.

(2) Good Operating Practices.

(a) A person who is subject to this section shall implement good operating practices to minimize VOC emissions into the atmosphere.

(b) Good operating practices shall, at a minimum, include the following:

(i) Provisions for training of operators on practices, procedures, and maintenance requirements that are consistent with the equipment manufacturers' recommendations and the source's experience in operating the equipment, with the training to include proper procedures for maintenance of air pollution

control equipment;

(ii) Maintenance of covers on containers and other vessels that contain VOC and VOC-containing materials when not in use;

(iii) As practical, scheduling of operations to minimize color or material changes when applying VOC coatings or other materials by spray gun;

(iv) For spray gun applications of coatings, use of high volume low pressure (HVLP) or other high efficiency application methods where practical; and

(v) As practical, mixing or blending materials containing VOC in closed containers and taking preventive measures to minimize emissions for products that contain VOC.

(c) A person subject to this regulation shall:

(i) Establish good operating practices in writing;

(ii) Make the written operating practices available to the Department upon request; and

(iii) Display the good operating practices so that they are clearly visible to the operator or include them in operator training.

(3) Equipment Cleanup.

(a) A person subject to this section shall take all reasonable precautions to prevent or minimize the discharge of VOC into the atmosphere when cleaning process and coating application equipment, including containers, vessels, tanks, lines, and pumps.

(b) Reasonable precautions for equipment cleanup shall, at a minimum, include the following:

(i) Storing all wastes and waste materials, including cloth and paper that are contaminated with VOC, in closed containers;

(ii) Preparing written standard operating procedures for frequently cleaned equipment, including when practical, provisions for the use of low-VOC or non-VOC materials and procedures to minimize the quantity of VOC materials used;

(iii) Using enclosed spray gun cleaning, VOC-recycling systems and other spray gun cleaning methods where practical that reduce or eliminate VOC emissions; and

(iv) Using, when practical, detergents, high-pressure water, or other non-VOC cleaning options to clean coating lines, containers, and process equipment.

(4) VOC Storage and Transfer.

(a) A person subject to this section who stores VOCs shall, at a minimum, install conservation vents or other vapor control measures on storage tanks with a capacity of 2,000 gallons or more, to minimize VOC emissions.

(b) A person subject to this section shall, at a minimum, utilize vapor balance, vapor control lines, or other vapor control measures when VOCs are transferred from a tank truck into a stationary storage tank with a capacity greater than 10,000 gallons and less than 40,000 gallons that store VOCs or materials containing VOCs, other than gasoline, that have a vapor pressure greater than 1.5 psia.

Compliance Demonstration
The Permittee shall implement and maintain an operations and preventive maintenance plan. The plan shall include how the good operating practices outlined above shall be implemented and any logs as needed to assure compliance.
[Authority: COMAR 26.11.03.06C]

B. COMAR 26.11.19.16 - Control of VOC Equipment Leaks.

(1) Definitions. In this regulation, the following terms have the meanings indicated:

(a) "Component" means equipment which has the potential to leak VOC, including process equipment, storage tanks, pumps, compressors, valves, flanges and other pipeline fittings, pressure relief valves, process drains, and open-ended pipes.

(b) "Leak" means an unintended liquid or vapor release of VOC from a component into the ambient air or into a building.

(2) Applicability. A person subject to any VOC emission standard or limitation established in this chapter and not otherwise subject to more specific VOC leak requirements of another regulation is subject to the requirements of this regulation.

Compliance Demonstration
The Permittee shall:

(1) Visually inspect all components on the premises for leaks at least once a month.

(2) Tag any leak immediately so that the tag is clearly visible. The tag shall be made of material that will withstand any weather or corrosive conditions to which it might normally be exposed. The tag shall bear an identification number, the date the leak was discovered, and the name of the person who discovered the leak. The tag shall remain in place until the leak is repaired.

(3) Take immediate action to repair all observed VOC leaks that can be repaired within 48 hours.

(4) Repair all other leaking components not later than 15 days after a leak is discovered. If a replacement part is needed, the part shall be ordered within 3 days after discovery of the leak, and the leak shall be repaired within 48 hours of receiving the part.

(5) Maintain a supply of components or component parts that are recognized by the source to wear or corrode, or that otherwise need to be routinely replaced, such as seals, gaskets, packing, and pipe fittings.
[Authority: COMAR 26.11.19.16(C)]

(6) The Permittee shall maintain a log that includes the name of the person conducting the inspection and the date on which the leak inspections are made, the findings of the inspection, and a list of leaks by tag identification number. The log shall be made available to the Department upon request.

(7) Exceptions: Components that cannot be repaired as required in this regulation because they are inaccessible, or that they cannot be repaired during operation of the source, shall be identified in the log and included within the source's maintenance schedule for repair during the next source shutdown.
[Authority: COMAR 26.11.03.06C & COMAR 26.11.19.16C & D]

13. **Nodal Energy System [NES} VOC NSR Synthetic-Minor Requirements**

The nodal energy system [NES] under MILCON P-222 consists of one 4.5-MW natural gas fired combustion turbine (CT), one 29.5 MM Btu heat recovery steam generator (HRSG), seventeen natural gas fired boilers, and five emergency diesel generators.
{See Facility Inventory List – to identify the [NES] equipment}.

Note: Per the Indian Head NES permit to contract application and supplemental information, including estimated emissions calculations, the NES was projected to be a potential major source of VOC emissions that could trigger NSR. Some questions were raised by the reviewer of the PTC application concerning the accuracy of the data submitted, in particular the VOC emissions factors used for in the emissions demonstration. This is why VOC emission testing was included in the NES permit to construct for the CT and (500-hp) Hurst Power Flame NG fired boiler(s). This would help confirm emissions factors used to determine compliance with the NES VOC Synthetic Minor emission limit.

(1) In order to prevent the VOC emissions from the decentralized (nodal) energy production system (NES) from triggering a "Significant" net increase for the facility as defined under COMAR 26.11.17.01B(26) and the Nonattainment Provisions for Major New Sources and Modifications (NSR) under COMAR 26.11.17, the Permittee shall limit the VOC emissions from the NES to less than 25 tons per year, for any 12-month consecutive period.

(2) In order to demonstrate compliance with the annual emissions limitations, the Permittee shall

calculate and record the premises-wide NES emissions for each previous calendar month and a total for the previous 12 consecutive calendar months. The calculations and records shall be updated monthly, within the first 15 days of each following month.

(3) Monthly records of the hours of operation, fuel use, VOC emissions calculations and supporting data for the NES shall be kept on site for at least five (5) years and shall be made available to the Department upon request.

[Authority: PTC #017-0040-5-0019 & -5-0020]

***C**ompliance Demonstration*

Testing Requirements:

{Conditions (1) & {2) below applies to CT & HRSG}

(1) The Permittee shall conduct an initial performance stack test of the 4.5-MW natural gas fired combustion turbine (CT) and 29.5 MM Btu heat recovery steam generator (HRSG) for VOC emissions, and subsequently at least once every 5 years. The test shall be used to confirm the emission factors being used to calculate VOC emissions to show compliance with the Synthetic-Minor Limit for VOC and for submittal in the annual ECR The Permittee shall conduct performance testing and submit the results in accordance with Condition F. (1) (e), above.

(2) The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. You may perform testing at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. You must conduct three separate test runs for each performance test. The minimum time per run is 20 minutes. The emissions factors determined as a result of stack testing shall be used for emissions certification reports (ECR) and to determine compliance with the NES VOC synthetic minor operating limit.

{Conditions (3) & (4) below, applies to all performance testing}

(3) The Permittee shall perform all testing at a reasonable time and with at least 30-calendar days notice to allow for representation by the Department personnel.

(4) Final testing results shall be submitted to the Department within 45 days of completion of the testing.

[Authority: PERMIT No. 017-0040-5-0019 & -5-0020- {CT & HRSG}]

{Conditions (5), (6), and (7) applies to the SNP-2-B-1 and SNP-2-B-2boilers}

(5) The Permittee shall conduct an initial performance stack test of at least one of the 20.9 MM Btu (500-hp) Hurst Power Flame NG fired boiler {SNP-2-B-1 or SNP-2-B-2} for VOC emissions. The test shall be used to compare with the baseline emission factors used to estimate pre-construction VOC emissions and to demonstrate compliance with the Synthetic-Minor Limit for VOC and for submittal in the annual emissions certification reports (ECR). The Permittee shall conduct performance testing and submit the results in accordance with Conditions (3) & (4), above.

(6) At least 30 days prior to conducting any compliance stack test, the Permittee shall submit a test protocol to ARMA for review. Compliance stack testing shall be conducted in accordance with ARMA Technical Memorandum (TM) 91-01, "Test Methods and Equipment Specifications for Stationary Sources" (January, 1991), as amended by Supplement 1 (1 July 1991), 40 CFR 51,

40 CFR 60, or subsequent test protocols approved by ARMA. Test ports shall be located in accordance with TM 91-01 (January 1991), or subsequent or alternative measures approved by ARMA.

(7) The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. You may perform testing at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. You must conduct three separate test runs for each performance test. The minimum time per run is 20 minutes. The emissions factors determined as a result of stack testing shall be used for emissions certification reports (ECR) and to determine compliance with the NES VOC synthetic minor operating limit.

[Authority: PERMIT No. 017-0040-5-0021 thru -5-0033-{Boilers}]

PERIODIC TESTING

{Apples to CT & HRSG and SNP-Boilers}

The Permittee shall conduct periodic testing for VOC emissions at least once every 5 years or at least once during the term of the operating permit. The emission factor derived as a result of the testing shall be used to when determine compliance with the NSR VOC Synthetic-Minor limit and in the annual emissions certification.

[Authority: COMAR 26.11.03.06C]

Monitoring

(1) The Permittee shall monitor and log the monthly fuel use and hours of operation for the CT and HRSG.

[Authority: PTC #017-0040-5-0019 & -5-0020]

NES Synthetic Minor Requirements for Exemption from NSR

(2) In order to demonstrate compliance with the emissions limitations requirement for exemption from VOC NSR, the Permittee shall calculate and record the VOC emissions from all stationary sources that comprise the NES, for each previous calendar month and a total for the previous 12 consecutive calendar months. The calculations and records shall be updated monthly, within the first 15 days of each following month.

(3) The Permittee shall maintain monthly records of the hours of operation, fuel use, VOC emissions calculations and supporting data for the NES shall be kept on site for at least five (5) years and shall be made available to the Department upon request

[Authority: PTC #017-0040-5-0019 & -5-0020]

Recordkeeping

(1) The Permittee shall maintain monthly records of VOC emissions calculations and supporting data for the NES to verify the Permittee has not exceeded the NSR Synthetic Minor VOC limitation of 25 tons for any 12-month consecutive period. The calculations and records shall be updated monthly, within the first 15 days of each following month.

(2) The Permittee shall maintain monthly records of the following:

(a) Type and monthly amount of fuel combusted,

(b) Fuel supplier certifications,

(c) Combustion turbine operating hours, and

(d) A verification of the capacity factor for each gas turbine generator set, which shall include the heat input (in million British thermal units or equivalent units of measure) and/or electric output (expressed in MWe-hr).

[COMAR 26.11.03.06C & PTC #017-0040-5-0019 & -5-0020]

Reporting

NES VOC Synthetic Minor Requirement for Exemption from NSR

(1) By April 1 of each year, the Permittee shall submit to the Department, for the previous calendar year, a certified emissions statement verifying that for the previous 12-month consecutive period, the [NES] VOC emissions limitation as stated in Condition IV-1.1 D of the operating permit was not exceeded.

(2) The Permittee shall submit semi-annual reports to the Department on the [NES] VOC emissions for the previous 12 consecutive calendar months. The reports shall be submitted within 30 days after the end of the last previous semi-annual period covered.

[Authority: COMAR 26.11.03.06C]

COMPLIANCE SCHEDULE

The Indian Head facility is currently in compliance with all applicable air quality regulations.

TITLE IV – ACID RAIN

The Acid Rain Program does not apply to the Indian Head facility.

TITLE VI – OZONE DEPLETING SUBSTANCES

The Permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in subpart B.

SECTION 112(r) – ACCIDENTAL RELEASE

The Permittee shall submit risk management plans by the date specified in 40 CFR 68.150.

The Permittee shall certify compliance with the requirements of 40 CFR 68 as part of the annual compliance certification as required by 40 CFR 70.

Note: This section does apply to the Indian Head facility, the Indian Head facility submitted a Risk Management Plan to the EPA Region III on June 16th, 1999. The EPA notified Indian Head on July 2nd, 1999 that the Risk Management Plan was administratively complete.

PERMIT SHIELD

The NSF – Indian Head Facility requested that a permit shield be included in their Part 70 Operating Permit.

SECTION V INSIGNIFICANT ACTIVITIES

This section provides a list of insignificant emissions units that were reported in the Title V permit application. The applicable Clean Air Act requirements, if any, are listed below the insignificant activity.

(1) No. 6 Fuel burning equipment using gaseous fuels or no. 1 or no. 2 fuel oil, and having a heat input less than 1,000,000 Btu (1.06 gigajoules) per hour;

The boilers are subject to the following requirements:

COMAR 26.11.09.05A(1), which establishes that the Permittee may not cause or permit the discharge of emissions from any fuel burning equipment, other than water in an uncombined form, which is greater than 20 percent opacity.

Exceptions. Section A(1) and (2) of this regulation do not apply to emissions during load changing, soot blowing, startup, or adjustments or occasional cleaning of control equipment if:

(a) The visible emissions are not greater than 40 percent opacity; and

(b) The visible emissions do not occur for more than 6 consecutive minutes in any sixty-minute period.

[For Distillate Fuel Oil]

COMAR 26.11.09.07A(1)(c), which establishes that the Permittee may not burn, sell, or make available for sale any distillate fuel with a sulfur content by weight in excess of 0.3 percent.

(2) No. 31 Stationary internal combustion engines with less than 500 brake horsepower (373 kilowatts) and which are not used to generate electricity for sale or for peak or load shaving.

The engines are subject to the following requirements:

(A) COMAR 26.11.09.05E(2), Emissions During Idle Mode: The Permittee may not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity.

(B) COMAR 26.11.09.05E(3), Emissions During Operating Mode: The Permittee may not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity.

(C) Exceptions:

(i) COMAR 26.11.09.05E(2) does not apply for a period of 2 consecutive minutes after a period of idling of 15 consecutive minutes for the purpose of clearing the exhaust system.

(ii) COMAR 26.11.09.05E(2) does not apply to emissions resulting directly from cold engine start-up and warm-up for the following maximum periods:

(a) Engines that are idled continuously when not in service: 30 minutes
(b) all other engines: 15 minutes.

(iii) COMAR 26.11.09.05E(2) & (3) do not apply while maintenance, repair or testing is being performed by qualified mechanics.

The engines are also subject to the following federal requirements:

(D) New Source Performance Standards (NSPS) 40 CFR Part 60 Subpart IIII – All units constructed after the NSPS applicability date of July 11, 2005 are subject to the requirements of this rule. For 2007 model year and later model year NSPS emergency diesel engines, the Permittee must purchase and install an engine certified to the emission standards of §60.4205(b) for the same model year and maximum engine horsepower, to wit [Reference: §60.4211(c)].

(E) National Emissions Standards for Hazardous Air Pollutants (NESHAP) promulgated under 40 CFR 63, Subparts ZZZZ for Reciprocating Internal Combustion Engines – All reciprocating internal combustion engines are subject to this rule. However, units subject to Subpart IIII have no further requirements under Subpart ZZZZ

(3) ✓ Space heaters utilizing direct heat transfer and used solely for comfort heat;

(4) ✓ Water cooling towers and water cooling ponds unless used for evaporative cooling of water from barometric jets or barometric condensers, or used in conjunction with an installation requiring a permit to operate;

(5) No. 33 Unheated VOC dispensing containers or unheated VOC rinsing containers of 60 gallons (227 liters) capacity or less;

The units are subject to COMAR 26.11.19.09D, which requires that the Permittee control emissions of volatile organic compounds (VOC) from cold degreasing operations by meeting the following requirements:

(a) COMAR 26.11.19.09D(2)(b), which establishes that the Permittee shall not use any VOC degreasing material that exceeds a vapor pressure of 1 mm Hg at 20 ° C;

(b) COMAR 26.11.19.09D(3)(a—d), which requires that the Permittee implement good operating practices designed to minimize spills and evaporation of VOC degreasing material. These practices, which shall be established in writing and displayed such that they are clearly visible to operators, shall include covers (including water covers), lids, or other methods of minimizing evaporative losses, and reducing the time and frequency during which parts are cleaned;

(c) COMAR 26.11.19.09D(4), which prohibits the use of any halogenated VOC for cold degreasing.

The Permittee shall maintain on site for at least five (5) years, and shall make available to the Department upon request, the following records of operating data:

(a) Monthly records of the total VOC degreasing materials used; and

(b) Written descriptions of good operating practices designed to minimize spills and evaporation of VOC degreasing materials.

(6) ✓ Equipment for drilling, carving, cutting, routing, turning, sawing, planing, spindle sanding, or disc sanding of wood or wood products;

(7) ✓ Brazing, soldering, or welding equipment, and cutting torches related to manufacturing and construction activities that emit HAP metals and not directly related to plant maintenance, upkeep and repair or maintenance shop activities;

(8) ✓ Equipment for washing or drying products fabricated from metal or glass, provided that no VOC is used in the process and that no oil or solid fuel is burned;

(9) ✓ Containers, reservoirs, or tanks used exclusively for electrolytic plating work, or electrolytic polishing, or electrolytic stripping of brass, bronze, cadmium, copper, iron, lead, nickel, tin, zinc, and precious metals;

(10) Containers, reservoirs, or tanks used exclusively for:

(a) ✓ Dipping operations for applying coatings of natural or synthetic resins that contain no VOC;

(b) ✓ Dipping operations for coating objects with oils, waxes, or greases, and where no VOC is used;

(c) ✓ Storage of butane, propane, or liquefied petroleum, or natural gas;

(d) No. 1 Storage of lubricating oils;

(e) No. 3 Unheated storage of VOC with an initial boiling point of 300 °F (149 °C) or greater;

(f) No. 46 Storage of Numbers 1, 2, 4, 5, and 6 fuel oil and aviation jet engine fuel;

(g) No. 2 Storage of motor vehicle gasoline and having individual tank capacities of 2,000 gallons (7.6 cubic meters) or less;

(h) No. 23 The storage of VOC normally used as solvents, diluents, thinners, inks, colorants, paints, lacquers, enamels, varnishes, liquid resins, or other surface coatings and having individual capacities of 2,000 gallons (7.6 cubic meters) or less;

(11) ✓ Gaseous fuel-fired or electrically heated furnaces for heat treating glass or metals, the use of which does not involve molten materials;

(12) ✓ Charbroilers and pit barbecues as defined in COMAR 26.11.18.01 with a total cooking area of 5 square feet (0.46 square meter) or less;

(13) ✓ First aid and emergency medical care provided at the facility, including related activities such as sterilization and medicine preparation used in support of a manufacturing or production process;

(14) ✓ Certain recreational equipment and activities, such as fireplaces, barbecue pits and cookers, fireworks displays, and kerosene fuel use;

(15) ✓ Potable water treatment equipment, not including air stripping equipment;

(16) ✓ Firing and testing of military weapons and explosives;

(17) ✓ Comfort air conditioning subject to requirements of Title VI of the Clean Air Act;

(18) ✓ Natural draft hoods or natural draft ventilators that exhaust air pollutants into the ambient air from manufacturing/industrial or commercial processes;

(19) ✓ Laboratory fume hoods and vents;

(20) Any other emissions unit, not listed in this section, with a potential to emit less than the "de minimus" levels listed in COMAR 26.11.02.10X (list and describe units):

No. 1 **NR-OBCR-E1**: Open burning at the Caffee Road Thermal Treatment Point. Explosive or propellant contaminated metal objects, cardboard and packaging materials are the raw products and the finished products are ash residue and scrap metal for recycling.

No. 1 **NR-OBSA-E1-E8**: Open burning at the Strauss Avenue Thermal Treatment Point. Waste propellants, explosives and pyrotechnics are the raw products and the finished products treatment residue.

No. 27 **Reg. Nos. 9-0062 & 7-0008 M:** Spent & Mixed Acid Storage - TANK Nos.: - 0781-E1, E2, and 3, 0672-E1, 0674-E1, 0674-E3, E4, E5, & E6, and TANK-1107-E1

No. 36 **(Reg. # 6-0097 & 6-0101):** Miscellaneous VOC storage & Usage - MiscVOC-727-

E2, 1024-E2, 1035-E1, 1006-E6, 859-E3, 859-E4, MiscVOC-717-E14, 717-E6, 1866-E7, 1913-E2, Misc. VOC 0676 E7, Misc. VOC 1913-E, Nitrate Ester (TANKS – 1513-E2 & E3), and Heptane tank (TANK-859-E5)

No. 6 MIXER 646-E1: 100 gallon horizontal mixer in Building 846; MIXER 856-E1: two 500-gallon mixers, two 100 gallon mixers and one 50 gallon mixer in Building 856.

SECTION VI STATE-ONLY ENFORCEABLE CONDITIONS

The Permittee is subject to the following State-only enforceable requirements:

1. Applicable Regulations.

a. **COMAR 26.11.06.08 and 26.11.06.09**, which generally prohibit the discharge of emissions beyond the property line in such a manner that a nuisance or air pollution is created.

b. **COMAR 26.11.15.05**, which requires that the Permittee implement "Best Available Control Technology for Toxics" (T – BACT) to control emissions of toxic air pollutants.

c. **COMAR 26.11.15.06**, which prohibits the discharge of toxic air pollutants to the extent that such emissions will unreasonably endanger human health.

d. **COMAR 26.11.36.03** - Emergency Generators and Load Shaving Units NO_X Requirements.

"A. Applicability and General Requirements for Emergency Generators and Load Shaving Units.

(1) The owner or operator of an emergency generator may not operate the generator except for emergencies, testing, and maintenance purposes.

(2) Except as provided in §A(5) of this regulation, this regulation does not apply to any engine that is fueled with natural gas or propane.

(3) This regulation does not apply to any engine that operates as a redundant system for power without direct or indirect compensation that is:

(a) Located at a nuclear power plant; or

(b) Located at a facility where operation of the engine is necessary to support critical national activities relating to security, aerospace research, or communications.

(4) The owner or operator of an emergency generator or load shaving unit may be subject to the federal standards for stationary internal combustion engines under 40 CFR Parts 60 and 63.

(5) The owner or operator of an emergency generator or load shaving unit may

not operate the engine for testing and engine maintenance purposes between 12:01 a.m. and 2 p.m. on any day on which the Department forecasts that the air quality will be a code orange, code red, or code purple unless the engine fails a test and engine maintenance and a re-test are necessary.

(6) The owner or operator of an engine that is used for any purpose other than for emergency purposes shall install and operate a non-resettable hourly time meter on the engine for the purpose of maintaining the operating log required in §E of this regulation."

COMAR 26.11.36.01 B - Definitions:
"(5) Emergency.

(a) "Emergency" means a condition where the primary energy or power source is disrupted or discontinued due to conditions beyond the control of the owner or operator of a facility, including:

(i) A failure of the electrical grid;

(ii) On-site disaster or equipment failure; or

(iii) Public service emergencies such as flood, fire, natural disaster, or severe weather conditions."

(b) "Emergency" includes a PJM declared emergency.

"(6) "Emergency generator" means:

(a) An engine used only during an emergency or for testing and engine maintenance purposes; and

(b) An engine that operates during an emergency according to the procedures in the PJM Emergency Operations Manual for a PJM declared emergency."

"(10) Load Shaving Unit.

(a) "Load shaving unit" means an engine that operates for other than an emergency to generate electricity for use on-site or for sale."

2. Operating Conditions.

a. Materials containing any asbestos (friable or non-friable) shall not be decontaminated in the industrial waste processor.

b. The dry scrubber and baghouse shall be used when burning any plastics, wood or other combustibles in the industrial waste processor.

c. Metal waste shall be charged separately from any combustible waste in the industrial

waste processor.

[Authority: PTC #08-6-00132 M, issued 13/3/97 and PTC #08-2-0004 N, issued 2/18/99 & COMAR 26.11.15.06]

3. **Record Keeping and Reporting**.

a. The Permittee shall submit to the Department, by April 1 of each year during the term of this permit, a written certification of the results of an analysis of emissions of toxic air pollutants from the Permittee's facility during the previous calendar year. The analysis shall include either:

i. a statement that previously submitted compliance demonstrations for emissions of toxic air pollutants remain valid; or

ii. a revised compliance demonstration, developed in accordance with requirements included under COMAR 26.11.15 & 16, that accounts for changes in operations, analytical methods, emissions determinations, or other factors that have invalidated previous demonstrations.

b. The Permittee shall log the type of charge (i.e., metals or combustibles), the date, and the duration of charge and temperature set point of the industrial waste processor

c. The Permittee shall maintain a log for all emergency and load-shaving generators indicating the amounts of fuel oil combusted, the hours of operation, and reason for generator operation (i.e., maintenance or operational testing, power outage, load shaving etc.).

SECTION I SOURCE IDENTIFICATION

1. DESCRIPTION OF FACILITY

The Naval Support Facility Indian Head (NSFIH) began in 1890 as a naval gun testing facility and evolved into a critical resource serving the armed forces with special ordnance devices and components.

INSFIH occupies a 3,500-acre peninsula, bounded by the Potomac River and Mattawoman Creek, and is located in the town of Indian Head, in Charles County, Maryland, 30 miles south of Washington, D.C.

2. FACILITY INVENTORY LIST

Emissions Unit Number	MDE Registration Number	Emissions Unit Name and Description	Date of Installation
COMBINED HEAT & POWER PLANT [NES]			
FBE-PNP-E1	017-0040 -5-0019	53 MM Btu/hr (4.5-MW) Centaur 50 dual (NG/No.2 fuel oil) fired combustion turbine (CT) generator e/w Dry SoLoNo$_X$® Injectors	March 2015
FBE-PNP-E2	017-0040 -5-0020	29.5 MM Btu/hr dual (NG/No.2 fuel oil) fired heat recovery steam generator (HRSG)	March 2015
AUXILIARY STEAM PLANT			
FBE-712-E1	4-0081	43-MM BTU/hr Johnson No. 2 fuel oil fired boiler, which is used to supplement steam generation of the NES CHP plant.	1978
FBE-712-E3	4-0241	97 MM Btu/hr Nebraska B-601 E, No. 2 fuel oil fired boiler	Jan. 2014/ Aug. 2015
EG-1920A-E1 **[NES]**	9-0166	2,500-kW (3674-Bhp) MTU Emergency Diesel Generators (EDG)	Aug. 2015
EG1920B-E1 **[NES]**	9-0166	2,500-kW (3674-Bhp) MTU Emergency Diesel Generators (EDG)	Aug. 2015
STEAM B [NES]			
FBE-SB-1-E1	5-0021	38 MM Btu (900-hp) Hurst/Power Flame NG Fired Steam Boiler	TBD
FBE-SB-2-E1	5-0022	38 MM Btu (900-hp) Hurst/Power Flame NG Fired Steam Boiler	TBD
EG-SB1-E1	9-0169	450-kW Cummins Emergency Diesel Generator	TBD
PNP-1-Strauss [NES]			
FBE-PNP-1-E1	5-0023	31.54 MM Btu (750-hp) Hurst Power Flame dual(NG /No.2 oil) fired boiler	Aug. 2015
EG-PNP-1-E1	9-0167	1,000-kW (1495-Bhp) Cummins Emergency Diesel Generator	Aug. 2015

Emissions Unit Number	MDE Registration Number	Emissions Unit Name and Description	Date of Installation
SNP-2 [NES]			
FBE-SNP-2-E1	5-0024	20.9 MM Btu (500-hp) Hurst Power Flame NG fired boiler	Aug. 2015
FBE-SNP-2-E2	5-0025	20.9 MM Btu (500-hp) Hurst Power Flame NG fired boiler	Aug. 2015
SNP-6 [NES]			
FBE-SNP-6-E1	5-0026	16.7 MM Btu (400-hp) Hurst Power Flame NG fired boilers	Aug. 2015
FBE-SNP-6-E2	5-0026	16.7 MM Btu (400-hp) Hurst Power Flame NG fired boilers	Aug. 2015
SNP-4 [NES]			
FBE-SNP-4-E1	5-0027	14.7 MM Btu (350-hp) Hurst Power Flame NG fired boiler	Aug. 2015
FBE-SNP-4-E2	5-0028	14.7 MM Btu (350-hp) Hurst Power Flame NG fired boiler	Aug. 2015
SNP-7 [NES]			
FBE-SNP-7-E1	5-0029	10.5 MM Btu (250-hp) Hurst Power Flame (Euro Series) NG fired boiler	Aug. 2015
FBE-SNP-7-E2	5-0030	10.5 MM Btu (250-hp) Hurst Power Flame (Euro Series) NG fired boiler	Aug. 2015
SNP-1 [NES]			
FBE-SNP-1-E1	5-0031	8.5 MM Btu (200-hp) Hurst Power Flame (Euro Series) NG boilers	Aug. 2015
FBE-SNP-1-E2	5-0031	8.5 MM Btu (200-hp) Hurst Power Flame (Euro Series) NG boilers	Aug. 2015
SNP-3 [NES]			
FBE-SNP-3-E1	5-0032	8.5 MM Btu (200-hp) Hurst Power Flame (Euro Series) NG boilers	Aug. 2015
FBE-SNP-3-E2	5-0032	8.5 MM Btu (200-hp) Hurst Power Flame (Euro Series) NG boilers	Aug. 2015
SNP-8 [NES]			
FBE-SNP-8-E1	5-0033	5.3 MM Btu (125-hp) Hurst Power Flame (Euro Series) NG boilers	Aug. 2015
FBE-SNP-8-E2	5-0033	5.3 MM Btu (125-hp) Hurst Power Flame (Euro Series) NG boilers	Aug. 2015
MARINE BARRACKS – BLDG 901			
FBE-901-1-E1	5-0035	14.3 mm Btu/hr(350-HP) Cleaver Brooks (NG/No.2 fuel) fired boiler	Aug. 2015
FBE-901-2-E1	5-0036	14.3 mm Btu/hr(350-HP) Cleaver Brooks (NG/No.2 fuel) fired boiler	Aug. 2015
MISC. DIESEL ENGINES/ GENERATORS & BOILERS			
FBE 3157-E1	5-0011	1 MM BTU/hr. Fulton propane-fired boiler - ESTL Complex - (Bldg 3157)	March 2012

Emissions Unit Number	MDE Registration Number	Emissions Unit Name and Description	Date of Installation
FBE-900-E1	9-0122	750 kW Detroit Diesel emergency generator-Bldg 900	March 2005
FBE-901-E1	9-0143	500-hp/410-kW Caterpillar model 6134 NSPS emergency diesel generator – Bldg. 901	October 2009
EG-3123-E1	9-0168	450-kW Emergency Diesel Generator	August 2015
GASOLINE STORAGE TANKS			
TANK-510-E3	9-0174	12,000-gallon above ground storage tank which stores gasoline. The tank is connected to a gasoline dispensing unit e/w Stage I & II vapor recovery	Sept. 2015
PAINTING			
PAINT-588-E1	6-0099	Paint booth that is located in building 588 and used for touch-up painting. Control equipment: Filters with a 97.5% control efficiency for Particulate Matter.	1944
PAINT-1134-E1	6-0099	Paint booth in building 1134, which is used to coat weapons systems and simulators. Control Equipment: Filter with 96% control efficiency for Particulate Matter.	1973
PAINT-1134-E3	6-0099	Automatic Paint gun cleaner, which uses paint thinner to clean the paint guns after use.	1995
PAINT-717-E10	6-0099	Paint booth, which is used to coat ordnance items. Control Equipment: Filter with 90% control efficiency for Particulate Matter and an 80% control efficiency for VOC.	1995
PAINT-717-E11	6-0099	Automatic Paint spray gun cleaner in building 717.	1995
PAINT-1866-E3	6-0099	Paint spray booth in Building 1866, which is used for coating ordnance items. Control Equipment: Activated Carbon filters 18% control efficiency for Particulate Matter, and 95% control efficiency for VOCs.	1996
PAINT-1866-E4	6-0099	Automatic paint gun cleaning in building 1866.	1996
PAINT-0693-E5		Paint spray booth, which is used as an environmental box. Control Equipment: Filter with 90% control	1997

Emissions Unit Number	MDE Registration Number	Emissions Unit Name and Description	Date of Installation
		efficiency for Particulate Matter.	
PAINT-720-E1	6-0099 & 6-0116 N - 2003	Paint booth in building 720, which is used to coat ordnance items. Control Equipment: Filters with 99% control efficiency for Particulate Matter, and 60 % control efficiency for VOC.	2000
PAINT-720-E2	6-0099	Automatic paint gun cleaning.	1995
PAINT-730-E3 & E-4	6-0116	BRACON Paint Spray Booth - (EP - 4) - Bldg 730 - for Ordnance Coating e/w 3-Stage Filtration - NESHAP compliant	Dec. 2011
PAINT-1913-E4	6-0116 N	Paint booth in Bldg. 1913 for the CAD/PAD Manufacturing and Rework Facility	2003
MISCELLANEOUS PROCESSES			
INC-1770-E1	2-0004	Industrial waste processor which is located in building 1770 and is fired by two #2 fuel oil burners manufactured by L&L Special Furnace. Control Equipment**: BCE Cyclone (5CL-152-DT-52)** with a control efficiency of 99% and a capture efficiency of 100% for particulate matter. This unit also has a bag-house attached to it, INC-1770-E1. Control Equipment: Dry Scrubber & BCE Baghouse (R12W-54-3X) for emissions control, which is used on the industrial waste processor. This unit has a control efficiency of 99% and a capture efficiency of 100%.	1993/ **Mar. 2014**
EXPLOSIVE AND PROPELLANT MFG. PROCESSES			
EXPL-808-E2	6-0101	Apply end washers, spiral wrap and end sleeves. Solvent is used to adhere tape to the grains. The solvent air-dries (cures) following applications of the end washers and spiral wrap.	1951
EXPL-874-E2	6-0101	Apply end washers, spiral wrap and end sleeves. Solvent is used to adhere tape to the grains. The solvent air-dries (cures) following applications of the end washers and spiral wrap.	1969
EXPL-729-E1	6-0101	Five Drying ovens, which take the solvent and water, wet energetic material and dry them into a usable product.	1991

Emissions Unit Number	MDE Registration Number	Emissions Unit Name and Description	Date of Installation
EXPL-728-E3	6-0101	Used to dry energetic materials.	1953
EXPL-214-E1	6-0101	Propellant drying: Trays of propellant grains produced in the LOVA Plant are dried in heated bays.	Pre-1991
EXPL-216-E1	6-0101	Propellant drying: Trays of propellant grains produced in the LOVA Plant are dried in heated bays.	Pre-1991
EXPL-218-E1	6-0101	Propellant drying: Trays of propellant grains produced in the LOVA Plant are dried in heated bays.	Pre-1991
EXPL-219-E1	6-0101	Propellant drying: Trays of propellant grains produced in the LOVA Plant are dried in heated bays.	Pre-1991
EXPL-220-E1	6-0101	Propellant drying: Trays of propellant grains produced in the LOVA Plant are dried in heated bays.	Pre-1991
EXPL-326-E1	6-0101	Propellant drying: Trays of propellant grains produced in the LOVA Plant are dried in heated bays.	Pre-1991
EXPL-327-E1	6-0101	Propellant drying: Trays of propellant grains produced in the LOVA Plant are dried in heated bays.	Pre-1991
EXPL-1028-E1	6-0101	Strainer, propellant mix produced in the LOVA plant is blocked, strained, and re-blocked. This process takes propellant dough and produces propellant strands and scrap propellant.	1960
EXPL-1029-E1	6-0101	Strainer, propellant mix produced in the LOVA plant is blocked, strained, and re-blocked. This process takes propellant dough and produces propellant strands and scrap propellant.	1960
EXPL-1031-E1	6-0101	Vertical extrusion press, this unit takes propellant mix produced in the LOVA plant and presses it into extruded strands and propellant scrap.	1965
EXPL-1033-E1	6-0101	Vertical extrusion press, this unit takes propellant mix produced in the LOVA plant and presses it into extruded strands and propellant scrap.	1965
EXPL-1430-E1	6-0101	Grinding and dryer, grind energetic materials to desired particle size prior to further processing. Control Equipment: Inline Filter, with a	1987

Emissions Unit Number	MDE Registration Number	Emissions Unit Name and Description	Date of Installation
		control efficiency of 98% for Particulate Matter. HEPA filter, with a control efficiency of 95% for Particulate Matter. Baghouse with 99.6% control efficiency for Particulate matter. Condenser for Particulate Matter control.	
EXPL-0786-E3	6-0101	Biazzi Nitration Equipment uses a nitrator, separators, and washers, which are used to synthesize nitrate esters. Control Equipment: Cyclone Separator, with a control efficiency of 80%.	1953
EXPL-213-E1	6-0101	Propellant curing	1918
EXPL-332-E1	6-0101	Propellant curing	1918
EXPL-335-E1	6-0101	Propellant curing	1918
MIXERS			
MIXER-1024-E1	6-0098	150-gallon sigma mixer - mixes energetic ingredients, solvents, and inert ingredients to develop energetics. Control Equipment: Thermal/Catalytic Oxidizer, which has a capture efficiency of 100%. (For use during Nitramine Processing only).	1970 1997
MIXER-530-E1	6-0098	Mix ingredients and solvent then extracted. The result is a mixed product.	1968
MIXER-530-E2	6-0098	High-Shear Mixer, which mixes energetic material and solvent to form energetic material.	1972
MIXER-1122-E1	6-0098	150-Gallon Mixer, which mixes propylene glycol solution and mix ingredients to form propellants and explosives. Control Equipment: Carbon filters with a control efficiency of 99.9%. Industrial Grade HEPA filters which have a control efficiency of 99.97, pre-filters with a control efficiency of 30%, particulate filters with a control efficiency of 98% and a condenser with a control efficiency of 96%.	1996
MIXER-1122-E2	6-0098	Solvent cleanup Control Equipment: Carbon Filters with a control efficiency of 99.9%, HEPA filter with a control efficiency of 99.97% and a pre-filter with a control efficiency of 30%.	1996
MIXER-1866-E1	6-0098	40-gallon mixer, which mixes ingredients for liner mixes.	1996

Emissions Unit Number	MDE Registration Number	Emissions Unit Name and Description	Date of Installation
MIXER-1881-E1	6-0098	420-gallon mixer, which mixes ingredients, liquid and bulk solid ingredients to make explosives and propellants. Control Equipment: Activated charcoal filter, pre-filter, bag filters with a control efficiency of 98%, cartridge filters with a control efficiency of 98%, condenser system with a control efficiency of 80% and a vacuum pump oil and mist eliminator.	1996
MIXER-3069-E1	6-0018 M	Propellant Mixing, Twin Screw Extruder	2003
BRACON P002 EXPLOSIVES MFG/QA-QC PROCESSES			
EXPL-727-E1	7-0014	BRACON Molding Powder Processing	Dec. 2011
EXPL-727-E2	7-0015	BRACON Melt Cast Explosives Operation	Dec. 2011
EXPL-727-E3	7-0016	BRACON Explosives Removal Operation	Dec. 2011
AGILE CHEMICAL FACILITY			
EXPL-786-E7	-9-0151	Nitration: Raw Materials Prep & Storage	Feb. 2016
EXPL-786-E8	-7-0018	Nitration Process	Feb. 2016
EXPL-1464-E1	-7-0017	Nitration: Product Formulation, Transport, Holding, & Sampling.	Feb. 2016
EXPL-790-E1	-9-0153	Denitration: Spent Acid Mixing and Holding	Feb. 2016

SECTION II GENERAL CONDITIONS

1. DEFINITIONS

[COMAR 26.11.01.01] and [COMAR 26.11.02.01]

The words or terms in this Part 70 permit shall have the meanings established under COMAR 26.11.01 and .02 unless otherwise stated in this permit.

2. ACRONYMS

ARMA	Air and Radiation Management Administration
BACT	Best Available Control Technology
Btu	British thermal unit
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CEM	Continuous Emissions Monitor
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COMAR	Code of Maryland Regulations
EPA	United States Environmental Protection Agency
FR	Federal Register
gr	grains
HAP	Hazardous Air Pollutant
MACT	Maximum Achievable Control Technology
MDE	Maryland Department of the Environment
MVAC	Motor Vehicle Air Conditioner
NESHAPS	National Emission Standards for Hazardous Air Pollutants
NO_X	Nitrogen Oxides
NSPS	New Source Performance Standards
NSR	New Source Review
OTR	Ozone Transport Region
PM	Particulate Matter
PM10	Particulate Matter with Nominal Aerodynamic Diameter of 10 micrometers or less
ppm	parts per million
ppb	parts per billion
PSD	Prevention of Significant Deterioration
PTC	Permit to construct
PTO	Permit to operate (State)
SIC	Standard Industrial Classification
SO_2	Sulfur Dioxide
TAP	Toxic Air Pollutant
tpy	tons per year
VE	Visible Emissions
VOC	Volatile Organic Compounds

3. EFFECTIVE DATE

The effective date of the conditions in this Part 70 permit is the date of permit issuance, unless otherwise stated in the permit.

4. PERMIT EXPIRATION

[COMAR 26.11.03.13B(2)]

Upon expiration of this permit, the terms of the permit will automatically continue to remain in effect until a new Part 70 permit is issued for this facility provided that the Permittee has submitted a timely and complete application and has paid applicable fees under COMAR 26.11.02.16.

Otherwise, upon expiration of this permit the right of the Permittee to operate this facility is terminated.

5. PERMIT RENEWAL

[COMAR 26.11.03.02B(3)] and [COMAR 26.11.03.02E]

The Permittee shall submit to the Department a completed application for renewal of this Part 70 permit at least 12 months before the expiration of the permit. Upon submitting a completed application, the Permittee may continue to operate this facility pending final action by the Department on the renewal.

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall submit such supplementary facts or corrected information no later than 10 days after becoming aware that this occurred. The Permittee shall also provide additional information as necessary to address any requirements that become applicable to the facility after the date a completed application was submitted, but prior to the release of a draft permit. This information shall be submitted to the Department no later than 20 days after a new requirement has been adopted.

6. CONFIDENTIAL INFORMATION

[COMAR 26.11.02.02G]

In accordance with the provisions of the State Government Article, Sec. 10-611 et seq., Annotated Code of Maryland, all information submitted in an application shall be considered part of the public record and available for inspection and copying, unless the Permittee claims that the information is confidential when it is submitted to the Department. At the time of the request for inspection or copying, the Department will make a determination with regard to the

confidentiality of the information. The Permittee, when requesting confidentiality, shall identify the information in a manner specified by the Department and, when requested by the Department, promptly provide specific reasons supporting the claim of confidentiality. Information submitted to the Department without a request that the information be deemed confidential may be made available to the public. Subject to approval of the Department, the Permittee may provide a summary of confidential information that is suitable for public review. The content of this Part 70 permit is not subject to confidential treatment.

7. PERMIT ACTIONS

[COMAR 26.11.03.06E(3)] and [COMAR 26.11.03.20(A)]

This Part 70 permit may be revoked or reopened and revised for cause. The filing of an application by the Permittee for a permit revision or renewal; or a notification of termination, planned changes or anticipated noncompliance by the facility, does not stay a term or condition of this permit.

The Department shall reopen and revise, or revoke the Permittee's Part 70 permit under the following circumstances:

a. Additional requirements of the Clean Air Act become applicable to this facility and the remaining permit term is 3 years or more;

b. The Department or the EPA determines that this Part 70 permit contains a material mistake, or is based on false or inaccurate information supplied by or on behalf of the Permittee;

c. The Department or the EPA determines that this Part 70 permit must be revised or revoked to assure compliance with applicable requirements of the Clean Air Act; or

d. Additional requirements become applicable to an affected source under the Federal Acid Rain Program.

8. PERMIT AVAILABILITY

[COMAR 26.11.02.13G]

The Permittee shall maintain this Part 70 permit in the vicinity of the facility for which it was issued, unless it is not practical to do so, and make this permit immediately available to officials of the Department upon request.

9. REOPENING THE PART 70 PERMIT FOR CAUSE BY THE EPA

[COMAR 26.11.03.20B]

The EPA may terminate, modify, or revoke and reissue a permit for cause as prescribed in 40 CFR §70.7(g)

10. TRANSFER OF PERMIT

[COMAR 26.11.02.02E]

The Permittee shall not transfer this Part 70 permit except as provided in COMAR 26.11.03.15.

11. REVISION OF PART 70 PERMITS – GENERAL CONDITIONS

[COMAR 26.11.03.14] and [COMAR 26.11.03.06A(8)]

a. The Permittee shall submit an application to the Department to revise this Part 70 permit when required under COMAR 26.11.03.15 -.17.

b. When applying for a revision to a Part 70 permit, the Permittee shall comply with the requirements of COMAR 26.11.03.02 and .03 except that the application for a revision need include only information listed that is related to the proposed change to the source and revision to the permit. This information shall be sufficient to evaluate the proposed change and to determine whether it will comply with all applicable requirements of the Clean Air Act.

c. The Permittee may not change any provision of a compliance plan or schedule in a Part 70 permit as an administrative permit amendment or as a minor permit modification unless the change has been approved by the Department in writing.

d. A permit revision is not required for a change that is provided for in this permit relating to approved economic incentives, marketable permits, emissions trading, and other similar programs.

12. SIGNIFICANT PART 70 OPERATING PERMIT MODIFICATIONS

[COMAR 26.11.03.17]

The Permittee may apply to the Department to make a significant modification to its Part 70 Permit as provided in COMAR 26.11.03.17 and in accordance with the following conditions:

a. A significant modification is a revision to the federally enforceable provisions in the permit that does not qualify as an administrative permit amendment under COMAR 26.11.03.15 or a minor permit modification as defined under COMAR 26.11.03.16.

b. This permit does not preclude the Permittee from making changes, consistent with the provisions of COMAR 26.11.03, that would make the permit or particular terms and conditions of the permit irrelevant, such as by shutting down or reducing the level of operation of a source or of an emissions unit within the source. Air pollution control equipment shall not be shut down or its level of operation reduced if doing so would violate any term of this permit.

c. Significant permit modifications are subject to all requirements of COMAR 26.11.03 as they apply to permit issuance and renewal, including the requirements for applications, public participation, and review by affected states and EPA, except:

(1) An application need include only information pertaining to the proposed change to the source and modification of this permit, including a description of the change and modification, and any new applicable requirements of the Clean Air Act that will apply if the change occurs;

(2) Public participation, and review by affected states and EPA, is limited to only the application and those federally enforceable terms and conditions of the Part 70 permit that are affected by the significant permit modification.

d. As provided in COMAR 26.11.03.15B(5), an administrative permit amendment may be used to make a change that would otherwise require a significant permit modification if procedures for enhanced preconstruction review of the change are followed that satisfy the requirements of 40 CFR 70.7(d)(1)(v).

e. Before making a change that qualifies as a significant permit modification, the Permittee shall obtain all permits-to-construct and approvals required by COMAR 26.11.02.

f. The Permittee shall not make a significant permit modification that results in a violation of any applicable requirement of the Clean Air Act.

g. The permit shield in COMAR 26.11.03.23 applies to a final significant permit modification that has been issued by the Department, to the extent applicable under COMAR 26.11.03.23.

13. MINOR PERMIT MODIFICATIONS

[COMAR 26.11.03.16]

The Permittee may apply to the Department to make a minor modification to the federally enforceable provisions of this Part 70 permit as provided in COMAR 26.11.03.16 and in accordance with the following conditions:

a. A minor permit modification is a Part 70 permit revision that:

(1) Does not result in a violation of any applicable requirement of the Clean Air Act;

(2) Does not significantly revise existing federally enforceable monitoring, including test methods, reporting, record keeping, or compliance certification requirements except by:

(a) Adding new requirements,

(b) Eliminating the requirements if they are rendered meaningless because the emissions to which the requirements apply will no longer occur, or

(c) Changing from one approved test method for a pollutant and source category to another;

(3) Does not require or modify a:

(a) Case-by-case determination of a federally enforceable emissions standard,

(b) Source specific determination for temporary sources of ambient impacts, or

(c) Visibility or increment analysis;

(4) Does not seek to establish or modify a federally enforceable permit term or condition for which there is no corresponding underlying applicable requirement of the Clean Air Act, but that the Permittee has assumed to avoid an applicable requirement to which the source would otherwise be subject, including:

(a) A federally enforceable emissions standard applied to the source pursuant to COMAR 26.11.02.03 to avoid classification as a Title I modification; and

(b) An alternative emissions standard applied to an emissions unit pursuant to regulations promulgated under Section 112(i)(5) of the Clean Air Act

(5) Is not a Title I modification; and

(6) Is not required under COMAR 26.11.03.17 to be processed as a significant modification to this Part 70 permit.

b. Application for a Minor Permit Modification

The Permittee shall submit to the Department an application for a minor permit modification that satisfies the requirements of COMAR 26.11.03.03 which includes the following:

(1) A description of the proposed change, the emissions resulting from the change, and any new applicable requirements that will apply if the change is made;

(2) The proposed minor permit modification;

(3) Certification by a responsible official, in accordance with COMAR 26.11.02.02F, that:

(a) The proposed change meets the criteria for a minor permit modification, and

(b) The Permittee has obtained or applied for all required permits-to-construct required by COMAR 26.11.03.16 with respect to the proposed change;

(4) Completed forms for the Department to use to notify the EPA and affected states, as required by COMAR 26.11.03.07-.12.

c. Permittee's Ability to Make Change

(1) For changes proposed as minor permit modifications to this permit that will require the applicant to obtain a permit to construct, the permit to construct must be issued prior to the new change.

(2) During the period of time after the Permittee applies for a minor modification but before the Department acts in accordance with COMAR 26.11.03.16F(2):

(a) The Permittee shall comply with applicable requirements of the Clean Air Act related to the change and the permit terms and conditions described in the application for the minor modification.

(b) The Permittee is not required to comply with the terms and conditions in the permit it seeks to modify. If the Permittee fails to comply with the terms and conditions in the application during

this time, the terms and conditions of both this permit and the application for modification may be enforced against it.

d. The Permittee is subject to enforcement action if it is determined at any time that a change made under COMAR 26.11.03.16 is not within the scope of this regulation.

e. Minor permit modification procedures may be used for Part 70 permit modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches, but only to the extent that the minor permit modification procedures are explicitly provided for in regulations approved by the EPA as part of the Maryland SIP or in other applicable requirements of the Clean Air Act.

14. ADMINISTRATIVE PART 70 OPERATING PERMIT AMENDMENTS

[COMAR 26.11.03.15]

The Permittee may apply to the department to make an administrative permit amendment as provided in COMAR 26.11.03.15 and in accordance with the following conditions:

a. An application for an administrative permit amendment shall:

(1) Be in writing;

(2) Include a statement certified by a responsible official that the proposed amendment meets the criteria in COMAR 26.11.03.15 for an administrative permit amendment, and

(3) Identify those provisions of this part 70 permit for which the amendment is requested, including the basis for the request.

b. An administrative permit amendment:

(1) Is a correction of a typographical error;

(2) Identifies a change in the name, address, or phone number of a person identified in this permit, or a similar administrative change involving the Permittee or other matters which are not directly related to the control of air pollution;

(3) requires more frequent monitoring or reporting by the Permittee;

(4) Allows for a change in ownership or operational control of a source for which the Department determines that no other revision to the permit is necessary and is documented as per COMAR 26.11.03.15B(4);

(5) Incorporates into this permit the requirements from preconstruction review permits or approvals issued by the Department in accordance with COMAR 26.11.03.15B(5), but only if it satisfies 40 CFR 70.7(d)(1)(v);

(6) Incorporates any other type of change, as approved by the EPA, which is similar to those in COMAR 26.11.03.15B(1)—(4);

(7) Notwithstanding COMAR 26.11.03.15B(1)—(6), all modifications to acid rain control provisions included in this Part 70 permit are governed by applicable requirements promulgated under Title IV of the Clean Air Act; or

(8) Incorporates any change to a term or condition specified as State-only enforceable, if the Permittee has obtained all necessary permits-to-construct and approvals that apply to the change.

c. The Permittee may make the change addressed in the application for an administrative amendment upon receipt by the Department of the application, if all permits-to-construct or approvals otherwise required by COMAR 26.11.02 prior to making the change have first been obtained from the Department.

d. The permit shield in COMAR 26.11.03.23 applies to administrative permit amendments made under Section B(5) of COMAR 26.11.03.15 , but only after the Department takes final action to revise the permit.

e. The Permittee is subject to enforcement action if it is determined at any time that a change made under COMAR 26.11.03.15 is not within the scope of this regulation.

15. OFF-PERMIT CHANGES TO THIS SOURCE

[COMAR 26.11.03.19]

The Permittee may make off-permit changes to this facility as provided in COMAR 26.11.03.19 and in accordance with the following conditions:

a. The Permittee may make a change to this permitted facility that is not addressed or prohibited by the federally enforceable conditions of this Part 70 permit without obtaining a Part 70 permit revision if:

(1) The Permittee has obtained all permits and approvals required by COMAR 26.11.02 and .03;

(2) The change is not subject to any requirements under Title IV of the Clean Air Act;

(3) The change is not a Title I modification; and

(4) The change does not violate an applicable requirement of the Clean Air Act or a federally enforceable term or condition of the permit.

b. For a change that qualifies under COMAR 26.11.03.19, the Permittee shall provide contemporaneous written notice to the Department and the EPA, except for a change to an emissions unit or activity that is exempt from the Part 70 permit application, as provided in COMAR 26.11.03.04. This written notice shall describe the change, including the date it was made, any change in emissions, including the pollutants emitted, and any new applicable requirements of the Clean Air Act that apply as a result of the change.

c. Upon satisfying the requirements of COMAR 26.11.03.19, the Permittee may make the proposed change.

d. The Permittee shall keep a record describing:

(1) Changes made at the facility that result in emissions of a regulated air pollutant subject to an applicable requirement of the Clean Air Act , but not otherwise regulated under this permit; and

(2) The emissions resulting from those changes.

e. Changes that qualify under COMAR 26.11.03.19 are not subject to the requirements for Part 70 revisions.

f. The Permittee shall include each off-permit change under COMAR 26.11.03.19 in the application for renewal of the part 70 permit.

g. The permit shield in COMAR 26.11.03.23 does not apply to off-permit changes made under COMAR 26.11.03.19.

h. The Permittee is subject to enforcement action if it is determined that an off-permit change made under COMAR 26.11.03.19 is not within the scope of this regulation.

16. ON-PERMIT CHANGES TO SOURCES

[COMAR 26.11.03.18]

The Permittee may make on-permit changes that are allowed under Section 502(b)(10) of the Clean Air Act as provided in COMAR 26.11.03.18 and in accordance with the following conditions:

a. The Permittee may make a change to this facility without obtaining a revision to this Part 70 permit if:

(1) The change is not a Title I modification;

(2) The change does not result in emissions in excess of those expressly allowed under the federally enforceable provisions of the Part 70 permit for the permitted facility or for an emissions unit within the facility, whether expressed as a rate of emissions or in terms of total emissions;

(3) The Permittee has obtained all permits and approvals required by COMAR 26.11.02 and .03;

(4) The change does not violate an applicable requirement of the Clean Air Act;

(5) The change does not violate a federally enforceable permit term or condition related to monitoring, including test methods, record keeping, reporting, or compliance certification requirements;

(6) The change does not violate a federally enforceable permit term or condition limiting hours of operation, work practices, fuel usage, raw material usage, or production levels if the term or condition has been established to limit emissions allowable under this permit;

(7) If applicable, the change does not modify a federally enforceable provision of a compliance plan or schedule in this Part 70 permit unless the Department has approved the change in writing; and

(8) This permit does not expressly prohibit the change under COMAR 26.11.03.18.

b. The Permittee shall notify the Department and the EPA in writing of a proposed on-permit change under COMAR 26.11.03.18 not later than 7 days before the change is made. The written information shall include the following information:

(1) A description of the proposed change;

(2) The date on which the change is proposed to be made;

(3) Any change in emissions resulting from the change, including the pollutants emitted;

(4) Any new applicable requirement of the Clean Air Act; and

(5) Any permit term or condition that would no longer apply.

c. The responsible official of this facility shall certify in accordance with COMAR 26.11.02.02F that the proposed change meets the criteria for the use of on-permit changes under COMAR 26.11.03.18.

d. The Permittee shall attach a copy of each notice required by condition b. above to this Part 70 permit.

e. On-permit changes that qualify under COMAR 26.11.03.18 are not subject to the requirements for part 70 permit revisions.

f. Upon satisfying the requirements under COMAR 26.11.03.18, the Permittee may make the proposed change.

g. The permit shield in COMAR 26.11.03.23 does not apply to on-permit changes under COMAR 26.11.03.18.

h. The Permittee is subject to enforcement action if it is determined that an on-permit change made under COMAR 26.11.03.18 is not within the scope of the regulation or violates any requirement of the State air pollution control law.

17. FEE PAYMENT

[COMAR 26.11.02.16A(2) & (5)(b)]

a. The fee for this Part 70 permit is as prescribed in Regulation .19 of COMAR 26.11.02.

b. The fee is due on and shall be paid on or before each 12-month anniversary date of the permit.

c. Failure to pay the annual permit fee constitutes cause for revocation of the permit by the Department.

18. REQUIREMENTS FOR PERMITS-TO-CONSTRUCT AND APPROVALS

[COMAR 26.11.02.09.]

The Permittee may not construct or modify or cause to be constructed or modified any of the following sources without first obtaining, and having in current effect, the specified permits-to-construct and approvals:

a. New Source Review source, as defined in COMAR 26.11.01.01, approval required, except for generating stations constructed by electric companies;

b. Prevention of Significant Deterioration source, as defined in COMAR 26.11.01.01, approval required, except for generating stations constructed by electric companies;

c. New Source Performance Standard source, as defined in COMAR 26.11.01.01, permit to construct required, except for generating stations constructed by electric companies;

d. National Emission Standards for Hazardous Air Pollutants source, as defined in COMAR 26.11.01.01, permit to construct required, except for generating stations constructed by electric companies;

e. A stationary source of lead that discharges one ton per year or more of lead or lead compounds measured as elemental lead, permit to construct required, except for generating stations constructed by electric companies;

f. All stationary sources of air pollution, including installations and air pollution control equipment, except as listed in COMAR 26.11.02.10, permit to construct required;

g. In the event of a conflict between the applicability of (a.— e.) above and an exemption listed in COMAR 26.11.02.10, the provision that requires a permit applies.

h. Approval of a PSD or NSR source by the Department does not relieve the Permittee obtaining an approval from also obtaining all permits-to-construct required b y (c.— g.) above.

19. CONSOLIDATION OF PROCEDURES FOR PUBLIC PARTICIPATION

[COMAR 26.11.02.11C] and [COMAR 26.11.03.01K]

The Permittee may request the Department to authorize special procedures for the Permittee to apply simultaneously, to the extent possible, for a permit to construct and a revision to this permit.

These procedures may provide for combined public notices, informational meetings, and public hearings for both permits but shall not adversely affect the rights of a person, including EPA and affected states, to obtain information about the application for a permit, to comment on an application, or to challenge a permit that is issued.

These procedures shall not alter any existing permit procedures or time frames.

20. PROPERTY RIGHTS

[COMAR 26.11.03.06E(4)]

This Part 70 permit does not convey any property rights of any sort, or any exclusive privileges.

21. SEVERABILITY

[COMAR 26.11.03.06A(5)]

If any portion of this Part 70 permit is challenged, or any term or condition deemed unenforceable, the remainder of the requirements of the permit continues to be valid.

22. INSPECTION AND ENTRY

[COMAR 26.11.03.06G(3)]

The Permittee shall allow employees and authorized representatives of the Department, the EPA, and local environmental health agencies, upon presentation of credentials or other documents as may be required by law, to:

a. Enter at a reasonable time without delay and without prior notification the Permittee's property where a Part 70 source is located, emissions-related activity is conducted, or records required by this permit are kept;

b. Have access to and make copies of records required by the permit;

c. Inspect all emissions units within the facility subject to the permit and all related monitoring systems, air pollution control equipment, and practices or operations regulated or required by the permit; and

d. Sample or monitor any substances or parameters at or related to the emissions units at the facility for the purpose of determining compliance with the permit.

23. DUTY TO PROVIDE INFORMATION

[COMAR 26.11.03.06E(5)]

The Permittee shall furnish to the Department, within a reasonable time specified by the Department, information requested in writing by the Department in order to determine whether the Permittee is in compliance with the federally enforceable conditions of this Part 70 permit, or whether cause exists for revising or revoking

the permit. Upon request, the Permittee shall also furnish to the Department records required to be kept under the permit.

For information claimed by the Permittee to be confidential and therefore potentially not discloseable to the public, the Department may require the Permittee to provide a copy of the records directly to the EPA along with a claim of confidentiality.

The Permittee shall also furnish to the Department, within a reasonable time specified by the Department, information or records requested in writing by the Department in order to determine if the Permittee is in compliance with the State-only enforceable conditions of this permit.

24. COMPLIANCE REQUIREMENTS

[COMAR 26.11.03.06E(1)] and [COMAR 26.11.03.06A(11)] and [COMAR 26.11.02.05]

The Permittee shall comply with the conditions of this Part 70 permit. Noncompliance with the permit constitutes a violation of the Clean Air Act, and/or the Environment Article Title 2 of the Annotated Code of Maryland and may subject the Permittee to:

a. Enforcement action,

b. Permit revocation or revision,

c. Denial of the renewal of a Part 70 permit, or

d. Any combination of these actions.

The conditions in this Part 70 permit are enforceable by EPA and citizens under the Clean Air Act except for the State-only enforceable conditions.

Under Environment Article Section 2-609, Annotated Code of Maryland, the Department may seek immediate injunctive relief against a person who violates this permit in such a manner as to cause a threat to human health or the environment.

25. CREDIBLE EVIDENCE

Nothing in this permit shall be interpreted to preclude the use of credible evidence to demonstrate noncompliance with any term of this permit.

26. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE

[COMAR 26.11.03.06E(2)]

The need to halt or reduce activity in order to comply with the conditions of this permit may not be used as a defense in an enforcement action.

27. CIRCUMVENTION

[COMAR 26.11.01.06]

The Permittee may not install or use any article, machine, equipment or other contrivance, the use of which, without resulting in a reduction in the total weight of emissions, conceals or dilutes emissions which would otherwise constitute a violation of any applicable air pollution control regulation.

28. PERMIT SHIELD

[COMAR 26.11.03.23]

A permit shield as described in COMAR 26.11.03.23 shall apply only to terms and conditions in this Part 70 permit that have been specifically identified as covered by the permit shield. Neither this permit nor COMAR 26.11.03.23 alters the following:

a. The emergency order provisions in Section 303 of the Clean Air Act, including the authority of EPA under that section;

b. The liability of the Permittee for a violation of an applicable requirement of the Clean Air Act before or when this permit is issued or for a violation that continues after issuance;

c. The requirements of the Acid Rain Program, consistent with Section 408(a) of the Clean Air Act;

d. The ability of the Department or EPA to obtain information from a source pursuant to Maryland law and Section 114 of the Clean Air Act; or

e. The authority of the Department to enforce an applicable requirement of the State air pollution control law that is not an applicable requirement of the Clean Air Act.

29. ALTERNATE OPERATING SCENARIOS

[COMAR 26.11.03.06A(9)]

For all alternate operating scenarios approved by the Department and contained within this permit, the Permittee, while changing from one approved scenario to another, shall contemporaneously record in a log maintained at the facility each scenario under which the emissions unit is operating and the date and time the scenario started and ended.

SECTION III PLANT WIDE CONDITIONS

1. PARTICULATE MATTER FROM CONSTRUCTION AND DEMOLITION

[COMAR 26.11.06.03D]

The Permittee shall not cause or permit any building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne.

2. OPEN BURNING

[COMAR 26.11.07]

Except as provided in COMAR 26.11.07.04, the Permittee shall not cause or permit an open fire from June 1 through August 31 of any calendar year. Prior to any open burning, the Permittee shall request and receive approval from the Department.

3. AIR POLLUTION EPISODE

[COMAR 26.11.05.04]

When requested by the Department, the Permittee shall prepare in writing standby emissions reduction plans, consistent with good industrial practice and safe operating procedures, for reducing emissions creating air pollution during periods of Alert, Warning, and Emergency of an air pollution episode.

4. REPORT OF EXCESS EMISSIONS AND DEVIATIONS

[COMAR 26.11.01.07] and [COMAR 26.11.03.06C(7)]

The Permittee shall comply with the following conditions for occurrences of excess emissions and deviations from requirements of this permit, including those in Section VI – State-only Enforceable Conditions:

a. Report any deviation from permit requirements that could endanger human health or the environment, by orally notifying the Department immediately upon discovery of the deviation;

b. Promptly report all occurrences of excess emissions that are expected to last for one hour or longer by orally notifying the Department of the onset and termination of the occurrence;

c. When requested by the Department the Permittee shall report all deviations from permit conditions, including those attributed to malfunctions as defined

in COMAR 26.11.01.07A, within 5 days of the request by submitting a written description of the deviation to the Department. The written report shall include the cause, dates and times of the onset and termination of the deviation, and an account of all actions planned or taken to reduce, eliminate, and prevent recurrence of the deviation;

d. The Permittee shall submit to the Department semi-annual monitoring reports that confirm that all required monitoring was performed, and that provide accounts of all deviations from permit requirements that occurred during the reporting periods. Reporting periods shall be January 1 through June 30 and July 1 through December 31, and reports shall be submitted within 30 days of the end of each reporting period. Each account of deviation shall include a description of the deviation, the dates and times of onset and termination, identification of the person who observed or discovered the deviation, causes and corrective actions taken, and actions taken to prevent recurrence. If no deviations from permit conditions occurred during a reporting period, the Permittee shall submit a written report that so states.

e. When requested by the Department, the Permittee shall submit a written report to the Department within 10 days of receiving the request concerning an occurrence of excess emissions. The report shall contain the information required in COMAR 26.11.01.07D(2).

5. ACCIDENTAL RELEASE PROVISIONS

[COMAR 26.11.03.03B(23)] and [40 CFR 68]

The Permittee shall submit risk management plans by the date specified in 40 CFR 68.150.

The Permittee shall certify compliance with the requirements of 40 CFR 68 as part of the annual compliance certification as required by 40 CFR 70.

6. GENERAL TESTING REQUIREMENTS

[COMAR 26.11.01.04]

The Department may require the Permittee to conduct, or have conducted, testing to determine compliance with this Part 70 permit. The Department, at its option, may witness or conduct these tests. This testing shall be done at a reasonable time, and all information gathered during a testing operation shall be provided to the Department.

7. EMISSIONS TEST METHODS

[COMAR 26.11.01.04]

Compliance with the emissions standards and limitations in this Part 70 permit shall be determined by the test methods designated and described below or other test methods submitted to and approved by the Department.

Reference documents of the test methods approved by the Department include the following:

a. 40 CFR 60, appendix A

b. 40 CFR 51, appendix M

c. The Department's Technical Memorandum 91-01 "Test Methods and Equipment Specifications for Stationary Sources", (January 1991), as amended through Supplement 3, (October 1, 1997)

8. EMISSIONS CERTIFICATION REPORT

[COMAR 26.11.01.05-1] and [COMAR 26.11.02.19C] and [COMAR 26.11.02.19D]

The Permittee shall certify actual annual emissions of regulated pollutants from the facility on a calendar year basis.

a. The certification shall be on forms obtained from the Department and submitted to the Department not later than April 1 of the year following the year for which the certification is required;

b. The individual making the certification shall certify that the information is accurate to the individual's best knowledge. The individual shall be:

   (1) Familiar with each source for which the certifications forms are submitted, and

   (2) Responsible for the accuracy of the emissions information;

c. The Permittee shall maintain records necessary to support the emissions certification including the following information if applicable:

   (1) The total amount of actual emissions of each regulated pollutant and the total of all regulated pollutants;

(2) An explanation of the methods used to quantify the emissions and the operating schedules and production data that were used to determine emissions, including significant assumptions made;

(3) Amounts, types and analyses of all fuels used;

(4) Emissions data from continuous emissions monitors that are required by this permit, including monitor calibration and malfunction information;

(5) Identification, description, and use records of all air pollution control equipment and compliance monitoring equipment including:

(a) Significant maintenance performed,
(b) Malfunctions and downtime, and
(c) Episodes of reduced efficiency of all equipment;

(6) Limitations on source operation or any work practice standards that significantly affect emissions; and

(7) Other relevant information as required by the Department.

9. COMPLIANCE CERTIFICATION REPORT

[COMAR 26.11.03.06G(6) and (7)]

The Permittee shall submit to the Department and EPA Region III a report certifying compliance with each term of this Part 70 permit including each applicable standard, emissions limitation, and work practice for the previous calendar year by April 1 of each year.

a. The compliance certification shall include:

(1) The identification of each term or condition of this permit which is the basis of the certification;

(2) The compliance status;

(3) Whether the compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of each source, currently and over the reporting period; and

(5) Any other information required to be reported to the Department that is necessary to determine the compliance status of the Permittee with this permit.

b. The Permittee shall submit the compliance certification reports to the Department and EPA simultaneously.

10. CERTIFICATION BY RESPONSIBLE OFFICIAL

[COMAR 26.11.02.02F]

All application forms, reports, and compliance certifications submitted pursuant to this permit shall be certified by a responsible official as to truth, accuracy, and completeness. The Permittee shall expeditiously notify the Department of an appointment of a new responsible official.

The certification shall be in the following form:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

11. SAMPLING AND EMISSIONS TESTING RECORD KEEPING

[COMAR 26.11.03.06C(5)]

The Permittee shall gather and retain the following information when sampling and testing for compliance demonstrations:

a. The location as specified in this permit, and the date and time that samples and measurements are taken;

b. All pertinent operating conditions existing at the time that samples and measurements are taken;

c. The date that each analysis of a sample or emissions test is performed and the name of the person taking the sample or performing the emissions test;

d. The identity of the Permittee, individual, or other entity that performed the analysis;

e. The analytical techniques and methods used; and

f. The results of each analysis.

12. GENERAL RECORDKEEPING

[COMAR 26.11.03.06C(6)]

The Permittee shall retain records of all monitoring data and information that support the compliance certification for a period of five (5) years from the date that the monitoring, sample measurement, application, report or emissions test was completed or submitted to the Department.

These records and support information shall include:

a. All calibration and maintenance records;

b. All original data collected from continuous monitoring instrumentation;

c. Records which support the annual emissions certification; and

d. Copies of all reports required by this permit.

13. GENERAL CONFORMITY

[COMAR 26.11.26.09]

The Permittee shall comply with the general conformity requirements of 40 CFR 93, Subpart B and COMAR 26.11.26.09.

14. ASBESTOS PROVISIONS

[40 CFR 61, Subpart M]

The Permittee shall comply with 40 CFR 61, Subpart M when conducting any renovation or demolition activities at the facility.

15. OZONE DEPLETING REGULATIONS

[40 CFR 82, Subpart F]

The Permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for MVACs in subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the prohibitions and required practices pursuant to 40 CFR 82.154 and 82.156.

b. Equipment used during the maintenance, service, repair or disposal of appliances shall comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

c. Persons performing maintenance, service, repairs or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.

d. Persons performing maintenance, service, repairs or disposal of appliances shall certify with the Administrator pursuant to 40 CFR 82.162.

e. Persons disposing of small appliances, MVACS, and MVAC-like appliances as defined in 40 CFR 82.152, shall comply with record keeping requirements pursuant to 40 CFR 82.166.

f. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.

g. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

16. ACID RAIN PERMIT

Not applicable

SECTION IV PLANT SPECIFIC CONDITIONS

This section provides tables that include the emissions standards, emissions limitations, and work practices applicable to each emissions unit located at this facility. The Permittee shall comply with all applicable emissions standards, emissions limitations and work practices included herein.

The tables also include testing, monitoring, record keeping and reporting requirements specific to each emissions unit. In addition to the requirements included here in **Section IV**, the Permittee is also subject to the general testing, monitoring, record keeping, and reporting requirements included in **Section III – Plant Wide Conditions** of this permit.

Unless otherwise provided in the specific requirements for an emissions unit, the Permittee shall maintain at the facility for at least five (5) years, and shall make available to the Department upon request, all records that the Permittee is required under this section to establish. [Authority: COMAR 26.11.03.06C(5)(g)]

Table IV – 1	
1.0	**Emissions Unit Number(s): NES Combined Heat & Power Plant** **FBE-PNP-E1** (Reg. No. 5-0019): 53 MM Btu/hr (4.5-MW) Centaur 50 dual (NG/No.2 fuel oil) fired combustion turbine (CT) generator e/w Dry SoLoNoX® Injectors; equipped with a **FBE-PNP-E2** (Reg. No. 5-0020): 29.5 MM Btu/hr dual (NG/No.2 fuel oil) fired heat recovery steam generator (HRSG)
1.1	**Applicable Standards/Limits:** A. Control of Visible Emissions **COMAR 26.11.09.05 A - Visible Emissions – Fuel Burning Equipment**. "(1) Areas I, II, V, and VI. In Areas I, II, V, and VI, a person may not cause or permit the discharge of emissions from any fuel burning equipment, other than water in an uncombined form, which is greater than 20 percent opacity." "(3) Exceptions. Section A(1) and (2) of this regulation do not apply to emissions during load changing, soot blowing, startup, or adjustments or occasional cleaning of control equipment if: (a) The visible emissions are not greater than 40 percent opacity; and (b) The visible emissions do not occur for more than 6 consecutive minutes in any sixty minute period." B. Control of Sulfur Oxides **COMAR 26.11.09.07 – Control of Sulfur Oxides from Fuel Burning Equipment**. "A. Sulfur Content Limitations for Fuel. "A person may not burn, sell, or make available for sale any fuel with a sulfur content by weight in excess of or which otherwise exceeds the following limitations: (1) In Areas I, II, V, and VI: (c) Distillate fuel oils, 0.3 percent. "C. Request for Analyses. "Any person offering to sell or deliver fuel or any

Table IV – 1

person responsible for equipment in which fuel or process gas is burned, upon request, shall submit to the Department or control officer such analyses of fuel or process gas as may be required to determine compliance with this regulation."

Note: Since the COMAR requirement is less stringent than the NSPS Subpart KKKK Sulfur Control requirements for CTs, the NSPS requirement shall apply.

40 CFR 60, Subpart KKKK--Standards of Performance for Stationary Combustion Turbines -
§60.4325 What emission limits must I meet for NO_X if my turbine burns both natural gas and distillate oil (or some other combination of fuels)?
You must meet the emission limits specified in Table 1 to this subpart. If your total heat input is greater than or equal to 50 percent natural gas, you must meet the corresponding limit for a natural gas-fired turbine when you are burning that fuel. Similarly, when your total heat input is greater than 50 percent distillate oil and fuels other than natural gas, you must meet the corresponding limit for distillate oil and fuels other than natural gas for the duration of the time that you burn that particular fuel.

§ 60.4330 What emission limits must I meet for sulfur dioxide (SO_2)?
(a) If your turbine is located in a continental area, you must comply with either paragraph (a)(1) or (a)(2) of this section:
(i) You must not cause to be discharged into the atmosphere from the subject stationary combustion turbine any gases which contain SO_2 in excess of **110 nanograms per Joule (ng/J) (0.90 pounds per megawatt-hour (lb/MWh)) gross output**, **or**

(ii) You must not burn in the subject stationary combustion turbine any fuel, which contains total potential sulfur emissions in excess of **26 ng SO_2/J (0.060 lb SO_2 /MM Btu) heat input**. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement."

Note: The Permittee may satisfy this requirement by meeting the fuel oil ***sulfur content limitation of*** **0.05% by weight** as specified in a current valid purchase contract, tariff sheet or transportation contract for the fuel per **40 CFR § 60.4365 (a)**.

C. Control of Nitrogen Oxides
40 CFR 60, Subpart KKKK, § 60.4320 - NO_X Standard

Table 1: Subpart KKKK of Part 60. Nitrogen Oxide Emission Limits for New Stationary Combustion Turbines. **NO_X emissions from each stationary combustion turbine shall not exceed the following:**

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Combustion turbine type	Combustion turbine heat input at peak load (HHV)	NO_X emission standard
New turbine firing natural gas	> 50 MMBtu/hr and ≤ 850 MMBtu/hr	**25 ppm at 15 percent O_2** or 150 ng/J of useful output **(1.2 lb/MWh).**
New turbine firing fuels other than natural gas	> 50 MMBtu/hr and ≤ 850 MMBtu/hr	**74 ppm at 15 percent O_2** or 460 ng/J of useful output **(3.6 lb/MWh)**.
Heat recovery units operating independent of the combustion turbine	All sizes	**54 ppm at 15 percent** O_2 or 110 ng/J of useful output **(0.86 lb/MWh).**

[NO_X RACT]
COMAR 26.11.09.08G. Control of NO_X Emissions for Major Stationary Sources. "Requirements for Fuel-Burning Equipment with a Capacity Factor of 15 Percent or Less, and Combustion Turbines with a Capacity Factor Greater than 15 Percent.

{Condition G(1)below applies to Fuel-Burning Equipment with a Capacity Factor of 15 Percent or Less.}
(1) A person who owns or operates fuel-burning equipment with a capacity factor (as defined in 40 CFR Part 72.2) of 15 percent or less shall:

(a) Provide certification of the capacity factor of the equipment to the Department in writing;

(b) For fuel-burning equipment that operates more than 500 hours during a calendar year, perform a combustion analysis and optimize combustion at least once annually;

(c) Maintain the results of the combustion analysis at the site for at least 2 years and make these results available to the Department and the EPA upon request;

(d) Require each operator of an installation, except combustion turbines, to attend operator training programs at least once every 3 years, on combustion optimization that are sponsored by the Department, the EPA, or equipment vendors; and

(e) Maintain a record of training program attendance for each operator at the site, and make these records available to the Department upon request.

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	{Condition G(2) below applies only to the combustion turbine – FBE-PNP-E1} (2) A person who owns or operates a combustion turbine with a capacity factor greater than 15 percent shall meet an hourly average NO_X emission rate of not more than 42 ppm when burning gas or 65 ppm when burning fuel oil (dry volume at 15 percent oxygen) or meet applicable Prevention of Significant Deterioration limits, whichever is more restrictive. **Note:** The federal requirements under 40 CFR Subpart KKKK are more stringent than the State requirements and therefore take precedence over COMAR 26.11.09.08G. ***{COMAR 26.11.09.08E applies only to the HRSG - FBE-PNP-E2}*** **COMAR 26.11.09.08 E.** Requirements for Fuel-Burning Equipment with a Rated Heat Input capacity of 100 MMBtu Per Hour or Less. A person who owns or operates fuel-burning equipment with a rated heat input capacity of 100 MMBtu per hour or less shall: (1) Submit to the Department an identification of each affected installation, the rated heat input capacity of each installation, and the type of fuel burned in each; (2) Perform a combustion analysis for each installation at least once each year and optimize combustion based on the analysis; *{**Note:** Applies for units that operate more than 500 hour in a calendar year - Ref: Condition G(1) above.}* (3) Maintain the results of the combustion analysis at the site for at least 2 years and make this data available to the Department and the EPA upon request; (4) Once every 3 years, require each operator of the installation to attend operator training programs on combustion optimization that are sponsored by the Department, the EPA, or equipment vendors; and (5) Prepare and maintain a record of training program attendance for each operator at the site, and make these records available to the Department upon request. D. <u>Operational Limitations</u> (1) The Solar **Centaur 50** combustion turbines (CT) and HRSG shall fire only natural gas as the primary fuel and distillate fuel oil – as a backup stand-by fuel in the combustion turbine and heat recovery steam generator (HRSG) . (2) **General Compliance Requirements - Sec. 60.4333** "You must operate and maintain your stationary combustion turbine, air pollution control equipment, and monitoring equipment in a manner

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consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction."

[Authority: PTC #017-0040-5-0019 & -5-0020 and 40 CFR 60, Subpart KKKK]

1.2 **Testing Requirements:**

A. Control of Visible Emissions – {See Monitoring Requirements, below}

B. Control of Sulfur Oxides

Note: The Permittee may opt to use periodic monitoring of sulfur content of the fuel as stipulated under 40 CFR § 60.4360 & § 60.4365. {See Monitoring Requirements, Conditions 1.3 B, below}

[Authority: 40 CFR 60, Subpart KKKK]

C. Control of Nitrogen Oxides

§60.4400 How do I conduct the initial and subsequent performance tests, regarding NO_X?

(a) You **must conduct an initial performance test**, as required in §60.8. **Subsequent NO_X performance tests shall be conducted on an annual basis (no more than 14 calendar months following the previous performance test)**.

(1) There are two general methodologies that you may use to conduct the performance tests. For each test run:

(i) Measure the NO_X concentration (in parts per million (ppm)), using EPA Method 7E or EPA Method 20 in appendix A of this part. For units complying with the output based standard, concurrently measure the stack gas flow rate, using EPA Methods 1 and 2 in appendix A of this part, and measure and record the electrical and thermal output from the unit. Then, use the following equation to calculate the NO_X emission rate:

(Equation 5)

$$E = \frac{1.194 \times 10^{-7} * (NO_X)_c * Q_{std}}{P}$$

Where:

$E = NO_X$ emission rate, in lb/MWh

1.194×10^{-7} = conversion constant, in lb/dscf-ppm

$(NO_X)_c$ = average NO_X concentration for the run, in ppm

Q_{std} = stack gas volumetric flow rate, in dscf/hr

P = gross electrical and mechanical energy output of the

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	combustion turbine, in MW (for simple-cycle operation), for combined-cycle operation, the sum of all electrical and mechanical output from the combustion and steam turbines, or, for combined heat and power operation, the sum of all electrical and mechanical output from the combustion and steam turbines plus all useful recovered thermal output not used for additional electric or mechanical generation, in MW, calculated according to §60.4350(f)(2); or **(ii)** Measure the NO_X and diluent gas concentrations, using either EPA Methods 7E and 3A, or EPA Method 20 in appendix A of this part. Concurrently measure the heat input to the unit, using a fuel flowmeter (or flowmeters), and measure the electrical and thermal output of the unit. Use EPA Method 19 in appendix A of this part to calculate the NO_X emission rate in lb/MMBtu. Then, use Equations 1 and, if necessary, 2 and 3 in §60.4350(f) to calculate the NO_X emission rate in lb/MWh. (2) Sampling traverse points for NO_X and (if applicable) diluent gas are to be selected following EPA Method 20 or EPA Method 1 (non-particulate procedures), and sampled for equal time intervals. The sampling must be performed with a traversing single-hole probe, or, if feasible, with a stationary multi-hole probe that samples each of the points sequentially. Alternatively, a multi-hole probe designed and documented to sample equal volumes from each hole may be used to sample simultaneously at the required points. (3) Notwithstanding paragraph (a)(2) of this section, you may test at fewer points than are specified in EPA Method 1 or EPA Method 20 in appendix A of this part if the following conditions are met: (i) You may perform a stratification test for NO_X and diluent pursuant to (A) [Reserved], or (B) The procedures specified in section 6.5.6.1(a) through (e) of appendix A of part 75 of this chapter. **(iii)** Once the stratification sampling is completed, you may use the following alternative sample point selection criteria for the performance test: (B) For turbines with a NO_X standard greater than 15 ppm @ 15% O_2, you may sample at a single point, located at least 1 meter from the stack wall or at the stack centroid if each of the individual traverse point NO_X concentrations is within ±5 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than ±3ppm or ±0.3 percent CO_2 (or O_2) from the mean for all traverse points; or **(b)** The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. You may perform

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	testing at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. You must conduct three separate test runs for each performance test. The minimum time per run is 20 minutes. (1) If the stationary combustion turbine combusts both oil and gas as primary or backup fuels, separate performance testing is required for each fuel. (2) For a combined cycle and CHP turbine systems with supplemental heat (duct burner), you must measure the total NO_X emissions after the duct burner rather than directly after the turbine. The duct burner must be in operation during the performance test. (4) Compliance with the applicable emission limit in §60.4320 must be demonstrated at each tested load level. Compliance is achieved if the three-run arithmetic average NO_X emission rate at each tested level meets the applicable emission limit in §60.4320. (5) If you elect to install a CEMS, the performance evaluation of the CEMS may either be conducted separately or (as described in §60.4405) as part of the initial performance test of the affected unit. (6) The ambient temperature must be greater than 0 °F during the performance test. **[Authority: 40 CFR 60, Subpart KKKK & PTC #017-0040-5-0019 & -5-0020]** **[NO_X RACT]** ***{See Monitoring Requirements Condition 1.3 below}*** D. Operational Limitations **{See Monitoring Requirements, below}**
1.3	**Monitoring Requirements:** A. Control of Visible Emissions The Permittee is required to implement a preventative maintenance plan and maintain on site an operations manual and records of maintenance performed that relate to combustion performance and shall maintain logs of any visible emissions observations performed. **[Authority: COMAR 26.11.03.06C]** B. Control of Sulfur Oxides (1) Sulfur Content Monitoring - The Permittee shall determine sulfur content of the combustion turbines fuel in accordance with § 60.4360 that states: "You must monitor the total sulfur content of the fuel being fired in the turbine, except as provided in Sec. 60.4365. The sulfur content of the fuel must be determined using total sulfur methods described in Sec. 60.4415. Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than half the

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applicable limit, ASTM D4084, D4810, D5504, or D6228, or Gas Processors Association Standard 2377 (all of which are incorporated by reference, see Sec. 60.17), which measure the major sulfur compounds, may be used."

(2) Exemption from Fuel Sulfur Content Monitoring

§60.4365 How can I be exempted from monitoring the total sulfur content of the fuel?

You may elect not to monitor the total sulfur content of the fuel combusted in the turbine, if the fuel is demonstrated not to exceed potential sulfur emissions of 26 ng SO_2/J ***(0.060 lb SO_2/MMBtu)*** heat input for units located in continental areas…. You must use one of the following sources of information to make the required demonstration:

(a) The fuel quality characteristics ***in a current, valid purchase contract***, ***tariff sheet or transportation contract for the fuel***, specifying that the maximum total sulfur content for oil use in continental areas ***is 0.05 weight percent (500 ppmw) or less…***, the ***total sulfur content for natural gas use in continental areas is 20 grains of sulfur or less per 100 standard cubic feet …*** and has potential sulfur emissions of less than less than ***26 ng SO_2/J (0.060 lb SO_2/MMBtu) heat input*** for continental areas…; or

(b) Representative fuel sampling data which show that the sulfur content of the fuel does not exceed 26 ng SO_2/J (0.060 lb SO_2/MMBtu) heat input for continental areas ….

[Authority: 40 CFR 60, Subpart KKKK]

(3) Frequency of Sulfur Content Monitoring

The frequency of determining the sulfur content of the fuel must be as follows:

(a) Fuel oil. For fuel oil, use one of the total sulfur sampling options and the associated sampling frequency described in sections 2.2.3, 2.2.4.1, 2.2.4.2, and 2.2.4.3 of appendix D to part 75 of this chapter (i.e., flow proportional sampling, daily sampling, sampling from the unit's storage tank after each addition of fuel to the tank, or sampling each delivery prior to combining it with fuel oil already in the intended storage tank).

(b) Gaseous fuel. If you elect not to demonstrate sulfur content using options in §60.4365, and the fuel is supplied without intermediate bulk storage, the sulfur content value of the gaseous fuel must be determined and recorded once per unit operating day.

(c) Custom schedules. Notwithstanding the requirements of paragraph (b) of this section, operators or fuel vendors may develop custom schedules for determination of the total sulfur content of gaseous fuels, based on the

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design and operation of the affected facility and the characteristics of the fuel supply. Except as provided in paragraphs (c)(1) and (c)(2) of this section, custom schedules shall be substantiated with data and shall be approved by the Administrator before they can be used to comply with the standard in §60.4330.

(4) COMAR 26.11.09.07 C. - Request for Analyses. Any person offering to sell or deliver fuel or any person responsible for equipment in which fuel or process gas is burned, upon request, shall submit to the Department or control officer such analyses of fuel or process gas as may be required to determine compliance with this regulation.

(5) The Permittee shall obtain a certification from the supplier stating that the fuel oil burned complies with the sulfur limitations for distillate fuel oil, as stated in COMAR 26.11.09.07A(2). Certification may include the following:

(a) A fuel supplier certification consisting of the name of the oil supplier and a statement from the oil supplier that the oil complies with specifications for No. 2 fuel oil; or

(b) A record of fuel analysis by the Maryland State Comptroller's Office; and

(c) A certified statement signed by the authorized representative of the Facility, stating that the records of fuel supplier certifications submitted represent all of the fuel oil combusted during the quarter.

[Authority: 40 CFR 60, Subpart KKKK & PTC #017-0040-5-0019 & -5-0020]

C. Control of Nitrogen Oxides

§60.4340 How do I demonstrate continuous compliance for NO_X if I do not use water or steam injection?

(a) If you are not using water or steam injection to control NO_X emissions, **you must perform annual performance tests in accordance with §60.4400 to demonstrate continuous compliance**. If the NO_X emission result from the performance test is less than or equal to 75 percent of the NO_X emission limit for the turbine, you may reduce the frequency of subsequent performance tests to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75 percent of the NO_X emission limit for the turbine, you must resume annual performance tests.

(b) As an alternative, you may install, calibrate, maintain and operate one of the following continuous monitoring systems:

(1) Continuous emission monitoring as described in §§60.4335(b) and 60.4345,

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	or **(2) Continuous parameter monitoring as follows**: (ii) For any lean premix stationary combustion turbine, you must continuously monitor the appropriate parameters to determine whether the unit is operating in low-NO_X mode. Parametric Monitoring **§60.4410 How do I establish a valid parameter range if I have chosen to continuously monitor parameters?** If you have chosen to monitor combustion parameters or parameters indicative of proper operation of NOX emission controls in accordance with §60.4340, the appropriate parameters must be continuously monitored and recorded during each run of the initial performance test, to establish acceptable operating ranges, for purposes of the parameter monitoring plan for the affected unit, as specified in §60.4355. **[Authority: 40 CFR 60, Subpart KKKK & PTC #017-0040-5-0019 & -5-0020]** **[Periodic Testing]** If the Permittee decides to perform parametric monitoring as an alternative to conducting annual testing as allowed for under §60.4340 (b), after the initial compliance test required under 40 CFR § 60.8, the owner or operator shall as a minimum, conduct an performance stack test for NOx for each CT unit, at least once every 5 years or at least once during the term of the operating permit. The Permittee shall conduct performance test for NOx in accordance with the methodologies specified in 40 CFR §§ 60.4340 & 60.4400. [**Authority: COMAR 26.11.01.04]** **[NO_X RACT] applies only to the HRSG - FBE-PNP-E2** The Permittee shall: (1) Provide certification of the capacity factor of the equipment to the Department in writing ; (2) Perform a combustion analysis and optimize combustion at least once annually for fuel-burning equipment that operates more than 500 hours during a calendar year; and (3) Submit to the Department an identification of each affected installation, the rated heat input capacity of each installation, and the type of fuel burned in each unit. **[Authority COMAR 26.11.09.08 G & E]** D. Operational Limitations The Permittee shall monitor and log the monthly fuel use and hours of

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	operation for the CT and HRSG. **[Authority: PTC #017-0040-5-0019 & -5-0020]**
1.4	**Record Keeping Requirements:** [All records shall be maintained for a period of at least five years and shall be made available to the Department upon request.] A. Control of Visible Emissions The Permittee is maintain a preventative maintenance plan, operations manual and records of maintenance performed that relates to combustion performance and shall maintain logs of any visible emissions observations performed. **[Authority: COMAR 26.11.03.06C]** B. Control of Sulfur Oxides The Permittee shall maintain records and results of fuel sulfur content monitoring, fuel oil certifications or statements indicating that the fuel oil used complies with the limitation on sulfur content. **[Authority: COMAR 26.11.03.06C]** C. Control of Nitrogen Oxides The Permittee shall maintain records and results of any tests performed in compliance with testing as required under 40 CFR § 60.8 and 40 CFR 60, Subpart KKKK and any other testing required under this permit. The Permittee shall maintain a copy of the parametric monitoring plan in accordance with § 60.4355 and records of pilot fuel valve position and report any incidence of "Minimum Pilot Mode" = OFF to indicate potential NOx exceedances, in accordance with the plan. **[Authority: 40 CFR 60, Subpart KKKK & COMAR 26.11.03.06C]** The Permittee shall maintain records of all maintenance preformed that relates to combustion performance, and records of all performance testing conducted **[COMAR 26.11.03.06C]** **{NO_X RACT COMAR applies only to the HRSG - FBE-PNP-E2}** The Permittee shall: (1) Maintain records which verify the capacity factor for each unit and make these records available to the Department upon request; (2) Maintain the results of the combustion analysis at the site for at least 2 years and make this data available to the Department and the EPA upon request; and (3) Prepare and maintain a record of training program attendance for each operator at the site, and make these records available to the Department upon request. D. Operational Limitations The Permittee shall maintain records of the monthly fuel use and hours of

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	operation for the CT and HRSG. [Authority: PTC #017-0040-5-0019 & -5-0020]
1.5	**Reporting Requirements:** A. Control of Visible Emissions The Permittee shall report incidents of visible emissions in accordance with Permit Condition 4, of Section III, "Report of Excess Emissions and Deviations" B. Control of Sulfur Oxides **Reporting under § 60.4375:** "(a) For each affected unit required to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content under this subpart, you must submit reports of excess emissions and monitor downtime, in accordance with Sec. 60.7(c). Excess emissions must be reported for all periods of unit operation, including start-up, shutdown, and malfunction." "(b) For each affected unit that performs performance tests in accordance with Sec. 60.4340(a), you must submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test." **§60.4385 How are excess emissions and monitoring downtime defined for SO_2?** If you choose the option to monitor the sulfur content of the fuel, excess emissions and monitoring downtime are defined as follows: (a) For samples of gaseous fuel and for oil samples obtained using daily sampling, flow proportional sampling, or sampling from the unit's storage tank, an excess emission occurs each unit operating hour included in the period beginning on the date and hour of any sample for which the sulfur content of the fuel being fired in the combustion turbine exceeds the applicable limit and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit. (b) If the option to sample each delivery of fuel oil has been selected, you must immediately switch to one of the other oil sampling options (i.e., daily sampling, flow proportional sampling, or sampling from the unit's storage tank) if the sulfur content of a delivery exceeds 0.05 weight percent. You must continue to use one of the other sampling options until all of the oil from the delivery has been combusted, and you must evaluate excess emissions according to paragraph (a) of this section. When all of the fuel from the delivery has been burned, you may resume using the as-delivered sampling option. (c) A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour of a required sample, if invalid results are obtained. The period of monitor downtime ends on the date and hour of the next valid sample.

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	C. Control of Nitrogen Oxides **Reporting under § 60.4375:** "(b) For each affected unit that performs performance tests in accordance with Sec. 60.4340(a), you must submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test." **§60.4380 How are excess emissions and monitor downtime defined for NOX?** For the purpose of reports required under §60.7(c), periods of excess emissions and monitor downtime that must be reported are defined as follows: (c) For turbines required to monitor combustion parameters or parameters that document proper operation of the NOX emission controls: (1) An excess emission is a 4-hour rolling unit operating hour average in which any monitored parameter does not achieve the target value or is outside the acceptable range defined in the parameter monitoring plan for the unit. (2) A period of monitor downtime is a unit operating hour in which any of the required parametric data are either not recorded or are invalid. **[Authority: 40 CFR 60, Subpart KKKK]** The Permittee shall report all periods of excess emissions in accordance with permit condition 4, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviations". **[Authority: COMAR 26.11.03.06C.]** **[NO_X RACT COMAR applies only to the HRSG - FBE-PNP-E2] –** ***{See Recordkeeping Requirements Condition 1.4 above}*** D. Operational Limitations ***{See Recordkeeping Requirements, above}***

A permit shield shall cover the applicable requirements of the Clean Air Act that are listed in the table above for the NES Combined Heat & Power Plant {See Section 1.0, above}

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2.0	**Emissions Unit Number(s): Auxiliary Steam Plant** **FBE-712-E1** (Reg. #4-0081) 43 MM Btu/hr, *No. 2 fuel oil fired* "limited-use" boiler **FBE-712-E3** (Reg. #4-0241) 97 MM Btu/hr, *No. 2 fuel oil fired* **(NSPS)** "limited-use" boiler
2.1	**Applicable Standards/Limits:** **A.** Control of Visible Emissions: (1) **COMAR 26.11.09.05(A)(1)**: Areas I, II, V, and VI, a person may not cause or permit the discharge of emissions from any fuel burning equipment other than water in an uncombined form, which is greater than 20 percent opacity. (2) **COMAR 26.11.09.05A(3)** Exceptions. Section A(1) and (2) of this regulation do not apply to emissions during load changing, soot blowing, startup, or adjustments or occasional cleaning of control equipment if: (i) The visible emissions are not greater than 40 percent opacity; and (ii) The visible emissions do not occur for more than 6 consecutive minutes in any sixty-minute period. **B.** Control of Sulfur Oxides: ***{(1) Applies to NSPS Boiler only - FBE-712-E3 (Reg. #4-0241)}*** (1) **40 CFR 60, Subpart Dc, §60.42c** "(d) On and after the date on which the initial performance test is completed or required to be completed under §60.8, …, 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[*(1)]. The percent reduction requirements are not applicable to affected facilities under this paragraph." [*(1)] **Note:**Because COMAR 26.11.09.07A(2)(b) fuel sulfur content limitation is more stringent, it supersedes the fuel sulfur content specified under 40 CFR 60, Subpart Dc, §60.42c., see Condition B(2), below. "(g) Except as provided in paragraph (h) of this section, compliance with the percent reduction requirements, fuel oil sulfur limits, and emission limits of this section shall be determined on a 30-day rolling average basis." "(h) For affected facilities listed under paragraphs (h)(1), (2), or (3) of this section, compliance with the emission limits or fuel oil sulfur limits under this section may be determined based on a certification from the fuel supplier, as described under §60.48c(f), as applicable. (1) Distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 MM Btu/hr)."

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"(i) The SO_2 emission limits, fuel oil sulfur limits, and percent reduction requirements under this section apply at all times, including periods of startup, shutdown, and malfunction."

(2) **COMAR 26.11.09.07** – ***Control of Sulfur Oxides from Fuel Burning Equipment***.
"A. Sulfur Content Limitations for Fuel. A person may not burn, sell, or make available for sale any fuel with a sulfur content by weight in excess of or which otherwise exceeds the following limitations: (1) In Areas I, II, V, and VI: **(c) Distillate fuel oils, 0.3 percent**.

"C. Request for Analyses. "Any person offering to sell or deliver fuel or any person responsible for equipment in which fuel or process gas is burned, upon request, shall submit to the Department or control officer such analyses of fuel or process gas as may be required to determine compliance with this regulation."

C. Control of Nitrogen Oxides:
COMAR 26.11.09.08G. *Control of NOx Emissions for Major Stationary Sources*. "***Requirements for Fuel-Burning Equipment with a Capacity Factor of 15 Percent or Less***, and Combustion Turbines with a Capacity Factor Greater than 15 Percent.

(1) A person who owns or operates fuel-burning equipment with a capacity factor (as defined in 40 CFR Part 72.2) of 15 percent or less shall:

(a) Provide certification of the capacity factor of the equipment to the Department in writing;

(b) For fuel-burning equipment that operates more than 500 hours during a calendar year, perform a combustion analysis and optimize combustion at least once annually;

(c) Maintain the results of the combustion analysis at the site for at least 2 years and make these results available to the Department and the EPA upon request;

(d) Require each operator of an installation, except combustion turbines, to attend operator training programs at least once every 3 years, on combustion optimization that are sponsored by the Department(*), the EPA, or equipment vendors; and

(e) Maintain a record of training program attendance for each operator at the site, and make these records available to the Department upon request."

[40CFR72.2] *Capacity factor* means either: (1) the ratio of a unit's actual annual electric output (expressed in MWe-hr) to the unit's nameplate

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	capacity times 8760 hours, or (2) the ratio of a unit's annual heat input (in million British thermal units or equivalent units of measure) to the unit's maximum design heat input (in million British thermal units per hour or equivalent units of measure) times 8,760 hours. **(*)Note:** A Department approved Permittee's in-house training program can also satisfy the requirement of a Department sponsored operator training program of COMAR 26.11.09.08G. **D.** Operational Limitations The Permittee shall fire only No. 2 fuel oil unless the Permittee applies for and receives an approval or permit from the Department to burn alternate fuels. In order to meet the definition of a "limited-use boiler" under Subpart JJJJJJ, the Permittee shall operate the auxiliary boilers at an annual capacity factor of less than or equal to 10 percent. **[Authority: 40 CFR §63.11237 & PTC 017-0040-4-0241]** **Note: See Table IV – 2 a. – for the Area Source Boiler MACT requirements**
2.2	**Testing Requirements:** A. Control of Visible Emissions: {See Section 2.3, Monitoring Requirements, below.} B. Control of Sulfur Oxides: {See Section 2.3, Monitoring Requirements, below.} C. Control of Nitrogen Oxides:: {See Section 2.3, Monitoring Requirements, below.} D. Operational Limitations: {See Section 3.3 Record Keeping Requirements, below.}
2.3	**Monitoring Requirements:** **A.** Control of Visible Emissions: (1) The Permittee shall properly operate and maintain the boilers in a manner to prevent visible emissions (2) The Permittee shall verify that there are no visible emissions when burning No. 2 fuel oil. The Permittee shall perform a visual observation for a 6-minute period, once every 168 hours of operation or at a minimum once per calendar year. (3) The Permittee shall perform the following, if visible emissions are observed: (a) Inspect combustion control system and boiler operations, (b) Perform all necessary adjustments and/or repairs to the boiler within 48 hours, so that visible emissions are eliminated;

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	(c) Document in writing the results of the inspections, adjustments and/or repairs to the boiler; and (d) After 48 hours, if the required adjustments and/or repairs have not eliminated the visible emissions, perform Method 9 observations once daily for 18 minutes until corrective actions have reduced the visible emissions to less than 20 percent opacity. **[Authority: COMAR 26.11.03.06C].** **B.** Control of Sulfur Oxides: (Sulfur Content of Fuel) The Permittee shall obtain a certification of sulfur content from the supplier for the fuel oil. The Permittee shall maintain records of the fuel oil certifications indicating that the oil complies with the limitations on sulfur content. Certification may include: (i) a fuel supplier certification consisting of the name of the oil supplier and a statement from the oil supplier that the oil complies with specifications for distillate fuel oil; or (ii) a record of fuel analysis by the Maryland State Comptroller's Office. (iii) The Permittee shall report fuel supplier certification to the Department upon request. **[Authority: COMAR 26.11.09.07A(2)(b) & COMAR 26.11.03.06C]** **C.** Control of Nitrogen Oxides: The Permittee shall perform a combustion analysis for each installation at least once each year and optimize combustion based on the analysis, for fuel burning equipment that operates more than 500 hours during a calendar year. **[Authority: COMAR 26.11.09.08 G (1)(b)]** **D.** Operational Limitations: {See Section 2.4, Record Keeping Requirements, below.}
2.4	**Record Keeping Requirements:** **Note:** All records must be maintained for a period of 5 years [Authority: COMAR 26.11.03.06C(5)(g)]. **A.** Control of Visible Emissions: The Permittee shall maintain an operations manual and preventive maintenance plan. The Permittee shall maintain a log of maintenance performed that relates to combustion performance and records of any visible observations performed. **[Authority: COMAR 26.11.03.06C].** **B.** Control of Sulfur Oxides: The Permittee shall retain fuel supplier certifications stating that the fuel oil is in

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	compliance with the limitation on the sulfur content of the fuel oil as specified by regulation **[Authority: COMAR 26.11.09.07C].** The Permittee shall maintain records of the quantity and types of fuel burned. **[Authority: COMAR 26.11.02.19C(1)(c)]** **C.** Control of Nitrogen Oxides: The Permittee shall: (1) Maintain the results of the combustion analysis at the site and make this data available to the Department and the EPA upon request; and (2) Prepare and maintain a record of training program attendance for each operator at the site, and make these records available to the Department upon request; and (3) Provide certification of the capacity factor of the equipment to the Department in writing and shall make these records available to the Department upon request. **[Authority: COMAR 26.11.09.08(G)]** **D.** Operational Limitations: The Permittee shall monitor and log the dates and hours of operation for each boiler as well as the monthly amounts of fuel used. The Permittee shall determine the annual capacity factor for each boiler and maintain a copy the verification of each boiler's capacity factor on site and shall make this record available to the Department upon request. **[Authority: COMAR 26.11.03.06 C]**
2.5	**Reporting Requirements:** **A.** Control of Visible Emissions: The Permittee shall report incidents of visible emissions in accordance with permit condition 4, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviations". **B.** Control of Sulfur Oxides: (1) The Permittee shall report fuel supplier certifications to the Department upon request. **[Authority: COMAR 26.11.09.07C].** ***{(2) Applies to NSPS Boiler only - FBE-712-E3 (Reg. #4-0241)}*** (2) **§ 60.48c Reporting and recordkeeping requirements.** "**(d)** The owner or operator of each affected facility subject to the SO_2 emission limits, **fuel oil sulfur limits**, or percent reduction requirements under §60.42c shall submit reports to the Administrator." "**(e)** The owner or operator of each affected facility subject to the SO_2 emission limits, fuel oil sulfur limits, or percent reduction requirements under §60.42c shall keep records and submit reports as required under paragraph (d) of this section, including the following information, as applicable.

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	(1) Calendar dates covered in the reporting period. (2) Each 30-day average SO_2 emission rate (ng/J or lb/MMBtu), or 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of corrective actions taken. (3) Each 30-day average percent of potential SO_2 emission rate calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of the corrective actions taken. (11) If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under paragraph (f)(1), (2), (3), or (4) of this section, as applicable. 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." "**(f) Fuel supplier certification** shall include the following information: **(2) For distillate oil**: (i) The name of the oil supplier; (ii) The location of the oil when the sample was drawn for analysis to determine the sulfur content of the oil, specifically including whether the oil was sampled as delivered to the affected facility, or whether the sample was drawn from oil in storage at the oil supplier's or oil refiner's facility, or other location; (iii) The sulfur content of the oil from which the shipment came (or of the shipment itself); and (iv) The method used to determine the sulfur content of the oil." "**(g)(1)** Except as provided under paragraphs (g)(2) and (g)(3) of this section, the owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day. **(2)** As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in

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	§60.48c(f) to demonstrate compliance with the SO_2 standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month." "(i) All records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record." "(j) 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 30th day following the end of the reporting period." **C.** Control of Nitrogen Oxides: The Permittee shall submit to the Department an identification of each affected installation, the rated heat input capacity of each installation, the type of fuel burned in each. The Permittee shall maintain annual fuel use records and hour of operation on site for not less than 5 years, and make those records available to the Department upon request. **[Authority: COMAR 26.11.09.08(G) & COMAR 26.11.09.08K(3)]** **D.** Operational Limitations: {See Record Keeping Requirements, Section 2.4, above}

A permit shield shall cover the applicable requirements of the Clean Air Act that are listed in the table above for the Auxiliary Steam Plant Emissions Unit No. FBE-712-E1 & FBE-712-E3.

Table IV – 2a – Area Source Boiler MACT Subpart JJJJJJ Requirements (Limited-Use Units}	
2a.0	**Emissions Unit Number(s): Boilers Cont'd:** **FBE-712-E1** (Reg. #4-0081) 43 MM Btu/hr, No. 2 fuel oil fired "limited-use" boiler – Installed 1978 {"Existing Unit"} **FBE-712-E3** (Reg. #4-0241) 97 MM Btu/hr, No. 2 fuel oil fired (NSPS) "limited-use" boiler - Installed Jan. 2014/ Aug. 2015 {"New Unit"}
2a.1	**Applicable Standards/Limits:** Control of HAPs: **40 CFR Part 63, Subpart JJJJJJ – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources** **§ 63.11196 What are my compliance dates?** (3) If the existing affected boiler is subject to the energy assessment requirement, you must achieve compliance with the energy assessment requirement no later than ***March 21, 2014.***

Table IV – 2a – Area Source Boiler MACT Subpart JJJJJJ Requirements (Limited-Use Units}

(c) If you start up a ***new*** affected source after ***May 20, 2011***, you must achieve compliance with the provisions of this subpart upon startup of your affected source.

§ 63.11201 What standards must I meet?
(b) You must comply with each work practice standard, emission reduction measure, and management practice specified in Table 2 to this subpart that applies to your boiler. An energy assessment completed on or after January 1, 2008 that meets or is amended to meet the energy assessment requirements in Table 2 to this subpart satisfies the energy assessment requirement. A facility that operates under an energy management program established through energy management systems compatible with ISO 50001, that includes the affected units, also satisfies the energy assessment requirement.

(d) These standards apply at all times the affected boiler is operating, except during periods of startup and shutdown as defined in § 63.11237, during which time you must comply only with Table 2 to this subpart.

Table 2 to Subpart JJJJJJ of Part 63—Work Practice Standards, Emission Reduction Measures, and Management Practices
As stated in § 63.11201, you must comply with the following applicable work practice standards, emission reduction measures, and management practices:

Your boiler is in this subcategory. . .	**You must meet the following. . .**
{Applies to FBE-712-E1} **10**. ***Existing*** limited-use boilers	Conduct an initial tune-up as specified in §63.11214, and conduct a ***tune-up of the boiler every 5 years as*** specified in §63.11223.
{Applies to FBE-712-E3} **11. *New*** limited-use boilers	Conduct a ***tune-up of the boiler every 5 years*** as specified in §63.11223.

§ 63.11210 What are my initial compliance requirements and by what date must I conduct them?
{(c) Applies to FBE-712-E1}
(c) For ***existing*** affected boilers that have applicable work practice standards, management practices, or emission reduction measures, you must demonstrate initial compliance no later than the compliance date that is specified in § 63.11196 and according to the applicable provisions in § 63.7(a)(2), except as provided in paragraph (j) of this section.

{(f) Applies to FBE-712-E3}
(f) For ***new*** or reconstructed affected boilers that have applicable work practice standards or management practices, you are not required to complete an initial performance tune-up, but you are required to complete the applicable biennial or 5-year tune-up as specified in §63.11223 no later than 25 months or 61

Table IV – 2a – Area Source Boiler MACT Subpart JJJJJJ Requirements (Limited-Use Units}	
	months, respectively, after the initial startup of the new or reconstructed affected source. **§ 63.11223 How do I demonstrate continuous compliance with the work practice and management practice standards?** **(a)** For affected sources subject to the work practice standard or the management practices of a tune-up, you must conduct a performance tune-up according to paragraph (b) of this section and keep records as required in § 63.11225(c) to demonstrate continuous compliance. You must conduct the tune-up while burning the type of fuel (or fuels in the case of boilers that routinely burn two types of fuels at the same time) that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up. **(b)** Except as specified in paragraphs (c) through (f) of this section, you must conduct a tune-up of the boiler biennially to demonstrate continuous compliance as specified in paragraphs (b)(1) through (7) of this section. 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.
2a.2	**Testing Requirements:** Control of HAPs: **§63.11214 How do I demonstrate initial compliance with the work practice standard, emission reduction measures, and management practice?** (b) If you own or operate an … ***existing or new oil-fired boiler***, you must conduct a performance tune-up according to §63.11223(b) and you must submit a signed statement in the Notification of Compliance Status report that indicates that you conducted a tune-up of the boiler. (c) If you own or operate an existing affected boiler with a heat input capacity of 10 million Btu per hour or greater, you must submit a signed certification in the Notification of Compliance Status report that an energy assessment of the boiler and its energy use systems was completed according to Table 2 to this subpart and is an accurate depiction of your facility. **§63.11223 How do I demonstrate continuous compliance with the work practice and management practice standards?** **(f) *Limited-use boilers*** must conduct a ***tune-up every 5 years*** as specified in paragraphs (b)(1) through (7) of this section. Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up. For a new or reconstructed limited-use boiler, the first 5-year tune-up must be no later than 61 months after the initial startup. You may delay the burner inspection specified in paragraph (b)(1) of this section and inspection of the system controlling the air-to-fuel ratio specified in paragraph (b)(3) of this section until the next scheduled unit shutdown, but you must inspect each burner and system

Table IV – 2a – Area Source Boiler MACT Subpart JJJJJJ Requirements (Limited-Use Units}	
	controlling the air-to-fuel ratio at least once every 72 months. ***Limited-use boilers <u>are not</u>*** subject to the *emission limits in Table 1* to this subpart, *the energy assessment requirements in Table 2* to this subpart, or *the operating limits in Table 3* to this subpart.
2a.3	**<u>Monitoring Requirements:</u>** <u>Control of HAPs:</u> **§63.11205 What are my general requirements for complying with this subpart?** **(a)** At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
2a.4	**<u>Record Keeping Requirements</u>:** <u>Control of HAPs:</u> 1. The Permittee must keep a copy of each notification and report that is submitted to comply with 40 CFR Part 63, Subpart JJJJJJ and all documentation supporting any Initial Notification or Notification of Compliance Status that is submitted as required in 40 CFR §63.10(b)(2)(xiv). **[Authority: 40 CFR §63.11225(c)(1)]** 2. The Permittee must keep records to document conformance with the work practices, emission reduction measures, and management practices required by 40 CFR §63.11214 as follows: a. 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. b. Records documenting the fuel type(s) used monthly by each boiler, including, but not limited to, a description of the fuel and the total fuel usage amount with units of measure. **[Authority 40 CFR §63.11225(c)(2)]** 3. The Permittee must keep records of the occurrence and duration of each malfunction of the boiler or of associated air pollution control equipment and monitoring equipment. **[Authority: 40 CFR §63.11225(c)(4)]** 4. The Permittee must keep records of actions taken during periods of

Table IV – 2a – Area Source Boiler MACT Subpart JJJJJJ Requirements (Limited-Use Units}	
	malfunctions to minimize emissions in accordance with the general duty to minimize emissions in 40 CFR §63.11205(a), including corrective actions to restore the malfunctioning boiler to its normal or usual manner of operation. **[Authority: 40 CFR §63.11225(c)(5)]** 5. The Permittee must keep the records in a form suitable and readily available for expeditious review. Each record must be kept for five (5) years following the date of each recorded action. The records must remain on site for at least two (2) years after the date of each recorded action. **[Authority: 40 CFR §63.11225(d)]**
2a.5	**Reporting Requirements:** Control of HAPs: 1. The Permittee must submit all applicable notifications in 40 CFR §63.7(b), §63.8(e), §63.9(b) through (e), and §63.9(g) and (h). **[Authority: 40 CFR §63.11225(a)(1)]** 2. The Permittee must submit the Notification of Compliance Status in accordance with 40 CFR §63.9(h) no later than 120 days after the applicable compliance date specified in 40 CFR §63.11196. In addition to the information required in 40 CFR §63.9(h)(2), your notification must include the following certifications of compliance, as applicable, and signed by a responsible official: a. "This facility complies with the requirements in §63.11214 to conduct an initial tune-up of the boiler." **[40 CFR §63.11225(a)(4)(i), and (4)(ii), 40 CFR §63.11214(b) and 40 CFR §63.11214(c)]** 3. For boilers that are subject only to a requirement to conduct a biennial or 5-year tune-up according to §63.11223(a) and not subject to emission limits or operating limits, you may prepare only a biennial or 5-year compliance report as specified in paragraphs (b)(1) and (2) of this section.. The compliance report must contain the following information: 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 this subpart. Your notification must include the following certification(s) of compliance, as applicable, and signed by a responsible official: (i) "This facility complies with the requirements in §63.11223 to conduct a biennial or 5-year tune-up, as applicable, of each boiler." (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

Table IV – 2a – Area Source Boiler MACT Subpart JJJJJJ Requirements (Limited-Use Units}	
	a boiler of similar design if manufacturer's recommended procedures are not available c. If the source experiences any deviations from the applicable requirements during the reporting period, include a description of deviations, time periods during which the deviations occurred, and the corrective actions taken. **[Authority: 40 CFR §63.11225(b)(1) through (3)]**

A permit shield shall cover the applicable requirements of the Clean Air Act that are listed in the table above for the Auxiliary Steam Plant Emissions Unit No. FBE-712-E1 & FBE-712-E3.

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3.0	**Emissions Unit Number(s): NSPS BOILERS** **[NES]** **FBE-SB-E1**: (5-0021) -38 MM Btu (900-hp) Hurst/Power Flame NG Fired Steam Boiler **FBE-SB-E2**: (5-0022) -38 MM Btu (900-hp) Hurst/Power Flame NG Fired Steam Boiler **FBE-PNP-1-E1**: (5-0023) – 31.5 MM Btu (750-hp) Hurst Power Flame dual (NG /No.2 oil) fired boiler **FBE-SNP-2-E1**: (5-0024) - 20.9 MM Btu (500-hp) Hurst Power Flame NG fired boiler **FBE-SNP-2-E2**: (5-0025) - 20.9 MM Btu (500-hp) Hurst Power Flame NG fired boiler **FBE-SNP-6-E1**: (5-0026) - 16.7 MM Btu (400-hp) Hurst Power Flame NG fired boilers **FBE-SNP-6-E2**: (5-0026) - 16.7 MM Btu (400-hp) Hurst Power Flame NG fired boilers **FBE-SNP-4-E1**: (5-0027) - 14.7 MM Btu (350-hp) Hurst Power Flame NG fired boiler **FBE-SNP-4-E2**: (5-0028) - 14.7 MM Btu (350-hp) Hurst Power Flame NG fired boiler **FBE-SNP-7-E1**: (5-0029) - 10.5 MM Btu (250-hp) Hurst Power Flame NG fired boiler **FBE-SNP-7-E2**: (5-0030) - 10.5 MM Btu (250-hp) Hurst Power Flame NG fired boiler **[901- Marine Barracks]** **FBE-901-E1 & E2**: (5-0035 & -5-0036) - Two-(2) 14.3 MM Btu/hr (350-hp) Cleaver Brooks dual (NG - primary/No. 2 fuel oil - backup) fired boilers **Note:** Because Indian Head boilers fire N.G and/or fire No. 2 fuel oil only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel they ***are exempt*** from the ***Area Source Boiler MACT*** Part 63 Subpart JJJJJJ **[Ref. 40 CFR §63.11237]**
3.1	**Applicable Standards/Limits:** **A.** Control of Visible Emissions:

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(1) **COMAR 26.11.09.05(A)(1)**: Areas I, II, V, and VI, a person may not cause or permit the discharge of emissions from any fuel burning equipment other than water in an uncombined form, which is greater than 20 percent opacity.

(2) **COMAR 26.11.09.05A(3)** Exceptions.
Section A(1) and (2) of this regulation do not apply to emissions during load changing, soot blowing, startup, or adjustments or occasional cleaning of control equipment if:

(i) The visible emissions are not greater than 40 percent opacity; and

(ii) The visible emissions do not occur for more than 6 consecutive minutes in any sixty-minute period.

B. Control of Sulfur Oxides:
Note: {§ 60.42c, § 60.44c, and § 60.46c below, applies to FBE-PNP-1-E1: (5-0023) & FBE-901-E1 & -E2: Marne Barracks boilers due to their oil firing capability}

(1) § 60.42c Standard for sulfur dioxide (SO_2).

"(d) On and after the date on which the initial performance test is completed or required to be completed under §60.8,…; 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[*(1)]. The percent reduction requirements are not applicable to affected facilities under this paragraph."

"(g) Except as provided in paragraph (h) of this section, compliance with the percent reduction requirements, fuel oil sulfur limits, and emission limits of this section shall be determined on a 30-day rolling average basis."

"(h) For affected facilities listed under paragraphs (h)(1), (2), or (3) of this section, compliance with the emission limits or fuel oil sulfur limits under this section may be determined based on a certification from the fuel supplier, as described under §60.48c(f), as applicable. (1) Distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 MMBtu/hr)."

"(i) The SO_2 emission limits, fuel oil sulfur limits, and percent reduction requirements under this section apply at all times, including periods of startup, shutdown, and malfunction."

[*(1)] **Note:**Because COMAR 26.11.09.07A(2)(b) fuel sulfur content limitation is more stringent, it supersedes the fuel sulfur content specified under 40 CFR 60, Subpart Dc, §60.42c., see Condition B(2), below.

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(2) **COMAR 26.11.09.07** – *Control of Sulfur Oxides from Fuel Burning Equipment*.
"A. Sulfur Content Limitations for Fuel. A person may not burn, sell, or make available for sale any fuel with a sulfur content by weight in excess of or which otherwise exceeds the following limitations: (1) In Areas I, II, V, and VI: **(c) Distillate fuel oils, 0.3 percent**.

"C. Request for Analyses. "Any person offering to sell or deliver fuel or any person responsible for equipment in which fuel or process gas is burned, upon request, shall submit to the Department or control officer such analyses of fuel or process gas as may be required to determine compliance with this regulation."

C. Control of Nitrogen Oxides:
COMAR 26.11.09.08B(5) - Operator Training.

(a) For purposes of this regulation, the equipment operator to be trained may be the person who maintains the equipment and makes the necessary adjustments for efficient operation.

(b) The operator training course sponsored by the Department shall include an in-house training course that is approved by the Department.

COMAR 26.11.09.08 E. Requirements for Fuel-Burning Equipment with a ***Rated Heat Input Capacity of 100 Million Btu Per Hour or Less.*** A person who owns or operates fuel-burning equipment with a rated heat input capacity of 100 Million Btu per hour or less shall:

(1) Submit to the Department an identification of each affected installation, the rated heat input capacity of each installation, and the type of fuel burned in each;

(2) Perform a combustion analysis for each installation at least once each year and optimize combustion based on the analysis;

(3) Maintain the results of the combustion analysis at the site for at least 2 years and make this data available to the Department and the EPA upon request;

(4) Once every 3 years, require each operator of the installation to attend operator training programs on combustion optimization that are sponsored by the Department, the EPA, or equipment vendors; and

(5) Prepare and maintain a record of training program attendance for each operator at the site, and make these records available to the Department upon request.

Note: Combustion analysis shall be conducted using both fuels (Natural gas/No. 2 fuel oil) that are allowed to be fired in the

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	boilers. **[Authority: COMAR 26.11.03.06C]** **D.** Operational Limitations ***{Note: Applies to the NES NSPS boilers, except for FBE-PNP-E1, FBE-901-E1, and FBE-901-E2 which may fire No.2 fuel oil as a stand-by back-up fuel}*** The Permittee shall combust only natural gas as the primary fuel, unless the Permittee applies for and receives an approval or permit from the Department to burn alternate fuels. **[Authority: COMAR 26.11.02.09A & PTC 017-0040-5-0021 thru. -5-0033]**
3.2	**Testing Requirements:** A. Control of Visible Emissions: {See Section 3.3, Monitoring Requirements, below.} B. Control of Sulfur Oxides: {See Section 3.3, Monitoring Requirements, below.} C. Control of Nitrogen Oxides:: {See Section 3.3, Monitoring Requirements, below.} D. Operational Limitations: {See Section 3.3, Monitoring Requirements, below.}
3.3	**Monitoring Requirements:** **A.** Control of Visible Emissions: (1) The Permittee shall properly operate and maintain the boilers in a manner to prevent visible emissions [Authority: COMAR 26.11.03.06C]. (2) The Permittee shall verify that there are no visible emissions when burning No. 2 fuel oil. The Permittee shall perform a visual observation for a 6-minute period, once every 168 hours of operation or at a minimum once per calendar year. ***{Condition (3) below applies to the Strauss Boiler EU# PNP-1-B-1}*** (3) The Permittee shall conduct a Method 22 at least once each day that the Hurst Boiler (EU: PNP-1-B-1) is firing No. 2 fuel oil. The Permittee shall perform the annual combustion analysis while operating on No. 2 fuel oil (4) The Permittee shall perform the following, if visible emissions are observed: (a) Inspect combustion control system and boiler operations, (b) Perform all necessary adjustments and/or repairs to the boiler within 48 hours, so that visible emissions are eliminated; (c) Document in writing the results of the inspections, adjustments and/or repairs to the boiler; and

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	(d) After 48 hours, if the required adjustments and/or repairs have not eliminated the visible emissions, perform Method 9 observations once daily for 18 minutes until corrective actions have reduced the visible emissions to less than 20 percent opacity. **[Authority: COMAR 26.11.09.08E &COMAR 26.11.03.06C]** **B.** Control of Sulfur Oxides: (Sulfur Content of Fuel) The Permittee shall obtain a certification of sulfur content from the supplier for the fuel oil. The Permittee shall maintain records of the fuel oil certifications indicating that the oil complies with the limitations on sulfur content. Certification may include: (i) a fuel supplier certification consisting of the name of the oil supplier and a statement from the oil supplier that the oil complies with specifications for distillate fuel oil; or (ii) a record of fuel analysis by the Maryland State Comptroller's Office. (iii) The Permittee shall report fuel supplier certification to the Department upon request. **[Authority: COMAR 26.11.09.07A(2)(b) & COMAR 26.11.03.06C]** **C.** Control of Nitrogen Oxides: The Permittee shall perform a combustion analysis for each installation at least once each year and optimize combustion based on the analysis. **[Authority: COMAR 26.11.09.08(E) (2)]** The Permittee shall perform the combustion analysis using both fuels (Natural gas/No. 2 fuel oil) that are allowed to be fired in the boilers. **[Authority: COMAR 26.11.03.06C]** **D.** Operational Limitations: {See Section 3.4, Record Keeping Requirements, below.}
3.4	**Record Keeping Requirements:** **Note:** All records must be maintained for a period of 5 years **[Authority: COMAR 26.11.03.06C(5)(g)]** **A.** Control of Visible Emissions: The Permittee shall maintain an operations manual and preventive maintenance plan. The Permittee shall maintain a log of maintenance performed that relates to combustion performance and records of any visible observations performed. **[Authority: COMAR 26.11.03.06C].** **B.** Control of Sulfur Oxides: The Permittee shall retain fuel supplier certifications stating that the fuel oil is in compliance with the limitation on the sulfur content of the fuel oil as specified

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	by regulation **[Authority: COMAR 26.11.09.07C].** The Permittee shall maintain records of the quantity and types of fuel burned. **[Authority: COMAR 26.11.02.19C(1)(c)]** **C.** Control of Nitrogen Oxides: The Permittee shall: (1) Maintain the results of the combustion analysis at the site and make this data available to the Department and the EPA upon request; and (2) Prepare and maintain a record of training program attendance for each operator at the site, and make these records available to the Department upon request. **[Authority: COMAR 26.11.09.08(E)]** **D.** Operational Limitations: The Permittee shall monitor and log the monthly amounts of fuel used for each boiler. **[Authority: COMAR 26.11.03.06 C]**
3.5	**Reporting Requirements:** **A.** Control of Visible Emissions: The Permittee shall report incidents of visible emissions in accordance with permit condition 4, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviations". **B.** Control of Sulfur Oxides: (1) The Permittee shall report fuel supplier certifications to the Department upon request. **[Authority: COMAR 26.11.09.07C]**. ***{(2) Applies to [901- Marine Barracks]}*** (2) **§ 60.48c Reporting and recordkeeping requirements.** "**(a)** The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction and actual startup, as provided by §60.7 of this part. This notification shall include: (1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility…." "**(c)** The owner or operator of each coal-fired, **oil-fired**, or wood-fired affected facility subject to the opacity limits under §60.43c(c) shall submit excess emission reports for any excess emissions from the affected facility that occur during the reporting period." "**(d)** The owner or operator of each affected facility subject to the SO_2 emission limits, **fuel oil sulfur limits**, or percent reduction requirements under §60.42c shall submit reports to the Administrator." "**(e)** The owner or operator of each affected facility subject to the SO_2

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		emission limits, fuel oil sulfur limits, or percent reduction requirements under §60.42c shall keep records and submit reports as required under paragraph (d) of this section, including the following information, as applicable. (1) Calendar dates covered in the reporting period. (2) Each 30-day average SO_2 emission rate (ng/J or lb/MMBtu), or 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of corrective actions taken. (3) Each 30-day average percent of potential SO_2 emission rate calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of the corrective actions taken. (11) If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under paragraph (f)(1), (2), (3), or (4) of this section, as applicable. 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." "**(f) Fuel supplier certification** shall include the following information: **(2) For distillate oil**: (i) The name of the oil supplier; (ii) The location of the oil when the sample was drawn for analysis to determine the sulfur content of the oil, specifically including whether the oil was sampled as delivered to the affected facility, or whether the sample was drawn from oil in storage at the oil supplier's or oil refiner's facility, or other location; (iii) The sulfur content of the oil from which the shipment came (or of the shipment itself); and (iv) The method used to determine the sulfur content of the oil." "**(g)(1)** Except as provided under paragraphs (g)(2) and (g)(3) of this section, the owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day.

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(2) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in §60.48c(f) to demonstrate compliance with the SO_2 standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month."

"(i) All records required under this section shall be maintained by the owner or operator of the affected facility for a period of **two years** following the date of such record."

"(j) 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 30th day following the end of the reporting period."
[Authority: 40 CFR 60 Subpart Dc]

C. Control of Nitrogen Oxides:
The Permittee shall:

(1) Submit to the Department an identification of each affected installation, the rated heat input capacity of each installation, and the type of fuel burned in each;

(2) Maintain the results of the combustion analysis for at least 5 years and shall make this data available to the Department and the EPA upon request;

(3) Prepare and maintain a record of training program attendance for each operator at the site, and make these records available to the Department upon request.

(4) Maintain annual fuel use records on site for not less than 3 years, and make these records available to the Department upon request.

[Authority: COMAR 26.11.09.08(E) & COMAR 26.11.09.08K(3)]

D. Operational Limitations:
{See Record Keeping Requirements, Section 3.4, above}

A permit shield shall cover the applicable requirements of the Clean Air Act that are listed in the table above for the NSPS Boilers {See Section 3.0, above.}

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4.0	**MISCELLANEOUS SMALL BOILERS** **Emissions Unit Number(s)** **FBE 3157-E1- ESTL Complex** - Reg. No. 5-0011: 1 MM BTU/hr. Fulton propane-fired boiler **{NES Boilers}** **FBE-SNP-1-E1:** (5-0031) - 8.5 MM Btu (200-hp) Hurst Power Flame NG fired boiler **FBE-SNP-1-E2:** (5-0031) - 8.5 MM Btu (200-hp) Hurst Power Flame NG fired boiler **FBE-SNP-3-E1:** (5-0032) - 8.5 MM Btu (200-hp) Hurst Power Flame NG fired boiler **FBE-SNP-3-E2:** (5-0032) - 8.5 MM Btu (200-hp) Hurst Power Flame NG fired boiler **FBE-SNP-8-E1:** (5-0033) - 5.3 MM Btu (125-hp) Hurst Power Flame NG fired boiler **FBE-SNP-8-E2:** (5-0033) - 5.3 MM Btu (125-hp) Hurst Power Flame NG fired boiler **Note:** Because these boilers fire only N.G they ***are exempt from the Area Source Boiler MACT*** Part 63 Subpart JJJJJJ **[Ref. 40 CFR §63.11237]**
4.1	**Applicable Standards/Limits:** A. Control of Visible Emissions **COMAR 26.11.09.05 A. – Visible Emissions**. A. Fuel Burning Equipment. "(1) Areas I, II, V, and VI. In Areas I, II, V, and VI, a person may not cause or permit the discharge of emissions from any fuel burning equipment, other than water in an uncombined form, which is greater than 20 percent opacity." "(3) Exceptions. Section A(1) and (2) of this regulation do not apply to emissions during load changing, soot blowing, startup, or adjustments or occasional cleaning of control equipment if: (a) The visible emissions are not greater than 40 percent opacity; and (b) The visible emissions do not occur for more than 6 consecutive minutes in any sixty minute period." B. Control of Sulfur Oxides **COMAR 26.11.09.07A(1)** – Control of Sulfur Oxides from fuel burning equipment. "A person may not burn, sell, or make available for sale any fuel with a sulfur content by weight in excess of or which otherwise exceeds the following limitations: In Areas I, II, V, and VI: **(c) Distillate fuel oil, 0.3 percent.**" C. Control of Nitrogen Oxides **COMAR 26.11.09.08B(5)** - Operator Training.

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	(a) For purposes of this regulation, the equipment operator to be trained may be the person who maintains the equipment and makes the necessary adjustments for efficient operation. (b) The operator training course sponsored by the Department shall include an in-house training course that is approved by the Department. **COMAR 26.11.09.08 E.** Requirements for Fuel-Burning Equipment with a ***Rated Heat Input Capacity of 100 Million Btu Per Hour or Less.*** A person who owns or operates fuel-burning equipment with a rated heat input capacity of 100 Million Btu per hour or less shall: (1) Submit to the Department an identification of each affected installation, the rated heat input capacity of each installation, and the type of fuel burned in each; (2) Perform a combustion analysis for each installation at least once each year and optimize combustion based on the analysis; (3) Maintain the results of the combustion analysis at the site for at least 2 years and make this data available to the Department and the EPA upon request; (4) Once every 3 years, require each operator of the installation to attend operator training programs on combustion optimization that are sponsored by the Department, the EPA, or equipment vendors; and (5) Prepare and maintain a record of training program attendance for each operator at the site, and make these records available to the Department upon request.
4.2	**Testing Requirements:** A. Control of Visible Emissions – {See Monitoring Requirements Sec. 4.3, below} B. Control of Sulfur Oxides – {See Monitoring Requirements Sec. 4.3, below} C. Control of Nitrogen Oxides – {See Monitoring Requirements Sec. 4.3, below}
4.3	**Monitoring Requirements:** A. Control of Visible Emissions The Permittee shall keep the equipment in good working order and properly maintained as to assure compliance with the visible emissions requirements. [**Authority: COMAR 26.11.03.06C]** B. Control of Sulfur Oxides The Permittee shall obtain fuel supplier certifications stating that the fuel oil is in compliance with the sulfur content in the fuel limitation.

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	[**Authority: COMAR 26.11.03.06C]** C. Control of Nitrogen Oxides The Permittee shall perform a combustion analysis for each installation at least once each year and optimize combustion based on the analysis. **[Authority: COMAR 26.11.09.08(E) (2)]** The Permittee shall perform the combustion analysis using each fuel (Natural gas and/or Propane) that is allowed to be fired in the boilers. **[Authority: COMAR 26.11.03.06C]**
4.4	**Record Keeping Requirements:** A. Control of Visible Emissions The Permittee shall maintain records of the results of visual emissions observations for a period of at least 5 years. [**Authority: COMAR 26.11.03.06C]** B. Control of Sulfur Oxides The Permittee shall retain fuel supplier certifications stating that the fuel oil is in compliance with the sulfur content in the fuel limitation for at least 5 years. [**Authority: COMAR 26.11.03.06C].** C. Control of Nitrogen Oxides (1) Maintain the results of the combustion analysis at the site and make this data available to the Department and the EPA upon request; and (2) Prepare and maintain a record of training program attendance for each operator at the site, and make these records available to the Department upon request. **[Authority: COMAR 26.11.09.08(E)]**
4.5	**Reporting Requirements:** A. Control of Visible Emissions The Permittee shall report incidents of visible emissions in accordance with Permit Condition 4, Section III, “Report of Excess Emissions and Deviations.” [**Authority: COMAR 26.11.03.06C].** B. Control of Sulfur Oxides The Permittee shall submit fuel certification reports if requested by the Department. [**Authority: COMAR 26.11.03.06C]** C. Control of Nitrogen Oxides The Permittee shall: (1) Submit to the Department an identification of each affected installation, the rated heat input capacity of each installation, and the type of fuel burned in each; (2) Maintain the results of the combustion analysis for at least 5 years and

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	shall make this data available to the Department and the EPA upon request; (3) Prepare and maintain a record of training program attendance for each operator at the site, and make these records available to the Department upon request. (4) Maintain annual fuel use records on site for not less than 3 years, and make these records available to the Department upon request. **[Authority: COMAR 26.11.09.08(E) & COMAR 26.11.09.08K(3)]**

A permit shield shall cover the applicable requirements of the Clean Air Act that are listed in the table above for the Miscellaneous Small Boilers {See Section 4.0, above.}

Table IV – 5 - Emergency Diesel Generators{EDGs}	
5.0	**Emissions Unit Number(s):** **[NES]** **EG1920A-E1 & EG 1920B-E1:** (Reg. No. 9-0166)**:** Two-(2) 2,500-kW (3674-Bhp) MTU Emergency Diesel Generators {NSPS IIII} **EG-PNP-1-E1** (Reg. No. 9-0167) 1,000-kW (1495-BhP) Cummins {NSPS IIII}EDG **EG3123-E1:** (Reg. No. 9-0168) 600-kW (804-bhp) Cummins {NSPS IIII}EDG **EGSB1-E1:** (Reg. No. 9-0169) 450-kW (603-Bhp) Cummins{NSPS IIII} EDG **[Ref: Nodal Energy System (NES) EDG PTC No. 017-0040-9-0166 through -9-0169]** **FBE-901-E1** (Reg. 9-0143) **–** 500-hp/410-kW Caterpillar {NSPS IIII}EDG **Note:** The Permittee shall satisfy the requirements of 40 CFR, Part 63, Subpart ZZZZ by meeting the requirements of 40 CFR, Part 60, Subpart IIII for the NSPS emergency generators. No further requirements apply to the emergency generator under 40 CFR, Part 63, Subpart ZZZZ. [Reference: 40 CFR §63.6590(c)(1)] **FBE-900-E1** (Reg. 9-0122) **–** 750 kW Detroit Diesel EDG**- *Non-NSPS Unit*(*)** (*)***Note:*** NSPS Subpart IIII requirements listed below do not apply to this unit; the RICE MACT Requirements for FBE-900-E1 are included under Table IV-5a.
5.1	**Applicable Standards/Limits:** **A.** Control of Visible Emissions **COMAR 26.11.09.05(E)**: Stationary Internal Combustion Engine Powered Equipment: "(2) Emissions During Idle Mode. A person may not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity. (3) Emissions During Operating Mode. A person may not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity. (4) Exceptions.

Table IV – 5 - Emergency Diesel Generators{EDGs}

(a) Section E(2) does not apply for a period of 2 consecutive minutes after a period of idling of 15 consecutive minutes for the purpose of clearing the exhaust system.

(b) Section E(2) does not apply to emissions resulting directly from cold engine start-up and warm-up for the following maximum periods:

(i) Engines that are idled continuously when not in service: 30 minutes;
(ii) All other engines: 15 minutes.

(c) Section E(2) and (3) does not apply while maintenance, repair, or testing is being performed by qualified mechanics."

B. Control of Sulfur Oxides
40 CFR Part 60 Subpart IIII NSPS for Stationary Compression Ignition Internal Combustion Engines:
(1) Fuel Requirements for Owners and Operators
Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder must comply with the diesel fuel standards of §60.4207(b) which limit the ***maximum sulfur content of the fuel to 15 ppm*** [Ref. § 80.510 (b) (1)(i)];

COMAR 26.11.09.07A. **Sulfur Content Limitations for Fuel.**
"A person may not burn, sell, or make available for sale any fuel with a sulfur content by weight in excess of or which otherwise exceeds the following limitations: (1) In Areas I, II, V, and VI: (c) Distillate fuel oils, 0.3 percent."

Note: Since the fuel sulfur limitation under 40 CFR Part 60, Subpart IIII is more stringent than the COMAR limitation the Permittee must comply must comply with the fuel standards of §60.4207 which limit the maximum sulfur content of the fuel to 15 ppm.

C. Control of Nitrogen Oxides
COMAR 26.11.09.08G**.** Requirements for ***Fuel-Burning Equipment with a Capacity Factor of 15 Percent or Less***, and Combustion Turbines with a Capacity Factor Greater than 15 Percent.

"(1) A person who owns or operates fuel-burning equipment with a capacity factor (as defined in 40 CFR Part 72.2) of 15 percent or less shall:

(a) Provide certification of the capacity factor of the equipment to the Department in writing;

(b) For fuel-burning equipment that operates more than 500 hours during a calendar year, perform a

Table IV – 5 - Emergency Diesel Generators{EDGs}

combustion analysis and optimize combustion at least once annually;

(c) Maintain the results of the combustion analysis at the site for at least 2 years and make these results available to the Department and the EPA upon request;

(d) Require each operator of an installation, except combustion turbines, to attend operator training programs at least once every 3 years, on combustion optimization that are sponsored by the Department, the EPA, or equipment vendors; and

(e) Maintain a record of training program attendance for each operator at the site, and make these records available to the Department upon request."

COMAR 26.11.09.08B(5) - Operator Training.
"(a) for the purpose of COMAR 26.11.09.08, the equipment operator to be trained may be the person who maintains the equipment and makes the necessary adjustments for efficient operation; and

(b) that the operator training course sponsored by the Department shall include an in-house training course that is approved by the Department."

D. Operational Limitations

(1) Except as otherwise provided in this part, the emergency diesel generator shall be operated in accordance with specifications included in the application and any operating procedures recommended by equipment vendors unless the Permittee obtains from the Department written authorization for alternative operating procedures.

(2) The Permittee must operate and maintain an NSPS emergency diesel generator and control devices according to the manufacturer's written instructions or according to procedures developed by the owner or operator that are approved by the manufacturer. Additionally the Permittee may change only those settings that are permitted by the manufacturer. The Permittee must also meet the requirements of 40 CFR part 89, part 1039 for model year 2011 or later, part 94 and/or part 1068, as they may apply to an owner or operator **[Ref: §60.4211(a)].**

(3) Beginning October 1, 2010, owners and operators (the Permittee) of a stationary source CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must purchase diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel. **[Ref: §60.4207(b)]**.

Table IV – 5 - Emergency Diesel Generators{EDGs}

(4) In accordance with 40 CFR §60.4211(f), as owner/operator of an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs (f)(1) through (3) of this section. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation and maintenance and testing is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (3) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

(f)(1) There is no time limit on the use of emergency stationary ICE in emergency situations.

(f)(2)(i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

[Authority: 40 CFR Part 60, Subpart IIII & PTC No. 017-0040-9-0166 through -9-0169]

5.2 **Testing Requirements:**

A. Control of Visible Emissions

The Permittee shall properly operate and maintain the generators in accordance with the engines manufacturer's recommendations and in a manner to assure compliance with the visible emissions standards. [Authority: COMAR 26.11.03.06C].

B. Control of Sulfur Oxides

{See Monitoring, Condition 5.3 B, below.}

C. Control of Nitrogen Oxides

The Permittee shall perform a combustion analysis for each unit at least once each year and optimize combustion based on the analysis. Optimization shall include inspection and adjustment of engine timing, fuel injection and engine operation specifications. Engine inspections, tuning, and adjustments shall be performed by a qualified mechanic and in accordance with the engines manufacturer's recommendations.

Table IV – 5 - Emergency Diesel Generators{EDGs}	
	[Authority: COMAR 26.11.03.06C] **D.** Operational Limitations **{**See Monitoring, Condition 5.3 D, below.}
5.3	**Monitoring Requirements:** **A.** Control of Visible Emissions The Permittee shall properly operate and maintain the generators in accordance with the engines manufacturer's recommendations and in a manner to assure compliance with the visible emissions standards. **[Authority: COMAR 26.11.03.06C].** **B.** Control of Sulfur Oxides The Permittee shall obtain a certification from the fuel supplier indicating that the oil complies with the limitation on the sulfur content of fuel oil. **[Authority: COMAR 26.11.03.06C].** **C.** Control of Nitrogen Oxides **{**See Record keeping, Condition 5.4 C, below**.}** **D.** Operational Limitations {See Record keeping, Condition 5.4 D, below**.}**
5.4	**Record Keeping Requirements:** NOTE: All records must be maintained for a period of 5 years [Authority: COMAR 26.11.03.06C(5)(g)]. **A.** Control of Visible Emissions The Permittee shall maintain an operations manual and preventive maintenance plan. The Permittee shall maintain a log of maintenance performed that relates to combustion performance **[Authority: COMAR 26.11.03.06C].** **B.** Control of Sulfur Oxides For any NSPS emergency diesel engine the Permittee shall for each fuel delivery obtain from the fuel supplier a fuel supplier certification consisting of the name of the oil supplier, the date of delivery, the amount of fuel delivered, and a statement from the fuel supplier that the diesel fuel oil complies with the specifications of 40 CFR §80.510. The Permittee shall maintain the required records on site for at least five (5) years **[Authority: 40 CFR Part 60, Subpart IIII & PTC No. 017-0040-9-0166 through -9-0169]** The Permittee shall maintain records of the quantity and types of fuel burned. The Permittee shall retain fuel supplier certifications stating that the fuel oil is in compliance with this regulation [**Authority: COMAR 26.11.02.19C(1)(c)] & COMAR 26.11.09.07C].**

Table IV – 5 - Emergency Diesel Generators{EDGs}

C. Control of Nitrogen Oxides

The Permittee shall:

(1) Maintain the records of the combustion analysis and optimization on site.

(2) Prepare and maintain a record of training program attendance for each operator at the site, and make these records available to the Department upon request.

[Authority: COMAR 26.11.09.08(E) (3) & (5)]

D. Operational Limitations

The Permittee shall the following maintain records on site for at least five (5) years and they shall be made available to the Department upon request:

(a) The operating hours for each generator,

(b) Monthly records of fuel use,

(c) Reason for generator operation (i.e., maintenance or operational testing, power outage, etc.), and

(d) A copy of the generator's and operations and maintenance manual, and records of maintenance and repair performed.\

[Authority: COMAR 26.11.09.08(E)(1) & COMAR 26.11.09.08K(3) & PTC No. 017-0040-9-0166 through -9-0169]

The Permittee shall maintain on site for the life of the source the following records for the emergency diesel engine(s):

(a) Documentation of the manufacture date of the diesel engine, if manufactured prior to April 1, 2006 and the manufacturer model year of the diesel engine;

(b) The installation date of each emergency diesel engine; and

(c) The certifications of compliance or manufacturer engine test data required by 40 CFR §60.4211 and §60.4214(b).

(d) For any NSPS emergency diesel engine the Permittee shall for each fuel delivery obtain from the fuel supplier a fuel supplier certification consisting of the name of the oil supplier, the date of delivery, the amount of fuel delivered, and a statement from the fuel supplier that the diesel fuel oil complies with the specifications of 40 CFR §80.510. The Permittee shall maintain the required records on site for at least five (5) years.

[Authority: 40 CFR Part 60, Subpart IIII & PTC No. 017-0040-9-0166

Table IV – 5 - Emergency Diesel Generators{EDGs}	
	through -9-0169]
5.5	**Reporting Requirements:** **A.** Control of Visible Emissions The Permittee shall report incidents of visible emissions in accordance with permit condition 4, Section III, Plant Wide Conditions, "Report of Excess Emissions and Deviations". **B.** Control of Sulfur Oxides The Permittee shall submit fuel supplier certifications to the Department upon request **[Authority: COMAR 26.11.09.07C].** **C.** Control of Nitrogen Oxides The Permittee shall submit records of the results of the combustion analysis and optimization to the Department as part of the submittal of the annual emissions certification reports**,** due April 1 of each year. **[Authority: COMAR 26.11.03.06C].** **D.** Operational Limitations If you operate the emergency stationary CI ICE in a manner such that it is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §60.4211(f)(2)(ii) and (iii) or that operates for the purposes specified in §60.4211(f)(3)(i), you must submit an annual report according to the requirements in paragraphs (d)(1) through (3) of this section. (d)(1) The report must contain the following information: (i) Company name and address where the engine is located. (ii) Date of the report and beginning and ending dates of the reporting period. (iii) Engine site rating and model year. (iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place. (v) Hours operated for the purposes specified in §60.4211(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in §60.4211(f)(2)(ii) and (iii). (vi) Number of hours the engine is contractually obligated to be available for the purposes specified in §60.4211(f)(2)(ii) and (iii). (vii) Hours spent for operation for the purposes specified in § 60.4211(f)(3)(i), including the date, start time, and end time for

Table IV – 5 - Emergency Diesel Generators{EDGs}	
	engine operation for the purposes specified in §60.4211(f)(3)(i). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine. (d)(2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year. (d)(3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in §60.4. **[Authority: 40 CFR Part 60, Subpart IIII & PTC No. 017-0040-9-0166 through -9-0169]**

A permit shield shall cover the applicable requirements of the Clean Air Act that are listed in the table above for the Emergency Diesel Generators {EDGs} {See Section 5, above.}

Table IV – 5a **Premises-wide Area Source RICE MACT Requirements**	
5a.0	**Emissions Unit Number(s): Generators (Emergency) Cont'd** **FBE-900-E1** (Reg. 9-0122) **–** 750 kW Detroit Diesel EDG**- *Non-NSPS Unit***
5a.1	**Applicable Standards/Limits:** **§63.6590 What parts of my plant does this subpart cover?** This subpart applies to each affected source. (a) Affected source. An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand. (1) Existing stationary RICE. (iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006 **§63.6595 - When do I have to comply with this subpart?** (a) *Affected sources.* (1)" ….. If you have … **an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than May 3, 2013. …**". **§63.6603 - What emission limitations and operating limitations must I meet if**

Table IV – 5a
Premises-wide Area Source RICE MACT Requirements

I own or operate an existing stationary RICE located at an area source of HAP emissions?

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

(a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 1b and Table 2b to this subpart that apply to you.

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

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

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
4. Emergency stationary CI RICE and black start stationary CI RICE.[2]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[1]	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	

[1]Sources have the option to utilize an oil analysis program as described in §63.6625(i) in order to extend the specified oil change requirement in Table 2d of this subpart.

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

Table IV – 5a **Premises-wide Area Source RICE MACT Requirements**	
	§63.6605 - What are my general requirements for complying with this subpart? "(a) You must be in compliance with the emission limitations and operating limitations in this subpart that apply to you at all times. (b) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source."
5a.2	**Testing Requirements:** *{See Monitoring Requirements, below.}*
5a.3	**Monitoring Requirements:** **§63.6625 - What are my monitoring, installation, collection, operation, and maintenance requirements?** "(e) If you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions: (3) An **existing emergency** or black start stationary RICE located at an area source of HAP emissions." "(f) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or **an existing emergency stationary RICE located at an area source of HAP emissions,** you must install a non-resettable hour meter if one is not already installed." "(h) If you operate a new, reconstructed, or **existing stationary engine**, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply. (i) If you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to this subpart or in items 1 or 4 of Table 2d to this subpart, you have the option of utilizing an oil

Table IV – 5a **Premises-wide Area Source RICE MACT Requirements**	
	analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine." **§63.6640 - How do I demonstrate continuous compliance with the emission limitations and operating limitations?** (a) You must demonstrate continuous compliance with each emission limitation and operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart. (b) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE. "(f) *Requirements for emergency stationary RICE.* (1) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that was installed on or after June 12, 2006, or **an existing emergency stationary RICE located at an area source of HAP emissions**, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1)(i) through (iii) of this section. Any operation other than emergency operation, maintenance and testing is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1)(i) through (iii) of this section, the engine will not be considered an emergency engine under this subpart and will need to meet all requirements for non-

Table IV – 5a **Premises-wide Area Source RICE MACT Requirements**	
	emergency engines. (i) There is no time limit on the use of emergency stationary RICE in emergency situations. (ii) You may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The 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 year. **(*)Note:** Engines that operate in non-emergency situations are considered "load sharing units" under COMAR 26.11.36 Distributive Generation, and must satisfy the requirements of COMAR 26.11.36.03
5a.4	**Record Keeping Requirements:** **Note:** All records must be maintained for a period of at least 5 years. **[Reference: COMAR 26.11.03.06C(5)(g)]** **§63.6655 - What records must I keep?** "(e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE; (2) An existing stationary emergency RICE. (3) An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart." "(f) If you own or operate any of the stationary RICE in paragraphs (f)(1) or (2) of this section, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. (2) An existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines."
5a.5	**Reporting Requirements:** "Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable." [Footnote 2 of Table 2d]

A permit shield shall cover the applicable requirements of the Clean Air Act that are listed in the table above for the Non-NSPS EDG - FBE-900-E1 {See Section 5a.0, above.}

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6.0	**Emissions Unit Number(s): TANK-510-E3** (12 K gal AST) for **Gasoline Storage (Reg. No. 9-0174)** – Sept. 2015
6.1	**Applicable Standards/Limits:** A. Control of Volatile Organic Compounds (VOCs) (1) **COMAR 26.11.13.04 – Loading Operations**. "C Small Storage Tanks. (1) Applicability. This section applies to a person who owns or operates: (a) A gasoline storage tank that has a tank capacity greater than 2,000 gallons but less than 40,000 gallons; or (b) A gasoline tank truck used to transfer gasoline into a storage tank that is listed in Sec. C(1)(a) of this regulation. (2) Stage I Vapor Recovery. An owner or operator of a gasoline tank truck or an owner or operator of a stationary storage tank subject to this regulation may not cause or permit gasoline to be loaded into a stationary tank unless the loading system is equipped with a vapor balance line that is properly installed, maintained and used." "D. General Standards. A person may not cause or permit a gasoline or VOC having a TVP of 1.5 psia (10.3 kilonewtons/square meter) or greater to be loaded into any truck, railroad tank car, or other contrivance unless the: (1) Loading connections on the vapor lines are equipped with fittings that have no leaks and that automatically and immediately close upon disconnection to prevent release of gasoline or VOC from these fittings; and (2) Equipment is maintained and operated in a manner to prevent avoidable liquid leaks during loading and unloading operations." (2) **COMAR 26.11.24.02 - Stage II Vapor Recovery at Gasoline Dispensing Facilities** - Applicability, Exemptions, and Effective Date. "A. This chapter applies in Baltimore City and Anne Arundel , Baltimore, Calvert, Carroll, Cecil, ***Charles***, Frederick, Harford, Howard, Montgomery, and Prince George's Counties." **"**B. A gasoline dispensing facility exempted under Sec. C of this regulation is subject only to the record-keeping and reporting requirement of Regulation .07D of this chapter." **"**C. The provisions of this chapter do not apply to: (1) The owner or operator of an existing gasoline

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	dispensing facility with a monthly gasoline throughput of less than 10,000 gallons; (2) The owner or operator of any new gasoline dispensing facility that has a total gasoline storage tank capacity of less than 2,000 gallon; or (3) An existing independent small business gasoline marketer whose monthly gasoline throughput during calendar years 1990 and 1991 was less than 50,000 gallons." **Note:** TANK-510-E1 was not equipped with Stage II Vapor Recovery in accordance with the "Stage II Vapor Recovery Systems – Enforcement Discretion Policy" issued by the Department on March 20, 2014.
6.2	**Testing Requirements:** ***{See Monitoring Requirements – Section 6.3, below}***
6.3	**Monitoring Requirements:** A. Control of Volatile Organic Compounds (VOCs) Once a month during a delivery, the Permittee shall visually inspect all components on the premises for leaks and retain a record of these leak inspections. If leaks are detected, corrective action shall be as follows: (1) Take immediate action to repair all observed VOC leaks that can be repaired with 48 hours; and (2) Repair all other leaking components not later than 15 days after the leak is discovered. If a replacement part is needed, the part shall be ordered within 3 days after discovery of the leak, and the leak shall be repaired within 48 hours after receiving the part. **[Authority: COMAR 26.11.03.06C].**
6.4	**Record Keeping Requirements:** A. Control of Volatile Organic Compounds (VOCs) The Permittee shall maintain records of all inspections and submit records to the Department upon request. **[Authority: COMAR 26.11.03.06C]**
6.5	**Reporting Requirements: {**See Record keeping Requirements, Section 6.4, above.}

A permit shield shall cover the applicable requirements of the Clean Air Act that are listed in the table above for the Gasoline Storage Tank – EN- 510-E3 {See Section 6, above.}

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7.0	**Emissions Unit Number(s): (Reg. # 6-0099 & 6-0116)** Various paint spray booths and associated equipment primarily used for aerospace or miscellaneous metal parts coating. PAINT Nos. 588-E1, 1134-E1, 1134-E3 (misc. metal parts), 717-E10, 717-E11 (Ordnance), 1866-E3 & E4 (Ordnance), 0693-E5, 720- E1 & E2

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	(Ordnance), **PAINT-730-E3 & E4 (BRACON Ordnance),** and 1913-E4 (CAD/PAD – misc. metal parts).
7.1	**Applicable Standards/Limits:** **A.** Control of Volatile Organic Compounds (VOCs) **(1) COMAR 26.11.19.08 - Metal Parts and Products Coating.** A. Definitions. In this regulation, the following terms have the meanings indicated: (Note: Following listing of definitions is not complete, for complete citing, see the regulation @ http://www.dsd.state.md.us/COMAR/) (1) *"Adhesion promoter"* means a thin coating applied to a substrate to: (a) Promote wetting; and (b) Form a chemical bond with the subsequently applied material. (2) *Air-dried coating* means a coating that is cured at a temperature below 90°C (194°F). (3*) Baked coating* means a coating that is cured at a temperature at or above 90°C (194°F). (4) *Camouflage coating* means a coating used, principally by the military, to conceal equipment from detection. (9) *Extreme performance coating* means a coating used on a metal surface where the coated surface is, in its intended use, subject to the following: (a) Chronic exposure to corrosive, caustic or acidic agents, chemicals, chemical fumes, chemical mixtures or solution; (b) Repeated exposure to temperatures in excess of 250°F; (c) A temperature of at least 400°F during normal use; or (d) Repeated heavy abrasion, including mechanical wear and repeated scrubbing with industrial grade solvents, cleansers or scouring agents. (10) *Heat-resistant coating* means a coating that must withstand a temperature of at least 400°F during normal use. (11) *High performance architectural coating* means a coating used to protect architectural subsections and which meets the requirements of the American Architectural Manufacturer's Association publication number AAMA 2604-05 (Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels) or 2605-05 (Voluntary Specification, Performance Requirements

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		and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels). (12) *High temperature coating* means a coating that is certified to withstand a temperature of 1000°F for 24 hours. (15) Metal Parts and Products Coating. (a) *"Metal parts and products coating"* means coating the surface of any metal part or product which will be assembled with other metal, wood, fabric, plastic, or glass parts. (b) Metal parts and products coating does not include metal furniture coatings. (16) *Metallic coating* means a coating which contains more than 5 grams of metal particles per liter of coating, as applied. (17) *Military specification coating* means a coating which has a formulation approved by a United States Military Agency for use on military equipment. (24) *Repair coating* means a coating used to re-coat portions of a previously coated product which has sustained mechanical damage to the coating following normal coating operations. (29) *Stencil coating* means an ink or a coating which is rolled or brushed onto a template or stamp in order to add identifying letters and/or numbers to metal parts and products. (30) *Touch-up coating* means a coating used to cover minor coating imperfections appearing after the main coating operation. C. Applicability and Exemptions. (1) This regulation applies to a person who owns or operates: (b) A metal parts and products coating operation at a premises where the total VOC emissions from all metal parts and products surface coating operations (including emissions from related cleaning activities), exceed 15 pounds (6.8 kilograms) per day. (2) This regulation does not apply to: (g) Cold and Vapor Degreasing subject to COMAR 26.11.19.09; (j) Aerospace coating subject to COMAR 26.11.19.13-1; (3) This regulation does not apply to repair or touch-up coatings when applied using a hand-held, pressurized, non-refillable container which expels coatings from the container in a finely divided spray when a valve on the container is depressed.

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D. Emission Standards.
(1) A person subject to this regulation may not exceed the applicable VOC emission standards (expressed in terms of mass of VOC per volume of coating excluding water and exempt compounds, as applied) of the following table when applying a metal furniture coating:

Coating Type	Baked		Air-Dried	
	Lbs/gal	Kg/l	Lbs/gal	Kg/l
General, one-component	2.3	0.275	2.3	0.275
General, multi-component	2.3	0.275	2.8	0.340
Extreme performance	3.0	0.360	3.5	0.420
Metallic	3.5	0.420	3.5	0.420
Pretreatment	3.5	0.420	3.5	0.420
Solar absorbent	3.0	0.360	3.5	0.420
Extreme high gloss	3.0	0.360	2.8	0.340

(2) A person subject to this regulation may not exceed the applicable VOC emission standards (expressed in terms of mass of VOC per volume of coating excluding water and exempt compounds, as applied) of the following table when applying a metal parts and products coating:

Coating Type	Baked		Air-Dried	
	Lbs/gal	Kg/l	Lbs/gal	Kg/l
General, one-component	2.3	0.275	2.8	0.340
General, multi-component	2.3	0.275	2.8	0.340
Adhesion promoter	4.0	0.479	4.0	0.479
Prefabricated architectural one component and multi-component	2.3	0.280	3.5	0.420
Military specification	2.3	0.280	2.8	0.340
Extreme high-gloss; extreme performance; heat-resistant; high performance architectural; repair coating; solar absorbent; or touch up coating	3.0	0.360	3.5	0.420
Camouflage, electric-insulating varnish; etching filler; high temperature; metallic; mold-seal; pan backing; pretreatment; silicone release and vacuum-metalizing	3.5	0.420	2.8	0.420

E. Application Methods.

(1) Except as provided in §E(2) of this regulation, a person subject to the requirements of this regulation shall use the following application methods:

(a) Electrostatic application;

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(b) HVLP spray;

(c) Flow coat;

(d) Roller coat;

(e) Dip coat including electro-deposition;

(f) Brush coat; or

(g) A coating application method capable of achieving a transfer efficiency equivalent to or better than the efficiency achieved by HVLP spraying.

(2) The application requirements of §E(1) of this regulation do not apply to the following coating operations:

(a) Repair coatings;

(b) Touch-up coatings;

(c) Coatings applied to create a textured finish; or

(d) Robotic application of heavy-duty engine coatings.

(2) <u>COMAR 26.11.19.13-1 Aerospace Coating Operations</u>.

A. Applicability and Exemptions.

1) This regulation applies to an aerospace coating operation at a premises where the *total actual VOC emissions from all aerospace coating operations is 20 pounds or more per day*.

2) The standards in §C(2) of this regulation do not apply to tooling and touch up and repair operations.

3) A person subject to the standards in §C(2) of this regulation may comply with those standards by using an air pollution control device (see Regulation .02B(2)(b) of this chapter).

C. General Requirements for Aerospace Coating Operations.

1) Except as provided in §C(3) of this regulation, a person who owns or operates an aerospace coating operation subject to this regulation may not cause or permit the discharge of VOC into the atmosphere unless the standards in §C(2) of this regulation are met.

2) Aerospace Coating Operation Standards.

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a) Standards for Topcoats, Primers and Milling Maskants Maximum Allowable VOC in Pounds Per Gallon (Kilograms Per Liter) of Coating Applied (Minus Water):

Coating Types	Pounds/Gallon (Kilograms/Liter)
Topcoats	3.5 (0.42)
Self-priming topcoat	3.5 (0.42)
Primers	2.9 (0.35)
Chemical Milling Maskants	1.3 (0.16)

b) Standards for Specialty Coatings.

Coating	Pounds/Gallon (Kilograms/Liter)
Ablative Coating	5.0 (600)
Adhesion Promoter	7.42 (890)
Adhesive Bonding Primers: Cured at 250F or below	7.09 (850)
Adhesive Bonding Primers: Cured above 250F	8.59 (1030)
Antichafe Coating	5.50(660)
Bearing Coating	5.17 (620)
Bonding Maskant	10.26 (1,230)
Caulking and Smoothing Com pounds	7.09 (850)
Chemical Agent-Resistant Coating	4.58 (550)
Clear Coating	6.00 (720)
Commercial Exterior Aerodynamic Structure Primer	5.42 (650)
Commercial Interior Adhesive	6.34 (760)
Compatible Substrate Primer	6.50 (780)
Corrosion Prevention Compound	5.92 (710)
Critical Use and Line Sealer Maskant	8.51 (1,020)
Cryogenic Flexible Primer	5.38 (645)
Cryoprotective Coating	5.00 (600)
Cyanoacrylate Adhesive	8.51 (1,020)
Dry Lubricative Material	7.34 (880)
Electric or Radiation-Effect Coating	6.67 (800)
Electrostatic Discharge and Electromagnetic Interference (EMI) Coating	6.67 (800)
Elevated-Temperature Skydrol- Resistant Commercial Primer	6.17 (740)
Epoxy Polyamide Topcoat	5.50 (660)
Fire-Resistant (interior) Coating	6.67 (800)
Flexible Primer	5.34 (640)
Flight-Test Coatings Missile or Single Use Aircraft	3.50 (420)
Flight-Test Coatings All Other	7.0 (840)

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Fuel Tank Adhesive	5.17 (620)
Fuel-Tank Coating	6.00 (720)
High-Temperature Coating	7.09 (850)
Insulation Covering	6.17 (740)
Intermediate Release Coating	6.25 (750)
Lacquer	6.9 (830)
Metallized Epoxy Coating	6.17 (740)
Mold Release	6.50 (780)
Nonstructural Adhesive	3.00 (360)
Optical Antireflective Coating	6.25 (750)
Part Marking Coating	7.09 (850)
Rain Erosion-Resistant Coating	7.09 (850)
Rocket Motor Bonding Adhesive	7.42 (890)
Rocket Motor Nozzle Coating	5.50 (660)
Rubber-Based Adhesive	7.09 (850)
Scale Inhibitor	7.34 (880)
Screen Print Ink	7.00 (840)
Sealants: Extrudable/Rollable/Brushable Sealant	2.33 (280)
Sprayable Sealant	5.0 (600)
Seal Coat Maskant	10.26 (1,230)
Silicone Insulation Material	7.09 (850)
Solid Film Lubricant	7.34 (880)
Specialized Function Coating	7.42 (890)
Structural Autoclavable Adhesive	0.50 (60)
Structural Nonautoclavable Adhesive	7.09 (850)
Temporary Protective Coating	2.67 (320)
Thermal Control Coating	6.67 (800)
Wet Fastener Installation Coating	5.63 (675)
Wing Coating	7.09 (850)

3) A person subject to this regulation may exceed the specialty coating standards in §C(2)(b) of this regulation if the total VOC emissions from all specialty coatings that exceed the standard in §C(2)(b) of this regulation do not exceed 20 pounds on any day.

4) A person who owns or operates an aerospace coating operation subject to this regulation shall comply with the primer and topcoat applications operations, chemical milling maskant operations, and the test methods and coating averaging procedures specified in 40 Code of Federal Regulations (CFR) §§63.745(a)—(e), 63.747(a)—(e), and 63.750(e)—(h), (i), (o), and (p), which are incorporated by reference.

5) Cleanup Requirements. A person who owns or operates an aerospace coating operation shall:

(a) Store all waste materials containing VOC, including cloth or paper, in closed containers;

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(b) Maintain lids on surface preparation and cleanup materials when not in use; and

(c) Use enclosed containers or VOC recycling equipment to clean spray gun equipment.

(3) 40 CFR Part 63 – Subpart GG - National Emission Standards for Aerospace Manufacturing and Rework Facilities:.

63.741 ***Applicability and designation of affected sources.***

(a) This subpart applies to facilities that are engaged, either in part or in whole, in the manufacture or rework of commercial, civil, or military aerospace vehicles or components and that are major sources as defined in §63.2.

(f) This subpart does not contain control requirements for use of specialty coatings, adhesives, adhesive bonding primers, or sealants at aerospace facilities. It also does not regulate research and development, quality control, and laboratory testing activities, chemical milling, metal finishing, electrodeposition (except for electrodeposition of paints), composites processing (except for cleaning and coating of composite parts or components that become part of an aerospace vehicle or component as well as composite tooling that comes in contact with such composite parts or components prior to cure), electronic parts and assemblies (except for cleaning and top coating of completed assemblies), manufacture of aircraft transparencies, and wastewater operations at aerospace facilities. These requirements do not apply to the rework of aircraft or aircraft components if the holder of the Federal Aviation Administration (FAA) design approval, or the holder's licensee, is not actively manufacturing the aircraft or aircraft components. These requirements also do not apply to parts and assemblies not critical to the vehicle's structural integrity or flight performance. The requirements of this subpart also do not apply to primers, topcoats, chemical milling maskants, strippers, and cleaning solvents containing HAP and VOC at concentrations less than 0.1 percent for carcinogens or 1.0 percent for noncarcinogens, as determined from manufacturer's representations. Additional specific exemptions from regulatory coverage are set forth in paragraphs (e), (g), (h), (i) and (j) of this section and §§63.742, 63.744(a)(1), (b), (e), 63.745(a), (f)(3), (g)(4), 63.746(a), (b)(5), 63.747(c)(3), and 63.749(d).

(g) The requirements for primers, topcoats, and chemical milling maskants in § 63.745 and § 63.747 do not apply to the use of low-volume coatings in these categories for which the annual total of each separate formulation used at a facility does not exceed 189 l (50 gal), and the combined annual total of all such primers, topcoats, and chemical milling maskants used at a facility does not exceed 757 l (200 gal). Primers and topcoats exempted under paragraph (f) of this section and under § 63.745(f)(3) and (g)(4) are not included in the 50 and 200 gal limits. Chemical milling maskants exempted under § 63.747(c)(3) are

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	also not included in these limits. **§ 63.745 *Standards: Primer and topcoat application operations*.** (a) Each owner or operator of a new or existing primer or topcoat application operation subject to this subpart shall comply with the requirements specified in paragraph (c) of this section for those coatings that are uncontrolled (no control device is used to reduce organic HAP emissions from the operation), and in paragraph (d) of this section for those coatings that are controlled (organic HAP emissions from the operation are reduced by the use of a control device). Aerospace equipment that is no longer operational, intended for public display, and not easily capable of being moved is exempt from the requirements of this section. (b) Each owner or operator shall conduct the handling and transfer of primers and topcoats to or from containers, tanks, vats, vessels, and piping systems in such a manner that minimizes spills. (c) *Uncontrolled coatings*—organic HAP and VOC content levels. Each owner or operator shall comply with the organic HAP and VOC content limits specified in paragraphs (c)(1) through (c)(4) of this section for those coatings that are uncontrolled. (1) Organic HAP emissions from primers shall be limited to an organic HAP content level of no more than*: 540 g/L (4.5 lb/gal) of primer (less water),* as applied, for general aviation rework facilities; (2) VOC emissions from primers shall be limited to a VOC content level of no more than: 540 g/L (4.5 lb/gal) of primer (less water and exempt solvents), as applied, for general aviation rework facilities; (3) Organic HAP emissions from topcoats shall be limited to an organic HAP content level of no more than: 420 g/L (3.5 lb/gal) of coating (less water) as applied or 540 g/L (4.5 lb/gal) of coating (less water) as applied for general aviation rework facilities. Organic HAP emissions from self-priming topcoats shall be limited to an organic HAP content level of no more than: 420 g/L (3.5 lb/gal) of self-priming topcoat (less water) as applied or 540 g/L (4.5 lb/gal) of self-priming topcoat (less water) as applied for general aviation rework facilities. (4) VOC emissions from topcoats shall be limited to a VOC content level of no more than: 420 g/L (3.5 lb/gal) of coating (less water and exempt solvents) as applied or 540 g/L (4.5 lb/gal) of coating (less water and exempt solvents) as applied for general aviation rework facilities. VOC emissions from self-priming topcoats shall be limited to a VOC content level of no more than: 420 g/L (3.5 lb/gal) of self-priming topcoat (less water and exempt solvents) as applied or 540 g/L (4.5 lb/gal) of self-priming topcoat (less water) as applied for general aviation rework facilities.

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	(d) *Controlled coatings* - control system requirements. Each control system shall reduce the operation's organic HAP and VOC emissions to the atmosphere by 81% or greater, taking into account capture and destruction or removal efficiencies, as determined using the procedures in §63.750(g) when a carbon adsorber is used and in §63.750(h) when a control device other than a carbon adsorber is used. (e) *Compliance methods*. Compliance with the organic HAP and VOC content limits specified in paragraphs (c)(1) through (c)(4) of this section shall be accomplished by using the methods specified in paragraphs (e)(1) and (e)(2) of this section either by themselves or in conjunction with one another. (1) Use primers and topcoats (including self-priming topcoats) with HAP and VOC content levels equal to or less than the limits specified in paragraphs (c)(1) through (c)(4) of this section; or (2) Use the averaging provisions described in §63.743(d). (f) *Application equipment*. Except as provided in paragraph (f)(3) of this section, each owner or operator of a new or existing primer or topcoat (including self-priming topcoat) application operation subject to this subpart in which any of the coatings contain organic HAP or VOC shall comply with the requirements specified in paragraphs (f)(1) and (f)(2) of this section. (1) All primers and topcoats (including self-priming topcoats) shall be applied using one or more of the application techniques specified in paragraphs (f)(1)(i) through (f)(1)(ix) of this section. (i) Flow/curtain coat application; (ii) Dip coat application; (iii) Roll coating; (iv) Brush coating; (v) Cotton-tipped swab application; (vi) Electrodeposition (dip) coating; (vii) High volume low pressure (HVLP) spraying; (viii) Electrostatic spray application; or (ix) Other coating application methods that achieve emission reductions equivalent to HVLP or electrostatic spray application methods, as determined according to the requirements in §63.750(i).

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	(2) All application devices used to apply primers or topcoats (including self-priming topcoats) shall be operated according to company procedures, local specified operating procedures, and/or the manufacturer's specifications, whichever is most stringent, at all times. Equipment modified by the facility shall maintain a transfer efficiency equivalent to HVLP and electrostatic spray application techniques. (3) The following situations are exempt from the requirements of paragraph (f)(1) of this section: (i) Any situation that normally requires the use of an airbrush or an extension on the spray gun to properly reach limited access spaces; (ii) The application of coatings that contain fillers that adversely affect atomization with HVLP spray guns and that the permitting agency has determined cannot be applied by any of the application methods specified in paragraph (f)(1) of this section; (iii) The application of coatings that normally have a dried film thickness of less than 0.0013 centimeter (0.0005 in.) and that the permitting agency has determined cannot be applied by any of the application methods specified in paragraph (f)(1) of this section; (iv) The use of airbrush application methods for stenciling, lettering, and other identification markings; (v) The use of hand-held spray can application methods; and (vi) Touch-up and repair operations. (g) *Inorganic HAP emissions*. Except as provided in paragraph (g)(4) of this section, each owner or operator of a new or existing primer or topcoat application operation subject to this subpart in which any of the coatings that are spray applied contain inorganic HAP, shall comply with the applicable requirements in paragraphs (g)(1) through (g)(3) of this section. (1) Apply these coatings in a booth or hangar in which air flow is directed downward onto or across the part or assembly being coated and exhausted through one or more outlets. (2) Control the air stream from this operation as follows: (i) For existing sources, the owner or operator must choose one of the following: (A) Before exhausting it to the atmosphere, pass the air stream through a dry particulate filter system certified using the methods described in §63.750(o) to meet or exceed the efficiency data points in Tables 1 and 2 of this section; or

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Table 1_Two-Stage Arrestor; Liquid Phase Challenge for Existing Sources

Filtration efficiency requirement, %	Aerodynamic particle size range, mm
>90	>5.7
>50	>4.1
>10	>2.2

Table 2_Two-Stage Arrestor; Solid Phase Challenge for Existing Sources

Filtration efficiency requirement, %	Aerodynamic particle size range, mm
>90	>8.1
>50	>5.0
>10	>2.6

(B) Before exhausting it to the atmosphere, pass the air stream through a waterwash system that shall remain in operation during all coating application operations; or

(C) Before exhausting it to the atmosphere, pass the air stream through an air pollution control system that meets or exceeds the efficiency data points in Tables 1 and 2 of this section and is approved by the permitting authority.

(ii) For new sources, either:

(A) Before exhausting it to the atmosphere, pass the air stream through a dry particulate filter system certified using the methods described in §63.750(o) to meet or exceed the efficiency data points in Tables 3 and 4 of this section; or

Table 3_Three-Stage Arrestor; Liquid Phase Challenge for New Sources

Filtration efficiency requirement, %	Aerodynamic particle size range, mm
>95	>2.0
>80	>1.0
>65	>0.42

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Table 4_Three-Stage Arrestor; Solid Phase Challenge for New Sources

Filtration efficiency requirement, %	Aerodynamic particle size range, mm
>95	>2.5
>85	>1.1
>75	>0.70

(B) Before exhausting it to the atmosphere, pass the air stream through an air pollution control system that meets or exceeds the efficiency data points in Tables 3 and 4 of this section and is approved by the permitting authority.

(iii) Owners or operators of new sources that have commenced construction or reconstruction after June 6, 1994 but prior to October 29, 1996 may comply with the following requirements in lieu of the requirements in paragraph (g)(2)(ii) of this section:

(A) Pass the air stream through either a two-stage dry particulate filter system or a waterwash system before exhausting it to the atmosphere.

(B) If the primer or topcoat contains chromium or cadmium, control shall consist of a HEPA filter system, three-stage filter system, or other control system equivalent to the three stage filter system as approved by the permitting agency.

(iv) If a dry particulate filter system is used, the following requirements shall be met:

(A) Maintain the system in good working order;

(B) Install a differential pressure gauge across the filter banks;

(C) Continuously monitor the pressure drop across the filter and read and record the pressure drop once per shift; and

(D) Take corrective action when the pressure drop exceeds or falls below the filter manufacturer's recommended limit(s).

(v) If a conventional waterwash system is used, continuously monitor the water flow rate and read and record the water flow rate once per shift. If a pumpless system is used, continuously monitor the booth parameter(s) that indicate performance of the booth per the manufacturer's recommendations to maintain the booth within the acceptable operating efficiency range and read and record the parameters once per shift.

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	(3) If the pressure drop across the dry particulate filter system, as recorded pursuant to §63.752(d)(1), is outside the limit(s) specified by the filter manufacturer or in locally prepared operating procedures, shut down the operation immediately and take corrective action. If the water path in the waterwash system fails the visual continuity/flow characteristics check, or the water flow rate recorded pursuant to §63.752(d)(2) exceeds the limit(s) specified by the booth manufacturer or in locally prepared operating procedures, or the booth manufacturer's or locally prepared maintenance procedures for the filter or waterwash system have not been performed as scheduled, shut down the operation immediately and take corrective action. The operation shall not be resumed until the pressure drop or water flow rate is returned within the specified limit(s). (4) The requirements of paragraphs (g)(1) through (g)(3) of this section do not apply to the following: (i) Touch-up of scratched surfaces or damaged paint; (ii) Hole daubing for fasteners; (iii) Touch-up of trimmed edges; (iv) Coating prior to joining dissimilar metal components; (v) Stencil operations performed by brush or air brush; (vi) Section joining; (vii) Touch-up of bushings and other similar parts; (viii) Sealant detackifying; (ix) Painting parts in an area identified in a title V permit, where the permitting authority has determined that it is not technically feasible to paint the parts in a booth; and (x) The use of hand-held spray can application methods. [60 FR 45956, Sept. 1, 1996, as amended at 63 FR 15019, Mar. 27, 1998; 63 FR 46533, Sept. 1, 1998; 65 FR 76945, Dec. 8, 2000] **§ 63.747 *Standards: Chemical milling maskant application operations*.** (c) Uncontrolled maskants—organic HAP and VOC content levels. Each owner or operator shall comply with the organic HAP and VOC content limits specified in paragraphs (c)(1) and (c)(2) of this section for each chemical milling maskant

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	that is uncontrolled. (1) Organic HAP emissions from chemical milling maskants shall be limited to organic HAP content levels of no more than 622 grams of organic HAP per liter (5.2 lb/gal) of Type I chemical milling maskant (less water) as applied, and no more than 160 grams of organic HAP per liter (1.3 lb/gal) of Type II chemical milling maskant (less water) as applied. (2) VOC emissions from chemical milling maskants shall be limited to VOC content levels of no more than 622 grams of VOC per liter (5.2 lb/gal) of Type I chemical milling maskant (less water and exempt solvents) as applied, and no more than 160 grams of VOC per liter (1.3 lb/gal) of Type II chemical milling maskant (less water and exempt solvents) as applied. (3) The requirements of paragraphs (c)(1) and (c)(2) of this section do not apply to the following: (i) Touch-up of scratched surfaces or damaged maskant; and (ii) Touch-up of trimmed edges. (d) Controlled maskants—control system requirements. Each control system shall reduce the operation's organic HAP and VOC emissions to the atmosphere by 81% or greater, taking into account capture and destruction or removal efficiencies, as determined using the procedures in §63.750(g) when a carbon adsorber is used and in §63.750(h) when a control device other than a carbon adsorber is used. (e) Compliance methods. Compliance with the organic HAP and VOC content limits specified in paragraphs (c)(1) and (c)(2) of this section may be accomplished by using the methods specified in paragraphs (e)(1) and (e)(2) of this section either by themselves or in conjunction with one another. (1) Use chemical milling maskants with HAP and VOC content levels equal to or less than the limits specified in paragraphs (c)(1) and (c)(2) of this section. (2) Use the averaging provisions described in §63.743(d). [60 FR 45956, Sept. 1, 1996, as amended at 63 FR 15021, Mar. 27, 1998] **[Authority: 40 CFR Part 63 – Subpart GG]** **B.** Operational Limitations (1) (General Operating Condition) - The Permittee shall maintain and operate the spray booths and associated equipment in accordance with the manufacturers recommendations, good operating practices, and in accordance with the facility's Operations Manual and Maintenances Plan. (2) COMAR 26.11.19.02I -"Good Operating Practices, Equipment Cleanup, and VOC Storage" and COMAR 26.11.19.16. - "Control of VOC Equipment Leaks". (See Table IV-12)

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	[Authority: COMAR 26.11.03.06C]
7.2	**Testing Requirements:** **A.** Control of Volatile Organic Compounds (VOCs) (1) (Metal Parts and Products) – {See Monitoring Requirements Condition 7.3 A (1), below.} (2) (State Aerospace) – {See Monitoring Condition 7.3 A (2), below} (3) (NESHAP - Aerospace) - The Permittee shall comply with the requirements as stated in §63.750 - Test methods and procedures. **[Authority: 40 CFR Part 63 – Subpart GG]** **B.** Operational Limitations - ***{See Monitoring Condition 7.3, below}***
7.3	**Monitoring Requirements:** **A.** Control of Volatile Organic Compounds (VOCs) (1) (Metal Parts and Products) (a) The Permittee shall monitor and log the class of component (i.e., metals or aerospace, other, etc.) being coated, types of materials used and VOC contents. (b) The Permittee shall determine the VOC contents using manufacturer's supplied data (i.e., MSD) or Method 24 of 40 CFR 60, Appendix A. **[Authority: COMAR 26.11.19.02D & COMAR 26.11.03.06C]** (2) (State Aerospace) A person who owns or operates an aerospace coating operation subject to this regulation shall comply with the primer and topcoat applications operations, chemical milling maskant operations, and the test methods and coating averaging procedures specified in 40 Code of Federal Regulations (CFR) §§63.745(a)—(e), 63.747(a)—(e), and 63.750(e)—(h), (i), (o), and (p), which are incorporated by reference. **[Authority: COMAR 26.11.19.13-1]** (3) (NESHAP - Aerospace) – The Permittee shall comply with the requirements of §63.751 – Monitoring requirements, including but not limited to the following: (a) Enclosed spray gun cleaners. Each owner or operator using an enclosed spray gun cleaner under §63.744(c)(1) shall visually inspect the seals and all other potential sources of leaks associated with each enclosed gun spray cleaner system at least once per month. Each inspection shall occur while the system is in operation. (c) Dry particulate filter, HEPA filter, and waterwash systems—primer and topcoat application operations. (1) Each owner or operator using a dry particulate filter system to meet the requirements of §63.745(g)(2) shall,

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	while primer or topcoat application operations are occurring, continuously monitor the pressure drop across the system and read and record the pressure drop once per shift following the recordkeeping requirements of §63.752(d). **[Authority: 40 CFR Part 63 – Subpart GG]** **B.** Operational Limitations (1) (General Operation) - The Permittee shall visually inspect active spray booths and associated equipment once each calendar month for leaks and in accordance with the facility's operations and preventative maintenance manual. (2) The Permittee shall implement the good operating practices as specified in COMAR 26.11.19.02I -"Good Operating Practices, Equipment Cleanup, and VOC Storage" and COMAR 26.11.19.16. - "Control of VOC Equipment Leaks". (See Table IV-12). **[Authority: COMAR 26.11.03.06C]**
7.4	**Record Keeping Requirements:** **A.** Control of Volatile Organic Compounds (VOCs) (1) (Metal Parts and Products) - The Permittee shall maintain records of what is being painted, types of materials used, Material Safety Data sheets, the monthly records of the amounts of materials used, VOC content, and hours of operation of the spray booths. **[Authority: COMAR 26.11.03.06C].** (2) (State COMAR – Aerospace) – See Condition 7.3 (2), above. The Permittee shall maintain records of what is being painted, types of materials used, Material Safety Data sheets, monthly records of the amounts of materials used, VOC content, (including calculations and/or procedures used to determine the VOC), and hours of operation of the spray booths. **[Authority: COMAR 26.11.03.06C & COMAR 26.11.19.13-1]** (3) (NESHAP - Aerospace) – The Permittee shall comply with the requirements of § 63.752 - Recordkeeping requirements, including but not limited to the following: (a) *General*. Each owner or operator of a source subject to this subpart shall fulfill all recordkeeping requirements specified in §63.10 (a), (b), (d), and (f). (b) *Cleaning operation*. Each owner or operator of a new or existing cleaning operation subject to this subpart shall record the information specified in paragraphs (b)(1) through (b)(5) of this section, as appropriate. (1) The name, vapor pressure, and documentation showing the organic HAP constituents of each cleaning solvent used for affected cleaning operations at the facility.

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(2) For each cleaning solvent used in hand-wipe cleaning operations that complies with the composition requirements specified in §63.744(b)(1) or for semi-aqueous cleaning solvents used for flush cleaning operations:

(i) The name of each cleaning solvent used;

(ii) All data and calculations that demonstrate that the cleaning solvent complies with one of the composition requirements; and

(iii) Annual records of the volume of each solvent used, as determined from facility purchase records or usage records.

(3) For each cleaning solvent used in hand-wipe cleaning operations that does not comply with the composition requirements in §63.744(b)(1), but does comply with the vapor pressure requirement in §63.744(b)(2):

(i) The name of each cleaning solvent used;

(ii) The composite vapor pressure of each cleaning solvent used;

(iii) All vapor pressure test results, if appropriate, data, and calculations used to determine the composite vapor pressure of each cleaning solvent; and

(iv) The amount (in gallons) of each cleaning solvent used each month at each operation.

(4) For each cleaning solvent used for the exempt hand-wipe cleaning operations specified in §63.744(e) that does not conform to the vapor pressure or composition requirements of §63.744(b):

(i) The identity and amount (in gallons) of each cleaning solvent used each month at each operation; and

(ii) A list of the processes set forth in §63.744(e) to which the cleaning operation applies.

(5) A record of all leaks from enclosed spray gun cleaners identified pursuant to §63.751(a) that includes for each leak found:

(i) Source identification;

(ii) Date leak was discovered; and

(iii) Date leak was repaired.

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	(c) *Primer and topcoat application operations*—organic HAP and VOC. Each owner or operator required to comply with the organic HAP and VOC content limits specified in §63.745(c) shall record the information specified in paragraphs (c)(1) through (c)(6) of this section, as appropriate. (1) The name and VOC content as received and as applied of each primer and topcoat used at the facility. (2) For uncontrolled primers and topcoats that meet the organic HAP and VOC content limits in §63.745(c)(1) through (c)(4) without averaging: (i) The mass of organic HAP emitted per unit volume of coating as applied (less water) (Hi) and the mass of VOC emitted per unit volume of coating as applied (less water and exempt solvents) (Gi) for each coating formulation within each coating category used each month (as calculated using the procedures specified in §63.750(c) and (e)); (ii) All data, calculations, and test results (including EPA Method 24 results) used in determining the values of Hi and Gi; and (iii) The volume (gal) of each coating formulation within each coating category used each month. (3) For "low HAP content" uncontrolled primers with organic HAP content less than or equal to 250 g/l (2.1 lb/gal) less water as applied and VOC content less than or equal to 250 g/l (2.1 lb/gal) less water and exempt solvents as applied: (i) Annual purchase records of the total volume of each primer purchased; and (ii) All data, calculations, and test results (including EPA Method 24 results) used in determining the organic HAP and VOC content as applied. These records shall consist of the manufacturer's certification when the primer is applied as received, or the data and calculations used to determine Hi if not applied as received. (4) For primers and topcoats complying with the organic HAP or VOC content level by averaging: (i) The monthly volume-weighted average masses of organic HAP emitted per unit volume of coating as applied (less water) (Ha) and of VOC emitted per unit volume of coating as

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			applied (less water and exempt solvents) (Ga) for all coatings (as determined by the procedures specified in §63.750(d) and (f)); and	
		(ii)	All data, calculations, and test results (including EPA Method 24 results) used to determine the values of Ha and Ga.	
	(5)		For primers and topcoats that are controlled by a control device other than a carbon adsorber:	
		(i)	The overall control efficiency of the control system (as determined using the procedures specified in §63.750(h)) and all test results, data, and calculations used in determining the overall control efficiency;	
		(ii)	If an incinerator other than a catalytic incinerator is used, continuous records of the firebox temperature recorded under §63.751(b)(9) and all calculated 3-hour averages of the firebox temperature; and	
		(iii)	If a catalytic incinerator is used, continuous records of the temperature recorded under §63.751(b)(10) and all calculated 3-hour averages of the recorded temperatures.	
	(6)		For primer and topcoats that are controlled by a carbon adsorber:	
		(i)	The overall control efficiency of the control system (as determined using the procedures specified in §63.750(g)) and all test results, data, and calculations used in determining the overall control efficiency. The length of the rolling material balance period and all data and calculations used for determining this rolling period. The record of the certification of the accuracy of the device that measures the amount of HAP or VOC recovered; or	
		(ii)	For nonregenerative carbon adsorbers, the overall control efficiency of the control system (as determined using the procedures specified in §63.750(g)) and all test results, data, and calculations used in determining the overall control efficiency. The record of the carbon replacement time established as the site-specific operating parameter to demonstrate compliance.	
	(d)		*Primer and topcoat application operations*—inorganic HAP emissions.	
	(1)		Each owner or operator complying with §63.745(g) for the control of inorganic HAP emissions from primer and topcoat application operations through the use of a dry particulate filter system or a HEPA filter system shall record the pressure drop across the operating system once each shift during which coating operations	

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occur.

(f) *Chemical milling maskant application operations.*
Each owner or operator seeking to comply with the organic HAP and VOC content limits for the chemical milling maskant application operation, as specified in §63.747(c), or the control system requirements specified in §63.747(d), shall record the information specified in paragraphs (f)(1) through (f)(4) of this section, as appropriate.

(1) For uncontrolled chemical milling maskants that meet the organic HAP or VOC content limit without averaging:
- (i) The mass of organic HAP emitted per unit volume of chemical milling maskant as applied (less water) (H_i) and the mass of VOC emitted per unit volume of chemical milling maskant as applied (less water and exempt solvents) (G_i) for each chemical milling maskant formulation used each month (as determined by the procedures specified in §63.750 (k) and (m));
- (ii) All data, calculations, and test results (including EPA Method 24 results) used in determining the values of H_i and G_i; and
- (iii) The volume (gal) of each chemical milling maskant formulation used each month.

(2) For chemical milling maskants complying with the organic HAP or VOC content level by averaging:
- (i) The monthly volume-weighted average masses of organic HAP emitted per unit volume of chemical milling maskant as applied (less water) (H_a) and of VOC emitted per unit volume of chemical milling maskant as applied (less water and exempt solvents) (G_a) for all chemical milling maskants (as determined by the procedures specified in §63.750 (l) and (n)); and
- (ii) All data, calculations, and test results (including EPA Method 24 results) used to determine the values of H_a and G_a.

(3) For chemical milling maskants that are controlled by a carbon adsorber:
- (i) The overall control efficiency of the control system (as determined using the procedures specified in §63.750(g)) and all test results, data, and calculations used in determining the overall control efficiency. The length of the rolling material balance period and all data and calculations used for determining this rolling period. The record of the certification of the accuracy of the device that measures the amount of HAP or VOC recovered; or
- (ii) For nonregenerative carbon adsorbers, the overall control efficiency of the control system (as determined using the

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	procedures specified in §63.750(g)) and all test results, data, and calculations used in determining the overall control efficiency. The record of the carbon replacement time established as the site-specific operating parameter to demonstrate compliance. (4) For chemical milling maskants that are controlled by a control device other than a carbon adsorber: (i) The overall control efficiency of the control system (as determined using the procedures specified in §63.750(h)) and all test results, data, and calculations used in determining the overall control efficiency; (ii) If an incinerator other than a catalytic incinerator is used, continuous records of the firebox temperature recorded under §63.751(b)(9) and all calculated 3-hour averages of the firebox temperature; and (iii) If a catalytic incinerator is used, continuous records of the temperature recorded under §63.751(b)(10) and all calculated 3-hour averages of the recorded temperatures. [60 FR 45956, Sept. 1, 1996, as amended at 63 FR 15023, Mar. 27, 1998; 63 FR 46534, Sept. 1, 1998] **[Authority: 40 CFR Part 63 – Subpart GG]** **B.** Operational Limitations (General Operation) - The Permittee shall maintain an operations manual and preventive maintenance plan. The Permittee shall maintain a log of maintenance performed that relates emissions control and control equipment efficiency **[Authority: COMAR 26.11.03.06C].**
7.5	**Reporting Requirements:** **A.** Control of Volatile Organic Compounds (VOCs) (1) (Metal Parts and Products) – The Permittee shall maintain records required under Condition 8.4 (1), above and make them available to the Department upon request. **[Authority: COMAR 26.11.03.06C].** (2) (State COMAR – Aerospace) – The Permittee shall maintain records required under Condition 8.4 (2), above and make them available to the Department upon request. **[Authority: COMAR 26.11.03.06C].** (3) (NESHAP - Aerospace) – The Permittee shall comply with the requirements of §63.753 Reporting requirements. (a)(1) Except as provided in paragraphs (a)(2) and (a)(3) of this section, each owner or operator subject to this subpart shall fulfill the requirements contained in §63.9(a) through (e) and (h) through (j), Notification requirements, and §63.10(a), (b), (d), and (f), Recordkeeping and reporting

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		requirements, of the General Provisions, 40 CFR part 63, subpart A, and that the initial notification for existing sources required in §63.9(b)(2) shall be submitted not later than September 1, 1997. (b) *Cleaning operation.* Each owner or operator of a cleaning operation subject to this subpart shall submit the following information: (1) Semiannual reports occurring every 6 months from the date of the notification of compliance status that identify: (i) Any instance where a noncompliant cleaning solvent is used for a non-exempt hand-wipe cleaning operation; (ii) A list of any new cleaning solvents used for hand-wipe cleaning in the previous 6 months and, as appropriate, their composite vapor pressure or notification that they comply with the composition requirements specified in §63.744(b)(1); (iii) Any instance where a noncompliant spray gun cleaning method is used; (iv) Any instance where a leaking enclosed spray gun cleaner remains unrepaired and in use for more than 15 days; and (v) If the operations have been in compliance for the semiannual period, a statement that the cleaning operations have been in compliance with the applicable standards. Sources shall also submit a statement of compliance signed by a responsible company official certifying that the facility is in compliance with all applicable requirements. (c) *Primer and topcoat application operations.* Each owner or operator of a primer or topcoat application operation subject to this subpart shall submit the following information: (1) Semiannual reports occurring every 6 months from the date of the notification of compliance status that identify: (i) For primers and topcoats where compliance is not being achieved through the use of averaging or a control device, each value of H_i and G_i, as recorded under §63.752(c)(2)(i), that exceeds the applicable organic HAP or VOC content limit specified in §63.745(c); (ii) For primers and topcoats where compliance is being achieved through the use of averaging, each value of H_a and G_a, as recorded under §63.752(c)(4)(i), that exceeds the applicable organic HAP or VOC content limit specified in §63.745(c); (iii) If incinerators are used to comply with the standards, all periods when the 3-hour average combustion temperature(s) is (are) less than the average combustion temperature(s) established under §63.751(b) (11) or (12) during the most recent performance test during which compliance was demonstrated; (iv) If a carbon adsorber is used; (A) each rolling period when the overall control efficiency of

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the control system is calculated to be less than 81%, the initial material balance calculation, and any exceedances as demonstrated through the calculation; or,
(B) for nonregenerative carbon adsorbers, submit the design evaluation, the continuous monitoring system performance report, and any excess emissions as demonstrated through deviations of monitored values.

(v) For control devices other than an incinerator or carbon adsorber, each exceedance of the operating parameter(s) established for the control device under the initial performance test during which compliance was demonstrated;

(vi) All times when a primer or topcoat application operation was not immediately shut down when the pressure drop across a dry particulate filter or HEPA filter system, the water flow rate through a conventional waterwash system, or the recommended parameter(s) that indicate the booth performance for pumpless systems, as appropriate, was outside the limit(s) specified by the filter or booth manufacturer or in locally prepared operating procedures;

(vii) If the operations have been in compliance for the semiannual period, a statement that the operations have been in compliance with the applicable standards; and,

(2) Annual reports beginning 12 months after the date of the notification of compliance status listing the number of times the pressure drop or water flow rate for each dry filter or waterwash system, as applicable, was outside the limit(s) specified by the filter or booth manufacturer or in locally prepared operating procedures.

(e) *Chemical milling maskant application operation.* Each owner or operator of a chemical milling maskant application operation subject to this subpart shall submit semiannual reports occurring every 6 months from the date of the notification of compliance status that identify:

(1) For chemical milling maskants where compliance is not being achieved through the use of averaging or a control device, each value of H_i and G_i, as recorded under §63.752(f)(1)(i), that exceeds the applicable organic HAP or VOC content limit specified in §63.747(c);

(2) For chemical milling maskants where compliance is being achieved through the use of averaging, each value of H_a and G_a, as recorded under §63.752(f)(2)(i), that exceeds the applicable organic HAP or VOC content limit specified in §63.747(c);

(3) Where a control device is used,

(i) If incinerators are used to comply with the standards, all

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	periods when the 3-hour average combustion temperature(s) is (are) less than the average combustion temperature(s) established under §63.751(b) (11) or (12) during the most recent performance test during which compliance was demonstrated; (ii) If a carbon adsorber is used, (A) Each rolling period when the overall control efficiency of the control system is calculated to be less than 81%, the initial material balance calculation, and any exceedances as demonstrated through the calculation; or, (B) For nonregenerative carbon adsorbers, submit the design evaluation, the continuous monitoring system performance report, and any excess emissions as demonstrated through deviations of monitored values. (iii) For control devices other than an incinerator or carbon adsorber, each exceedance of the operating parameter(s) established for the control device under the initial performance test during which compliance was demonstrated; (4) All chemical milling maskants currently in use that were not listed in the notification of compliance status or any other subsequent semiannual report; (5) Descriptions of any control devices currently in use that were not listed in the notification of compliance status or any subsequent report; and (6) If the operations have been in compliance for the semiannual period, a statement that the chemical milling maskant application operation has been in compliance with the applicable standards. [60 FR 45956, Sept. 1, 1996; 61 FR 4903, Feb. 9, 1996, as amended at 61 FR 66227, Dec. 17, 1996; 63 FR 15023, Mar. 27, 1998; 63 FR 46535, Sept. 1, 1998] **[Authority: 40 CFR Part 63 – Subpart GG]** **B.** Operational Limitations ***{See Condition A , above}***

A permit shield shall cover the applicable requirements of the Clean Air Act that are listed in the table above for the Misc. Spray Booths/Paint Coating Operations {See Section 7, above.}

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8.0	**Emissions Unit Number(s): Reg. #6-0013 & #2-0004** INC-1770-E1: Industrial Waste Processor equipped with cyclone, dry scrubber and baghouse
8.1	**Applicable Standards/Limits:** A. Control of Visible Emissions **COMAR 26.11.08.04 A. – Visible Emissions.** In Areas I, II, V, and VI, the following apply: (1) Except as provided in Regulations .08 and .08-1 of this chapter, a person may not cause or permit the discharge of emissions from

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any incinerator, other than water in an uncombined form, which is greater than 20 percent opacity;

COMAR 26.11.08.04 C. - Exceptions.
The requirements of §§A and B of this regulation do not apply to emissions during start-up, or adjustments or occasional cleaning of control equipment if:

(1) The visible emissions are not greater than 40 percent opacity; and

(2) The visible emissions do not occur for more than 6 consecutive minutes in any 60-minute period.

B. Control of Particulate Matter

COMAR 26.11.08.05 A - **Particulate Matter**. In Areas I, II, V, and VI, the following apply:

"(1) Calculations. Except as provided in Regulations .08 and .08-1 of this chapter, incinerator or hazardous waste incinerator emissions shall be adjusted to 12 percent carbon dioxide."

"(3) Incinerators Constructed on or After January 17, 1972. Except as provided in Regulations .07, .08, and .08-1 of this chapter, a person may not cause or permit the discharge of particulate matter into the outdoor atmosphere from any incinerator constructed on or after January 17, 1972, to exceed 0.10 gr/SCFD (229 mg/dscm)."

C. Operational Limitations

COMAR 26.11.08.09 - Incinerator Operator Training.

"A. Applicability.
This regulation applies to any person in this State who owns or operates an incinerator."

"B. Certification and Operation.
A person may not operate or allow an incinerator to be operated unless the owner certifies to the Department on a form provided by the Department that the incinerator operator:

(1) Has completed an initial training course approved by the Department which meets the requirements of §C or D of this regulation;

(2) Annually, after initial certification, completes a review course approved by the Department; and

(3) Is present at all times whenever the incinerator is in operation."

"C. Training Course for Operators of Special Medical Waste or Industrial Waste Incinerators.

(1) For any incinerator operator who operates a special medical waste incinerator or an industrial waste incinerator, the training

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	course shall be the "Hospital Incinerator Operator Training Course" Volumes I—III (EPA-450/3-89-003, EPA-450/3-89-004, and EPA-450/3-89-010, respectively), Control Technology Center, March 1989, which is incorporated by reference, and "Operation and Maintenance of Hospital Medical Waste Incinerators" (EPA-450/3-89-002), Control Technology Center, March 1989, which is incorporated by reference. (2) For the operator of any special medical waste incinerator or an industrial waste incinerator, completing a training course means: (a) Completing an initial training course approved by the Department of at least 3 days (24 hours) duration; and (b) Passing a written test approved by the Department. (3) The certified operator shall, after initial training, complete and pass an annual review course approved by the Department of at least 1-day (8 hours) duration." **8.2** **<u>Testing Requirements</u>:** A. <u>Control of Visible Emissions</u> The Permittee shall perform an EPA Reference Method 22 once every 168 hours of operation, to determine if there are visible emissions. If there are visible emissions, then perform an EPA Method 9 for 18 minutes to determine the opacity. The Permittee shall perform the following, if emissions exceed 20 percent opacity: (1) Inspect combustion control system and boiler operations, (2) Perform all necessary adjustments and/or repairs to the boiler within 48 hours, so that visible emissions limitation is satisfied; (3) Document in writing the results of the inspections, adjustments and/or repairs to the boiler; and (4) After 48 hours, if the required adjustments and/or repairs has had not satisfied the visible emissions limitation, perform Method 9 observations once daily for 18 minutes until corrective actions have brought the visible emissions into compliance with the visible emissions limitation. **[Authority: COMAR 26.11.03.06C]** **B.** <u>Control of Particulate Matter</u> ***{See Monitoring Requirements of Condition 8.3 B, below.}*** **C.** <u>Operational Limitations</u> The Permittee shall comply with the Operator Training Requirements 9.1C, above. **[Authority: COMAR 26.11.08.09 & COMAR 26.11.03.06C]**

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8.3	**Monitoring Requirements:** **A**. Control of Visible Emissions The Permittee shall log the results of all Methods 22 and 9 tests, if applicable. **[Authority: COMAR 26.11.03.06C].** **B.** Control of Particulate Matter The Permittee shall develop and maintain a preventative maintenance plan for the baghouse that describes the maintenance activity and time schedule for completing each activity. The Permittee shall perform maintenance activities within the timeframes established in the plan and shall maintain a log with records of the dates that maintenance was performed **[Authority: COMAR 26.11.03.06C].** **C.** Operational Limitations ***{See Record Keeping Requirements 8.4 C, below.}***
8.4	**Record Keeping Requirements:** **A** Control of Visible Emissions The Permittee shall maintain an operations manual and preventive maintenance plan. The Permittee shall maintain a log of Methods 22 and 9 observations and any maintenance performed that relates to emissions control and control equipment efficiency **[Authority: COMAR 26.11.03.06C].** **B.** Control of Particulate Matter The Permittee shall maintain a copy of the preventive maintenance plan and a record of the dates of and description of maintenance activity performed. The Permittee shall maintain records of baghouse malfunctions and the corrective actions taken to bring it into proper operation. **[Authority: COMAR 26.11.03.06C].** **C.** The Permittee shall maintain records verifying that all operator have received their initial Incinerator Operator Training and have in current affect their proper Incinerator operator certification **[Authority: COMAR 26.11.03.06C].**
8.5	**Reporting Requirements:** The Permittee shall make records available to the Department upon request **[Authority: COMAR 26.11.03.06C].**

A permit shield shall cover the applicable requirements of the Clean Air Act that are listed in the table above for the Industrial Waste Processor - INC-1770-E1. {See Section 8, above.}

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9.0	**Emissions Unit Number(s):** **Reg. # 6-0101 – (Explosive and Propellant Mfg. Process e/w, particulate filters, cyclone, condenser, and baghouse PM controls)** (*Existing Equipment – Installed Prior to 1991*): EXPL – 808-E2, - 874-E2, - 728-E3, - 1028 E-1, - 1029 E1, -1031 E1, -1033 E1, -1430 E-1 -0786-E3, -859 E2, (-213-, -214-, -216-, -218-, & -332-, & -335-E1 (curing/extrusion)); EXPL-219-E1, -220-E1, -326-E1, & -327-E1. (*New Equipment – Installed After Jan. 1991*):EXPL-729-E1 **Reg. # 6-0098; 6-0057; 6-0079; 6-0120; & 6-0118 – (Explosives & Propellant Mfg. Mixers e/w particulate filters, activated carbon filters, condenser, and thermal oxidizer for PM and VOC control)** - (*Existing Equipment – Installed Prior to 1991*): Mixer -1024-E1 (in. 1970), -530-E1(in 1968), & -530-E2 (in 1972). (*New Equipment – Installed After Jan. 1991*): Mixer –1122-E1 & -E2, -1866-E1, -1881-E1, & -3069-E1 Thermal/Catalytic Oxidizer control of Mixer 1024-E1, added in 1997, *for use during Nitramine Processing only*.
9.1	**Applicable Standards/Limits:** **A.** Control of Visible Emissions (VE): COMAR 26.11.06.02(C)(1): Areas I, II, IV, and V. "A person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is greater than 20 percent opacity." **B.** Control of Particulate Matter (PM): **COMAR 26.11.06.03(B)(1)**: "Areas I, II, IV, and V." (1) Installations Constructed On or After January 17, 1972. A person may not cause or permit particulate matter to be discharged from any installation constructed on or after January 17, 1972 in excess of 0.05 gr/SCFD (115 kg/dscm). (2) Installations Constructed Before January 17, 1972. (i) A person may not cause or permit particulate matter to be discharged from any installation constructed before January 17, 1972 in excess of the values determined from Table 1. When the process weight per hour falls between two values in the table, the maximum weight discharged per hour shall be determined by linear interpolation. When the process weight exceeds 60,000 pounds (27,200 kilograms) per hour, the maximum allowable weight discharged per hour will be determined by use of the following equation: E = 55.0 P(0.11 power)-40 — E = 11.79 P(0.11 power)-18.14 E = Maximum weight discharged per hour (lbs) — E = maximum weight discharged per hour (kg) P = process weight in tons — P = process weight in

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per hour kilograms per hour

C. Control of Volatile Organic Compounds (VOCs):

COMAR 26.11.19.25 - Control of Volatile Organic Compounds From Explosives and Propellant Manufacturing.

"A. Applicability.

(1) This regulation applies to a person who owns or operates existing equipment at a premises that has a potential to emit 25 tons or more of VOC per year from all explosives and propellant manufacturing equipment at the premises.

(2) Section C(2) of this regulation applies to a person who constructs, owns, or operates new equipment that has or will have total actual VOC emissions of 50 pounds or more per day.

B. Definitions.

(1) "Existing equipment" means explosives and propellant manufacturing equipment placed in operation before January 1, 1991.

(2) "Explosives and propellant manufacturing equipment" means process equipment used to preheat, grind, mix, blend, cure, dry, cut, press, extrude, or cast materials to produce energetic materials such as rocket fuels and gun propellants.

(3) "New equipment" means explosives and propellant manufacturing equipment placed in operation on or after January 1, 1991.

(4) "Nitramine propellant manufacturing equipment" means explosives and propellant manufacturing equipment used to mix, blend, dry, cut, press, or otherwise manufacture nitramine-based propellants such as low vulnerability ammunition.

C. General Requirements.

(1) A person who owns or operates existing explosives and propellant manufacturing equipment subject to this regulation shall:

(a) Install a VOC control device, having a VOC destruction or removal efficiency of 85 percent or more overall, on all active nitramine propellant mixing equipment that has a capacity of 150 gallons or more; and

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	(c) Implement the good operating practices within 30 days after approval by the Department. (2) A person who constructs, owns, or operates new equipment subject to this regulation shall reduce emissions from the new equipment by 85 percent or more, overall."
9.2	**Testing Requirements:** **A.** Control of Visible Emissions (VE): {See Monitoring Requirements of 9.3A, below.} **B.** Control of Particulate Matter (PM): {See Monitoring Requirements of 9.3B, below.} **C.** Control of Volatile Organic Compounds (VOCs): {See Monitoring Requirements of 9.3C, below.}
9.3	**Monitoring Requirements:** **A.** Control of Visible Emissions (VE): As part of implementation of the preventive maintenance plan and good operating practices, the Permittee shall perform preventive maintenance on emissions control devices, associated with this process, including the line and cartridge filters, bag filters, vacuum condenser, and thermal oxidizer in accordance with manufacturer recommendations and/or in accordance with the preventive maintenance plan and good operating practices to assure they are operating properly. **[Authority: COMAR 26.11.03.06C].** **B.** Control of Particulate Matter (PM): {See Monitoring Requirements Section 9.3 A, above} **C.** Control of Volatile Organic Compounds (VOCs): (1) As part of implementation of the preventive maintenance plan and good operating practices, the Permittee shall perform preventive maintenance on emissions control devices, associated with this process, including the carbon activated filters, vacuum condenser, and thermal oxidizer to assure they are operating properly.] (2) The thermal oxidizer shall be operated in accordance with the operating procedures that were recommended by the equipment vendors, and as follows: i. The thermal oxidizer shall be equipped with a sensor and recorder to continuously monitor temperature of the flue gas. ii. The thermal oxidizer shall be operated so that the temperature is at least 1400 °F when any of mixer line is running unless the

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	stack test shows that the Permittee can achieve a control efficiency of at least 85% at a lower temperature. **Note**: The thermal/catalytic oxidizer is only used during the Nitramine production process to control emissions from Mixer 1024-E1. Though Nitramine production is not currently in production, it may occur in the future. (3) The activated carbon filters shall be changed in accordance with manufacturer recommendation and/or in accordance with the preventive maintenance plan and good operating practices. **[Authority: COMAR 26.11.03.06C, & 26.11.19.25C]**
9.4	**<u>Record Keeping Requirements</u>:** **A.** The Permittee shall maintain a good operating practices manual and preventive maintenance plan. The Permittee shall maintain a log of maintenance performed that relates emissions control and control equipment efficiency. **[Authority: COMAR 26.11.03.06C & 26.11.19.25 C (1)].** **B.** The Permittee shall maintain a copy of the preventive maintenance plan and a record of the dates of and description of maintenance activity performed. The Permittee shall maintain a log that includes the name of the person conducting the inspection and the date on which the inspections are made, the findings of the inspection. The Permittee shall maintain records of baghouse malfunctions and the corrective actions taken to bring it into proper operation. **[Authority: COMAR 26.11.03.06C]** **C.** The Permittee shall maintain records of the amounts of materials processed including the VOC content on site, and shall be made available to the Department upon request. The Permittee shall maintain records of the strip chart recordings of the thermal oxidizer and records of maintenance performed to baghouse, activated carbon and PM filters on site, and shall be made available to the Department upon request. **[Authority: COMAR 26.11.03.06C]**
9.5	**<u>Reporting Requirements</u>:** The Permittee shall make records available to the Department upon request **[Authority: COMAR 26.11.03.06C]**

A permit shield shall cover the applicable requirements of the Clean Air Act that are listed in the table above for Explosive and Propellant Mfg. Processes. {See Section 9, above.}

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10.0	**BRACON P002 Explosives Mfg/QA-QC Processes** **Emissions Unit Number(s)** **EXPL-727-E1:** Reg. No. 7-0014 - BRACON Molding Powder Processing **EXPL-727-E2:** Reg. No. 7-0015 - BRACON Melt Cast Explosives Operation **EXPL-727-E3:** Reg. No. 7-0016 - BRACON Explosives Removal Operation
10.1	**Applicable Standards/Limits:** A. Control of Visible Emissions **COMAR 26.11.06.02(C)(1):** Areas I, II, V, and V. "A person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is greater than 20 percent opacity." B. Control of Particulate **COMAR 26.11.06.03(B)(1):** Areas I, II, V, and V. "A person may not cause or permit particulate matter to be discharged from any installation constructed on or after January 17, 1972 in excess of 0.05 gr/SCFD (115 kg/dscm)" C. Control of VOC (a) **COMAR 26.11.19.02I**, which requires that the Permittee establish in writing and implement facility-wide "good operating practices" designed to minimize emissions of VOC. (b) **COMAR 26.11.19.16**, which requires that the Permittee implement a VOC leak detection and repair program designed to minimize unintended emissions of VOC from process equipment and components, e.g., in-process vessels, storage tanks, pumps, compressors, valves, flanges and other pipeline fittings, pressure relief valves, process drains, and open-ended pipes. (c) **COMAR 26.11.19.25 - Control of Volatile Organic Compounds from Explosives and Propellant Manufacturing**. "A. Applicability. (1) This regulation applies to a person who owns or operates existing equipment at a premises that has a potential to emit 25 tons or more of VOC per year from all explosives and propellant manufacturing equipment at the premises. (2) Section C(2) of this regulation applies to a person who constructs, owns, or operates new equipment that has or will have total actual VOC emissions of 50 pounds or more per day. B. Definitions. (1) "Existing equipment" means explosives and

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	propellant manufacturing equipment placed in operation before January 1, 1991. (2) "Explosives and propellant manufacturing equipment" means process equipment used to preheat, grind, mix, blend, cure, dry, cut, press, extrude, or cast materials to produce energetic materials such as rocket fuels and gun propellants. (3) "New equipment" means explosives and propellant manufacturing equipment placed in operation on or after January 1, 1991. (4) "Nitramine propellant manufacturing equipment" means explosives and propellant manufacturing equipment used to mix, blend, dry, cut, press, or otherwise manufacture nitramine-based propellants such as low vulnerability ammunition. C. General Requirements. (1) A person who owns or operates existing explosives and propellant manufacturing equipment subject to this regulation shall: (a) Install a VOC control device, having a VOC destruction or removal efficiency of 85 percent or more overall, on all active nitramine propellant mixing equipment that has a capacity of 150 gallons or more; and (c) Implement the good operating practices within 30 days after approval by the Department. (2) A person who constructs, owns, or operates new equipment subject to this regulation shall reduce emissions from the new equipment by 85 percent D. Operating Requirements The vapor condensers and JM Microdyne venturi scrubbers used to control emissions from the Molding Powder Processing (Reg. #7-0014) and Melt Cast (Reg. #7-0015) operations shall be operated as indicated in the standard operating procedure (SOP) referenced in the PTC application, and the molding powder manufacturing shall not occur unless the scrubber(s) are in operation. **[Authority: Permit to Construct (PTC) # 017-0040-7-0014, -7-0015, -7-0016]**
10.2	**Testing Requirements:** {See Monitoring Requirements, below}
10.3	**Monitoring Requirements:** A. Control of Visible Emissions: {See 10.4 C, below}

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	B. Control of Particulate: As part of implementation of the preventive maintenance plan and good operating practices, the Permittee shall perform preventive maintenance on emissions control devices, associated with this process to assure they are operating properly. **[Authority: COMAR 26.11.03.06C]** C. Control of VOCs: (1) The Permittee shall maintain a Standard Operating Procedures (SOP) manual and preventive maintenance (PM) plan that includes all written descriptions of "good operating practices" designed to minimize emissions of VOC. As part of implementation of the preventive maintenance plan and good operating practices, the Permittee shall perform and keep a log of any preventive maintenance on emissions control devices including condensers, scrubbers, filters, etc., in accordance with manufacturer recommendations and/or in accordance with the preventive maintenance plan and good operating practices to assure they are operating properly. **[Authority: COMAR 26.11.03.06C & PTC # 017-0040-7-0014, -7-0015, -7-0016].** D. Operating Requirements: As part of implementation of the preventive maintenance plan and good operating practices, the Permittee shall perform preventive maintenance on emissions control devices associated with the BRACON Explosives Engineering Division and Quality Evaluation Division processes, including condensers, scrubbers, filters, etc., in accordance with manufacturer recommendations and/or in accordance with the preventive maintenance plan and good operating practices to assure they are operating properly. **[Authority: PTC No. 017-0040-7-0014, -0015, and -0016]**
10.4	**Record Keeping Requirements:** A. Control of Visible Emissions: The Permittee shall maintain a good operating practices manual and preventative maintenance plan. The Permittee shall maintain a log of maintenance performed for control devices. **[Authority: COMAR 26.11.03.06C]** B. Control of Particulate: ***{See Monitoring Requirement, Section 10.4 C., above}*** C. Control of VOCs: The Permittee shall maintain for at least five (5) years, and shall make available to the Department upon request, records of the following information: (a) SOP & PM plan, including all written descriptions of "good operating practices" designed to minimize emissions of

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	VOC. (b) VOC leak detection and repair logs that include identification of the persons who conducted the leak detection inspections, the dates on which the inspections were conducted, the findings during the inspections, a listing by tag identification number and a description of all leaks discovered, and the date and nature of all leak repairs effected. (c) Records of material usage (monthly basis), including VOC content as determined by EPA Reference Method 24, or equivalent; (d) Material Safety Data sheets for materials used; and (e) Operating schedule (hours/batch and no. of batches per month). **[Authority: COMAR 26.11.03.06C & PTC # 017-0040-7-0014, -7-0015, -7-0016 & Authority: COMAR 26.11.03.06C]** D. Operating Requirements: ***{**See **Monitoring Requirement, Condition 10.4 C., above}***
10.5	**Reporting Requirements:** The Permittee shall make records available to the Department upon request. **[Authority: COMAR 26.11.03.06C]**

A permit shield shall cover the applicable requirements of the Clean Air Act that are listed in the table above for BRACON Explosive and Propellant Mfg. Processes. {See Section 10, above.}

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11.0	**Agile Chemical Facility (ACF) Nitration Processes** **Emissions Unit Number(s): 786-E7 & E8; and 1464-E1** **(-9-0151)** Nitration: Raw Materials Prep & Storage **(-7-0018)** Nitration Process **(-7-0017)** Nitration: Product Formulation, Transport, Holding, & Sampling. **(-9-0153)** Denitration: Spent Acid Mixing and Holding [Ref.: Permit to Construct (PTC) # 017-0040-7-0017, -7-0018, and - 9-0151 & -9-0153]
11.1	**Applicable Standards/Limits:** A. Control of Visible Emissions **COMAR 26.11.06.02(C)(1):** Areas I, II, IV, and V. "A person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is greater than 20 percent opacity." B. Control of Particulate

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	COMAR 26.11.06.03(B)(1): Areas I, II, IV, and V. "A person may not cause or permit particulate matter to be discharged from any installation constructed on or after January 17, 1972 in excess of 0.05 gr/SCFD (115 kg/dscm)" C. Control of Sulfur Oxides COMAR 26.11.06.05: Sulfur Compounds from Other than Fuel-Burning Equipment. "A. General Conditions. All calculations of emissions governed by this regulation shall be adjusted to standard conditions and 7 percent oxygen. "PPM" means parts per million by volume. " "B. Areas I, II, V and VI. (1) A person may not cause or permit the discharge into the atmosphere from installations other than fuel-burning equipment of gases containing more than 500 ppm of sulfur dioxide. (2) A person may not cause or permit the discharge into the atmosphere from installations other than fuel-burning equipment of gases containing sulfuric acid, sulfur trioxide, or any combination of them greater than 35 milligrams per cubic meter reported as sulfuric acid." **D. Control of VOC** (a) **COMAR 26.11.19.02I**, which requires that the Permittee establish in writing and implement facility-wide "good operating practices" designed to minimize emissions of VOC. (b) **COMAR 26.11.19.16**, which requires that the Permittee implement a VOC leak detection and repair program designed to minimize unintended emissions of VOC from process equipment and components, e.g., in-process vessels, storage tanks, pumps, compressors, valves, flanges and other pipeline fittings, pressure relief valves, process drains, and open-ended pipes. (c) **COMAR 26.11.19.25 - Control of Volatile Organic Compounds from Explosives and Propellant Manufacturing**. "A. Applicability. (1) This regulation applies to a person who owns or operates existing equipment at a premises that has a potential to emit 25 tons or more of VOC per year from all explosives and propellant manufacturing equipment at the premises. (2) Section C(2) of this regulation applies to a person who constructs, owns, or operates new equipment that has or will have total actual VOC emissions of 50 pounds or more per day. B. Definitions. (1) "Existing equipment" means explosives and propellant

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	manufacturing equipment placed in operation before January 1, 1991. (2) "Explosives and propellant manufacturing equipment" means process equipment used to preheat, grind, mix, blend, cure, dry, cut, press, extrude, or cast materials to produce energetic materials such as rocket fuels and gun propellants. (3) "New equipment" means explosives and propellant manufacturing equipment placed in operation on or after January 1, 1991. (4) "Nitramine propellant manufacturing equipment" means explosives and propellant manufacturing equipment used to mix, blend, dry, cut, press, or otherwise manufacture nitramine-based propellants such as low vulnerability ammunition. C. General Requirements. (1) A person who owns or operates existing explosives and propellant manufacturing equipment subject to this regulation shall: (a) Install a VOC control device, having a VOC destruction or removal efficiency of 85 percent or more overall, on all active nitramine propellant mixing equipment that has a capacity of 150 gallons or more; and (c) Implement the good operating practices within 30 days after approval by the Department. (2) A person who constructs, owns, or operates new equipment subject to this regulation shall reduce emissions from the new equipment by 85 percent **Note:** Projected VOC emissions from the ACF are much less than 25 tons per year and/or 50 pound per day and therefore not expected to trigger the General Requirements of Condition C, above. **[Authority : PTC# 017-0040-7-0017, -7-0018, and 9-0151]** E. Operating Requirements The various emissions controls, including bubbler tanks and scrubber(s) shall be operated as indicated in the application and/or in accordance with manufacturer's recommendations as in the facility's standard operating procedure (SOP) **[Authority : PTC# 017-0040-7-0017, -7-0018, and 9-0151]**
11.2	**Testing Requirements:** {See Monitoring Requirements, below}

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11.3	**Monitoring Requirements:** A. Control of Visible Emissions: {See B., below} B. Control of Particulate: As part of implementation of the preventive maintenance plan and good operating practices, the Permittee shall perform preventive maintenance on emissions control devices, associated with this process to assure they are operating properly. **[Authority: COMAR 26.11.03.06C]** C. Control of Sulfur Oxides The Permittee shall maintain a Standard Operating Procedures (SOP) manual and preventive maintenance (PM) plan that includes all written descriptions of "good operating practices" designed to minimize emissions of SO_X. As part of implementation of the preventive maintenance plan and good operating practices, the Permittee shall perform and keep a log of any preventive maintenance on emissions control devices including bubbler tanks and fume scrubber(s), etc., in accordance with manufacturer recommendations and/or in accordance with the preventive maintenance plan and good operating practices to assure they are operating properly. **[Authority: COMAR 26.11.03.06C]** D. Control of VOCs: The Permittee shall maintain a Standard Operating Procedures (SOP) manual and preventive maintenance (PM) plan that includes all written descriptions of "good operating practices" designed to minimize emissions of VOC. As part of implementation of the preventive maintenance plan and good operating practices, the Permittee shall perform and keep a log of any preventive maintenance on emissions control devices including condensers, scrubbers, filters, etc., in accordance with manufacturer recommendations and/or in accordance with the preventive maintenance plan and good operating practices to assure they are operating properly. **[Authority: COMAR 26.11.03.06C & PTC# 017-0040-7-0017, -7-0018, and 9-0151].** E. Operating Requirements: ***{See Monitoring Condition(s) 11.3 C and D, above}***
11.4	**Record Keeping Requirements:** The Permittee shall maintain the following records for at least five (5) years, and shall make them available to the Department upon request. A. Control of Visible Emissions: {See 11.4 C., below} B. Control of Particulate: {See 11.4 C., below} C. Control of Sulfur Oxides: (1) SOP & PM plan, including all written descriptions of "good operating practices" designed to minimize emissions of SO_X.

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	(2) Log of any preventive maintenance on emissions control devices including bubbler tanks and fume scrubber(s), etc. (3) Records of material usage (monthly basis) and/or operating schedule (hours/batch and no. of batches per month). **[Authority: COMAR 26.11.03.06C]** D. Control of VOCs: (1) SOP & PM plan, including all written descriptions of "good operating practices" designed to minimize emissions of VOC. (2) VOC leak detection and repair logs that include identification of the persons who conducted the leak detection inspections, the dates on which the inspections were conducted, the findings during the inspections, a listing by tag identification number and a description of all leaks discovered, and the date and nature of all leak repairs effected. (3) Records of material usage (monthly basis), including VOC content as determined by EPA Reference Method 24, or equivalent; (4) Material Safety Data sheets for materials used; and (5) Operating schedule (hours/batch and no. of batches per month). **[Authority: COMAR 26.11.03.06C & PTC# 017-0040-7-0017, -7-0018, and 9-0151]** E. Operating Requirements***: {See Condition 11.4 C and D, above}***
11.5	**Reporting Requirements: *{See Record Keeping Requirements Condition 11.4, above}***

A permit shield shall cover the applicable requirements of the Clean Air Act that are listed in the table above for Agile Chemical Facility Nitration Processes. {See Section 11, above.}

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12.0	**Premises-wide VOC Requirements** Any equipment or operation subject to this permit and to Chapter 19 Volatile Organic Compounds from Specific Processes [Refer to Tables: 11-7, IV-8, IV-10, and IV-11.]
12.1	**Applicable Standards/Limits:** **A. COMAR 26.11.19.02I. - Good Operating Practices, Equipment Cleanup, and VOC Storage**. (1) Applicability. The requirements in this section apply to a person who owns or operates an installation that is subject to any

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requirement in this chapter.

(2) Good Operating Practices.

(a) A person who is subject to this section shall implement good operating practices to minimize VOC emissions into the atmosphere.

(b) Good operating practices shall, at a minimum, include the following:

(i) Provisions for training of operators on practices, procedures, and maintenance requirements that are consistent with the equipment manufacturers' recommendations and the source's experience in operating the equipment, with the training to include proper procedures for maintenance of air pollution control equipment;

(ii) Maintenance of covers on containers and other vessels that contain VOC and VOC-containing materials when not in use;

(iii) As practical, scheduling of operations to minimize color or material changes when applying VOC coatings or other materials by spray gun;

(iv) For spray gun applications of coatings, use of high volume low pressure (HVLP) or other high efficiency application methods where practical; and

(v) As practical, mixing or blending materials containing VOC in closed containers and taking preventive measures to minimize emissions for products that contain VOC.

(c) A person subject to this regulation shall:

(i) Establish good operating practices in writing;

(ii) Make the written operating practices available to the Department upon request; and

(iii) Display the good operating practices so that they are clearly visible to the operator or include them in operator training.

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	(3) Equipment Cleanup. (a) A person subject to this section shall take all reasonable precautions to prevent or minimize the discharge of VOC into the atmosphere when cleaning process and coating application equipment, including containers, vessels, tanks, lines, and pumps. (b) Reasonable precautions for equipment cleanup shall, at a minimum, include the following: (i) Storing all wastes and waste materials, including cloth and paper that are contaminated with VOC, in closed containers; (ii) Preparing written standard operating procedures for frequently cleaned equipment, including when practical, provisions for the use of low-VOC or non-VOC materials and procedures to minimize the quantity of VOC materials used; (iii) Using enclosed spray gun cleaning, VOC-recycling systems and other spray gun cleaning methods where practical that reduce or eliminate VOC emissions; and (iv) Using, when practical, detergents, high-pressure water, or other non-VOC cleaning options to clean coating lines, containers, and process equipment. (4) VOC Storage and Transfer. (a) A person subject to this section who stores VOCs shall, at a minimum, install conservation vents or other vapor control measures on storage tanks with a capacity of 2,000 gallons or more, to minimize VOC emissions. (b) A person subject to this section shall, at a minimum, utilize vapor balance, vapor control lines, or other vapor control measures when VOCs are transferred from a tank truck into a stationary storage tank with a capacity greater than 10,000 gallons and less than 40,000 gallons that store VOCs or materials containing VOCs, other than gasoline, that have a vapor pressure greater than 1.5 psia. **B. COMAR 26.11.19.16 - Control of VOC Equipment Leaks.** Definitions. In this regulation, the following terms have the meanings

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	indicated: (1) "Component" means equipment which has the potential to leak VOC, including process equipment, storage tanks, pumps, compressors, valves, flanges and other pipeline fittings, pressure relief valves, process drains, and open-ended pipes. (2) "Leak" means an unintended liquid or vapor release of VOC from a component into the ambient air or into a building. Applicability. A person subject to any VOC emission standard or limitation established in this chapter and not otherwise subject to more specific VOC leak requirements of another regulation is subject to the requirements of this regulation.
12.2	**Testing Requirements:** **A.** The Permittee shall implement and maintain an operations and preventive maintenance plan. The plan shall include how the good operating practices outlined in **Condition 13.1A** above shall be implemented and any logs as needed to assure compliance. **[Authority: COMAR 26.11.03.06C & COMAR 26.11.19.02I]** **B.** The Permittee shall comply with the Monitoring Requirements of Condition 13.3, below. **[Authority: COMAR 26.11.03.06C]**
12.3	**Monitoring Requirements:** **A.** The Permittee shall implement and maintain an operations and preventive maintenance plan. The plan shall include how the good operating practices outlined in **Condition 13.1A** above shall be implemented and any logs as needed to assure compliance. **[Authority: COMAR 26.11.03.06C & COMAR 26.11.19.02I]** **B.** The Permittee shall: (1) Visually inspect all components on the premises for leaks at least once a month. (2) Tag any leak immediately so that the tag is clearly visible. The tag shall be made of material that will withstand any weather or corrosive conditions to which it might normally be exposed. The tag shall bear an identification number, the date the leak was discovered, and the name of the person who discovered the leak. The tag shall remain in place until the leak is repaired. (3) Take immediate action to repair all observed VOC leaks that can be repaired within 48 hours. (4) Repair all other leaking components not later than 15 days after a leak is discovered. If a replacement part is needed, the part shall be ordered within 3 days after discovery of the leak, and the leak

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	shall be repaired within 48 hours of receiving the part. (5) Maintain a supply of components or component parts that are recognized by the source to wear or corrode, or that otherwise need to be routinely replaced, such as seals, gaskets, packing, and pipe fittings. **[Authority: COMAR 26.11.03.06C & COMAR 26.11.19.16(C)]**
12.4	**Record Keeping Requirements:** **A.** The Permittee shall maintain an operations manual and preventive maintenance plan. The Permittee shall maintain a log of maintenance performed that relates to how the good operating practices outlined in **Condition** 12.1A above shall be implemented and any logs as needed to assure compliance. **[Authority: COMAR 26.11.03.06C & & COMAR 26.11.19.02I].** **B.** The Permittee shall maintain a log that includes the name of the person conducting the inspection and the date on which the leak inspections are made, the findings of the inspection, and a list of leaks by tag identification number. The log shall be made available to the Department upon request. Exceptions: Components that cannot be repaired as required in this regulation because they are inaccessible, or that they cannot be repaired during operation of the source, shall be identified in the log and included within the source's maintenance schedule for repair during the next source shutdown. **[Authority: COMAR 26.11.03.06C & COMAR 26.11.19.16C & D]**
12.5	**Reporting Requirements:** The Permittee shall make records available to the Department upon request **[Authority: COMAR 26.11.03.06C].**

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13.0	**Nodal Energy System [NES] NSR VOC Synthetic-Minor Requirements** The nodal energy system [NES] under MILCON P-222 consists of one 4.5-MW natural gas fired combustion turbine (CT), one 29.5 MM Btu heat recovery steam generator (HRSG), seventeen natural gas fired boilers, and five emergency diesel generators. ***{See Facility Inventory List – to identify the [NES] equipment}***.
13.1	**Operational Standard/Limits:** (1) In order to prevent the VOC emissions from the decentralized (nodal) energy production system (NES) from triggering a "Significant" net increase for the facility as defined under COMAR 26.11.17.01B (26) and the Nonattainment Provisions for Major New Sources and Modifications (NSR) under COMAR 26.11.17, the Permittee shall limit the VOC emissions from

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	the NES to less than 25 tons per year, for any 12-month consecutive period.. (2) In order to demonstrate compliance with the annual emissions limitations, the Permittee shall calculate and record the premises-wide NES emissions for each previous calendar month and a total for the previous 12 consecutive calendar months. The calculations and records shall be updated monthly, within the first 15 days of each following month. (3) Monthly records of the hours of operation, fuel use, VOC emissions calculations and supporting data for the NES shall be kept on site for at least five (5) years and shall be made available to the Department upon request. **[Authority: PTC #017-0040-5-0019 & -5-0020]**
13.2	**<u>Testing Requirements</u>:** ***{Conditions (1) & {2) below applies to CT & HRSG}*** (1) The Permittee shall conduct an initial performance stack test of the 4.5-MW natural gas fired combustion turbine (CT) and 29.5 MM Btu heat recovery steam generator (HRSG) for VOC emissions, and subsequently at least once every 5 years. The test shall be used to confirm the emission factors being used to calculate VOC emissions to show compliance with the Synthetic-Minor Limit for VOC and for submittal in the annual ECR (2) The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. You may perform testing at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. You must conduct three separate test runs for each performance test. The minimum time per run is 20 minutes. The emissions factors determined as a result of stack testing shall be used for emissions certification reports (ECR) and to determine compliance with the NES VOC synthetic minor operating limit. ***{Conditions (3) & (4) below, applies to all performance testing}*** (3) The Permittee shall perform all testing at a reasonable time and with at least 30-calendar days notice to allow for representation by the Department personnel. (4) Final testing results shall be submitted to the Department within 45 days of completion of the testing. **[Authority: PERMIT No. 017-0040-5-0019 & -5-0020- {CT & HRSG}]** ***{Conditions (5), (6), and (7) applies to the FBE-SNP-2-E1 and FBE-SNP-2-E2 boilers}*** (5) The Permittee shall conduct an initial performance stack test of at least one of the 20.9 MM Btu (500-hp) Hurst Power Flame NG fired boilers for VOC emissions. The test shall be used to compare with the baseline emission factors used to estimate pre-construction VOC emissions and to demonstrate compliance

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	with the Synthetic-Minor Limit for VOC and for submittal in the annual emissions certification reports (ECR). The Permittee shall conduct performance testing and submit the results in accordance with Condition 14.2 (4), above. (6) At least 30 days prior to conducting any compliance stack test, the Permittee shall submit a test protocol to ARMA for review. Compliance stack testing shall be conducted in accordance with ARMA Technical Memorandum (TM) 91-01, "Test Methods and Equipment Specifications for Stationary Sources" (January, 1991), as amended by Supplement 1 (1 July 1991), 40 CFR 51, 40 CFR 60, or subsequent test protocols approved by ARMA. Test ports shall be located in accordance with TM 91-01 (January 1991), or subsequent or alternative measures approved by ARMA. (7) The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. You may perform testing at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. You must conduct three separate test runs for each performance test. The minimum time per run is 20 minutes. The emissions factors determined as a result of stack testing shall be used for emissions certification reports (ECR) and to determine compliance with the NES VOC synthetic minor operating limit. **[Authority: PERMIT No. 017-0040-5-0021 thru -5-0033-{Boilers}]** PERIODIC TESTING ***{Apples to CT & HRSG and SNP-Boilers}*** The Permittee shall conduct periodic testing for VOC emissions at least once every 5 years or at least once during the term of the operating permit. The emission factor derived as a result of the testing shall be used to when determine compliance with the NSR VOC Synthetic-Minor limit and in the annual emissions certification. **[Authority: COMAR 26.11.03.06C]**
13.3	**Monitoring Requirements:** (1) The Permittee shall monitor and log the monthly fuel use and hours of operation for the CT and HRSG. (2) In order to demonstrate compliance with the emissions limitations requirement for exemption from VOC NSR, the Permittee shall calculate and record the VOC emissions from all stationary sources that comprise the NES, for each previous calendar month and a total for the previous 12 consecutive calendar months. The calculations and records shall be updated monthly, within the first 15 days of each following month. (3) The Permittee shall maintain monthly records of the hours of operation, fuel use, VOC emissions calculations and supporting data for the NES shall be kept on site for at least five (5) years and shall be made available to the Department upon request

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	[Authority: PTC #017-0040-5-0019 & -5-0020]
13.4	**Record Keeping Requirements:** (1) The Permittee shall maintain monthly records of VOC emissions calculations and supporting data for the NES to verify the Permittee has not exceeded the NSR Synthetic Minor VOC limitation of 25 tons for any 12-month consecutive period. The calculations and records shall be updated monthly, within the first 15 days of each following month. (2) The Permittee shall maintain monthly records of the following: (a) Type and monthly amount of fuel combusted, (b) Fuel supplier certifications, (c) Combustion turbine operating hours, and (d) A verification of the capacity factor for each gas turbine generator set, which shall include the heat input (in million British thermal units or equivalent units of measure) and/or electric output (expressed in MWe-hr). **[COMAR 26.11.03.06C & PTC #017-0040-5-0019 & -5-0020]**
13.5	**Reporting Requirements:** (1) By April 1 of each year, the Permittee shall submit to the Department, for the previous calendar year, a certified emissions statement verifying that for the previous 12-month consecutive period, the [NES] VOC emissions limitation as stated in Condition IV-1.1 D of the operating permit was not exceeded. (2) The Permittee shall submit semi-annual reports to the Department on the [NES] VOC emissions for the previous 12 consecutive calendar months. The reports shall be submitted within 30 days after the end of the last previous semi-annual period covered. **[Authority: COMAR 26.11.03.06C]**

SECTION V INSIGNIFICANT ACTIVITIES

This section provides a list of insignificant emissions units that were reported in the Title V permit application. The applicable Clean Air Act requirements, if any, are listed below the insignificant activity.

(1) No. 6 Fuel burning equipment using gaseous fuels or no. 1 or no. 2 fuel oil, and having a heat input less than 1,000,000 Btu (1.06 gigajoules) per hour;

The boilers are subject to the following requirements:

COMAR 26.11.09.05A(1), which establishes that the Permittee may not cause or permit the discharge of emissions from any fuel burning equipment, other than water in an uncombined form, which is greater than 20 percent opacity.

Exceptions. Section A(1) and (2) of this regulation do not apply to emissions during load changing, soot blowing, startup, or adjustments or occasional cleaning of control equipment if:

(a) The visible emissions are not greater than 40 percent opacity; and

(b) The visible emissions do not occur for more than 6 consecutive minutes in any sixty-minute period.

[For Distillate Fuel Oil]

COMAR 26.11.09.07A(1)(c), which establishes that the Permittee may not burn, sell, or make available for sale any distillate fuel with a sulfur content by weight in excess of 0.3 percent.

(2) No. 32 Stationary internal combustion engines with less than 500 brake horsepower (373 kilowatts) and which are not used to generate electricity for sale or for peak or load shaving.

The engines are subject to the following requirements:

(A) COMAR 26.11.09.05E(2), Emissions During Idle Mode: The Permittee may not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity.

(B) COMAR 26.11.09.05E(3), Emissions During Operating Mode: The Permittee may not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity.

(C) Exceptions:

(i) COMAR 26.11.09.05E(2) does not apply for a period of 2 consecutive minutes after a period of idling of 15 consecutive minutes for the purpose of clearing the exhaust system.

(ii) COMAR 26.11.09.05E(2) does not apply to emissions resulting directly from cold engine start-up and warm-up for the following maximum periods:

(a) Engines that are idled continuously when not in service: 30 minutes
(b) all other engines: 15 minutes.

(iii) COMAR 26.11.09.05E(2) & (3) do not apply while maintenance, repair or testing is being performed by qualified mechanics.

The engines are also subject to the following federal requirements:

(D) New Source Performance Standards (NSPS) 40 CFR Part 60 Subpart IIII – All units constructed after the NSPS applicability date of July 11, 2005 are subject to the requirements of this rule. For 2007 model year and later model year NSPS emergency diesel engines, the Permittee must purchase and install an engine certified to the emission standards of §60.4205(b) for the same model year and maximum engine horsepower, to wit [Reference: §60.4211(c)].

(E) National Emissions Standards for Hazardous Air Pollutants (NESHAP) promulgated under 40 CFR 63, Subparts ZZZZ for Reciprocating Internal Combustion Engines – All reciprocating internal combustion engines are subject to this rule. However, units subject to Subpart IIII have no further requirements under Subpart ZZZZ

(3) ✓ Space heaters utilizing direct heat transfer and used solely for comfort heat;

(4) ✓ Water cooling towers and water cooling ponds unless used for evaporative cooling of water from barometric jets or barometric condensers, or used in conjunction with an installation requiring a permit to operate;

(5) No. 33 Unheated VOC dispensing containers or unheated VOC rinsing containers of 60 gallons (227 liters) capacity or less;

The units are subject to COMAR 26.11.19.09D, which requires that the Permittee control emissions of volatile organic compounds (VOC) from cold degreasing operations by meeting the following requirements:

(a) COMAR 26.11.19.09D(2)(b), which establishes that the Permittee shall not use any VOC degreasing material that exceeds a vapor pressure of 1 mm Hg at 20 ° C;

(b) COMAR 26.11.19.09D(3)(a—d), which requires that the Permittee implement good operating practices designed to minimize spills and evaporation of VOC degreasing material. These practices, which shall be established in writing and displayed such that they are clearly visible to operators, shall include covers (including water covers), lids, or other methods of minimizing evaporative losses, and reducing the time and frequency during which parts are cleaned;

(c) COMAR 26.11.19.09D(4), which prohibits the use of any halogenated VOC for cold degreasing.

The Permittee shall maintain on site for at least five (5) years, and shall make available to the Department upon request, the following records of operating data:

(a) Monthly records of the total VOC degreasing materials used; and

(b) Written descriptions of good operating practices designed to minimize spills and evaporation of VOC degreasing materials.

(6) ✓ Equipment for drilling, carving, cutting, routing, turning, sawing, planing, spindle sanding, or disc sanding of wood or wood products;

(7) ✓ Brazing, soldering, or welding equipment, and cutting torches related to manufacturing and construction activities that emit HAP metals and not directly related to plant maintenance, upkeep and repair or maintenance shop activities;

(8) ✓ Equipment for washing or drying products fabricated from metal or glass, provided that no VOC is used in the process and that no oil or solid fuel is burned;

(9) ✓ Containers, reservoirs, or tanks used exclusively for electrolytic plating work, or electrolytic polishing, or electrolytic stripping of brass, bronze, cadmium, copper, iron, lead, nickel, tin, zinc, and precious metals;

(10) Containers, reservoirs, or tanks used exclusively for:

(a) ✓ Dipping operations for applying coatings of natural or synthetic resins that contain no VOC;

(b) ✓ Dipping operations for coating objects with oils, waxes, or greases, and where no VOC is used;

(c) ✓ Storage of butane, propane, or liquefied petroleum, or natural gas;

(d) No. 1 Storage of lubricating oils;

(e) No. 3 Unheated storage of VOC with an initial boiling point of 300 °F (149 °C) or greater;

(f) No. 46 Storage of Numbers 1, 2, 4, 5, and 6 fuel oil and aviation jet engine fuel;

(g) No. 2 Storage of motor vehicle gasoline and having individual tank capacities of 2,000 gallons (7.6 cubic meters) or less;

(h) No. 23 The storage of VOC normally used as solvents, diluents, thinners, inks, colorants, paints, lacquers, enamels, varnishes, liquid resins, or other surface coatings and having individual capacities of 2,000 gallons (7.6 cubic meters) or less;

(11) ✓ Gaseous fuel-fired or electrically heated furnaces for heat treating glass or metals, the use of which does not involve molten materials;

(12) ✓ Charbroilers and pit barbecues as defined in COMAR 26.11.18.01 with a total cooking area of 5 square feet (0.46 square meter) or less;

(13) ✓ First aid and emergency medical care provided at the facility, including related activities such as sterilization and medicine preparation used in support of a manufacturing or production process;

(14) ✓ Certain recreational equipment and activities, such as fireplaces, barbecue pits and cookers, fireworks displays, and kerosene fuel use;

(15) ✓ Potable water treatment equipment, not including air stripping equipment;

(16) ✓ Firing and testing of military weapons and explosives;

(17) ✓ Comfort air conditioning subject to requirements of Title VI of the Clean Air Act;

(18) ✓ Natural draft hoods or natural draft ventilators that exhaust air pollutants into the ambient air from manufacturing/industrial or commercial processes;

(19) ✓ Laboratory fume hoods and vents;

(20) Any other emissions unit, not listed in this section, with a potential to emit less than the "de minimus" levels listed in COMAR 26.11.02.10X (list and describe units):

No. 1 **NR-OBCR-E1**: Open burning at the Caffee Road Thermal Treatment Point. Explosive or propellant contaminated metal objects, cardboard and packaging materials are the raw products and the finished products are ash residue and scrap metal for recycling.

No. 1 **NR-OBSA-E1-E8**: Open burning at the Strauss Avenue Thermal Treatment Point. Waste propellants, explosives and pyrotechnics are the raw products and the finished products treatment residue.

No. 27 **Reg. Nos. 9-0062 & 7-0008 M:** Spent & Mixed Acid Storage - TANK Nos.: -0781-E1, E2, and 3, 0672-E1, 0674-E1, 0674-E3, E4, E5, & E6, and TANK-1107-E1

No. 36 **(Reg. # 6-0097 & 6-0101):** Miscellaneous VOC storage & Usage - MiscVOC-727-E2, 1024-E2, 1035-E1, 1006-E6, 859-E3, 859-E4, MiscVOC-717-E14, 717-E6, 1866-E7, 1913-E2, Misc. VOC 0676 E7, Misc. VOC 1913-E, Nitrate Ester (TANKS – 1513-E2 & E3), and Heptane tank (TANK-859-E5)

No. 6 MIXER 646-E1: 100 gallon horizontal mixer in Building 846; MIXER 856-E1: two 500-gallon mixers, two 100 gallon mixers and one 50 gallon mixer in Building 856.

SECTION VI STATE-ONLY ENFORCEABLE CONDITIONS

The Permittee is subject to the following State-only enforceable requirements:

1. Applicable Regulations.

a. **COMAR 26.11.06.08 and 26.11.06.09**, which generally prohibit the discharge of emissions beyond the property line in such a manner that a nuisance or air pollution is created.

b. **COMAR 26.11.15.05**, which requires that the Permittee implement "Best Available Control Technology for Toxics" (T – BACT) to control emissions of toxic air pollutants.

c. **COMAR 26.11.15.06**, which prohibits the discharge of toxic air pollutants to the extent that such emissions will unreasonably endanger human health

d. **COMAR 26.11.36.03** - Emergency Generators and Load Shaving Units NO_X Requirements.

"A. Applicability and General Requirements for Emergency Generators and Load Shaving Units.

(1) The owner or operator of an emergency generator may not operate the generator except for emergencies, testing, and maintenance purposes.

(2) Except as provided in §A(5) of this regulation, this regulation does not apply to any engine that is fueled with natural gas or propane.

(3) This regulation does not apply to any engine that operates as a redundant system for power without direct or indirect compensation that is:

(a) Located at a nuclear power plant; or

(b) Located at a facility where operation of the engine is necessary to support critical national activities relating to security, aerospace research, or communications.

(4) The owner or operator of an emergency generator or load shaving unit may be subject to the federal standards for stationary internal combustion engines under 40 CFR Parts 60 and 63.

(5) The owner or operator of an emergency generator or load shaving unit may not operate the engine for testing and engine maintenance purposes between 12:01 a.m. and 2 p.m. on any day on which the Department forecasts that the air quality will be a code orange, code red, or code purple unless the engine fails a test and engine maintenance and a re-test are necessary.

(6) The owner or operator of an engine that is used for any purpose other than for emergency purposes shall install and operate a non-resettable hourly time meter on the engine for the purpose of maintaining the operating log required in §E of this regulation."

COMAR 26.11.36.01 B - Definitions:
"(5) Emergency.

(a) "Emergency" means a condition where the primary energy or power source is disrupted or discontinued due to conditions beyond the control of the owner or operator of a facility, including:

(i) A failure of the electrical grid;

(ii) On-site disaster or equipment failure; or

(iii) Public service emergencies such as flood, fire, natural disaster, or severe weather conditions."

(b) "Emergency" includes a PJM declared emergency.

"(6) "Emergency generator" means:

(a) An engine used only during an emergency or for testing and engine maintenance purposes; and

(b) An engine that operates during an emergency according to the procedures in the PJM Emergency Operations Manual for a PJM declared emergency."

"(10) Load Shaving Unit.

(a) "Load shaving unit" means an engine that operates for other than an emergency to generate electricity for use on-site or for sale."

2. Operating Conditions.

a. Materials containing any asbestos (friable or non-friable) shall not be decontaminated in the industrial waste processor.

b. The dry scrubber and baghouse shall be used when burning any plastics, wood or other combustibles in the industrial waste processor.

c. Metal waste shall be charged separately from any combustible waste in the industrial waste processor.

[Authority: PTC #08-6-00132 M, issued 13/3/97 and PTC #08-2-0004 N, issued 2/18/99 & COMAR 26.11.15.06]

3. **Record Keeping and Reporting**.

a. The Permittee shall submit to the Department, by April 1 of each year during the term of this permit, a written certification of the results of an analysis of emissions of toxic air pollutants from the Permittee's facility during the previous calendar year. The analysis shall include either:

i. a statement that previously submitted compliance demonstrations for emissions of toxic air pollutants remain valid; or

ii. a revised compliance demonstration, developed in accordance with requirements included under COMAR 26.11.15 & 16, that accounts for changes in operations, analytical methods, emissions determinations, or other factors that have invalidated previous demonstrations.

b. The Permittee shall log the type of charge (i.e., metals or combustibles), the date, and the duration of charge and temperature set point of the industrial waste processor

c. The Permittee shall maintain a log for all emergency and load-shaving generators indicating the amounts of fuel oil combusted, the hours of operation, and reason for generator operation (i.e., maintenance or operational testing, power outage, load shaving etc.).