Statement of Basis

Tier I Operating Permit No. T1-2016.0015
Project ID 61693

ITAFOS Conda LLC
Soda Springs, Idaho

Facility ID 029-00003

Final

January 30, 2019
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Permit Writer

The purpose of this Statement of Basis is to set forth the legal and factual basis for the Tier I operating permit terms and conditions, including references to the applicable statutory or regulatory provisions for the terms and conditions, as required by IDAPA 58.01.01.362

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1. ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE

APS	ammonium phosphate sulfate
acfm	actual cubic feet per minute
ASTM	American Society for Testing and Materials
BACT	Best Available Control Technology
BMP	best management practices
Btu	British thermal unit
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CEMS	continuous emission monitoring systems
cfm	cubic feet per minute
CFR	Code of Federal Regulations
CI	compression ignition
CMS	continuous monitoring systems
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	CO_2 equivalent emissions
COMS	continuous opacity monitoring systems
CV	conditioning vent
DEQ	Department of Environmental Quality
DPA	Dilute phosphoric acid
dscf	dry standard cubic feet
EPA	U.S. Environmental Protection Agency
GHG	greenhouse gases
gph	gallons per hour
gpm	gallons per minute
gr	grains (1 lb = 7,000 grains)
HAP	hazardous air pollutants
HF	hydrogen fluoride
HHV	higher heating value
hp	horsepower
hr/yr	hours per consecutive 12 calendar month period
ICE	internal combustion engines
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
iwg	inches of water gauge
km	kilometers
lb/hr	pounds per hour
m	meters
MACT	Maximum Achievable Control Technology
MAP	monoammonium phosphate
MGA	merchant grade phosphoric acid
mg/dscm	milligrams per dry standard cubic meter
MMBtu	million British thermal units
MMscf	million standard cubic feet
MRRR	Monitoring, Recordkeeping and Reporting Requirements
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_2	nitrogen dioxide
NO_x	nitrogen oxides
NSPS	New Source Performance Standards

O&M	operation and maintenance
O_2	oxygen
PC	permit condition
PM	particulate matter
$PM_{2.5}$	particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers
PM_{10}	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
ppm	parts per million
ppmw	parts per million by weight
PSD	Prevention of Significant Deterioration
psig	pounds per square inch gauge
PTC	permit to construct
PTE	potential to emit
PW	process weight rate
RICE	reciprocating internal combustion engines
Rules	*Rules for the Control of Air Pollution in Idaho*
scf	standard cubic feet
SIP	State Implementation Plan
SO_2	sulfur dioxide
SO_x	sulfur oxides
SPA	Superphosphoric Acid
T/day	tons per calendar day
T/hr	tons per hour
T/yr	tons per consecutive 12 calendar month period
T1	Tier I operating permit
T2	Tier II operating permit
TAP	toxic air pollutants
T-RACT	Toxic Air Pollutant Reasonably Available Control Technology
ULSD	ultra low sulfur diesel
U.S.C.	United States Code
VOC	volatile organic compound

2. INTRODUCTION AND APPLICABILITY

ITAFOS Conda LLC (ITAFOS) is a manufacturer of phosphate fertilizers, and is located at 3010 Conda Road, Soda Springs, Idaho. The facility is classified as a major facility, as defined by IDAPA 58.01.01.008.10.c, because it emits or has the potential to emit PM_{10}, SO_2, NO_x and CO above the major source threshold of 100 tons-per-year. The facility is also classified as a major facility, as defined by Subsection 008.10.a, because it emits or has the potential to emit hydrogen fluoride above the major source thresholds of 10 tons-per-year for any single HAP and 25 tons-per-year for any combination of HAP.

IDAPA 58.01.01.362 requires that as part of its review of the Tier I application, DEQ shall prepare a technical memorandum (i.e. statement of basis) that sets forth the legal and factual basis for the draft Tier I operating permit terms and conditions including reference to the applicable statutory provisions or the draft denial. This document provides the basis for the draft Tier I operating permit for ITAFOS.

The format of this Statement of Basis follows that of the permit. ITAFOS Tier I operating permit is organized into sections. They are as follows:

Section 1 – Acronyms, Units, and Chemical Nomenclature

The acronyms, units, and chemical nomenclature used in the permit are defined in this section.

Section 2 - Tier I Operating Permit Scope

The scope describes this permitting action.

Section 3 - Facility-wide Conditions

The Facility-wide Conditions section contains the applicable requirements (permit conditions) that apply facility-wide. Where required, monitoring, recordkeeping and reporting requirements (MRRR) sufficient to assure compliance with a permit condition follows the permit condition.

Sections 4 through 12 – Emission Unit Specific Requirements

The emissions unit-specific sections of the permit contain the applicable requirements that specifically apply to each regulated emissions unit. Some requirements that apply to an emissions unit (e.g. opacity limits) may be contained in the Facility-wide Conditions Section. As with the facility-wide conditions, monitoring, recordkeeping and reporting requirements (MRRR) sufficient to assure compliance with an applicable requirement follows the applicable requirement.

Section 13 - Non-applicable Requirements

This section lists those requirements that the applicant has requested as non-applicable, and DEQ proposes to grant a permit shield in accordance with IDAPA 58.01.01.325.

Section 14 - Insignificant Activities

This section contains a list of units or activities that are insignificant on the basis of size or production rate. Units and activities listed in this section must be listed in the permit application. The regulatory citation for units and activities that are insignificant on the basis of size or production rate is IDAPA 58.01.01.317.01.b.

Section 15 - General Provisions

The final section of the permit contains standard terms and conditions that apply to all major facilities subject to IDAPA 58.01.01.300. This section is the same for all Tier I facilities. The General Provisions have been reviewed by EPA and contain all terms and conditions required by IDAPA 58.01.01 et al as well as requirements from other air quality laws, rules and regulations. Each general provision has been paraphrased so it is more easily understood by the general public; however, there is no intent to alter the effect of the requirement. Should there be a discrepancy between a paraphrased general provision in this statement of basis and a rule or permit, the rule or permit shall govern.

3. FACILITY INFORMATION

Facility Description

The ITAFOS Conda facility produces multiple phosphate fertilizer products and alters its product mix to meet the changing requirements of its customers. The following is a brief description of the products manufactured at the Conda facility.

Super Phosphoric Acid (SPA)

The manufacture of liquid SPA accounts for approximately 50% of the facility's total production volume. It is produced by concentrating phosphoric acid to a level of 68-72% P_2O_5. The use of liquid fertilizer as a percentage of total phosphate fertilizers applied in the domestic U.S. market has grown steadily over the past few years, due to its agronomic, economic, and ecological advantages. SPA is not an end-use fertilizer; rather, it is upgraded, mixed, or blended with other liquid nutrients, pesticides, and/or herbicides before it is applied. As a liquid, it allows for easy and precise application to crops, which makes more

nutrients available to the plant. It can be injected below the soil in minimum-till or no-till programs to prevent leaching into waterways.

Merchant Grade Acid (MGA)

Merchant grade acid (MGA) is produced by concentrating phosphoric acid to a level of 50-58% P_2O_5. Like SPA, MGA contains no nitrogen and is generally diluted and mixed with other nutrients before application.

Dilute Phosphoric Acid (DPA)

Dilute phosphoric acid (DPA) is the filter-grade acid product of the "wet-acid" phosphoric acid process. This product is the feedstock for MGA. It has a P_2O_5 content of approximately 28-30%.

Dry Granular Products (MAP and APS)

The dry granular fertilizer products manufactured by the company are:

Mono-ammonium Phosphate ("MAP" or 11-52-0)

Ammonium Phosphate Sulfate ("APS" or 16-20-0)

Manufacturing Process and Raw Materials

The facility benefits from its close proximity to sources of phosphate rock, sulfuric acid, and sulfur-the principal raw materials used in its manufacturing process. At the Phosphoric Acid Plant, phosphate rock ore is mixed with water, sulfuric acid, and recycle acid in a series of reactors and digesters. A chemical reaction takes place, forming a slurry of phosphoric acid (approximately 30% P_2O_5) and crystals of calcium sulfate (known as phosphogypsum). The slurry is fed to a combination of two belt filters and a circular pan filter, where the 30% acid is separated from the phosphogypsum. The acid is pumped to additional processing steps and the phosphogypsum is slurried by pipeline to an impoundment, commonly referred to as a "gyp stack." The slurry contains approximately 20% solids. The phosphoric acid is concentrated in steam evaporators and used as feedstock in the fertilizer production process. The phosphoric acid is then either:

- Combined with anhydrous ammonia to produce various dry granular fertilizers, or
- Further concentrated to produce liquid fertilizer products containing no ammonia.

Sulfuric acid used in the process is either manufactured by the facility from elemental sulfur or purchased from third party sources. Currently, approximately 50% of the sulfuric acid utilized at the Conda Plant is purchased from a third party source.

Facility Permitting History

Tier I Operating Permit History - Previous permit term March 4, 2011 to present

The following information is the permitting history of this Tier I facility during the previous permit term which was from March 4, 2011 to the present. This information was derived from a review of the permit files available to DEQ. Permit status is noted as active and in effect (A) or superseded (S).

January 12, 2012 T1-060308, Incorporating NESHAP Subpart ZZZZ (S)

March 4, 2011 T1-060308, Permit Renewal, Permit status (S)

Permit History - Includes every permit issued to this facility

The following information is the comprehensive permitting history of all applicable permits issued to this Tier I facility. This information was derived from a review of the permit files available to DEQ. Permit status is noted as active and in effect (A) or superseded (S).

October 15, 2018	PTC No. P-2018.0001, B5 Boiler, to correct a NOx emission limitation (A)
January 12, 2018	PTC No. P-2010.0002, Gyp Stacks 0, 1, 2, Ownership Change to ITAFOS (A)
January 12, 2018	PTC No. P-2018.0001, B5 Boiler, Ownership Change to ITAFOS (S)
January 12, 2018	PTC No. P-2017.0050, Gyp Stack 3, Ownership Change to ITAFOS (A)
January 12, 2018	PTC No. P-2013.0001, Super Phos. Acid 3, Ownership Change to ITAFOS (A)
January 12, 2018	PTC No. P-2009.0068, Phos. Acid, Granulation, Cleaver- Brooks Boiler, Ownership Change to ITAFOS (A)
January 12, 2018	PTC No. P-2009.0002, East Sulfuric Acid, Ownership Change to ITAFOS (A)
November 17, 2017	PTC No. P-2017.0050, Initial PTC for Gyp Stack 3 (S)
May 20, 2013	PTC No. 2013.0001, Initial PTC for Super Phos. Acid 3 (S)
January 12, 2012	T1-060308, Incorporating NESHAP Subpart ZZZZ (S)
March 4, 2011	T1-060308 for Tier I renewal. This permit supersedes Tier I No. T1-040321 (S)
October 14, 2010	PTC No. P-2009.0068 to reduce SPA production limit since changes under P-040320 were not completed, and revise SPA Oxidation monitoring, and revise existing PTC conditions to be consistent with the Tier I OP (S)
March 25, 2010	PTC No. P-2010.0002; modified PTC for the East Sulfuric Acid Plant. The No. 2 absorbing tower is replaced, cesium catalyst is added to the fourth bed of the converter, the final absorbing tower heat exchanger is replaced, the cold interpass heat exchanger is upgraded, the product cooler is replaced, and acid pumps are upgraded. (S)
February 20, 2009	PTC No. P-2009.0002 issued as a PTC revision for the West Gyp Stack II project; includes improved monitoring, lower pond size and emission limits (S)
December 19, 2007	PTC No. P-2007.0170 for the initial West Gyp Stack II project (S)
August 22, 2007	PTC No. P-060310, revised PTC SPA Oxidation Process changes and to incorporate granulation plant changes from PTC No. P-060324. This PTC is superseded by PTC No. P-2009.0068 (S).
December 21, 2006	PTC No. P-060324, revised PTC issued for drum replacement at the Granulation Plant. This PTC was superseded by PTC No. P-060310 (S).
April 28, 2006	Tier I No. T1-040321,amended permit to incorporate changes in PTC No. P-040320. This permit was superseded by Tier I No. T1-060308 (S).
April 28, 2006	PTC No. P-040320, production increase at SPA and improved monitoring for the SPA Oxidation Process. This PTC was superseded by PTC P-060310 (S).
July 22, 2005	PTC No. P-050312 for the initial West Gyp Stack I project; public notice was per Section 209.05.a, so this PTC will be incorporated into the Tier I during renewal; this PTC was superseded by PTC No. P-2007.0170 (S).
April 8, 2005	Tier I No. T1-040308, modified permit to incorporate changes in PTC No. P-040307. This Tier I permit was superseded by permit No. T1-040321 (S).
December 10, 2004	PTC No. P-040307, for East Sulfuric Acid Plant SO_2 monitoring changes. This PTC was superseded by PTC No. P-1010.0002 (S).
September 23, 2003	Tier I No. 029-00003, amendment to remove the Experimental Silica Plant (S)

4. APPLICATION SCOPE AND APPLICATION CHRONOLOGY

Application Scope

This permit is the renewal of the facility's currently effective Tier I operating permit. This permitting action includes adding new applicable requirements from 40 CFR 63 Subpart DDDDD, PTC No. P-2017.0050 (PTC for Gyp Stack 3), and 40 CFR 63 Subpart ZZZZ for 5 additional existing engines. This permitting action also updates the permit to include amendments made to 40 CFR 63 Subpart AA and BB.

Application Chronology

August 26, 2015	DEQ received an application.
October 25, 2015	DEQ determined that the application was complete.
August 29, 2018	DEQ made available the draft permit and statement of basis for peer and regional office review.
September 6, 2018	DEQ made available the draft permit and statement of basis for applicant review.
December 13, 2018 - January 14, 2019	DEQ provided a public comment period on the proposed action.
January 16, 2019	DEQ provided the proposed permit and statement of basis for EPA review.

5. EMISSIONS UNITS, PROCESS DESCRIPTION(S), AND EMISSIONS INVENTORY

This section lists the emissions units, describes the production or manufacturing processes, and provides the emissions inventory for this facility. The information presented was provided by the applicant in its permit application. Also listed in this section are the insignificant activities based on size or production rate.

5.1 Ore unloading and transfer

Table 5.1 lists the emissions units and control devices associated with ore unloading and transfer.

Table 5.1 EMISSIONS UNITS, CONTROL DEVICE, AND DISCHARGE POINT INFORMATION

Emissions Unit Description	Control Device (if applicable)
ER-1 Ore unloading and transfers at North end of facility	Reasonable control of fugitive dust

Phosphate ore is received by train from nearby mines five to seven days per week, approximately eight months per year. Ore cars are unloaded at the "rollover" facility and the ore is conveyed to storage piles based on phosphate value or impurity grade.

5.2 Ore transfer to Wash Plant

Table 5.2 lists the emissions units and control devices associated with ore transfer to the wash plant.

Table 5.2 EMISSIONS UNITS, CONTROL DEVICE INFORMATION

Emissions Unit Description	Control Device (if applicable)
ER-2 Ore to wash plant transfers at north end of facility	Reasonable control of fugitive dust

A total of seven unenclosed drop points may occur while transferring ore from the storage piles into the Wash Plant. The actual number of drop points is not limited by this Tier I permit.

5.3 Wash Plant and Grinding Mill

Table 5.3 lists the emissions units and control devices associated with wash plant and grinding mill.

Table 5.3 EMISSIONS UNITS, CONTROL DEVICE INFORMATION

Emissions Unit Description	Control Device (if applicable)
ER-3 Wash Plant Building	Reasonable control of fugitive dust
ER-3 Grinding Mill	Reasonable control of fugitive dust

The function of the Wash Plant is to beneficiate phosphate ore by removing the "fines" and crushing the ore to ¼ inch for passage into the Wet Grinding Mill.

Wash Plant product, or "washed ore" can be fed directly to the Wet Grinding Mill or stockpiled. Fines removed from the ore through beneficiation are slurried to a settling pond.

The Wash Plant (S-W-1) and associated equipment is a wet beneficiation process and has no significant emissions. There is one drop point outside the building where washed (beneficiated) ore is stockpiled.

The function of the Wet Grinding Mill (S-W-2) is to grind phosphate ore to an average particle size of 2/1000 of an inch. The finely ground ore can then be introduced as a slurry into the Phosphoric Acid Plant.

5.4 Granulation Plant

Table 5.4 lists the emissions units and control devices associated with the Granulation Plant.

Table 5.4 EMISSIONS UNITS, CONTROL DEVICE INFORMATION

Emissions Unit Description	Control Device (if applicable)
Granulator	Granulation Scrubber
Dryer	Dryer Scrubber
Cooler and Baghouse	Dryer Scrubber

From ITAFOS' raw materials of phosphoric acid, sulfuric acid and ammonia, two different grades of granular fertilizer are produced: Monoammonium Phosphate (MAP) (11-52-0); and Ammonium Phosphate Sulfate (APS) (16-20-0). The basic reaction utilized for all products is the neutralization of acid with ammonia. The neutralization reaction is exothermic. This heat produces steam, which is responsible for most of the plume of steam out of the stack. Residual steam and minor amounts of particulates are emitted through the free standing stack adjoining the building. At various points in the process, dust, fluorine fumes, or ammonia fumes are generated. A weak acid solution is pumped through the scrubbers to capture the fumes. This liquor is pumped back to the pre-neutralizer tank and made into product. Phosphoric acid from the Phosphoric Acid Plant is pumped to the pre-neutralizing tank where it is mixed with sulfuric acid and ammonia to certain specifications depending on the product being made. Ammonia is also added to a pipe-cross reactor to finish ammoniation of the product in a process called reverse titration. The ammoniation also serves to dry the granular product before the product is discharged. Ammonia comes into the plant by rail car and is unloaded by granulation plant operators into the ammonia sphere. From the granulator, the product is discharged into the rotary dryer where moisture is removed from the granules. From the dryer, the product goes by belt conveyor to a screen distribution screw, to four screens that separate the oversized and undersized granules. The oversized granules go to the cage mills where they are broken up and sent back to the granulator. The under sized material goes directly back to the granulator as recycle. Also, some of the on-size product is recycled back to the granulator to help maintain consistent size and moisture of the product. The final product is cooled in a bulk flow cooler. Afterwards, it is coated with a dust control agent. This cooled and coated product is then transferred to shipping via conveyor belt.

5.5 Dry Product Transfer, Storage and Loadout

Table 5.5 lists the emissions units and control devices associated with the dry product transfer, storage, and loadout process.

Table 5.5 EMISSIONS UNITS, CONTROL DEVICE INFORMATION

Emissions Unit Description	Control Device (if applicable)
Dry product sizing and transfer	Enclosure, chemical dust suppressant
Dry product storage	Enclosure
Dry product loadout	Chemical dust suppressant, physical stabilization

Dry fertilizer from the granulation plant is conveyed to the shipping warehouse and stored until time to ship to customers. The warehouse holds approximately 60,000 tons of dry fertilizer products. Front-end loaders are used to transfer the product from the piles inside the warehouse to the feeders and conveyers. The fertilizer products are screened for size and loaded into railcars or trucks.

5.6 East Sulfuric Acid Plant

Table 5.6 lists the emissions units and control devices associated with the East Sulfuric Acid Plant.

Table 5.6 EMISSIONS UNITS, CONTROL DEVICE INFORMATION

Emissions Unit Description	Control Device (if applicable)
East Sulfuric Acid Plant	Dual absorption contact process and vertical tube mist eliminator, cesium catalyst in the fourth bed of the converter
Cooling Tower	None
Two waste heat boilers (use natural gas during startup)	None
Sulfur storage and transfer	Enclosed systems
Acid storage tanks and Acid pump tanks	Enclosed systems

The sulfuric acid is made by burning sulfur to create SO_2, converting the SO_2 into SO3 by passing it across vanadium catalyst beds (cesium catalyst is used in the fourth bed of the converter), and then absorbing the SO_3 into a liquid mixture of 93% sulfuric acid and water in packed bed absorbing towers to form 98.5% sulfuric acid.

5.7 Nebraska Boiler (B5)

Table 5.7 lists the emissions units and control devices associated with the Nebraska Boiler (B5).

Table 5.7 EMISSIONS UNITS, CONTROL DEVICE INFORMATION

Emissions Unit Description	Control Device (if applicable)
Nebraska boiler (B-5)	COEN low-NO_x burner, or Department approved equivalent

The "B-5" gas-fired boiler generates steam for the production of phosphoric acid. Following is a description of the B-5 boiler:

Manufacturer:	Nebraska Boiler Company
Model Number:	NSX-G-107-ECON
Rated Heat Input:	213.8 MMBtu/hr
Steam Capacity:	175,000 lb/hr
Fuel:	Natural gas

5.8 Phosphoric Acid and Superphosphoric Acid Plants

Table 5.8 lists the emissions units and control devices associated with the Phosphoric Acid and Superphosphoric Acid Plants.

Table 5.8 EMISSIONS UNITS, CONTROL DEVICE INFORMATION

Emissions Units / Processes	Control Devices
Phosphoric acid process	Multi-stage horizontal cross-flow scrubber (EU ID 26-11-042) Multi-stage horizontal cross-flow scrubber (EU ID 26-11-048) Conditioning vent scrubber (A-Pp-3) (TAG. No. CP-4536101) (EU ID 35-11-009)
Superphosphoric acid process	Multi-stage horizontal cross-flow scrubber (EU ID 26-11-048)
Thermal fluid heaters	Low NO_x package thermal heaters
Cooling Tower	Mist eliminator

At the Phosphoric Acid Plant, the rock is fed, along with water, sulfuric acid, and recycle acid, into a series of seven cells-the first five being "reactors" and the last two being "digesters". Here the ore slurry is mixed with sulfuric acid. The chemical reaction forms a slurry of phosphoric acid (approximately 30% P_2O_5 content) and crystals composed primarily of calcium sulfate known as phosphogypsum. The slurry is fed onto filters where the 30% acid is separated from the gyp. The phosphogypsum is slurried to an impoundment, commonly referred to as a "gyp stack".

The 30% acid filtrate is the starting material for a variety of intermediate and end products. Most of the 30% acid is evaporated to 70% P_2O_5 (superphosphoric acid or "SPA"; see Source: S-Pb-1). Minor portions of the 30% acid filtrate are marketed at lower P_2O_5 concentrations. In the superphosphoric acid (SPA) process, 50-58% P_2O_5 acid from phosphoric acid production is further evaporated to a concentration of approximately 70% P_2O_5. Filtration of suspended solids and chemical oxidation of organic material are ancillary steps in SPA production.

5.9 Gyp Stack System

Table 5.9 lists the emissions units and control devices associated with the Gyp Stacks.

Table 5.9 EMISSIONS UNITS, CONTROL DEVICE INFORMATION

Emissions Units / Processes	Control Devices
F-GYP-0 - 125-acre Gyp Stack (Includes Cells 1, 2/3, and # 3Tailings Pond (TP3))	Reasonable control of fugitive emissions
F-GYP-1 - 125-acre Gyp Stack	Reasonable control of fugitive emissions
F-GYP-2 - 125-acre Gyp Stack2	Reasonable control of fugitive emissions
151 Acre GYP-3 and 14.5 acre Decant Ditch 3	Reasonable control of fugitive emissions

Phosphogypsum, a by-product of the phosphoric acid production process, is slurried to a pile referred to as a "gyp stack." The slurry is approximately 20% solids. At the gyp stack, solids in the slurry are allowed to settle and the water is decanted to an evaporative cooling pond. The process water is recycled to the processing plant.

The settled phosphogypsum is allowed to dry to a moisture content of about 40% by directing the slurry to a rotation of cells on the stack. When a cell has dried appropriately, the cell is excavated using a backhoe or similar equipment to build up the exterior dikes of the stack. When the interior of the cell is excavated and dikes are elevated to the necessary height, the cell is flooded with slurry again.

5.10 Cleaver-Brooks Boiler

Table 5.10 lists the emissions units and control devices associated with the Cleaver-Brooks Boiler.

Table 5.10 EMISSIONS UNITS, CONTROL DEVICE INFORMATION

Emissions Units / Processes	Control Devices
Cleaver-Brooks Boiler	Low NO_x package boiler

The Cleaver-Brooks boiler supplies steam to the plant steam system. The boiler's steam-generating capacity is approximately 150,000 pounds per hour. Following is a description of the Cleaver-Brooks boiler:

Manufacturer:	Cleaver-Brooks
Model Number:	DFE-132-IWT (TAG No. CP-5536601)
Rated Heat Input:	180 MMBtu/hr
Steam Capacity:	~150,000 lb/hr
Fuel:	Natural gas

5.11 Emergency Internal Combustion Engines (ICE)

Table 5.11 lists the emissions units and control devices associated with the Emergency Internal Combustion Engines.

Table 5.11 EMISSIONS UNITS, CONTROL DEVICE INFORMATION

Emissions Units / Processes	Control Devices
North Sulfuric Emergency Generator – diesel, Caterpillar model 3512 DITA 1,545 bhp emergency engine installed in 1995	NA
South Firewater Pump Engine – diesel, John Deere 300 hp, emergency, installed in 2001	NA
#11 Well Pump Aux Engine – propane, Chevy 109 hp, emergency SI, installed in 2001	NA
#3 Potable Water Pump – natural gas, Caterpillar 95 hp, emergency SI, installed May 2003	NA
#11 Well Generator – propane, Caterpillar 33.5 hp, emergency, SI, installed May 2008	NA
Rollover Generator – diesel, Caterpillar118 hp, emergency, Installed before 1990	NA

5.12 Insignificant Emissions Units Based on Size or Production Rate

This section contains a list of units or activities that are insignificant on the basis of size or production rate. Units and activities listed in this section must be listed in the permit application. Table 5.12 lists the units and activities which have been determined to be insignificant on the basis of size or production rate. The regulatory authority for emissions units and activities that are insignificant on the basis of size or production rate is IDAPA 58.01.01.317.01.b. No emission unit or activity subject to an applicable requirement shall qualify as an insignificant emission unit or activity.

Table 5.12 INSIGNIFICANT EMISSION UNITS AND REGULATORY AUTHORITY/JUSTIFICATION

Description	Insignificant Activities IDAPA 58.01.01.317.01(b)(i) Citation
One 2,000-gallon gasoline storage tank	(3)
One 250-gallon diesel fuel storage tank	(3)
Three 500-gallon portable diesel fuel storage tanks	(3)
One 1,000-gallon diesel fuel storage tank	(3)
One 2,000-gallon diesel fuel storage tank	(3)
One 1,200-gallon diesel fuel storage tank	(3)
One 500-gallon 10W oil storage tank	(3)
One 250-gallon 30W oil storage tank	(3)
One 500-gallon 30W oil storage tank	(3)
One 250-gallon antifreeze storage tank	(3)
One 1,900-gallon used oil storage tank	(3)

Description	Insignificant Activities IDAPA 58.01.01.317.01(b)(i) Citation
One 10,000-gallon dust suppressant storage tank	(3)
One 250-gallon propane storage tank (4)	(4)
Two 500-gallon propane storage tanks	(4)
Direct heat transfer combustion equipment less than 5 MMBtu/hr, exclusively using natural gas, butane, propane, and/or LPG	(5)
Misc. welding operations	(9)
Industrial water chlorination system	(16)
Tanks and pumping equipment for storage and dispensing of acids not greater than 99% H_2SO_4 and H_3PO_4	(19)
Therminol pumping and storage equipment	(20)
Metal rolling	(23)
Unregulated open top and partially covered tanks and sumps with emissions less than or equal to 10% of the significant emission rate	(30)
Ammonia Railcar Unloading	(30)
Direct heat transfer heaters with emissions less than or equal to 10% of significant rate	(30)
One 17,000-gallon dust suppressant storage tank	(30)

The applicant listed boilers less than 5 MMBtu/hr as insignificant activities. However they do not qualify for insignificant activities because they are subject to the fuel burning equipment particulate matter standards (IDAPA 58.01.01.675) and are not listed in the table. The applicant also listed several fugitive dust emissions sources as insignificant activities. Fugitive dust sources do not qualify as insignificant activities because the requirement to reasonably control fugitive emissions applies (IDAPA 58.01.01.650). Therefore these fugitive dust sources are not listed in the table.

5.13 Non-applicable Requirements for Which a Permit Shield is Requested

This section of the permit lists the regulations for which the facility has requested, and DEQ proposes to grant, a permit shield pursuant to IDAPA 58.01.01.325. The findings on which this shield is based are presented below:

- 40 CFR 60 Subpart C and Cd: Emission Guidelines for Sulfuric Acid Production Units
- 40 CFR 60 Subpart K and Subpart Ka: Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978 and After After May 18, 1978, and Prior to July 23, 1984 respectively. The source does not have any vessels that meet the applicability criteria.
- 40 CFR 60 Subpart V, W, and X: ITAFOS does not produce or store granular diammonium phosphate, triple superphosphate, or granular triple superphosphate at the CPO facility
- 40 CFR 60 Subpart VV and VVa – Synthetic Organic Chemical Manufacturing: ITAFOS does not produce any of the chemicals listed in 40 CFR 60.489 as intermediates or final products
- 40 CFR 60 Subpart IIII- Compression Ignition Internal Combustion Engines: ITAFOS has not installed compression ignition engines after July 11, 2005
- 40 CFR 63 Subpart Q – Industrial Cooling Towers: ITAFOS does not use chromium-based water treatment chemicals
- 40 CFR 64 Compliance Assurance Monitoring

5.14 Emissions Inventory

Table 5.13 summarizes the emissions inventory for this major facility. All values are expressed in units of tons-per-year and represent the facility's potential to emit. Potential to emit is defined as the maximum

capacity of a facility or stationary source to emit an air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the facility or source to emit an air pollutant, including air pollution control equipment and restrictions on hour of operation or on the type or amount of material combusted, stored or processed shall be treated as part of its design if the limitation or the effect it would have on emission is state or federally enforceable.

The documentation provided by the applicant for the emissions inventory and emission factors is provided as Appendix A of this statement of basis. Table 2 in Appendix A lists all the 137 individual emissions units at the facility along with the emission inventory for each of them.

Table 5.13 EMISSIONS INVENTORY - POTENTIAL TO EMIT (T/yr)

Source Description	PM_{10} T/yr	$PM_{2.5}$ T/yr	SO_2 T/yr	NO_x T/yr	VOC T/yr	CO T/yr	HF T/yr
Facility-wide Emissions	143.3	38.38	737.89	215.44	11.27	173.08	123.05

As can be seen in Table 5.13 the facility is major for both criteria pollutants (PM_{10}, SO_2, NO_x, CO) and hazardous air pollutants (i.e. HF).

6. EMISSIONS LIMITS AND MRRR

This section contains the applicable requirements for this T1 facility.

This section is divided into the following subsections.

- Facility-Wide Conditions;
- Granulation Plant and Dry Product Storage and Transfer Emissions Limits;
- East Sulfuric Acid Plant Emissions Limits;
- Nebraska Boiler (B-5) Emissions Limits;
- Cleaver Brooks Boiler (B-6) Emissions Limits;
- 40 CFR 60 Subpart Db Industrial Steam Generating Units
- 40 CFR 63 Subpart DDDDD Industrial Boilers and Process Heaters
- Phosphoric Acid and Superphosphoric Acid Process Plants Emissions Limits;
- Gyp Stack System Emissions Limits;
- Emergency IC Engines
- Tier I Operating Permit General Provisions.

MRRR

Monitoring, recordkeeping and reporting requirements (MRRR) are the means with which compliance with an applicable requirement is demonstrated. In this section, the applicable requirement (permit condition) is provided first followed by the MRRR. Should an applicable requirement not include sufficient MRRR to satisfy IDAPA 58.01.01.322.06, 07, and 08, then the permit must establish adequate monitoring, recordkeeping and reporting sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit (i.e. gap filling). In addition to the specific MRRR provided for each applicable requirement, generally applicable facility-wide conditions and general provisions may also be provided, such as performance testing, reporting, and certification requirements.

The legal and factual basis for each permit condition is provided for in this document. If a permit condition was changed due to facility draft comments or public comments, an explanation of the changes is provided.

State Enforceability

An applicable requirement that is not required by the federal CAA and has not been approved by EPA as a SIP-approved requirement is identified as a "State-only" requirement and is enforceable only under state law. State-only requirements are not enforceable by the EPA or citizens under the CAA. State-only requirements are identified in the permit within the citation of the legal authority for the permit condition.

Federal Enforceability

Unless identified as "State-only," all applicable requirements, including MRRR, are state and federally enforceable. It should be noted that while a violation of a MRRR is a violation of the permit, it is not necessarily a violation of the underlying applicable requirement (e.g. emissions limit).

To minimize the length of this document, the following permit conditions and MRRR have been paraphrased. Refer to the permit for the complete requirements.

6.1 Facility-Wide Conditions

Permit Condition 3.1 & 3.2 - Fugitive Dust

3.1 - All reasonable precautions shall be taken to prevent PM from becoming airborne in accordance with IDAPA 58.01.01.650-651.

[IDAPA 58.01.01.650–651, 4/11/15]

3.2 - Fugitive emissions shall not be observed leaving the property for a period or periods aggregating more than three minutes in any 60-minute period. Visible emissions shall be determined by EPA Reference Method 22, as described in 40 CFR 60, Appendix A, or by an Idaho Department of Environmental Quality (DEQ) approved alternative method.

[PTC No. P-2009.0068, 1/12/18]

MRRR (Permit Conditions 3.3 through 3.5)

- Monitor and maintain records of the frequency and the methods used to control fugitive dust emissions;
- Maintain records of all fugitive dust complaints received and the corrective action taken in response to the complaint;
- Conduct facility-wide inspections of all sources of fugitive emissions. If any of the sources of fugitive dust are not being reasonably controlled, corrective action is required.

[IDAPA 58.01.01.322.06, 07, 08, 4/5/2000]

Permit Condition 3.6 - Odors

The permittee shall not allow, suffer, cause, or permit the emission of odorous gases, liquids, or solids to the atmosphere in such quantities as to cause air pollution.

[IDAPA 58.01.01.775-776 (State-only), 5/1/94]

MRRR (Permit Condition 3.7)

- Maintain records of all odor complaints received and the corrective action taken in response to the complaint;
- Take appropriate corrective action if the complaint has merit, and log the date and corrective action taken.

[IDAPA 58.01.01.322.06, 07 (State only), 5/1/94]

Permit Condition 3.8 - Visible Emissions

The permittee shall not discharge any air pollutant to the atmosphere from any point of emission for a period or periods aggregating more than three minutes in any 60-minute period which is greater than 20% opacity as determined by procedures contained in IDAPA 58.01.01.625. These provisions shall not apply when the presence of uncombined water, nitrogen oxides, and/or chlorine gas is the only reason for the failure of the emission to comply with the requirements of this section.

[IDAPA 58.01.01.625, 4/5/00]

MRRR (Permit Condition 3.9 through 3.10)

- Conduct facility-wide inspections of all emissions units subject to the visible emissions standards (or rely on continuous opacity monitoring);
- If visible emissions are observed, take appropriate corrective action and/or perform a Method 9 opacity test;
- Maintain records of the results of each visible emissions inspection.

[IDAPA 58.01.01.322.06, 07, 5/1/94]

Permit Conditions 3.11 through 3.15 - Excess Emissions

The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130-136 for excess emissions. The provisions of IDAPA 58.01.01.130-136 shall govern in the event of conflicts between the excess emissions facility wide conditions and the regulations of IDAPA 58.01.01.130-136.

[IDAPA 58.01.01.130-136, 4/5/00]

MRRR (Permit Conditions 3.11 through 3.14)

Monitoring, recordkeeping and reporting requirements for excess emissions are provided in Sections 131 through 136.

- Take appropriate action to correct, reduce, and minimize emissions from excess emissions events;
- Prohibit excess emissions during any DEQ Atmospheric Stagnation Advisory or Wood Stove Curtailment Advisory;
- Notify DEQ of each excess emissions event as soon as possible, including information regarding upset, breakdown, or safety events.
- Submit a report for each excess emissions event to DEQ;
- Maintain records of each excess emissions event.

Permit Condition 3.16 – Fuel-Burning Equipment PM Standards

The permittee shall not discharge to the atmosphere from any fuel-burning equipment PM in excess of 0.015 gr/dscf of effluent gas corrected to 3% oxygen by volume for gas, 0.050 gr/dscf of effluent gas corrected to 3% oxygen by volume for liquid, 0.050 gr/dscf of effluent gas corrected to 8% oxygen by volume for coal, and 0.080 gr/dscf of effluent gas corrected to 8% oxygen by volume for wood products.

[IDAPA 58.01.01.676-677, 5/1/94]

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Permit Condition 3.17 - Sulfur Content Limits

The permittee shall not sell, distribute, use, or make available for use any of the following:

- Distillate fuel oil containing more than the following percentages of sulfur:
  - ASTM Grade 1 fuel oil, 0.3% by weight.
  - ASTM Grade 2 fuel oil, 0.5% by weight.

[IDAPA 58.01.01.725, 4/11/15]

MRRR - (Permit Condition 3.18)

The permittee shall maintain documentation of supplier verification of fuel sulfur content on an as received basis.

[IDAPA 58.01.01.322.06, 5/1/94]

Permit Condition 3.19 - Open Burning

The permittee shall comply with the *Rules for Control of Open Burning*, IDAPA 58.01.01.600-623.

[IDAPA 58.01.01.600-623, 3/29/12]

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Permit Condition 3.20 - Asbestos

The permittee shall comply with all applicable requirements of 40 CFR 61, Subpart M—"National Emission Standard for Asbestos."

[40 CFR 61, Subpart M]

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Permit Condition 3.21 - Accidental Release Prevention

An owner or operator of a stationary source that has more than a threshold quantity of a regulated substance in a process, as determined under 40 CFR 68.115, shall comply with the requirements of the Chemical Accident Prevention Provisions at 40 CFR 68 no later than the latest of the following dates:

- Three years after the date on which a regulated substance present above a threshold quantity is first listed under 40 CFR 68.130.
- The date on which a regulated substance is first present above a threshold quantity in a process.

[40 CFR 68.10 (a)]

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Permit Condition 3.22 - Recycling and Emissions Reductions

The permittee shall comply with applicable standards for recycling and emissions reduction of refrigerants and their substitutes pursuant to 40 CFR 82, Subpart F, Recycling and Emissions Reduction.

[40 CFR 82, Subpart F]

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Permit Condition 3.23 through 3.24- NSPS/NESHAP General Provisions

This facility is subject to NSPS/NESHAP Subparts H, Db/ R, AA, BB, ZZZZ, and is therefore required to comply with applicable General Provisions.

[40 CFR 60/63, Subpart A]

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Permit Condition 3.25 - Monitoring and Recordkeeping

The permittee shall maintain sufficient records to assure compliance with all of the terms and conditions of this operating permit. Records of monitoring information shall include, but not be limited to, the following: (a) the date, place, and times of sampling or measurements; (b) the date analyses were performed; (c) the company or entity that performed the analyses; (d) the analytical techniques or methods used; (e) the results of such analyses; and (f) the operating conditions existing at the time of sampling or measurement. All monitoring records and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes, but is not limited to, all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. All records required to be maintained by this permit shall be made available in either hard copy or electronic format to DEQ representatives upon request.

[IDAPA 58.01.01.322.06, 07, 5/1/94]

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Permit Conditions 3.26 through 3.29 - Performance Testing

If performance testing is required, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test or shorter time period as provided in a permit, order, consent decree, or by DEQ approval. DEQ may, at its option, have an observer present at any emissions tests conducted on a source. DEQ requests such testing not be performed on weekends or state holidays.

All testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. Without prior DEQ approval, any alternative testing is conducted solely at the permittee's risk. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the testing does not satisfy the testing requirements. Therefore, prior to conducting any performance test, the permittee is encouraged to submit in writing to DEQ, at least 30 days in advance, the following for approval:

- The type of method to be used
- Any extenuating or unusual circumstances regarding the proposed test
- The proposed schedule for conducting and reporting the test

[IDAPA 58.01.01.157, 4/5/00; IDAPA 58.01.01.322.06, 08.a, 09, 4/5/00]

MRRR (Permit Conditions 3.27 and 3.29)

The permittee shall submit compliance test report(s) to DEQ following testing.

[IDAPA 58.01.01.157, 4/5/00; IDAPA 58.01.01.322.06, 08.a, 09, 4/5/00]

Permit Condition 3.30 - Reports and Certifications

This permit condition establishes generally applicable MRRR for submittal of reports, certifications, and notifications to DEQ and/or EPA as specified.

[IDAPA 58.01.01.322.08, 11, 4/5/00]

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Permit Condition 3.31 – Operation of Ambient Monitors

The permittee shall operate two PM_{10} monitors and one continuous ambient SO_2 monitor at sites approved by DEQ. Results of the above described monitoring shall be submitted to DEQ monthly in accordance

with the State Implementation Plan, 40 CFR 52.670(d), EPA-approved State Source-specific Requirements.

[Consent Order, Condition 10, 10/24/73; 40 CFR 52.670(d)]

Permit Condition 3.32 – MACT 40 CFR 63 Subpart A –Reporting Schedule

This condition provides for an alternative reporting schedule if consistent with this Subpart and in accordance with an agreement with the Department.

[40 CFR 63.10(a)(5) and (7)]

Permit Condition 3.33 - Incorporation of Federal Requirements by Reference

Unless expressly provided otherwise, any reference in this permit to any document identified in IDAPA 58.01.01.107.03 shall constitute the full incorporation into this permit of that document for the purposes of the reference, including any notes and appendices therein.

[IDAPA 58.01.01.107, 4/7/11]

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

Permit Condition 3.34 – Process Weight PM Emissions Limitations

No person shall emit into the atmosphere from any process or process equipment commencing operation on or after October 1, 1979, particulate matter in excess of the amount shown by the equations given in the permit condition.

[IDAPA 58.01.01.701, 4/5/00]

MRRR

No specific monitoring is required for this facility-wide condition. As with all permit conditions, the permittee must certify compliance with this condition annually, which includes making a reasonable inquiry to determine if this requirement was met during the reporting period.

6.2 Emissions Unit-Specific Emissions Limits and MRRR

Section 4 of the Permit - Granulation Plant and Dry Product Storage and Transfer

The purpose of this section of the permit is to include the applicable requirements of 40 CFR 63 Subpart BB – National Emission Standards for Hazardous Air Pollutants from Phosphate Fertilizer Production Plants. This subpart includes a total fluoride emission limit of 0.0580 lb/ton of equivalent P_2O_5 feed, for each phosphate fertilizer process line.

MRRR – Permit Conditions 4.5-4.20

This subpart was promulgated after November 15, 1990 pursuant to section 112 of the Clean Air Act and is exempt from compliance assurance monitoring (CAM) requirements. That is relevant in that the subpart itself has sufficient monitoring to assure compliance, and those monitoring requirements are included in the permit. Performance testing is required once per year. Additionally, control devices are to be continously monitored.

Section 5 of the Permit - East Sulfuric Acid Plant

Permit Condition 5.1 limits SO_2 emissions to 258 pounds per hour and 735.5 tons per year. This condition originates from PTC No. P-2010.0002, issued 1/12/18.

MRRR - Permit Conditions 5.4 – 5.7, 5.11

The permittee is required to determine the SO_2 pound per hour and ton per year emission rates using results of the SO_2 continuous emission monitor (CEM) required by 40 CFR 60 Subpart H (Permit Condition 5.11).

Permit Condition 5.2 includes a SO_2 emission limit of 28 pounds per ton of 100% sulfuric acid produced from the Rules for the Control of Air Pollution in Idaho, and Permit Condition 5.7 includes the NSPS SO_2 limit of 4 pounds per ton of 100% sulfuric acid produced.

MRRR – Permit Condition 5.11

A SO_2 continuous emission monitor (CEM) is required by 40 CFR 60 Subpart H (Permit Condition 5.11) which assures compliance with the limits.

Permit Condition 5.8 includes the NSPS sulfuric acid mist limit of 0.15 pounds per ton of 100% sulfuric acid produced.

MRRR – Permit Condition 5.6 requires a performance test to determine compliance with the sulfuric acid mist limit once each 13 month period.

Section 6 of the Permit - Nebraska Boiler (B-5)

Permit Condition 6.1 limits pounds per hour and tons per year emission of PM, PM_{10}, SO_2, NO_x, CO and VOC.

MRRR – Permit Conditions 6.3, 6.4, 6.5, 6.6, 6.7, 6.8

Emissions of PM, PM_{10}, SO_2, CO and VOC are in compliance by limiting the source to combusting natural gas exclusively (Permit Condition 6.3) and by limiting the annual fuel consumption to one billion seven hundred sixty-eight million standard cubic feet (Permit Condition 6.4) of natural gas fuel per year. The permittee is also required to use a COEN low-NO_x burner, or Department approved equivalent (Permit Condition 6.5).

Permit Condition 6.2 limits NO_x emissions to 0.20 lb/MMBtu and the NO_x emission limits listed Permit Condition 6.1 (pound per hour and ton per year limits).

MRRR – Permit Condition 6.6, 6.7and 6.8

The permittee is required to use the NO_x monitoring results from NSPS Subpart Db (Section 8 of the permit; Permit Condition 8.4) to determine compliance with the lb/MMBtu, pound per hour and ton per year NO_x emission limits.

Section 7 of the Permit - Cleaver-Brooks Boiler (B-6)

Permit Condition 7.1 limits NO_x emissions to 33 tons per year.

MRRR – Permit Condition 7.3

Each month the permittee shall use the NO_x monitoring data (i.e. lb/MMBtu and fuel consumption) required by 40 CFR 60 Subpart Db to calculate the tons of NO_x emitted during the previous consecutive 12-month period. NSPS Subpart Db is in Section 8 of the permit, the specific monitoring requirement is in Permit Condition 8.4.

Section 8 of the Permit - 40 CFR 60 Subpart Db Industrial Steam Generating Units

The purpose of this section of the permit is to incorporate the applicable requirements of NSPS Subpart Db. The subpart includes monitoring requirements to assure compliance with limits.

Permit Condition 8.1 exempts sources from an SO_2 emission rate limit if the boiler is fired with only very low sulfur gaseous fuel with a potential SO_2 emission rate of 140 ng/J (0.32 lb/MMBtu) heat input or less.

MRRR – Permit Condition 8.9

The owner or operator of an affected facility who elects to demonstrate that the affected facility combusts only very low sulfur natural gas, shall obtain and maintain at the affected facility fuel receipts (such as a current, valid purchase contract, tariff sheet, or transportation contract) from the fuel supplier that certify that the gaseous fuel the definition of natural gas as defined in §60.41b and the applicable sulfur limit.

Permit Condition 8.2 limits NO_x emissions from the Cleaver-Brooks Boiler to 0.10 lb/MMBtu and NO_x emissions from the Nebraska Boiler to 0.20 lb/MMBtu

MRRR – Permit Conditions 8.4, 8.5, 8.6, 8.7, 8.8

Permit Condition 8.4 includes NSPS monitoring requirements for NO_x emissions in units of lb/MMBtu heat input. Permit Conditions 8.5, 8.6, 8.7 and 8.8 include NSPS reporting and recordkeeping requirements.

Section 9 of the Permit - 40 CFR 63 Subpart DDDDD Industrial Boilers and Process Heaters

There are no emissions rate limits in Subpart DDDDD. However, there are work practice standards that require tune-ups. Tune-ups are required every 5 years with systems equipped with oxygen trim system and tune-ups are required every year for systems that are not equipped with oxygen trim systems.

Section 10 of the Permit – Phosphoric Acid and Superphosphoric Acid Process Plants

This section of the permit has both state emission limits and MACT emissions limits.

Permit Condition 10.1 includes a state NO_x emission limit of 5 ton per year on the Superphosphoric Acid Oxidation Process.

MRRR – Permit Conditions 10.5, 10.6 and 10.8

Permit Condition 10.8 requires NO_x emissions testing and Permit Condition 10.5 requires monthly calculating the annual NO_x emission rate based on the NO_x emission factor derived from the most recent source test.

Permit Condition 10.2 includes a state emission fluoride emission limit of 3.8 tons per year.

MRRR – Permit Condition 10.6 & 10.7

Each calendar month the permittee shall calculate and record the fluoride emissions from the phosphoric acid plant by multiplying the fluoride emission rate measured in the most recent annual performance test (as required by 40 CFR 63.606(b)) by the throughput each month. Each month the permittee shall record the tons of fluoride emitted during most recent consecutive 12-month period.

Permit Conditions 10.9 includes MACT fluoride emission limits (40 CFR 63.602).

MRRR – Permit Condition 10.10 – 10.32

This subpart was promulgated after November 15, 1990 pursuant to section 112 of the Clean Air Act and is exempt from compliance assurance monitoring (CAM) requirements. That is relevant in that the subpart itself has sufficient operating and monitoring to assure compliance, and those monitoring requirements are included in the permit (10.10 – 10.32). They include annual source testing and air pollution control device monitoring requirements.

Section 11 of the Permit – Gyp Stack System

Permit Condition 11.1 limits fluoride emissions from Gyp Stacks GYP-0, GYP-1 and GYP-2 to 200 pounds per day and 14.6 tons per year.

MRRR – Permit Condition 11.9, 11.11

The permittee is required to monitor the visible liquid area to assure compliance with throughput restrictions (Permit Condition 11.2) that are included to assure compliance with emission rate limits. Also, Permit Condition 11.11 requires monitoring of fugitive emissions to assure reasonable control is being used, thereby limiting emissions of particulate fluoride.

Permit Condition 11.12 includes the National Emission Standards for Radon Emissions From Phosphogypsum Stacks to the radon-222 emissions limits (1.9pCi/(ft2-sec) and related requirements in 40 CFR 61 Subpart R.

MRRR – Permit Condition 11.13

Within 60 days following the date on which a stack becomes an inactive stack, each owner or operator of an inactive phosphogypsum stack shall test the stack for radon-222 flux in accordance with the procedures described in 40 CFR part 61, Appendix B, Method 115.

Permit Section 12 – Emergency IC Engines

The purpose of this section of the permit is to incorporate the applicable requirements of 40 CFR 63 Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engine. Owners and operators of emergency IC engines of the size and construction dates that ITAFOS has are subject to work practice standards to meet emission limits specific to manufacturers of the engines. This subpart was promulgated after November 15, 1990 pursuant to section 112 of the Clean Air Act and is exempt from compliance assurance monitoring (CAM) requirements. That is relevant in that the subpart itself has sufficient operating and monitoring to assure compliance, and those requirements are included in the permit (12.1 – 12.16).

6.3 General Provisions

Unless expressly stated, there are no MRRR for the general provisions.

General Compliance, Duty to Comply

The permittee must comply with the terms and conditions of the permit.

[IDAPA 58.01.01.322.15.a, 5/1/94; 40 CFR 70.6(a)(6)(i)]

General Compliance, Need to Halt or Reduce Activity Not a Defense

The permittee cannot use the fact that it would have been necessary to halt or reduce an activity as a defense in an enforcement action.

[IDAPA 58.01.01.322.15.b, 5/1/94; 40 CFR 70.6(a)(6)(ii)]

General Compliance, Duty to Supplement or Correct Application

The permittee must promptly submit such supplementary facts or corrected information upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application. The permittee must also provide information as necessary to address any new requirements that become applicable after the date a complete application has been filed but prior to the release of a draft permit.

[IDAPA 58.01.01.315.01, 5/1/94; 40 CFR 70.5(b)]

Reopening, Additional Requirements, Material Mistakes, Etc.

This term lists the instances when the permit must be reopened and revised, including times when additional requirements become applicable, when the permit contains mistakes, or when revision or revocation is necessary to assure compliance with applicable requirements.

[IDAPA 58.01.01.322.15.c, 5/1/94; IDAPA 58.01.01.386, 3/19/99; 40 CFR 70.7(f)(1), (2); 40 CFR 70.6(a)(6)(iii)]

Reopening, Permitting Actions

This term discusses modification, revocation, reopening, and/or reissuance of the permit for cause. If the permittee files a request to modify, revoke, reissue, or terminate the permit, the request does not stay any permit condition, nor does notification of planned changes or anticipated noncompliance.

[IDAPA 58.01.01.322.15.d, 5/1/94; 40 CFR 70.6(a)(6)(iii)]

Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege.

[IDAPA 58.01.01.322.15.e, 5/1/94; 40 CFR 70.6(a)(6)(iv)]

Information Requests

The permittee must furnish, within a reasonable time to DEQ, any information, including records required by the permit, that is requested in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.

[Idaho Code §39-108; IDAPA 58.01.01.122, 4/5/00; IDAPA 58.01.01.322.15.f, 4/5/00; 40 CFR 70.6(a)(6)(v)]

Information Requests, Confidential Business Information

Upon request, the permittee must furnish to DEQ copies of records required to be kept by this permit. For information claimed to be confidential, the permittee may furnish such records along with a claim of confidentiality in accordance with Idaho Code §9-342A and applicable implementing regulations including IDAPA 58.01.01.128.

[IDAPA 58.01.01.322.15.g, 5/1/94; IDAPA 58.01.01.128, 4/5/00; 40 CFR 70.6(a)(6)(v)]

Severability

If any provision of the permit is held to be invalid, all unaffected provisions of the permit will remain in effect and enforceable.

[IDAPA 58.01.01.322.15.h, 5/1/94; 40 CFR 70.6(a)(5)]

Changes Requiring Permit Revision or Notice

The permittee may not commence construction or modification of any stationary source, facility, major facility, or major modification without first obtaining all necessary permits to construct or an approval under IDAPA 58.01.01.213, or complying with IDAPA 58.01.01.220 through 223. The permittee must comply with IDAPA 58.01.01.380 through 386 as applicable.

[IDAPA 58.01.01.200-223, 4/2/08; IDAPA 58.01.01.322.15.i, 3/19/99; IDAPA 58.01.01.380-386, 7/1/02; 40 CFR 70.4(b)(12), (14), (15), and 70.7(d), (e)]

Changes that are not addressed or prohibited by the Tier I operating permit require a Tier I operating permit revision if such changes are subject to any requirement under Title IV of the CAA, 42 U.S.C. Section 7651 through 7651c, or are modifications under Title I of the CAA, 42 U.S.C. Section 7401 through 7515. Administrative amendments (IDAPA 58.01.01.381), minor permit modifications (IDAPA 58.01.01. 383), and significant permit modifications (IDAPA 58.01.01.382) require a revision to the Tier I operating permit. IDAPA 58.01.01.502(b)(10) changes are authorized in accordance with IDAPA 58.01.01.384. Off permit changes and required notice are authorized in accordance with IDAPA 58.01.01.385.

[IDAPA 58.01.01.381-385, 7/1/02; IDAPA 58.01.01.209.05, 4/11/06; 40 CFR 70.4(b)(14) and (15)]

Federal and State Enforceability

All permit conditions are federally enforceable unless specified in the permit as a state or local only requirement. State and local only requirements are not required under the CAA and are not enforceable by EPA or by citizens.

[IDAPA 58.01.01.322.15.j, 5/1/94; IDAPA 58.01.01.322.15.k, 3/23/98; Idaho Code §39-108; 40 CFR 70.6(b)(1), (2)]

Inspection and Entry

Upon presentation of credentials, the facility shall allow DEQ or an authorized representative of DEQ to do the following:

- Enter upon the permittee's premises where a Tier I source is located or emissions related activity is conducted, or where records are kept under conditions of this permit;
- Have access to and copy, at reasonable times, any records that are kept under the conditions of this permit;
- Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
- As authorized by the Idaho Environmental Protection and Health Act, sample or monitor, at reasonable times, substances or parameters for the purpose of determining or ensuring compliance with this permit or applicable requirements.

[Idaho Code §39-108; IDAPA 58.01.01.322.15.l, 5/1/94; 40 CFR 70.6(c)(2)]

New Applicable Requirements

The permittee must continue to comply with all applicable requirements and must comply with new requirements on a timely basis.

[IDAPA 58.01.01.322.10, 4/5/00; IDAPA 58.01.01.314.10.a.ii, 5/1/94; 40 CFR 70.6(c)(3) citing 70.5(c)(8)]

Fees

The owner or operator of a Tier I source shall pay annual registration fees to DEQ in accordance with IDAPA 58.01.01.387 through IDAPA 58.01.01.397.

[IDAPA 58.01.01.387, 4/2/03; 40 CFR 70.6(a)(7)]

Certification

All documents submitted to DEQ shall be certified in accordance with IDAPA 58.01.01.123 and comply with IDAPA 58.01.01.124.

[IDAPA 58.01.01.322.15.o, 5/1/94; 40 CFR 70.6(a)(3)(iii)(A); 40 CFR 70.5(d)]

Renewal

The permittee shall submit an application to DEQ for a renewal of this permit at least six months before, but no earlier than 18 months before, the expiration date of this operating permit. To ensure that the term of the operating permit does not expire before the permit is renewed, the owner or operator is encouraged to submit a renewal application nine months prior to the date of expiration.

[IDAPA 58.01.01.313.03, 4/5/00; 40 CFR 70.5(a)(1)(iii)]

If a timely and complete application for a Tier I operating permit renewal is submitted, but DEQ fails to issue or deny the renewal permit before the end of the term of this permit, then all the terms and conditions of this permit including any permit shield that may have been granted pursuant to IDAPA 58.01.01.325 shall remain in effect until the renewal permit has been issued or denied.

[IDAPA 58.01.01.322.15.p, 5/1/94; 40 CFR 70.7(b)]

Permit Shield

Compliance with the terms and conditions of the Tier I operating permit, including those applicable to all alternative operating scenarios and trading scenarios, shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:

- Such applicable requirements are included and are specifically identified in the Tier I operating permit; or
  - DEQ has determined that other requirements specifically identified are not applicable and all of the criteria set forth in IDAPA 58.01.01.325.01(b) have been met.
- The permit shield shall apply to permit revisions made in accordance with IDAPA 58.01.01.381.04 (administrative amendments incorporating the terms of a permit to construct), IDAPA 58.01.01.382.04 (significant modifications), and IDAPA 58.01.01.384.03 (trading under an emissions cap).
- Nothing in this permit shall alter or affect the following:
  - Any administrative authority or judicial remedy available to prevent or terminate emergencies or imminent and substantial dangers;
  - The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
  - The applicable requirements of the acid rain program, consistent with 42 U.S.C. Section 7651(g)(a); and
  - The ability of EPA to obtain information from a source pursuant to Section 114 of the CAA; or the ability of DEQ to obtain information from a source pursuant to Idaho Code §39-108 and IDAPA 58.01.01.122.

[Idaho Code §39-108 and 112; IDAPA 58.01.01.122, 4/5/00; IDAPA 58.01.01.322.15.m, 325.01, 5/1/94; IDAPA 58.01.01.325.02, 3/19/99; IDAPA 58.01.01.381.04, 382.04, 383.05, 384.03, 385.03, 3/19/99; 40 CFR 70.6(f)]

Compliance Schedule and Progress Reports

- For each applicable requirement for which the source is not in compliance, the permittee shall comply with the compliance schedule incorporated in this permit.
- For each applicable requirement that will become effective during the term of this permit and that provides a detailed compliance schedule, the permittee shall comply with such requirements in accordance with the detailed schedule.
- For each applicable requirement that will become effective during the term of this permit that does not contain a more detailed schedule, the permittee shall meet such requirements on a timely basis.
- For each applicable requirement with which the permittee is in compliance, the permittee shall continue to comply with such requirements.

[IDAPA 58.01.01.322.10, 4/5/00; IDAPA 58.01.01.314.9, 5/1/94; IDAPA 58.01.01.314.10, 4/5/00; 40 CFR 70.6(c)(3) and (4)]

Periodic Compliance Certification

The permittee shall submit compliance certifications during the term of the permit for each emissions unit to DEQ and the EPA as specified.

- Compliance certifications for all emissions units shall be submitted annually unless otherwise specified;
- All original compliance certifications shall be submitted to DEQ and a copy of all compliance certifications shall be submitted to the EPA.

[IDAPA 58.01.01.322.11, 4/6/05; 40 CFR 70.6(c)(5)(iii) as amended, 62 Fed. Reg. 54900, 54946 (10/22/97); 40 CFR 70.6(c)(5)(iv)]

False Statements

The permittee may not make any false statement, representation, or certification in any form, notice, or report required under this permit, or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.125, 3/23/98]

No Tampering

The permittee may not render inaccurate any monitoring device or method required under this permit or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.126, 3/23/98]

Semiannual Monitoring Reports.

In addition to all applicable reporting requirements identified in this permit, the permittee shall submit reports of any required monitoring at least every six months as specified.

[IDAPA 58.01.01.322.15.q, 3/23/98; IDAPA 58.01.01.322.08.c, 4/5/00; 40 CFR 70.6(a)(3)(iii)]

Reporting Deviations and Excess Emissions

Each and every applicable requirement, including MRRR, is subject to prompt deviation reporting. Deviations due to excess emissions must be reported in accordance Sections 130-136. All instances of deviation from Tier I operating permit requirements must be included in the deviation reports. The reports must describe the probable cause of the deviation and any corrective action or preventative measures taken. Deviation reports must be submitted at least every six months unless the permit specifies a different time period as required by IDAPA 58.01.01.322.08.c. Examples of deviations include, but are not limited to, the following:

- Any situation in which an emissions unit fails to meet a permit term or condition

- Emission control device does not meet a required operating condition
- Observations or collected data that demonstrate noncompliance with an emissions standard
- Failure to comply with a permit term that requires a report

[IDAPA 58.01.01.322.15.q, 3/23/98; IDAPA 58.01.01.135, 4/11/06; 40 CFR 70.6(a)(3)(iii)]

Permit Revision Not Required, Emissions Trading

No permit revision will be required, under any approved, economic incentives, marketable permits, emissions trading, and other similar programs or processes, for changes that are provided for in the permit.

[IDAPA 58.01.01.322.05.b, 4/5/00; 40 CFR 70.6(a)(8)]

Emergency

In accordance with IDAPA 58.01.01.332, an "emergency" as defined in IDAPA 58.01.01.008, constitutes an affirmative defense to an action brought for noncompliance with such technology-based emissions limitation if the conditions of IDAPA 58.01.01.332.02 are met.

[IDAPA 58.01.01.332.01, 4/5/00; 40 CFR 70.6(g)]

7. REGULATORY REVIEW

Attainment Designation (40 CFR 81.313)

The facility is located in Caribou County which is designated as attainment or unclassifiable for PM_{10}, $PM_{2.5}$, CO, NO_2, SO_X, and Ozone. Reference 40 CFR 81.313.

Title V Classification (IDAPA 58.01.01.300, 40 CFR Part 70)

The facility is a major facility which has PM_{10}, SO_2, NO_x and CO emissions greater than 100 tons per year. The facility is also a HAP major source; hydrogen fluoride emissions are greater than both the 10 ton per year major facility threshold and the 25 tons per year threshold for all HAPs combined.

PSD Classification (40 CFR 52.21)

The facility is a designated source (phosphate rock processing plant) and has PM_{10}, SO_2, NO_x and CO emissions greater than 100 tons per year. The facility is an existing PSD source.

NSPS Applicability (40 CFR 60)

The facility is subject to the following NSPS:

40 CFR 60 Subpart Db - Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units

40 CFR 60 Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

Detailed regulatory reviews of these subparts are provided in Appendix B and C. DEQ is delegated these subparts.

NESHAP Applicability (40 CFR 61)

The facility is subject to 40 CFR 61 Subpart R - National Emission Standards for Radon Emissions From Phosphogypsum Stacks. All of the provisions included in this subpart are applicable to the permittee. The provisions of this subpart are included in 11 of this permit. DEQ is not delegated this subpart.

MACT Applicability (40 CFR 63)

The facility is subject to the following MACT:

40 CFR 63 Subpart AA - National Emission Standards for Hazardous Air Pollutants from Phosphoric Acid Manufacturing Plants

40 CFR 63 Subpart BB - National Emission Standards for Hazardous Air Pollutants from Phosphate Fertilizers Production Plants

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

40 CFR 63 Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

Detailed regulatory reviews of these subparts are provided in Appendix D through G. DEQ is delegated these subparts.

CAM Applicability (40 CFR 64)

In the previous Tier I permitting action for this facility it was determined that compliance assurance monitoring (CAM) requirements do not apply to the ITAFOS facility. The only new emission unit at the facility is GYP stack #3, and that emission unit does not have any specific emission rate limits to which CAM might apply. Consistent with the previous permit analysis it has been determined that CAM still does not apply.

The majority of the sources at the facility are regulated by MACTs that were proposed after 1990, thereby exempting the regulated air pollutants from CAM requirements in accordance with 40 CFR 64.2(b)(i). These sources include boilers and process heaters, phosphoric acid manufacturing equipment, and phosphate fertilizers production.

The Table 7.1 summarizes the individual CAM applicability determinations.

Table 7.1 CAM Determinations

Source Area	Regulated Pollutant	CAM Control Device	Post 1990 NSPS/MACT	Controlled Emissions (tpy)	Uncontrolled Emissions (tpy)	CAM Applicability[a]
Granulation	Fluoride	Gran Dryer scrubbers	MACT BB			No – Exempt per 40 CFR 64.2(b)(1)(i)
	PM	Gran Dryer scrubbers	--	7 (Stack Test)	70 (90% Control)	No – Does not meet 40 CFR 64.2(a)(3)
East Sulfuric Acid Plant	SO_2	No CAM control device[c]	--			No – Does not meet 40 CFR 64.2(a)(2) & Exempt for SO_2 by 40 CFR 64.2(b)(vi)
	H_2SO_4					
Nebraska Boiler	NO_x	No CAM control device	MACT DDDDD			No – Does not meet 40 CFR 64.2(a)(2) & Exempt per 40 CFR 64.2(b)(1)(i)
	PM					
	PM_{10}					
	SO_2					
	CO					
	VOC					
Phos Acid	Fluoride	Phos and CV[b] scrubbers	MACT AA			No – Exempt per 40 CFR 64.2(b)(1)(i)
	PM	Phos and CV[b] scrubbers	--	7 (stack test)	70 (90% control)	No – Does not meet 40 CFR 64.2(a)(3)
SPA	Fluoride	SPA scrubber	MACT AA			No – Exempt per 40 CFR 64.2(b)(1)(i)

	PM	SPA scrubber	--	1.1 (stack test)	11 (90% control)	No – Does not meet 40 CFR 64.2(a)(3)
	NO_x	No CAM control device	--			No – Does not meet 40 CFR 64.2(a)(2)
Gyp Stack System	Fluoride		MACT AA			No – Does not meet 40 CFR 64.2(a)(2) & Exempt per 40 CFR 64.2(b)(1)(i)
	Rn-222					
Cleaver Brooks Boiler	NO_x	No CAM control device	MACT DDDDD			No – Does not meet 40 CFR 64.2(a)(2) & Exempt per 40 CFR 64.2(b)(1)(i)
	PM					

a) If the CAM applicability entry in Table 7.1states that a source is "exempt per 40 CFR 64.2(b)(1)(i)", then the source also fails to meet the applicability criteria of 40 CFR 64.2(a)(1).
b) Conditioning vent.
c) The mist eliminator that limits H_2SO_4 emissions was previously determined to be process equipment as opposed to a control device (see the March 1, 2010 Statement of Basis, Section 6.13 for Permit No. T1-060308).

Acid Rain Permit (40 CFR 72-75)

ITAFOS is not an electric utility, therefore, the Title IV acid rain program requirements do not apply.

8. PUBLIC COMMENT

As required by IDAPA 58.01.01.364, a public comment period was made available to the public from December 13, 2018 – January 14, 2019. During this time, comments were not submitted in response to DEQ's proposed action.

9. EPA REVIEW OF PROPOSED PERMIT

As required by IDAPA 58.01.01.366, the proposed permit was sent to EPA Region 10 on January 16, 2019 for its review and comment. DEQ requested an expedited review because there were no comments on the proposed permit and no comments were received by January 28, 2019

Appendix A - Emissions Inventory

Table 2. Criteria Air Pollutant Emissions, Ammonia Emissions, Hydrogen Fluoride Emissions

EU ID	Emission Unit	Total Fluorides [c] (tpy)	HF (tpy)	NH_3 (tpy)	PM (tpy)	PM_{10} (tpy)	$PM_{2.5}$ (tpy)	SO_2 (tpy)	NO_X (tpy)	VOC (tpy)	CO (tpy)	Pb (tpy)	H_2S (tpy)	TRS (tpy)	H_2SO_4 (tpy)
EU ID 14-11-0##	All Ore Unloading Transfer Points	--	--	--	2.42	1.14	0.17	--	--	--	--	--	--	--	--
EU ID 14-11-100	ROM Storage Pile	--	--	--	18.81	9.41	1.41	--	--	--	--	--	--	--	--
EU ID 14-11-101	B+ Storage Pile	--	--	--	5.69	2.84	0.43	--	--	--	--	--	--	--	--
EU ID 14-11-102	High AL Storage Pile	--	--	--	5.65	2.82	0.42	--	--	--	--	--	--	--	--
EU ID 14-11-103	Washed Ore Stock Pile	--	--	--	0.76	0.38	0.06	--	--	--	--	--	--	--	--
EU ID 14-11-104	Reject Storage Pile	--	--	--	0.11	0.05	8.14E-03	--	--	--	--	--	--	--	--
EU ID 15-11-0##	All Wash Plant Transfer Points	--	--	--	2.20	1.04	0.16	--	--	--	--	--	--	--	--
EU ID 23-11-001	East Sulfuric Acid Plant Stack	--	--	--	19.67	7.37	3.19	735.50	25.46	--	--	--	--	--	42.43
EU ID 23-11-002	Duct Vent Stack (Startup Emissions for Warmup and 'Dry Blow')	--	--	--	7.47E-03	7.47E-03	7.47E-03	See Note "B"	0.10	5.41E-03	0.08	--	--	--	--
EU ID 23-11-003	Manway Door (Startup Emissions for 'Wet Blow')	--	--	--	3.45E-03	3.45E-03	3.45E-03	See Note "B"	0.05	2.49E-03	0.04	--	--	--	--
EU ID 23-11-004	East Sulfuric Acid Plant Cooling Tower	0.20	2.48E-03	--	14.59	4.81	0.72	--	--	--	--	--	--	--	--
EU ID 23-11-005	Molten Sulfur Railcar Unloading	--	--	--	--	--	--	--	--	--	--	--	18.53	18.53	--
EU ID 23-11-006	Sulfur Pit Ground-Level Vents	--	--	--	--	--	--	--	--	--	--	--	See Note "C"	See Note "C"	--
EU ID 23-11-007	Sulfur Storage Tank Vents	--	--	--	--	--	--	--	--	--	--	--	See Note "C"	See Note "C"	--
EU ID 23-11-008	East Plant 10' Sulfuric Acid Product Tank (93%)	--	--	--	--	--	--	--	--	--	--	--	--	--	4.37E-05
EU ID 23-11-009	East Plant 28.8' Sulfuric Acid Tank 1 (98%)	--	--	--	--	--	--	--	--	--	--	--	--	--	2.37E-03
EU ID 23-11-010	East Plant 20.5' Sulfuric Acid Tank 2 (98%)	--	--	--	--	--	--	--	--	--	--	--	--	--	1.02E-03
EU ID 23-11-011	East Plant Acid Regen Tank (93%)	--	--	--	--	--	--	--	--	--	--	--	--	--	1.84E-07
EU ID 23-11-701	Process Sewer Sump (East Plant)	--	--	--	--	--	--	--	--	--	--	--	--	--	5.91E-06
EU ID 23-11-702	Boiler Blowdown Sump	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 23-11-703	Cooling Tower Sump	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 08-11-001	Neutralization Tank	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 08-11-002	Limestone Bin	--	--	--	0.02	2.81E-03	1.05E-03	--	--	--	--	--	--	--	--
EU ID 08-11-003	H2SO4 Railcar Unloading (93%)	--	--	--	--	--	--	--	--	--	--	--	--	--	2.04E-06
EU ID 08-11-004	North Plant Acid Regen Tank (93%)	--	--	--	--	--	--	--	--	--	--	--	--	--	9.11E-08
EU ID 08-11-101	North Plant 52' Sulfuric Acid Tank 1 (93%)	--	--	--	--	--	--	--	--	--	--	--	--	--	2.75E-06
EU ID 08-11-102	North Plant 52' Sulfuric Acid Tank 2 (93%)	--	--	--	--	--	--	--	--	--	--	--	--	--	2.75E-06
EU ID 08-11-103	North Plant 75' Sulfuric Acid Tank 3 (93%)	--	--	--	--	--	--	--	--	--	--	--	--	--	4.11E-06
EU ID 08-11-105	North Plant 45' Sulfuric Acid Tank 5 (93%)	--	--	--	--	--	--	--	--	--	--	--	--	--	1.70E-06
EU ID 08-11-106	North Plant 45' Sulfuric Acid Tank 6 (93%)	--	--	--	--	--	--	--	--	--	--	--	--	--	1.64E-06
EU ID 08-11-107	North Plant 45' Sulfuric Acid Tank 7 (93%)	--	--	--	--	--	--	--	--	--	--	--	--	--	1.64E-06
EU ID 08-11-108	North Plant 45' Sulfuric Acid Tank 8 (93%)	--	--	--	--	--	--	--	--	--	--	--	--	--	1.64E-06
EU ID 08-11-501	Nebraska Boiler	--	--	--	4.42	4.42	4.42	0.53	70.71	1.50	35.40	4.59E-04	--	--	--
EU ID 08-11-502	North Sulfuric Emergency Generator	--	--	--	0.82	0.82	0.82	0.76	11.49	0.93	2.47	--	--	--	--
EU ID 08-11-701	Pipe Rack Blowdown Sump	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 08-11-702	Utility Sump	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 08-11-703	Acid Car Unloading Sump	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 08-11-704	Acid Storage Tank Area Sump	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 26-11-042	Phosphoric Acid Scrubber	3.80	2.85	--	140.14	35.03	5.26	--	--	--	--	--	--	--	--
EU ID 35-11-009	Conditioning Vent Scrubber ("CV Scrubber")	See Note "A"	See Note "A"	--	See Note "A"	See Note "A"	See Note "A"	--	--	--	--	--	--	--	--
EU ID 26-11-048	Superphosphoric Acid Scrubber	1.86	1.40	--	85.17	21.29	3.19	--	--	--	--	--	--	--	--
EU ID 26-11-002	#1 Flash Cooler Vacuum Pump	See Note "A"	See Note "A"	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 26-11-003	#2 Flash Cooler Vacuum Pump	See Note "A"	See Note "A"	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 26-11-011	24C Filter Vacuum Pump	See Note "A"	See Note "A"	--	--	--	--	--	--	--	--	--	--	--	--

[a] Emissions from the conditioning vent scrubber, flash cooler vacuum pumps, filter vacuum pumps, 24-c scrubber seal pot, and the 6&7 seal tank are included in the NESHAP AA fluorides emission limit for the phos acid plant. These sources are not routed to the scrubber, but their emissions are included in the regulatory limit and compliance demonstrations. Furthermore, PM emissions from the conditioning vent scrubber are conceptually included in the reported emissions for the phosphoric acid scrubber, whose upper limits on emissions are based on the process weight for the phosphoric acid process line.

[b] Emissions from the east sulfuric acid plant are emitted from these EU IDs during startup. However, the overall regulated PTE of the east plant is as identified for the EU ID for the plant stack. The quantity of emissions from startup on a per-event basis is calculated in the calculation tables for reference.

[c] Emissions from the sulfur pit vents and sulfur tank are already included in the calculation of the PTE of the unloading operation. This PTE calculation assumes 100% release of the reduced sulfur content of the molten sulfur.

[d] See following page.

[e] Total fluorides are calculated based on the sum of fluoride mass in the HF and SiF_4 emissions.

Molar Mass F (lb/lbmol):	19.00
Molar Mass HF	20.01
Molar Mass SiF_4	104.08

EU ID	Emission Unit	Total Fluorides [a] (tpy)	HF (tpy)	NH_3 (tpy)	PM (tpy)	PM_{10} (tpy)	$PM_{2.5}$ (tpy)	SO_2 (tpy)	NO_x (tpy)	VOC (tpy)	CO (tpy)	Pb (tpy)	H_2S (tpy)	TRS (tpy)	H_2SO_4 (tpy)
EU ID 26-11-006	#1 Belt Filter Vacuum Pump	See Note "A"	See Note "A"	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 26-11-007	#2 Belt Filter Vacuum Pump	See Note "A"	See Note "A"	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 26-11-010	24C Filter Scrubber Seal Pot	See Note "A"	See Note "A"	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 26-11-012	Nash Seal Tank	4.07E-05	3.73E-05	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 26-11-013	Uncontaminated Water Tank	8.61E-05	8.75E-05	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 26-11-601	North Phos Filtration Sump	1.83E-11	1.28E-11	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 26-11-602	South Phos Filtration Sump	1.83E-11	1.28E-11	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 26-11-603	Process Sewer Sump	0.03	0.03	--	--	--	--	--	--	--	--	--	--	--	3.17E-06
EU ID 26-11-609	Central Floor Sump	2.21E-03	2.23E-03	--	--	--	--	--	--	--	--	--	--	--	1.03E-07
EU ID 26-11-026	Tank #13	1.88E-04	1.84E-04	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 26-11-027	Tank #23 42% Acid	8.85E-04	8.63E-04	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 26-11-028	Tank #18 42% Acid	1.38E-03	1.34E-03	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 26-11-029	Tank #21	7.59E-04	7.39E-04	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 26-11-040	#6&7 Seal Tank	See Note "A"	See Note "A"	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 26-11-043	Scrubber Overflow Seal Tank	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 35-11-008	PPA Plant Cooling Tower	--	--	--	3.09	1.02	0.15	--	--	--	--	--	--	--	--
EU ID 35-11-010	PPA Plant Regen Tank (93%)	--	--	--	--	--	--	--	--	--	--	--	--	--	5.84E-08
EU ID 35-11-501	Cleaver-Brooks Boiler	--	--	--	5.87	5.87	5.87	0.46	33.00	4.25	64.93	3.86E-04	--	--	--
EU ID 35-11-502	South Firewater Pump Engine	--	--	--	0.17	0.17	0.17	0.15	2.33	0.19	0.50	--	--	--	--
EU ID 35-11-618	FFS Surge Sump	1.02E-05	9.59E-06	--	--	--	--	--	--	--	--	--	--	--	1.04E-07
EU ID 35-11-619	Green Acid Sump	7.11E-04	6.72E-04	--	--	--	--	--	--	--	--	--	--	--	4.50E-07
EU ID 35-11-620	Acid Sewer Sump	0.02	0.02	--	--	--	--	--	--	--	--	--	--	--	1.28E-06
EU ID 35-11-701	Utility Sump	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 26-11-044	Tank #55 (52%) Storage	7.53E-04	7.45E-04	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 26-11-045	Tank #56 (52%) Storage	7.53E-04	7.45E-04	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 26-11-046	Tank #57 (52%) Storage	3.00E-03	2.97E-03	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 26-11-047	Tank #58 (52%) Storage	3.00E-03	2.97E-03	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 26-11-401	MGA Truck Loadout (52% P2O5)	6.44E-06	4.13E-06	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 26-11-402	MGA Rail Loadout (52% P2O5)	4.70E-05	3.02E-05	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 26-11-052	#1 SPA Burner	--	--	--	0.83	0.83	0.83	0.07	5.49	0.60	9.22	5.49E-05	--	--	--
EU ID 26-11-053	#2 SPA Burner	--	--	--	0.83	0.83	0.83	0.07	10.97	0.60	9.22	5.49E-05	--	--	--
EU ID 26-11-054	#1 Therminol Tank	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 26-11-055	#2 Therminol Tank	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 26-11-056	Nitric Acid Tank	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 26-11-057	Oxidation Reactor	0.15	0.11	--	--	--	--	--	5.00	--	9.53	--	--	--	--
EU ID 26-11-059	Tank #28	2.62E-03	2.56E-03	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 26-11-403	SPA Loadout (69% P2O5)	1.77E-03	1.15E-03	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 26-11-604	Tank #26 Containment Area Sump	1.80E-05	1.80E-05	--	--	--	--	--	--	--	--	--	--	--	7.21E-08
EU ID 26-11-605	Tank #28 Containment Sump	1.82E-06	1.84E-06	--	--	--	--	--	--	--	--	--	--	--	5.66E-08
EU ID 26-11-606	Tank #51 Containment Area	4.96E-06	5.04E-06	--	--	--	--	--	--	--	--	--	--	--	5.39E-07
EU ID 26-11-657	North Car Wash Sump	1.54E-03	1.57E-03	--	--	--	--	--	--	--	--	--	--	--	1.59E-05
EU ID 26-11-607	South Car Wash Sump	6.40E-03	6.50E-03	--	--	--	--	--	--	--	--	--	--	--	1.99E-05
EU ID 26-11-610	Grade Control Floor Sump	2.52E-03	2.54E-03	--	--	--	--	--	--	--	--	--	--	--	2.81E-07
EU ID 26-11-611	Oxidation Area Sump	6.97E-03	7.05E-03	--	--	--	--	--	--	--	--	--	--	--	3.17E-07
EU ID 26-11-612	Oxidation Area Sump 2	7.07E-03	7.14E-03	--	--	--	--	--	--	--	--	--	--	--	8.06E-08
EU ID 26-11-701	Loadout Containment	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 26-11-702	SPA Containment Sump	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 26-11-703	(52%) Loadout Sump	--	--	--	--	--	--	--	--	--	--	--	--	--	--

[a] Emissions from the conditioning vent scrubber, flash cooler vacuum pumps, filter vacuum pumps, 24-c scrubber seal pot and the 6&7 seal tank are included in the NESHAP AA fluorides emission limit for the phos acid plant. These sources are not routed to the scrubber, but their emissions are included in the regulatory limit and compliance demonstrations. Furthermore, PM emissions from the conditioning vent scrubber are conceptually included in the reported emissions for the phosphoric acid scrubber, whose upper limits on emissions are based on the process weight for the phosphoric acid process line.

* Total fluorides are calculated based on the sum of fluoride mass in the HF and SiF_4 emissions.

Molar Mass F (lb/lbmol):	19.00
Molar Mass HF	20.01
Molar Mass SiF_4	104.08

EU ID	Emission Unit	Total Fluorides [a] (tpy)	HF (tpy)	NH_3 (tpy)	PM (tpy)	PM_{10} (tpy)	$PM_{2.5}$ (tpy)	SO_2 (tpy)	NO_x (tpy)	VOC (tpy)	CO (tpy)	Pb (tpy)	H_2S (tpy)	TRS (tpy)	H_2SO_4 (tpy)
EU ID 24-11-001	Gran Plant Stack	11.91	8.94	3.50	7.05	2.68	1.98	--	--	--	--	--	--	--	--
EU ID 24-11-002	Gran Scrubber Seal Tank	4.88E-04	4.96E-04	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 24-11-003	Gran/NH3 Scrubber Tank	4.99E-05	4.86E-05	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 24-11-004	Gran Effluent Tank	2.40E-03	2.44E-03	--	--	--	--	--	--	--	--	--	--	--	3.90E-06
EU ID 24-11-005	Dryer Scrubber Seal Tank	2.09E-04	2.13E-04	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 24-11-006	Dryer Scrubber Tank	1.53E-05	1.49E-05	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 24-11-007	Loading Point for Cleanup Elevator	2.15E-04	--	--	1.14E-02	5.38E-03	8.15E-04	--	--	--	--	--	--	--	--
EU ID 24-11-008	Ribbon Blender to Belt #38 Transfer Point	5.38E-05	--	--	2.85E-03	1.35E-03	2.04E-04	--	--	--	--	--	--	--	--
EU ID 24-11-009	Fines from Dryer Cyclones to #2 Drag Conveyor	2.15E-04	--	--	1.14E-02	5.38E-03	8.15E-04	--	--	--	--	--	--	--	--
EU ID 24-11-010	Bypass Drop Point from Cooler Feed Belt to Belt #28	2.36E-06	--	--	1.25E-04	5.90E-05	8.93E-06	--	--	--	--	--	--	--	--
EU ID 24-11-011	Belt #38 to Belt #28 Transfer Point	2.69E-04	--	--	1.42E-02	6.73E-03	1.02E-03	--	--	--	--	--	--	--	--
EU ID 24-11-012	Dryer Burner	--	--	--	1.79	1.79	1.79	0.14	23.62	1.30	19.84	1.18E-04	--	--	--
EU ID 24-11-013	Ammonia Sphere (Fugitive Components)	--	--	3.27	--	--	--	--	--	--	--	--	--	--	--
EU ID 24-11-014	Ammonia Railcar Unloading	--	--	0.07	--	--	--	--	--	--	--	--	--	--	--
EU ID 24-11-612	North Floor Sump	3.28E-03	3.34E-03	--	--	--	--	--	--	--	--	--	--	--	2.67E-07
EU ID 24-11-613	South Floor Sump	1.30E-03	1.32E-03	--	--	--	--	--	--	--	--	--	--	--	1.05E-07
EU ID 24-11-614	Out MAP Plant Sump	3.68E-06	3.69E-06	--	--	--	--	--	--	--	--	--	--	--	0.00E+00
EU ID 05-11-101	Dry MAP North Storage Pile	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 05-11-102	Dry MAP South Storage Pile	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 05-11-0##	All Drop Points in MAP Storage/Loadout	0.30	--	--	16.08	7.61	1.15	--	--	--	--	--	--	--	--
EU ID 09-11-100	F-Gyp-0	70.19	48.51	--	11.36	5.68	0.85	--	--	--	--	--	--	--	--
EU ID 09-11-101	F-Gyp-1	35.04	24.26	--	See Note "D"	See Note "D"	See Note "D"	--	--	--	--	--	--	--	--
EU ID 09-11-102	F-Gyp-2	37.96	26.28	--	See Note "D"	See Note "D"	See Note "D"	--	--	--	--	--	--	--	--
EU ID 09-11-001	Cooling Ponds	7.14	6.99	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 09-11-002	Tailing Ponds	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 09-11-003	Decant Ditches	3.68	3.61	--	--	--	--	--	--	--	--	--	--	--	--
EU ID 09-11-004	Borrow Pile	--	--	--	5.92	2.96	0.44	--	--	--	--	--	--	--	--
EU ID 09-11-801	Gyp Backhoe Drop Point	--	--	--	9.37E-03	4.43E-03	6.71E-04	--	--	--	--	--	--	--	--
EU ID 09-11-802	Unpaved Roads - Employee Vehicles	--	--	--	2.15	0.55	0.05	--	--	--	--	--	--	--	--
EU ID 09-11-803	Unpaved Roads - Four-Wheel Plant Carts	--	--	--	3.29	0.84	0.08	--	--	--	--	--	--	--	--
EU ID 09-11-804	Unpaved Roads - D10 Dozer	--	--	--	0.20	0.05	5.14E-03	--	--	--	--	--	--	--	--
EU ID 09-11-805	Unpaved Roads - 14M Grader	--	--	--	0.54	0.14	1.39E-02	--	--	--	--	--	--	--	--
EU ID 09-11-806	Unpaved Roads - 651E Scraper - Loaded - Gyp	--	--	--	16.76	6.36	0.64	--	--	--	--	--	--	--	--
EU ID 09-11-807	Unpaved Roads - 651E Scraper - Loaded - Borrow	--	--	--	3.87	1.47	0.15	--	--	--	--	--	--	--	--
EU ID 09-11-808	Unpaved Roads - 651E Scraper - Loaded - Borrow Route	--	--	--	2.78	0.71	0.07	--	--	--	--	--	--	--	--
EU ID 09-11-809	Unpaved Roads - 631 Water Wagon	--	--	--	0.32	0.08	8.22E-03	--	--	--	--	--	--	--	--
EU ID 09-11-810	Unpaved Roads - 815G Compactor	--	--	--	0.06	1.49E-02	1.49E-03	--	--	--	--	--	--	--	--
EU ID 09-11-811	Unpaved Roads - 1/2 Ton Pickups - Ponds - Gravel	--	--	--	20.19	5.15	0.51	--	--	--	--	--	--	--	--
EU ID 09-11-812	Unpaved Roads - 1/2 Ton Pickups - Ponds - Gyp Area	--	--	--	0.11	0.03	2.79E-03	--	--	--	--	--	--	--	--
EU ID 09-11-813	Unpaved Roads - 1/2 Ton Pickups - Ponds - Borrow Area	--	--	--	2.50	0.64	0.06	--	--	--	--	--	--	--	--
EU ID 09-11-814	Unpaved Roads - 1/2 Ton Pickups - Other Routes	--	--	--	17.13	4.37	0.44	--	--	--	--	--	--	--	--
EU ID 09-11-502	No. 11 Well Engine	--	--	--	0.02	0.02	0.02	1.34E-03	0.53	0.32	0.49	--	--	--	--
EU ID 09-11-503	Natural Gas-Fired Potable Water Pump	--	--	--	1.66E-03	1.66E-03	1.66E-03	9.78E-05	0.68	0.02	0.05	--	--	--	--
EU ID 09-11-504	25 kW Backup for No. 11 Well Engine	--	--	--	5.89E-03	5.89E-03	5.89E-03	4.12E-04	0.16	0.10	0.15	--	--	--	--
EU ID 09-11-505	Rollover Generator	--	--	--	0.06	0.06	0.06	0.06	0.91	0.07	0.20	--	--	--	--
Various	All Other Combustion Sources	--	--	--	1.90	1.90	1.90	0.15	24.95	1.37	20.96	1.25E-04	--	--	--
		Total Fluorides [c] (tpy)	HF (tpy)	NH_3 (tpy)	PM (tpy)	PM_{10} (tpy)	$PM_{2.5}$ (tpy)	SO_2 (tpy)	NO_x (tpy)	VOC (tpy)	CO (tpy)	Pb (tpy)	H_2S (tpy)	TRS (tpy)	H_2SO_4 (tpy)
TOTALS		172.35	123.05	6.84	425.41	143.30	38.38	737.89	215.44	11.27	173.08	1.20E-03	18.53	18.53	42.43

[a] Emissions of PM from the gyp stacks can take place by two mechanisms: wind erosion, and vehicle traffic on the stack. Vehicle traffic emissions are calculated in the section on unpaved roads. Wind erosion emissions are negligible for most of the gyp stack area. Non-eroding areas include the hard, caked surfaces on the exterior of the stacks, and the damp (20% or more moisture content) top surface of the stack in the middle. However, wind erosion can occur on areas of the stacks that are used as roads or access points. These areas are made of exposed dry phosphogypsum, which has a high silt content. Such areas are present on Gyp Stack "0." Wind erosion is calculated from these areas based on an EPA method for active storage pile wind erosion.

[c] Total fluorides are calculated based on the sum of fluoride mass in the HF and SiF_4 emissions.

Molar Mass F (lb/lbmol):	19.00
Molar Mass HF	20.01
Molar Mass SiF_4	104.08

Table 3. Speciated Combustion Pollutant Emissions

							EU ID	EU ID 08-11-501	EU ID 35-11-501	EU ID 26-11-052	EU ID 26-11-053	EU ID 24-11-012
							Description	Nebraska Boiler	Cleaver-Brooks Boiler	#1 SPA Burner	#2 SPA Burner	Dryer Burner
CAS No.	Pollutant	HAP? [a]	PAH? [b]	§585 TAP? [c]	§586 TAP? [c]	7-PAH? [d]	Total Emissions (tpy)	EMISSIONS (tpy)	EMISSIONS (tpy)	EMISSIONS (tpy)	EMISSIONS (tpy)	EMISSIONS (tpy)
79-34-5	1,1,2,2-Tetrachloroethane	YES	NO	NO	YES	NO	2.51E-05	--	--	--	--	--
71-55-6	1,1,2-Trichloroethane	YES	NO	YES	NO	NO	1.99E-05	--	--	--	--	--
75-34-3	1,1-Dichloroethane	YES	NO	YES	YES	NO	1.48E-05	--	--	--	--	--
526-73-8	1,2,3-Trimethylbenzene	NO	NO	NO	NO	NO	1.44E-05	--	--	--	--	--
95-63-6	1,2,4-Trimethylbenzene	NO	NO	NO	NO	NO	8.96E-06	--	--	--	--	--
107-06-2	1,2-Dichloroethane	NO	NO	NO	NO	NO	1.48E-05	--	--	--	--	--
78-87-5	1,2-Dichloropropane	YES	NO	YES	NO	NO	1.69E-05	--	--	--	--	--
108-67-8	1,3,5-Trimethylbenzene	NO	NO	NO	NO	NO	2.12E-05	--	--	--	--	--
106-99-0	1,3-Butadiene	YES	NO	NO	YES	NO	2.97E-04	--	--	--	--	--
542-75-6	1,3-Dichloropropene	YES	NO	NO	YES	NO	1.66E-05	--	--	--	--	--
91-57-6	2-Methylnaphthalene	NO	YES	NO	NO	NO	7.83E-05	2.20E-05	1.86E-05	2.63E-06	2.63E-06	5.67E-06
540-84-1	2,2,4-Trimethylpentane	YES	NO	YES	NO	NO	1.57E-04	--	--	--	--	--
83-32-9	Acenaphthene	NO	YES	NO	NO	NO	9.82E-06	1.65E-06	1.39E-06	1.97E-07	1.97E-07	4.25E-07
203-96-8	Acenaphthylene	NO	YES	NO	NO	NO	2.46E-05	1.65E-06	1.39E-06	1.97E-07	1.97E-07	4.25E-07
75-07-0	Acetaldehyde	YES	NO	NO	YES	NO	7.79E-03	--	--	--	--	--
107-02-8	Acrolein	YES	NO	YES	NO	NO	3.53E-03	--	--	--	--	--
71-43-2	Benzene	YES	NO	NO	YES	NO	8.41E-03	1.93E-03	1.62E-03	2.30E-04	2.30E-04	4.96E-04
205-99-2	Benzo(b)fluoranthene	POM	YES	NO	NO	YES	4.75E-06	1.65E-06	1.39E-06	1.97E-07	1.97E-07	4.25E-07
192-97-2	Benzo(e)pyrene	NO	YES	NO	NO	NO	2.60E-07	--	--	--	--	--
191-24-2	Benzo(g,h,i)perylene	POM	YES	NO	NO	NO	4.76E-06	1.10E-06	9.28E-07	1.32E-07	1.32E-07	2.83E-07
92-52-4	Biphenyl	YES	YES	YES	NO	NO	1.33E-04	--	--	--	--	--
106-97-8	Butane	NO	NO	NO	NO	NO	5.03E+00	1.93E+00	1.62E+00	2.30E-01	2.30E-01	4.96E-01
123-72-8; 78-84-2	Butyr/Isobutyraldehyde	NO	NO	NO	NO	NO	6.33E-05	--	--	--	--	--
56-23-5	Carbon Tetrachloride	NO	NO	NO	NO	NO	2.30E-05	--	--	--	--	--
108-90-7	Chlorobenzene	YES	NO	YES	NO	NO	1.91E-05	--	--	--	--	--
75-00-3	Chloroethane	YES	NO	YES	NO	NO	1.17E-06	--	--	--	--	--
67-66-3	Chloroform	YES	NO	NO	YES	NO	1.79E-05	--	--	--	--	--
218-01-9	Chrysene	POM	YES	NO	NO	YES	5.92E-06	1.65E-06	1.39E-06	1.97E-07	1.97E-07	4.25E-07
287-92-3	Cyclopentane	NO	NO	YES	NO	NO	1.42E-04	--	--	--	--	--
74-84-0	Ethane	NO	NO	NO	NO	NO	7.50E+00	2.85E+00	2.40E+00	3.40E-01	3.40E-01	7.32E-01
100-41-4	Ethylbenzene	YES	NO	YES	NO	NO	2.49E-05	--	--	--	--	--
106--93-4	Ethylene Dibromide	NO	NO	NO	NO	NO	2.78E-05	--	--	--	--	--
206-44-0	Fluoranthene	NO	YES	NO	NO	NO	3.32E-05	2.75E-06	2.32E-06	3.29E-07	3.29E-07	7.09E-07
86-73-7	Fluorene	NO	YES	NO	NO	NO	1.07E-04	2.57E-06	2.16E-06	3.07E-07	3.07E-07	6.61E-07
50-00-0	Formaldehyde	YES	NO	NO	YES	NO	2.17E-01	6.89E-02	5.80E-02	8.23E-03	8.23E-03	1.77E-02
67-56-1	Methanol	YES	NO	YES	NO	NO	1.57E-03	--	--	--	--	--
108-87-2	Methylcyclohexane	NO	NO	YES	NO	NO	7.71E-04	--	--	--	--	--

[a] Hazardous Air Pollutants (HAP) are listed in the 1990 Clean Air Act Amendments: http://www.epa.gov/ttnatw01/orig189.html. POM are species pulled in as Polycyclic Organic Matter ("includes organic compounds with more than one benzene ring, and which have a boiling point greater than or equal to 100 º C. ").

[b] Polycyclic Aromatic Hydrocarbon (PAH) are species with 3 or more benzene rings containing only carbon and hydrogen. Naphthalene is included for consistency with IDEQ's carcinogenic TAP definition of PAH.

[c] IDEQ lists Toxic Air Pollutants (TAP) in IDAPA 58.01.01, §§ 585 and 586. §585 contains a list of non-carcinogencic TAP; §586 contains a list of carcinogenic TAP.

[d] IDAPA 58.01.01.586 contains a direct list of the seven compounds that IDEQ classifies as 7-PAH.

Table 4. Speciated Combustion Pollutant Emissions

							EU ID	EU ID 08-11-501	EU ID 35-11-501	EU ID 26-11-052	EU ID 26-11-053	EU ID 24-11-012
							Description	Nebraska Boiler	Cleaver-Brooks Boiler	#1 SPA Burner	#2 SPA Burner	Dryer Burner
CAS No.	Pollutant	HAP? [a]	PAH? [b]	§585 TAP? [c]	§586 TAP? [c]	7-PAH? [d]	Total Emissions (tpy)	EMISSIONS (tpy)	EMISSIONS (tpy)	EMISSIONS (tpy)	EMISSIONS (tpy)	EMISSIONS (tpy)
75-09-2	Methylene Chloride	YES	NO	YES	NO	NO	1.25E-05	--	--	--	--	--
110-54-3	n-Hexane	YES	NO	YES	NO	NO	4.32E+00	1.65E+00	1.39E+00	1.97E-01	1.97E-01	4.25E-01
111-84-2	n-Nonane	NO	NO	YES	NO	NO	6.90E-05	--	--	--	--	--
111-65-9	n-Octane	NO	NO	YES	NO	NO	2.20E-04	--	--	--	--	--
109-66-0	n-Pentane	NO	NO	YES	NO	NO	6.23E+00	2.39E+00	2.01E+00	2.85E-01	2.85E-01	6.14E-01
91-20-3	Naphthalene	YES	YES	YES	NO	NO	1.79E-03	5.60E-04	4.71E-04	6.69E-05	6.69E-05	1.44E-04
85-01-8	Phenanthrene	NO	YES	NO	NO	NO	1.45E-04	1.56E-05	1.31E-05	1.87E-06	1.87E-06	4.02E-06
108-95-2	Phenol	YES	NO	YES	NO	NO	1.50E-05	--	--	--	--	--
74-98-6	Propane	NO	NO	NO	NO	NO	3.86E+00	1.47E+00	1.24E+00	1.76E-01	1.76E-01	3.78E-01
129-00-0	Pyrene	NO	YES	NO	NO	NO	2.87E-05	4.59E-06	3.86E-06	5.49E-07	5.49E-07	1.18E-06
100-42-5	Styrene	YES	NO	YES	NO	NO	1.48E-05	--	--	--	--	--
127-18-4	Tetrachloroethane	YES	NO	NO	YES	NO	1.55E-06	--	--	--	--	--
108-88-3	Toluene	YES	NO	YES	NO	NO	9.77E-03	3.12E-03	2.63E-03	3.73E-04	3.73E-04	8.03E-04
75-01-4	Vinyl Chloride	YES	NO	NO	YES	NO	9.34E-06	--	--	--	--	--
1330-20-7	Xylene	YES	NO	YES	NO	NO	1.06E-03	--	--	--	--	--
7349-92-1	Lead	YES	NO	NO	NO	NO	1.20E-03	4.59E-04	3.86E-04	5.49E-05	5.49E-05	1.18E-04
10024-97-2	Nitrous Oxide	NO	NO	YES	NO	NO	3.84E+00	5.88E-01	1.70E+00	2.41E-01	2.41E-01	5.20E-01
56-49-5	3-Methylchloranthrene	NO	NO	NO	YES	NO	4.31E-06	1.65E-06	1.39E-06	1.97E-07	1.97E-07	4.25E-07
57-97-6	7,12-Dimethylbenz(a)anthracene	NO	NO	NO	NO	NO	3.84E-05	1.47E-05	1.24E-05	1.76E-06	1.76E-06	3.78E-06
120-12-7	Anthracene	NO	YES	NO	NO	NO	1.20E-05	2.20E-06	1.86E-06	2.63E-07	2.63E-07	5.67E-07
56-55-3	Benzo(a)anthracene	POM	YES	NO	NO	NO	9.90E-06	1.65E-06	1.39E-06	1.97E-07	1.97E-07	4.25E-07
50-32-8	Benzo(a)pyrene	POM	YES	NO	YES	YES	3.50E-06	1.10E-06	9.28E-07	1.32E-07	1.32E-07	2.83E-07
207-08-9	Benzo(k)fluoranthene	POM	YES	NO	NO	YES	4.83E-06	1.65E-06	1.39E-06	1.97E-07	1.97E-07	4.25E-07
53-70-3	Dibenzo(a,h)anthracene	POM	YES	NO	NO	YES	4.82E-06	1.10E-06	9.28E-07	1.32E-07	1.32E-07	2.83E-07
25321-22-6	Dichlorobenzene	NO	NO	NO	NO	NO	2.88E-03	1.10E-03	9.28E-04	1.32E-04	1.32E-04	2.83E-04
193-39-5	Indeno(1,2,3-cd)pyrene	POM	YES	NO	NO	YES	5.56E-06	1.65E-06	1.39E-06	1.97E-07	1.97E-07	4.25E-07
115-07-1	Propylene	NO	NO	NO	NO	NO	8.58E-03	--	--	--	--	--
TOTAL PAH	--						2.41E-03	6.25E-04	5.26E-04	7.46E-05	7.46E-05	1.61E-04
TOTAL HAP	--						4.57E+00	1.73E+00	1.45E+00	2.06E-01	2.06E-01	4.44E-01

[a] Hazardous Air Pollutants (HAP) are listed in the 1990 Clean Air Act Amendments: http://www.epa.gov/ttnatw01/orig189.html. POM are species pulled in as Polycyclic Organic Matter ("includes organic compounds with more than one benzene ring, and which have a boiling point greater than or equal to 100 º C. ").

[b] Polycyclic Aromatic Hydrocarbon (PAH) are species with 3 or more benzene rings containing only carbon and hydrogen. Naphthalene is included for consistency with IDEQ's carcinogenic TAP definition of PAH.

[c] IDEQ lists Toxic Air Pollutants (TAP) in IDAPA 58.01.01, §§ 585 and 586. §585 contains a list of non-carcinogencic TAP; §586 contains a list of carcinogenic TAP.

[d] IDAPA 58.01.01.586 contains a direct list of the seven compounds that IDEQ classifies as 7-PAH.

Table 5. Speciated Combustion Pollutant Emissions

							EU ID 23-11-002	EU ID 09-11-503	EU ID 09-11-502	EU ID 09-11-504	Various
							Duct Vent Stack (Startup Emissions for Warmup and 'Dry	Natural Gas-Fired Potable Water Pump	No. 11 Well Engine	25 kW Backup for No. 11 Well Engine	All Other Natural Gas External Combustion Units
CAS No.	Pollutant	HAP? [a]	PAH? [b]	§585 TAP? [c]	§586 TAP? [c]	7-PAH? [d]	EMISSIONS (tpy)	EMISSIONS (tpy)	EMISSIONS (tpy)	EMISSIONS (tpy)	EMISSIONS (tpy)
79-34-5	1,1,2,2-Tetrachloroethane	YES	NO	NO	YES	NO	--	6.65E-06	1.41E-05	4.33E-06	--
71-55-6	1,1,2-Trichloroethane	YES	NO	YES	NO	NO	--	5.29E-06	1.12E-05	3.45E-06	--
75-34-3	1,1-Dichloroethane	YES	NO	YES	YES	NO	--	3.92E-06	8.31E-06	2.56E-06	--
526-73-8	1,2,3-Trimethylbenzene	NO	NO	NO	NO	NO	--	3.82E-06	8.10E-06	2.49E-06	--
95-63-6	1,2,4-Trimethylbenzene	NO	NO	NO	NO	NO	--	2.38E-06	5.04E-06	1.55E-06	--
107-06-2	1,2-Dichloroethane	NO	NO	NO	NO	NO	--	3.92E-06	8.31E-06	2.56E-06	--
78-87-5	1,2-Dichloropropane	YES	NO	YES	NO	NO	--	4.47E-06	9.48E-06	2.91E-06	--
108-67-8	1,3,5-Trimethylbenzene	NO	NO	NO	NO	NO	--	5.62E-06	1.19E-05	3.66E-06	--
106-99-0	1,3-Butadiene	YES	NO	NO	YES	NO	--	4.44E-05	9.41E-05	2.89E-05	--
542-75-6	1,3-Dichloropropene	YES	NO	NO	YES	NO	--	4.39E-06	9.30E-06	2.86E-06	--
91-57-6	2-Methylnaphthalene	NO	YES	NO	NO	NO	2.36E-08	5.52E-06	1.17E-05	3.60E-06	5.99E-06
540-84-1	2,2,4-Trimethylpentane	YES	NO	YES	NO	NO	--	4.16E-05	8.81E-05	2.71E-05	--
83-32-9	Acenaphthene	NO	YES	NO	NO	NO	1.77E-09	2.08E-07	4.40E-07	1.35E-07	4.49E-07
203-96-8	Acenaphthylene	NO	YES	NO	NO	NO	1.77E-09	9.19E-07	1.95E-06	5.99E-07	4.49E-07
75-07-0	Acetaldehyde	YES	NO	NO	YES	NO	--	1.39E-03	2.95E-03	9.06E-04	--
107-02-8	Acrolein	YES	NO	YES	NO	NO	--	8.55E-04	1.81E-03	5.57E-04	--
71-43-2	Benzene	YES	NO	NO	YES	NO	2.06E-06	7.32E-05	1.55E-04	4.77E-05	5.24E-04
205-99-2	Benzo(b)fluoranthene	POM	YES	NO	NO	YES	1.77E-09	2.76E-08	5.85E-08	1.80E-08	4.49E-07
192-97-2	Benzo(e)pyrene	NO	YES	NO	NO	NO	--	6.90E-08	1.46E-07	4.50E-08	--
191-24-2	Benzo(g,h,i)perylene	POM	YES	NO	NO	NO	1.18E-09	6.88E-08	1.46E-07	4.49E-08	2.99E-07
92-52-4	Biphenyl	YES	YES	YES	NO	NO	--	3.52E-05	7.47E-05	2.30E-05	--
106-97-8	Butane	NO	NO	NO	NO	NO	2.06E-03	8.99E-05	1.91E-04	5.86E-05	5.24E-01
123-72-8; 78-84-2	Butyr/Isobutyraldehyde	NO	NO	NO	NO	NO	--	1.68E-05	3.56E-05	1.09E-05	--
56-23-5	Carbon Tetrachloride	NO	NO	NO	NO	NO	--	6.10E-06	1.29E-05	3.98E-06	--
108-90-7	Chlorobenzene	YES	NO	YES	NO	NO	--	5.05E-06	1.07E-05	3.29E-06	--
75-00-3	Chloroethane	YES	NO	YES	NO	NO	--	3.11E-07	6.59E-07	2.03E-07	--
67-66-3	Chloroform	YES	NO	NO	YES	NO	--	4.74E-06	1.00E-05	3.09E-06	--
218-01-9	Chrysene	POM	YES	NO	NO	YES	1.77E-09	1.15E-07	2.44E-07	7.51E-08	4.49E-07
287-92-3	Cyclopentane	NO	NO	YES	NO	NO	--	3.77E-05	8.00E-05	2.46E-05	--
74-84-0	Ethane	NO	NO	NO	NO	NO	3.05E-03	1.75E-02	3.70E-02	1.14E-02	7.74E-01
100-41-4	Ethylbenzene	YES	NO	YES	NO	NO	--	6.60E-06	1.40E-05	4.30E-06	--
106--93-4	Ethylene Dibromide	NO	NO	NO	NO	NO	--	7.36E-06	1.56E-05	4.80E-06	--
206-44-0	Fluoranthene	NO	YES	NO	NO	NO	2.95E-09	1.85E-07	3.91E-07	1.20E-07	7.49E-07
86-73-7	Fluorene	NO	YES	NO	NO	NO	2.75E-09	9.43E-07	2.00E-06	6.14E-07	6.99E-07
50-00-0	Formaldehyde	YES	NO	NO	YES	NO	7.37E-05	8.78E-03	1.86E-02	5.72E-03	1.87E-02
67-56-1	Methanol	YES	NO	YES	NO	NO	--	4.16E-04	8.81E-04	2.71E-04	--
108-87-2	Methylcyclohexane	NO	NO	YES	NO	NO	--	2.04E-04	4.33E-04	1.33E-04	--

[a] Hazardous Air Pollutants (HAP) are listed in the 1990 Clean Air Act Amendments: http://www.epa.gov/ttnatw01/orig189.html. POM are species pulled in as Polycyclic Organic Matter ("includes organic compounds with more than one benzene ring, and which have a boiling point greater than or equal to 100 º C. ").

[b] Polycyclic Aromatic Hydrocarbon (PAH) are species with 3 or more benzene rings containing only carbon and hydrogen. Naphthalene is included for consistency with IDEQ's carcinogenic TAP definition of PAH.

[c] IDEQ lists Toxic Air Pollutants (TAP) in IDAPA 58.01.01, §§ 585 and 586. §585 contains a list of non-carcinogencic TAP; §586 contains a list of carcinogenic TAP.

[d] IDAPA 58.01.01.586 contains a direct list of the seven compounds that IDEQ classifies as 7-PAH.

Table 6. Speciated Combustion Pollutant Emissions

							EU ID 23-11-002	EU ID 09-11-503	EU ID 09-11-502	EU ID 09-11-504	Various
							Duct Vent Stack (Startup Emissions for Warmup and 'Dry	Natural Gas-Fired Potable Water Pump	No. 11 Well Engine	25 kW Backup for No. 11 Well Engine	All Other Natural Gas External Combustion Units
CAS No.	Pollutant	HAP? [a]	PAH? [b]	§585 TAP? [c]	§586 TAP? [c]	7-PAH? [d]	EMISSIONS (tpy)	EMISSIONS (tpy)	EMISSIONS (tpy)	EMISSIONS (tpy)	EMISSIONS (tpy)
75-09-2	Methylene Chloride	YES	NO	NO	YES	NO	--	3.33E-06	7.05E-06	2.17E-06	--
110-54-3	n-Hexane	YES	NO	YES	NO	NO	1.77E-03	1.85E-04	3.91E-04	1.20E-04	4.49E-01
111-84-2	n-Nonane	NO	NO	YES	NO	NO	--	1.83E-05	3.88E-05	1.19E-05	--
111-65-9	n-Octane	NO	NO	YES	NO	NO	--	5.84E-05	1.24E-04	3.80E-05	--
109-66-0	n-Pentane	NO	NO	YES	NO	NO	2.56E-03	4.32E-04	9.16E-04	2.82E-04	6.49E-01
91-20-3	Naphthalene	YES	YES	YES	NO	NO	6.00E-07	1.24E-05	2.62E-05	8.06E-06	1.52E-04
85-01-8	Phenanthrene	NO	YES	NO	NO	NO	1.67E-08	1.73E-06	3.66E-06	1.13E-06	4.24E-06
108-95-2	Phenol	YES	NO	YES	NO	NO	--	3.99E-06	8.46E-06	2.60E-06	--
74-98-6	Propane	NO	NO	NO	NO	NO	1.57E-03	6.97E-03	1.48E-02	4.54E-03	3.99E-01
129-00-0	Pyrene	NO	YES	NO	NO	NO	4.91E-09	2.26E-07	4.79E-07	1.47E-07	1.25E-06
100-42-5	Styrene	YES	NO	YES	NO	NO	--	3.92E-06	8.31E-06	2.56E-06	--
127-18-4	Tetrachloroethane	YES	NO	NO	YES	NO	--	4.12E-07	8.74E-07	2.69E-07	--
108-88-3	Toluene	YES	NO	YES	NO	NO	3.34E-06	6.78E-05	1.44E-04	4.42E-05	8.48E-04
75-01-4	Vinyl Chloride	YES	NO	NO	YES	NO	--	2.48E-06	5.25E-06	1.61E-06	--
1330-20-7	Xylene	YES	NO	YES	NO	NO	--	3.06E-05	6.48E-05	1.99E-05	--
7349-92-1	Lead	YES	NO	NO	NO	NO	4.91E-07	--	--	--	1.25E-04
10024-97-2	Nitrous Oxide	NO	NO	YES	NO	NO	2.16E-03	--	--	--	5.49E-01
56-49-5	3-Methylchloranthrene	NO	NO	NO	YES	NO	1.77E-09	--	--	--	4.49E-07
57-97-6	7,12-Dimethylbenz(a)anthracene	NO	NO	NO	NO	NO	1.57E-08	--	--	--	3.99E-06
120-12-7	Anthracene	NO	YES	NO	NO	NO	2.36E-09	--	--	--	5.99E-07
56-55-3	Benzo(a)anthracene	POM	YES	NO	NO	NO	1.77E-09	--	--	--	4.49E-07
50-32-8	Benzo(a)pyrene	POM	YES	NO	YES	YES	1.18E-09	--	--	--	2.99E-07
207-08-9	Benzo(k)fluoranthene	POM	YES	NO	NO	YES	1.77E-09	--	--	--	4.49E-07
53-70-3	Dibenzo(a,h)anthracene	POM	YES	NO	NO	YES	1.18E-09	--	--	--	2.99E-07
25321-22-6	Dichlorobenzene	NO	NO	NO	NO	NO	1.18E-06	--	--	--	2.99E-04
193-39-5	Indeno(1,2,3-cd)pyrene	POM	YES	NO	NO	YES	1.77E-09	--	--	--	4.49E-07
115-07-1	Propylene	NO	NO	NO	NO	NO	--	--	--	--	--
TOTAL PAH	--						6.69E-07	5.76E-05	1.22E-04	3.76E-05	1.70E-04
TOTAL HAP	--						1.85E-03	1.20E-02	2.54E-02	7.81E-03	4.70E-01

[a] Hazardous Air Pollutants (HAP) are listed in the 1990 Clean Air Act Amendments: http://www.epa.gov/ttnatw01/orig189.html. POM are species pulled in as Polycyclic Organic Matter ("includes organic compounds with more than one benzene ring, and which have a boiling point greater than or equal to 100 ª C. ").

[b] Polycyclic Aromatic Hydrocarbon (PAH) are species with 3 or more benzene rings containing only carbon and hydrogen. Naphthalene is included for consistency with IDEQ's carcinogenic TAP definition of PAH.

[c] IDEQ lists Toxic Air Pollutants (TAP) in IDAPA 58.01.01, §§ 585 and 586. §585 contains a list of non-carcinogencic TAP; §586 contains a list of carcinogenic TAP.

[d] IDAPA 58.01.01.586 contains a direct list of the seven compounds that IDEQ classifies as 7-PAH.

Table 7. Speciated Combustion Pollutant Emissions

							EU ID 35-11-502	EU ID 09-11-505	EU ID 08-11-502
							South Firewater Pump Engine	Rollover Generator	North Sulfuric Emergency Generator
CAS No.	Pollutant	HAP? [a]	PAH? [b]	§585 TAP? [c]	§586 TAP? [c]	7-PAH? [d]	EMISSIONS (tpy)	EMISSIONS (tpy)	EMISSIONS (tpy)
79-34-5	1,1,2,2-Tetrachloroethane	YES	NO	NO	YES	NO	--	--	--
71-55-6	1,1,2-Trichloroethane	YES	NO	YES	NO	NO	--	--	--
75-34-3	1,1-Dichloroethane	YES	NO	YES	YES	NO	--	--	--
526-73-8	1,2,3-Trimethylbenzene	NO	NO	NO	NO	NO	--	--	--
95-63-6	1,2,4-Trimethylbenzene	NO	NO	NO	NO	NO	--	--	--
107-06-2	1,2-Dichloroethane	NO	NO	NO	NO	NO	--	--	--
78-87-5	1,2-Dichloropropane	YES	NO	YES	NO	NO	--	--	--
108-67-8	1,3,5-Trimethylbenzene	NO	NO	NO	NO	NO	--	--	--
106-99-0	1,3-Butadiene	YES	NO	NO	YES	NO	2.05E-05	8.07E-06	1.01E-04
542-75-6	1,3-Dichloropropene	YES	NO	NO	YES	NO	--	--	--
91-57-6	2-Methylnaphthalene	NO	YES	NO	NO	NO	--	--	--
540-84-1	2,2,4-Trimethylpentane	YES	NO	YES	NO	NO	--	--	--
83-32-9	Acenaphthene	NO	YES	NO	NO	NO	7.46E-07	2.93E-07	3.68E-06
203-96-8	Acenaphthylene	NO	YES	NO	NO	NO	2.66E-06	1.04E-06	1.31E-05
75-07-0	Acetaldehyde	YES	NO	NO	YES	NO	4.03E-04	1.58E-04	1.99E-03
107-02-8	Acrolein	YES	NO	YES	NO	NO	4.86E-05	1.91E-05	2.40E-04
71-43-2	Benzene	YES	NO	NO	YES	NO	4.90E-04	1.93E-04	2.42E-03
205-99-2	Benzo(b)fluoranthene	POM	YES	NO	NO	YES	5.20E-08	2.05E-08	2.57E-07
192-97-2	Benzo(e)pyrene	NO	YES	NO	NO	NO	--	--	--
191-24-2	Benzo(g,h,i)perylene	POM	YES	NO	NO	NO	2.57E-07	1.01E-07	1.27E-06
92-52-4	Biphenyl	YES	YES	YES	NO	NO	--	--	--
106-97-8	Butane	NO	NO	NO	NO	NO	--	--	--
123-72-8; 78-84-2	Butyr/Isobutyraldehyde	NO	NO	NO	NO	NO	--	--	--
56-23-5	Carbon Tetrachloride	NO	NO	NO	NO	NO	--	--	--
108-90-7	Chlorobenzene	YES	NO	YES	NO	NO	--	--	--
75-00-3	Chloroethane	YES	NO	YES	NO	NO	--	--	--
67-66-3	Chloroform	YES	NO	NO	YES	NO	--	--	--
218-01-9	Chrysene	POM	YES	NO	NO	YES	1.85E-07	7.29E-08	9.16E-07
287-92-3	Cyclopentane	NO	NO	YES	NO	NO	--	--	--
74-84-0	Ethane	NO	NO	NO	NO	NO	--	--	--
100-41-4	Ethylbenzene	YES	NO	YES	NO	NO	--	--	--
106--93-4	Ethylene Dibromide	NO	NO	NO	NO	NO	--	--	--
206-44-0	Fluoranthene	NO	YES	NO	NO	NO	4.00E-06	1.57E-06	1.97E-05
86-73-7	Fluorene	NO	YES	NO	NO	NO	1.53E-05	6.03E-06	7.57E-05
50-00-0	Formaldehyde	YES	NO	NO	YES	NO	6.20E-04	2.44E-04	3.06E-03
67-56-1	Methanol	YES	NO	YES	NO	NO	--	--	--
108-87-2	Methylcyclohexane	NO	NO	YES	NO	NO	--	--	--

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[d] IDAPA 58.01.01.586 contains a direct list of the seven compounds that IDEQ classifies as 7-PAH.

Table 8. Speciated Combustion Pollutant Emissions

							EU ID 35-11-502	EU ID 09-11-505	EU ID 08-11-502
							South Firewater Pump Engine	Rollover Generator	North Sulfuric Emergency Generator
CAS No.	Pollutant	HAP? [a]	PAH? [b]	§585 TAP? [c]	§586 TAP? [c]	7-PAH? [d]	EMISSIONS (tpy)	EMISSIONS (tpy)	EMISSIONS (tpy)
75-09-2	Methylene Chloride	YES	NO	NO	YES	NO	--	--	--
110-54-3	n-Hexane	YES	NO	YES	NO	NO	--	--	--
111-84-2	n-Nonane	NO	NO	YES	NO	NO	--	--	--
111-65-9	n-Octane	NO	NO	YES	NO	NO	--	--	--
109-66-0	n-Pentane	NO	NO	YES	NO	NO	--	--	--
91-20-3	Naphthalene	YES	YES	YES	NO	NO	4.45E-05	1.75E-05	2.20E-04
85-01-8	Phenanthrene	NO	YES	NO	NO	NO	1.54E-05	6.07E-06	7.62E-05
108-95-2	Phenol	YES	NO	YES	NO	NO	--	--	--
74-98-6	Propane	NO	NO	NO	NO	NO	--	--	--
129-00-0	Pyrene	NO	YES	NO	NO	NO	2.51E-06	9.87E-07	1.24E-05
100-42-5	Styrene	YES	NO	YES	NO	NO	--	--	--
127-18-4	Tetrachloroethane	YES	NO	NO	YES	NO	--	--	--
108-88-3	Toluene	YES	NO	YES	NO	NO	2.15E-04	8.45E-05	1.06E-03
75-01-4	Vinyl Chloride	YES	NO	NO	YES	NO	--	--	--
1330-20-7	Xylene	YES	NO	YES	NO	NO	1.50E-04	5.89E-05	7.39E-04
7349-92-1	Lead	YES	NO	NO	NO	NO	--	--	--
10024-97-2	Nitrous Oxide	NO	NO	YES	NO	NO	--	--	--
56-49-5	3-Methylchloranthrene	NO	NO	NO	YES	NO	--	--	--
57-97-6	7,12-Dimethylbenz(a)anthracene	NO	NO	NO	NO	NO	--	--	--
120-12-7	Anthracene	NO	YES	NO	NO	NO	9.82E-07	3.86E-07	4.85E-06
56-55-3	Benzo(a)anthracene	POM	YES	NO	NO	NO	8.82E-07	3.47E-07	4.36E-06
50-32-8	Benzo(a)pyrene	POM	YES	NO	YES	YES	9.87E-08	3.88E-08	4.88E-07
207-08-9	Benzo(k)fluoranthene	POM	YES	NO	NO	YES	8.14E-08	3.20E-08	4.02E-07
53-70-3	Dibenzo(a,h)anthracene	POM	YES	NO	NO	YES	3.06E-07	1.20E-07	1.51E-06
25321-22-6	Dichlorobenzene	NO	NO	NO	NO	NO	--	--	--
193-39-5	Indeno(1,2,3-cd)pyrene	POM	YES	NO	NO	YES	1.97E-07	7.74E-08	9.73E-07
115-07-1	Propylene	NO	NO	NO	NO	NO	1.35E-03	5.33E-04	6.69E-03
TOTAL PAH	--						8.82E-05	3.47E-05	4.36E-04
TOTAL HAP	--						1.99E-03	7.84E-04	9.84E-03

[a] Hazardous Air Pollutants (HAP) are listed in the 1990 Clean Air Act Amendments: http://www.epa.gov/ttnatw01/orig189.html. POM are species pulled in as Polycyclic Organic Matter ("includes organic compounds with more than one benzene ring, and which have a boiling point greater than or equal to 100 º C. ").

[b] Polycyclic Aromatic Hydrocarbon (PAH) are species with 3 or more benzene rings containing only carbon and hydrogen. Naphthalene is included for consistency with IDEQ's carcinogenic TAP definition of PAH.

[c] IDEQ lists Toxic Air Pollutants (TAP) in IDAPA 58.01.01, §§ 585 and 586. §585 contains a list of non-carcinogenic TAP; §586 contains a list of carcinogenic TAP.

[d] IDAPA 58.01.01.586 contains a direct list of the seven compounds that IDEQ classifies as 7-PAH.

Appendix B – 40 CFR 60 Subpart Db

Subpart Db—Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units

§60.40b Applicability and delegation of authority.

(a) The affected facility to which this subpart applies is each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)).

ITAFOS operates two boilers that fall under this applicability:
1. B-5 Nebraska Boiler (EU ID 08-11-501) - 213.8 MMBtu/hr capacity, natural gas-fired
2. Cleaver-Brooks Boiler (EU ID 35-11-501) - 180 MMBtu/hr capacity, natural gas-fired

(b) Any affected facility meeting the applicability requirements under paragraph (a) of this section and commencing construction, modification, or reconstruction after June 19, 1984, but on or before June 19, 1986, is subject to the following standards:

(1) Coal-fired affected facilities having a heat input capacity between 29 and 73 MW (100 and 250 MMBtu/hr), inclusive, are subject to the particulate matter (PM) and nitrogen oxides (NO_X) standards under this subpart.

(2) Coal-fired affected facilities having a heat input capacity greater than 73 MW (250 MMBtu/hr) and meeting the applicability requirements under subpart D (Standards of performance for fossil-fuel-fired steam generators; §60.40) are subject to the PM and NO_X standards under this subpart and to the sulfur dioxide (SO_2) standards under subpart D (§60.43).

(3) Oil-fired affected facilities having a heat input capacity between 29 and 73 MW (100 and 250 MMBtu/hr), inclusive, are subject to the NO_X standards under this subpart.

(4) Oil-fired affected facilities having a heat input capacity greater than 73 MW (250 MMBtu/hr) and meeting the applicability requirements under subpart D (Standards of performance for fossil-fuel-fired steam generators; §60.40) are also subject to the NO_X standards under this subpart and the PM and SO_2 standards under subpart D (§60.42 and §60.43).

(b)(1)-(4) do not apply because the boilers do not burn coal or oil.

(c) Affected facilities that also meet the applicability requirements under subpart J or subpart Ja of this part are subject to the PM and NO_X standards under this subpart and the SO_2 standards under subpart J or subpart Ja of this part, as applicable.

None of the sources are subject to subpart J or subpart Ja.

(d) Affected facilities that also meet the applicability requirements under subpart E (Standards of performance for incinerators; §60.50) are subject to the NO_x and PM standards under this subpart.

None of the sources are subject to subpart E.

(e) Steam generating units meeting the applicability requirements under subpart Da (Standards of performance for electric utility steam generating units; §60.40Da) are not subject to this subpart.

None of the sources are subject to subpart Da.

(f) Any change to an existing steam generating unit for the sole purpose of combusting gases containing total reduced sulfur (TRS) as defined under §60.281 is not considered a modification under §60.14 and the steam generating unit is not subject to this subpart.

This paragraph doesn't apply, there is no change to an existing steam generating unit for the sole purpose of combusting gases containing total reduced sulfur (TRS).

(g) In delegating implementation and enforcement authority to a State under section 111(c) of the Clean Air Act, the following authorities shall be retained by the Administrator and not transferred to a State.

(1) Section 60.44b(f).

(2) Section 60.44b(g).

(3) Section 60.49b(a)(4).

(h) Any affected facility that meets the applicability requirements and is subject to subpart Ea, subpart Eb, subpart AAAA, or subpart CCCC of this part is not subject to this subpart.

None of the sources are subject to subpart Ea, subpart Eb, subpart AAAA, or subpart CCCC.

(i) Affected facilities (*i.e.,* heat recovery steam generators) that are associated with stationary combustion turbines and that meet the applicability requirements of subpart KKKK of this part are not subject to this subpart. This subpart will continue to apply to all other affected facilities (*i.e.* heat recovery steam generators with duct burners) that are capable of combusting more than 29 MW (100 MMBtu/h) heat input of fossil fuel. If the affected facility (*i.e.* heat recovery steam generator) is subject to this subpart, only emissions resulting from combustion of fuels in the steam generating unit are subject to this subpart. (The stationary combustion turbine emissions are subject to subpart GG or KKKK, as applicable, of this part.)

None of the sources are subject to subpart KKKK.

(j) Any affected facility meeting the applicability requirements under paragraph (a) of this section and commencing construction, modification, or reconstruction after June 19, 1986 is not subject to subpart D (Standards of Performance for Fossil-Fuel-Fired Steam Generators, §60.40).

(k) Any affected facility that meets the applicability requirements and is subject to an EPA approved State or Federal section 111(d)/129 plan implementing subpart Cb or subpart BBBB of this part is not covered by this subpart.

None of the sources are subject to subpart Cb or subpart BBBB.

(l) Affected facilities that also meet the applicability requirements under subpart BB of this part (Standards of Performance for Kraft Pulp Mills) are subject to the SO_2 and NO_X standards under this subpart and the PM standards under subpart BB.

None of the sources are subject to subpart BB.

(m) Temporary boilers are not subject to this subpart.

The boilers are not temporary boilers.

[72 FR 32742, June 13, 2007, as amended at 74 FR 5084, Jan. 28, 2009; 77 FR 9459, Feb. 16, 2012]

§60.41b Definitions.

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

Annual capacity factor means the ratio between the actual heat input to a steam generating unit from the fuels listed in §60.42b(a), §60.43b(a), or §60.44b(a), as applicable, during a calendar year and the potential heat input to the steam generating unit had it been operated for 8,760 hours during a calendar year at the maximum steady state design heat input capacity. In the case of steam generating units that are rented or leased, the actual heat input shall be determined based on the combined heat input from all operations of the affected facility in a calendar year.

Byproduct/waste means any liquid or gaseous substance produced at chemical manufacturing plants, petroleum refineries, or pulp and paper mills (except natural gas, distillate oil, or residual oil) and combusted in a steam generating unit for heat recovery or for disposal. Gaseous substances with carbon dioxide (CO_2) levels greater than 50 percent or carbon monoxide levels greater than 10 percent are not byproduct/waste for the purpose of this subpart.

Chemical manufacturing plants mean industrial plants that are classified by the Department of Commerce under Standard Industrial Classification (SIC) Code 28.

Coal means all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by the American Society of Testing and Materials in ASTM D388 (incorporated by reference, see §60.17), coal refuse, and petroleum coke. Coal-derived synthetic fuels, including but not limited to solvent refined coal, gasified coal not meeting the definition of natural gas, coal-oil mixtures, coke oven gas, and coal-water mixtures, are also included in this definition for the purposes of this subpart.

Coal refuse means any byproduct of coal mining or coal cleaning operations with an ash content greater than 50 percent, by weight, and a heating value less than 13,900 kJ/kg (6,000 Btu/lb) on a dry basis.

Cogeneration, also known as combined heat and power, means a facility that simultaneously produces both electric (or mechanical) and useful thermal energy from the same primary energy source.

Coke oven gas means the volatile constituents generated in the gaseous exhaust during the carbonization of bituminous coal to form coke.

Combined cycle system means a system in which a separate source, such as a gas turbine, internal combustion engine, kiln, etc., provides exhaust gas to a steam generating unit.

Conventional technology means wet flue gas desulfurization (FGD) technology, dry FGD technology, atmospheric fluidized bed combustion technology, and oil hydrodesulfurization technology.

Distillate oil means fuel oils that contain 0.05 weight percent nitrogen or less and comply with the specifications for fuel oil numbers 1 and 2, as defined by the American Society of Testing and Materials in ASTM D396 (incorporated by reference, see §60.17), diesel fuel oil numbers 1 and 2, as defined by the American Society for Testing and Materials in ASTM D975 (incorporated by reference, see §60.17), kerosine, as defined by the American Society of Testing and Materials in ASTM D3699 (incorporated by reference, see §60.17), biodiesel as defined by the American Society of Testing and Materials in ASTM D6751 (incorporated by reference, see §60.17), or biodiesel blends as defined by the American Society of Testing and Materials in ASTM D7467 (incorporated by reference, see §60.17).

Dry flue gas desulfurization technology means a SO_2 control system that is located downstream of the steam generating unit and removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline reagent and water, whether introduced separately or as a premixed slurry or solution and forming a dry powder material. This definition includes devices where the dry powder material is subsequently converted to another form. Alkaline slurries or solutions used in dry flue gas desulfurization technology include but are not limited to lime and sodium.

Duct burner means a device that combusts fuel and that is placed in the exhaust duct from another source, such as a stationary gas turbine, internal combustion engine, kiln, etc., to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a steam generating unit.

Emerging technology means any SO_2 control system that is not defined as a conventional technology under this section, and for which the owner or operator of the facility has applied to the Administrator and received approval to operate as an emerging technology under §60.49b(a)(4).

Federally enforceable means all limitations and conditions that are enforceable by the Administrator, including the requirements of 40 CFR parts 60 and 61, requirements within any applicable State Implementation Plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 51.24.

Fluidized bed combustion technology means combustion of fuel in a bed or series of beds (including but not limited to bubbling bed units and circulating bed units) of limestone aggregate (or other sorbent materials) in which these materials are forced upward by the flow of combustion air and the gaseous products of combustion.

Fuel pretreatment means a process that removes a portion of the sulfur in a fuel before combustion of the fuel in a steam generating unit.

Full capacity means operation of the steam generating unit at 90 percent or more of the maximum steady-state design heat input capacity.

Gaseous fuel means any fuel that is a gas at ISO conditions. This includes, but is not limited to, natural gas and gasified coal (including coke oven gas).

Gross output means the gross useful work performed by the steam generated. For units generating only electricity, the gross useful work performed is the gross electrical output from the turbine/generator set. For cogeneration units, the gross useful work performed is the gross electrical or mechanical output plus 75 percent of the useful thermal output measured relative to ISO conditions that is not used to generate additional electrical or mechanical output or to enhance the performance of the unit (*i.e.*, steam delivered to an industrial process).

Heat input means heat derived from combustion of fuel in a steam generating unit and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust gases from other sources, such as gas turbines, internal combustion engines, kilns, etc.

Heat release rate means the steam generating unit design heat input capacity (in MW or Btu/hr) divided by the furnace volume (in cubic meters or cubic feet); the furnace volume is that volume bounded by the front furnace wall where the burner is located, the furnace side waterwall, and extending to the level just below or in front of the first row of convection pass tubes.

Heat transfer medium means any material that is used to transfer heat from one point to another point.

High heat release rate means a heat release rate greater than 730,000 J/sec-m^3 (70,000 Btu/hr-ft^3).

ISO Conditions means a temperature of 288 Kelvin, a relative humidity of 60 percent, and a pressure of 101.3 kilopascals.

Lignite means a type of coal classified as lignite A or lignite B by the American Society of Testing and Materials in ASTM D388 (incorporated by reference, see §60.17).

Low heat release rate means a heat release rate of 730,000 J/sec-m^3 (70,000 Btu/hr-ft^3) or less.

Mass-feed stoker steam generating unit means a steam generating unit where solid fuel is introduced directly into a retort or is fed directly onto a grate where it is combusted.

Maximum heat input capacity means the ability of a steam generating unit to combust a stated maximum amount of fuel on a steady state basis, as determined by the physical design and characteristics of the steam generating unit.

Municipal-type solid waste means refuse, more than 50 percent of which is waste consisting of a mixture of paper, wood, yard wastes, food wastes, plastics, leather, rubber, and other combustible materials, and noncombustible materials such as glass and rock.

Natural gas means:

(1) A naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or

(2) Liquefied petroleum gas, as defined by the American Society for Testing and Materials in ASTM D1835 (incorporated by reference, see §60.17); or

(3) A mixture of hydrocarbons that maintains a gaseous state at ISO conditions. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 34 and 43 megajoules (MJ) per dry standard cubic meter (910 and 1,150 Btu per dry standard cubic foot).

Noncontinental area means the State of Hawaii, the Virgin Islands, Guam, American Samoa, the Commonwealth of Puerto Rico, or the Northern Mariana Islands.

Oil means crude oil or petroleum or a liquid fuel derived from crude oil or petroleum, including distillate and residual oil.

Petroleum refinery means industrial plants as classified by the Department of Commerce under Standard Industrial Classification (SIC) Code 29.

Potential sulfur dioxide emission rate means the theoretical SO_2 emissions (nanograms per joule (ng/J) or lb/MMBtu heat input) that would result from combusting fuel in an uncleaned state and without using emission control systems. For gasified coal or oil that is desulfurized prior to combustion, the *Potential sulfur dioxide emission rate* is the theoretical SO_2 emissions (ng/J or lb/MMBtu heat input) that would result from combusting fuel in a cleaned state without using any post combustion emission control systems.

Process heater means a device that is primarily used to heat a material to initiate or promote a chemical reaction in which the material participates as a reactant or catalyst.

Pulp and paper mills means industrial plants that are classified by the Department of Commerce under North American Industry Classification System (NAICS) Code 322 or Standard Industrial Classification (SIC) Code 26.

Pulverized coal-fired steam generating unit means a steam generating unit in which pulverized coal is introduced into an air stream that carries the coal to the combustion chamber of the steam generating

unit where it is fired in suspension. This includes both conventional pulverized coal-fired and micropulverized coal-fired steam generating units. Residual oil means crude oil, fuel oil numbers 1 and 2 that have a nitrogen content greater than 0.05 weight percent, and all fuel oil numbers 4, 5 and 6, as defined by the American Society of Testing and Materials in ASTM D396 (incorporated by reference, see §60.17).

Spreader stoker steam generating unit means a steam generating unit in which solid fuel is introduced to the combustion zone by a mechanism that throws the fuel onto a grate from above. Combustion takes place both in suspension and on the grate.

Steam generating unit means a device that combusts any fuel or byproduct/waste and produces steam or heats water or heats any heat transfer medium. This term includes any municipal-type solid waste incinerator with a heat recovery steam generating unit or any steam generating unit that combusts fuel and is part of a cogeneration system or a combined cycle system. This term does not include process heaters as they are defined in this subpart.

Steam generating unit operating day means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the steam generating unit. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

Temporary boiler means any gaseous or liquid fuel-fired steam generating unit that is designed to, and is capable of, being carried or moved from one location to another by means of, for example, wheels, skids, carrying handles, dollies, trailers, or platforms. A steam generating unit is not a temporary boiler if any one of the following conditions exists:

(1) The equipment is attached to a foundation.

(2) The steam generating unit or a replacement remains at a location for more than 180 consecutive days. Any temporary boiler that replaces a temporary boiler at a location and performs the same or similar function will be included in calculating the consecutive time period.

(3) The equipment is located at a seasonal facility and operates during the full annual operating period of the seasonal facility, remains at the facility for at least 2 years, and operates at that facility for at least 3 months each year.

(4) The equipment is moved from one location to another in an attempt to circumvent the residence time requirements of this definition.

Very low sulfur oil means for units constructed, reconstructed, or modified on or before February 28, 2005, oil that contains no more than 0.5 weight percent sulfur or that, when combusted without SO_2 emission control, has a SO_2 emission rate equal to or less than 215 ng/J (0.5 lb/MMBtu) heat input. For units constructed, reconstructed, or modified after February 28, 2005 and not located in a noncontinental area, *very low sulfur oil* means oil that contains no more than 0.30 weight percent sulfur or that, when combusted without SO_2 emission control, has a SO_2 emission rate equal to or less than 140 ng/J (0.32 lb/MMBtu) heat input. For units constructed, reconstructed, or modified after February 28,

2005 and located in a noncontinental area, *very low sulfur oil* means oil that contains no more than 0.5 weight percent sulfur or that, when combusted without SO_2 emission control, has a SO_2 emission rate equal to or less than 215 ng/J (0.50 lb/MMBtu) heat input.

Wet flue gas desulfurization technology means a SO_2 control system that is located downstream of the steam generating unit and removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gas with an alkaline slurry or solution and forming a liquid material. This definition applies to devices where the aqueous liquid material product of this contact is subsequently converted to other forms. Alkaline reagents used in wet flue gas desulfurization technology include, but are not limited to, lime, limestone, and sodium.

Wet scrubber system means any emission control device that mixes an aqueous stream or slurry with the exhaust gases from a steam generating unit to control emissions of PM or SO_2.

Wood means wood, wood residue, bark, or any derivative fuel or residue thereof, in any form, including, but not limited to, sawdust, sanderdust, wood chips, scraps, slabs, millings, shavings, and processed pellets made from wood or other forest residues.

[72 FR 32742, June 13, 2007, as amended at 74 FR 5084, Jan. 28, 2009; 77 FR 9459, Feb. 16, 2012]

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§60.42b Standard for sulfur dioxide (SO_2).

Paragraphs (a)-(j) do not apply because the source does not combust coal or oil.

(a) Except as provided in paragraphs (b), (c), (d), or (j) of this section, on and after the date on which the performance test is completed or required to be completed under §60.8, whichever comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, that combusts coal or oil shall cause to be discharged into the atmosphere any gases that contain SO_2 in excess of 87 ng/J (0.20 lb/MMBtu) or 10 percent (0.10) of the potential SO_2 emission rate (90 percent reduction) and the emission limit determined according to the following formula:

$$E_s = \frac{(K_a H_a + K_b H_b)}{(H_a + H_b)}$$

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Where:

E_s = SO_2 emission limit, in ng/J or lb/MMBtu heat input;

K_a = 520 ng/J (or 1.2 lb/MMBtu);

K_b = 340 ng/J (or 0.80 lb/MMBtu);

H_a = Heat input from the combustion of coal, in J (MMBtu); and

H_b = Heat input from the combustion of oil, in J (MMBtu).

For facilities complying with the percent reduction standard, only the heat input supplied to the affected facility from the combustion of coal and oil is counted in this paragraph. No credit is provided for the heat input to the affected facility from the combustion of natural gas, wood, municipal-type solid waste, or other fuels or heat derived from exhaust gases from other sources, such as gas turbines, internal combustion engines, kilns, etc.

(b) On and after the date on which the performance test is completed or required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, that combusts coal refuse alone in a fluidized bed combustion steam generating unit shall cause to be discharged into the atmosphere any gases that contain SO_2 in excess of 87 ng/J (0.20 lb/MMBtu) or 20 percent (0.20) of the potential SO_2 emission rate (80 percent reduction) and 520 ng/J (1.2 lb/MMBtu) heat input. If coal or oil is fired with coal refuse, the affected facility is subject to paragraph (a) or (d) of this section, as applicable. For facilities complying with the percent reduction standard, only the heat input supplied to the affected facility from the combustion of coal and oil is counted in this paragraph. No credit is provided for the heat input to the affected facility from the combustion of natural gas, wood, municipal-type solid waste, or other fuels or heat derived from exhaust gases from other sources, such as gas turbines, internal combustion engines, kilns, etc.

(c) On and after the date on which the performance test is completed or is required to be completed under §60.8, whichever comes first, no owner or operator of an affected facility that combusts coal or oil, either alone or in combination with any other fuel, and that uses an emerging technology for the control of SO_2 emissions, shall cause to be discharged into the atmosphere any gases that contain SO_2 in excess of 50 percent of the potential SO_2 emission rate (50 percent reduction) and that contain SO_2 in excess of the emission limit determined according to the following formula:

$$E_s = \frac{(K_c H_c + K_d H_d)}{(H_c + H_d)}$$

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Where:

E_s = SO2 emission limit, in ng/J or lb/MM Btu heat input;

K_c = 260 ng/J (or 0.60 lb/MMBtu);

K_d = 170 ng/J (or 0.40 lb/MMBtu);

H_c = Heat input from the combustion of coal, in J (MMBtu); and

H_d = Heat input from the combustion of oil, in J (MMBtu).

For facilities complying with the percent reduction standard, only the heat input supplied to the affected facility from the combustion of coal and oil is counted in this paragraph. No credit is provided for the heat input to the affected facility from the combustion of natural gas, wood, municipal-type solid waste, or other fuels, or from the heat input derived from exhaust gases from other sources, such as gas turbines, internal combustion engines, kilns, etc.

(d) On and after the date on which the performance test is completed or required to be completed under §60.8, whichever comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005 and listed in paragraphs (d)(1), (2), (3), or (4) of this section shall cause to be discharged into the atmosphere any gases that contain SO_2 in excess of 520 ng/J (1.2 lb/MMBtu) heat input if the affected facility combusts coal, or 215 ng/J (0.5 lb/MMBtu) heat input if the affected facility combusts oil other than very low sulfur oil. Percent reduction requirements are not applicable to affected facilities under paragraphs (d)(1), (2), (3) or (4) of this section. For facilities complying with paragraphs (d)(1), (2), or (3) of this section, only the heat input supplied to the affected facility from the combustion of coal and oil is counted in this paragraph. No credit is provided for the heat input to the affected facility from the combustion of natural gas, wood, municipal-type solid waste, or other fuels or heat derived from exhaust gases from other sources, such as gas turbines, internal combustion engines, kilns, etc.

(1) Affected facilities that have an annual capacity factor for coal and oil of 30 percent (0.30) or less and are subject to a federally enforceable permit limiting the operation of the affected facility to an annual capacity factor for coal and oil of 30 percent (0.30) or less;

(2) Affected facilities located in a noncontinental area; or

(3) Affected facilities combusting coal or oil, alone or in combination with any fuel, in a duct burner as part of a combined cycle system where 30 percent (0.30) or less of the heat entering the steam generating unit is from combustion of coal and oil in the duct burner and 70 percent (0.70) or more of the heat entering the steam generating unit is from the exhaust gases entering the duct burner; or

(4) The affected facility burns coke oven gas alone or in combination with natural gas or very low sulfur distillate oil.

(e) Except as provided in paragraph (f) of this section, compliance with the emission limits, fuel oil sulfur limits, and/or percent reduction requirements under this section are determined on a 30-day rolling average basis.

(f) Except as provided in paragraph (j)(2) of this section, compliance with the emission limits or fuel oil sulfur limits under this section is determined on a 24-hour average basis for affected facilities that (1) have a federally enforceable permit limiting the annual capacity factor for oil to 10 percent or less, (2) combust only very low sulfur oil, and (3) do not combust any other fuel.

(g) Except as provided in paragraph (i) of this section and §60.45b(a), the SO_2 emission limits and percent reduction requirements under this section apply at all times, including periods of startup, shutdown, and malfunction.

(h) Reductions in the potential SO_2 emission rate through fuel pretreatment are not credited toward the percent reduction requirement under paragraph (c) of this section unless:

(1) Fuel pretreatment results in a 50 percent or greater reduction in potential SO_2 emissions and

(2) Emissions from the pretreated fuel (without combustion or post-combustion SO_2 control) are equal to or less than the emission limits specified in paragraph (c) of this section.

(i) An affected facility subject to paragraph (a), (b), or (c) of this section may combust very low sulfur oil or natural gas when the SO_2 control system is not being operated because of malfunction or maintenance of the SO_2 control system.

(j) Percent reduction requirements are not applicable to affected facilities combusting only very low sulfur oil. The owner or operator of an affected facility combusting very low sulfur oil shall demonstrate that the oil meets the definition of very low sulfur oil by: (1) Following the performance testing procedures as described in §60.45b(c) or §60.45b(d), and following the monitoring procedures as described in §60.47b(a) or §60.47b(b) to determine SO_2 emission rate or fuel oil sulfur content; or (2) maintaining fuel records as described in §60.49b(r).

Paragraphs (a)-(j) do not apply because the source does not combust coal or oil.

(k)(1) Except as provided in paragraphs (k)(2), (k)(3), and (k)(4) of this section, on and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences construction, reconstruction, or modification after February 28, 2005, and that combusts coal, oil, natural gas, a mixture of these fuels, or a mixture of these fuels with any other fuels shall cause to be discharged into the atmosphere any gases that contain SO_2 in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 8 percent (0.08) of the potential SO_2 emission rate (92 percent reduction) and 520 ng/J (1.2 lb/MMBtu) heat input. For facilities complying with the percent reduction standard and paragraph (k)(3) of this section, only the heat input supplied to the affected facility from the combustion of coal and oil is counted in paragraph (k) of this section. No credit is provided for the heat input to the affected facility from the combustion of natural gas, wood, municipal-type solid waste, or other fuels or heat derived from exhaust gases from other sources, such as gas turbines, internal combustion engines, kilns, etc.

(2) Units firing only very low sulfur oil, gaseous fuel, a mixture of these fuels, or a mixture of these fuels with any other fuels with a potential SO_2 emission rate of 140 ng/J (0.32 lb/MMBtu) heat input or less are exempt from the SO_2 emissions limit in paragraph (k)(1) of this section.

The emission limit of 60.42b(k)(1) would apply to Nu-West's gas-fired units if they were constructed, reconstructed, or modified after February28, 2005; however, per 60.42b(k)(2); units constructed after February 28, 2005 and using gaseous fuels with potential SO2 emissions of 0.32lb/MMBtu heat input

or less are exempt from the SO2 emission limit of60.42b(k)(1). SOc emission from combusting pipeline quality natural gas is below this threshold.

(3) Units that are located in a noncontinental area and that combust coal, oil, or natural gas shall not discharge any gases that contain SO_2 in excess of 520 ng/J (1.2 lb/MMBtu) heat input if the affected facility combusts coal, or 215 ng/J (0.50 lb/MMBtu) heat input if the affected facility combusts oil or natural gas.

Does not apply.

(4) As an alternative to meeting the requirements under paragraph (k)(1) of this section, modified facilities that combust coal or a mixture of coal with other fuels shall not cause to be discharged into the atmosphere any gases that contain SO_2 in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 10 percent (0.10) of the potential SO_2 emission rate (90 percent reduction) and 520 ng/J (1.2 lb/MMBtu) heat input.

[72 FR 32742, June 13, 2007, as amended at 74 FR 5084, Jan. 28, 2009; 76 FR 3523, Jan. 20, 2011]

§60.43b Standard for particulate matter (PM).

Paragraphs (a)-(h) below do not apply because the source does not combust coal, oil, wood, or waste.

(a) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005 that combusts coal or combusts mixtures of coal with other fuels, shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of the following emission limits:

(1) 22 ng/J (0.051 lb/MMBtu) heat input, (i) If the affected facility combusts only coal, or

(ii) If the affected facility combusts coal and other fuels and has an annual capacity factor for the other fuels of 10 percent (0.10) or less.

(2) 43 ng/J (0.10 lb/MMBtu) heat input if the affected facility combusts coal and other fuels and has an annual capacity factor for the other fuels greater than 10 percent (0.10) and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor greater than 10 percent (0.10) for fuels other than coal.

(3) 86 ng/J (0.20 lb/MMBtu) heat input if the affected facility combusts coal or coal and other fuels and

(i) Has an annual capacity factor for coal or coal and other fuels of 30 percent (0.30) or less,

(ii) Has a maximum heat input capacity of 73 MW (250 MMBtu/hr) or less,

(iii) Has a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor of 30 percent (0.30) or less for coal or coal and other solid fuels, and

(iv) Construction of the affected facility commenced after June 19, 1984, and before November 25, 1986.

(4) An affected facility burning coke oven gas alone or in combination with other fuels not subject to a PM standard under §60.43b and not using a post-combustion technology (except a wet scrubber) for reducing PM or SO_2 emissions is not subject to the PM limits under §60.43b(a).

(b) On and after the date on which the performance test is completed or required to be completed under §60.8, whichever comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, and that combusts oil (or mixtures of oil with other fuels) and uses a conventional or emerging technology to reduce SO_2 emissions shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 43 ng/J (0.10 lb/MMBtu) heat input.

(c) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, and that combusts wood, or wood with other fuels, except coal, shall cause to be discharged from that affected facility any gases that contain PM in excess of the following emission limits:

(1) 43 ng/J (0.10 lb/MMBtu) heat input if the affected facility has an annual capacity factor greater than 30 percent (0.30) for wood.

(2) 86 ng/J (0.20 lb/MMBtu) heat input if (i) The affected facility has an annual capacity factor of 30 percent (0.30) or less for wood;

(ii) Is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor of 30 percent (0.30) or less for wood; and

(iii) Has a maximum heat input capacity of 73 MW (250 MMBtu/hr) or less.

(d) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts municipal-type solid waste or mixtures of municipal-type solid waste with other fuels, shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of the following emission limits:

(1) 43 ng/J (0.10 lb/MMBtu) heat input;

(i) If the affected facility combusts only municipal-type solid waste; or

(ii) If the affected facility combusts municipal-type solid waste and other fuels and has an annual capacity factor for the other fuels of 10 percent (0.10) or less.

(2) 86 ng/J (0.20 lb/MMBtu) heat input if the affected facility combusts municipal-type solid waste or municipal-type solid waste and other fuels; and

(i) Has an annual capacity factor for municipal-type solid waste and other fuels of 30 percent (0.30) or less;

(ii) Has a maximum heat input capacity of 73 MW (250 MMBtu/hr) or less;

(iii) Has a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor of 30 percent (0.30) or less for municipal-type solid waste, or municipal-type solid waste and other fuels; and

(iv) Construction of the affected facility commenced after June 19, 1984, but on or before November 25, 1986.

(e) For the purposes of this section, the annual capacity factor is determined by dividing the actual heat input to the steam generating unit during the calendar year from the combustion of coal, wood, or municipal-type solid waste, and other fuels, as applicable, by the potential heat input to the steam generating unit if the steam generating unit had been operated for 8,760 hours at the maximum heat input capacity.

(f) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, oil, wood, or mixtures of these fuels with any other fuels shall cause to be discharged into the atmosphere any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. An owner or operator of an affected facility that elects to install, calibrate, maintain, and operate a continuous emissions monitoring system (CEMS) for measuring PM emissions according to the requirements of this subpart and is subject to a federally enforceable PM limit of 0.030 lb/MMBtu or less is exempt from the opacity standard specified in this paragraph.

(g) The PM and opacity standards apply at all times, except during periods of startup, shutdown, or malfunction.

(h)(1) Except as provided in paragraphs (h)(2), (h)(3), (h)(4), (h)(5), and (h)(6) of this section, on and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification after February 28, 2005, and that combusts coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 13 ng/J (0.030 lb/MMBtu) heat input,

(2) As an alternative to meeting the requirements of paragraph (h)(1) of this section, the owner or operator of an affected facility for which modification commenced after February 28, 2005, may elect to meet the requirements of this paragraph. On and after the date on which the initial performance test is completed or required to be completed under §60.8, no owner or operator of an affected facility that commences modification after February 28, 2005 shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of both:

(i) 22 ng/J (0.051 lb/MMBtu) heat input derived from the combustion of coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels; and

(ii) 0.2 percent of the combustion concentration (99.8 percent reduction) when combusting coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels.

(3) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences modification after February 28, 2005, and that combusts over 30 percent wood (by heat input) on an annual basis and has a maximum heat input capacity of 73 MW (250 MMBtu/h) or less shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 43 ng/J (0.10 lb/MMBtu) heat input.

(4) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that commences modification after February 28, 2005, and that combusts over 30 percent wood (by heat input) on an annual basis and has a maximum heat input capacity greater than 73 MW (250 MMBtu/h) shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 37 ng/J (0.085 lb/MMBtu) heat input.

(5) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, an owner or operator of an affected facility not located in a noncontinental area that commences construction, reconstruction, or modification after February 28, 2005, and that combusts only oil that contains no more than 0.30 weight percent sulfur, coke oven gas, a mixture of these fuels, or either fuel (or a mixture of these fuels) in combination with other fuels not subject to a PM standard in §60.43b and not using a post-combustion technology (except a wet scrubber) to reduce SO_2 or PM emissions is not subject to the PM limits in (h)(1) of this section.

(6) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, an owner or operator of an affected facility located in a noncontinental area that commences construction, reconstruction, or modification after February 28, 2005, and that combusts only oil that contains no more than 0.5 weight percent sulfur, coke oven gas, a mixture of these fuels, or either fuel (or a mixture of these fuels) in combination with other fuels not subject to a PM standard in §60.43b and not using a post-combustion technology (except a wet scrubber) to reduce SO_2 or PM emissions is not subject to the PM limits in (h)(1) of this section.

[72 FR 32742, June 13, 2007, as amended at 74 FR 5084, Jan. 28, 2009; 77 FR 9459, Feb. 16, 2012]

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§60.44b Standard for nitrogen oxides (NO_x).

(a) Except as provided under paragraphs (k) and (l) of this section, on and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that is subject to the provisions of this section and that

combusts only coal, oil, or natural gas shall cause to be discharged into the atmosphere from that affected facility any gases that contain NO_x (expressed as NO_2) in excess of the following emission limits:

Fuel/steam generating unit type	Nitrogen oxide emission limits (expressed as NO_2) heat input	
	ng/J	lb/MMBTu
(1) Natural gas and distillate oil, except (4):		
(i) Low heat release rate ***Cleaver Brooks Boiler as certified by ITAFOS***	43	0.10
(ii) High heat release rate ***Nebraska Boiler as certified by ITAFOS***	86	0.20
(2) Residual oil:		
(i) Low heat release rate	130	0.30
(ii) High heat release rate	170	0.40
(3) Coal:		
(i) Mass-feed stoker	210	0.50
(ii) Spreader stoker and fluidized bed combustion	260	0.60
(iii) Pulverized coal	300	0.70
(iv) Lignite, except (v)	260	0.60
(v) Lignite mined in North Dakota, South Dakota, or Montana and combusted in a slag tap furnace	340	0.80
(vi) Coal-derived synthetic fuels	210	0.50
(4) Duct burner used in a combined cycle system:		

(i) Natural gas and distillate oil	86	0.20
(ii) Residual oil	170	0.40

(b) Except as provided under paragraphs (k) and (l) of this section, on and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that simultaneously combusts mixtures of only coal, oil, or natural gas shall cause to be discharged into the atmosphere from that affected facility any gases that contain NO_X in excess of a limit determined by the use of the following formula:

$$E_n = \frac{(EL_{go}H_{go}) + (EL_{ro}H_{ro}) + (EL_cH_c)}{(H_{go} + H_{ro} + H_c)}$$

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Where:

E_n = NO_X emission limit (expressed as NO_2), ng/J (lb/MMBtu);

EL_{go} = Appropriate emission limit from paragraph (a)(1) for combustion of natural gas or distillate oil, ng/J (lb/MMBtu);

H_{go} = Heat input from combustion of natural gas or distillate oil, J (MMBtu);

EL_{ro} = Appropriate emission limit from paragraph (a)(2) for combustion of residual oil, ng/J (lb/MMBtu);

H_{ro} = Heat input from combustion of residual oil, J (MMBtu);

EL_c = Appropriate emission limit from paragraph (a)(3) for combustion of coal, ng/J (lb/MMBtu); and

H_c = Heat input from combustion of coal, J (MMBtu).

ITAFOS does not combust a mixture of fuels.

(c) Except as provided under paragraph (d) and (l) of this section, on and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that simultaneously combusts coal or oil, natural gas (or any combination of the three), and wood, or any other fuel shall cause to be discharged into the atmosphere any gases that contain NO_X in excess of the emission limit for the coal, oil, natural gas (or any combination of the three), combusted in the affected facility, as determined pursuant to paragraph (a) or (b) of this section. This standard does not apply to an affected facility that is subject to and in compliance with a federally enforceable requirement that limits operation of the affected facility to an annual capacity factor of 10 percent (0.10) or less for coal, oil, natural gas (or any combination of the three).

ITAFOS exclusively combusts natural gas, this paragraph does not apply.

(d) On and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that simultaneously combusts natural gas and/or distillate oil with a potential SO_2 emissions rate of 26 ng/J (0.060 lb/MMBtu) or less with wood, municipal-type solid waste, or other solid fuel, except coal, shall cause to be discharged into the atmosphere from that affected facility any gases that contain NO_X in excess of 130 ng/J (0.30 lb/MMBtu) heat input unless the affected facility has an annual capacity factor for natural gas, distillate oil, or a mixture of these fuels of 10 percent (0.10) or less and is subject to a federally enforceable requirement that limits operation of the affected facility to an annual capacity factor of 10 percent (0.10) or less for natural gas, distillate oil, or a mixture of these fuels.

ITAFOS exclusively combusts natural gas, this paragraph does not apply.

(e) Except as provided under paragraph (l) of this section, on and after the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, no owner or operator of an affected facility that simultaneously combusts only coal, oil, or natural gas with byproduct/waste shall cause to be discharged into the atmosphere any gases that contain NO_X in excess of the emission limit determined by the following formula unless the affected facility has an annual capacity factor for coal, oil, and natural gas of 10 percent (0.10) or less and is subject to a federally enforceable requirement that limits operation of the affected facility to an annual capacity factor of 10 percent (0.10) or less:

ITAFOS exclusively combusts natural gas, this paragraph does not apply.

(f) Any owner or operator of an affected facility that combusts byproduct/waste with either natural gas or oil may petition the Administrator within 180 days of the initial startup of the affected facility to establish a NO_X emission limit that shall apply specifically to that affected facility when the byproduct/waste is combusted. The petition shall include sufficient and appropriate data, as determined by the Administrator, such as NO_X emissions from the affected facility, waste composition (including nitrogen content), and combustion conditions to allow the Administrator to confirm that the affected facility is unable to comply with the emission limits in paragraph (e) of this section and to determine the appropriate emission limit for the affected facility.

(1) Any owner or operator of an affected facility petitioning for a facility-specific NO_X emission limit under this section shall:

(i) Demonstrate compliance with the emission limits for natural gas and distillate oil in paragraph (a)(1) of this section or for residual oil in paragraph (a)(2) or (l)(1) of this section, as appropriate, by conducting a 30-day performance test as provided in §60.46b(e). During the performance test only natural gas, distillate oil, or residual oil shall be combusted in the affected facility; and

(ii) Demonstrate that the affected facility is unable to comply with the emission limits for natural gas and distillate oil in paragraph (a)(1) of this section or for residual oil in paragraph (a)(2) or (l)(1) of this

section, as appropriate, when gaseous or liquid byproduct/waste is combusted in the affected facility under the same conditions and using the same technological system of emission reduction applied when demonstrating compliance under paragraph (f)(1)(i) of this section.

(2) The NO_X emission limits for natural gas or distillate oil in paragraph (a)(1) of this section or for residual oil in paragraph (a)(2) or (l)(1) of this section, as appropriate, shall be applicable to the affected facility until and unless the petition is approved by the Administrator. If the petition is approved by the Administrator, a facility-specific NO_X emission limit will be established at the NO_X emission level achievable when the affected facility is combusting oil or natural gas and byproduct/waste in a manner that the Administrator determines to be consistent with minimizing NO_X emissions. In lieu of amending this subpart, a letter will be sent to the facility describing the facility-specific NO_X limit. The facility shall use the compliance procedures detailed in the letter and make the letter available to the public. If the Administrator determines it is appropriate, the conditions and requirements of the letter can be reviewed and changed at any point.

ITAFOS exclusively combusts natural gas, this paragraph does not apply.

(g) Any owner or operator of an affected facility that combusts hazardous waste (as defined by 40 CFR part 261 or 40 CFR part 761) with natural gas or oil may petition the Administrator within 180 days of the initial startup of the affected facility for a waiver from compliance with the NO_X emission limit that applies specifically to that affected facility. The petition must include sufficient and appropriate data, as determined by the Administrator, on NO_X emissions from the affected facility, waste destruction efficiencies, waste composition (including nitrogen content), the quantity of specific wastes to be combusted and combustion conditions to allow the Administrator to determine if the affected facility is able to comply with the NO_X emission limits required by this section. The owner or operator of the affected facility shall demonstrate that when hazardous waste is combusted in the affected facility, thermal destruction efficiency requirements for hazardous waste specified in an applicable federally enforceable requirement preclude compliance with the NO_X emission limits of this section. The NO_X emission limits for natural gas or distillate oil in paragraph (a)(1) of this section or for residual oil in paragraph (a)(2) or (l)(1) of this section, as appropriate, are applicable to the affected facility until and unless the petition is approved by the Administrator. (See 40 CFR 761.70 for regulations applicable to the incineration of materials containing polychlorinated biphenyls (PCB's).) In lieu of amending this subpart, a letter will be sent to the facility describing the facility-specific NO_X limit. The facility shall use the compliance procedures detailed in the letter and make the letter available to the public. If the Administrator determines it is appropriate, the conditions and requirements of the letter can be reviewed and changed at any point.

ITAFOS exclusively combusts natural gas, this paragraph does not apply.

(h) For purposes of paragraph (i) of this section, the NO_X standards under this section apply at all times including periods of startup, shutdown, or malfunction.

(i) Except as provided under paragraph (j) of this section, compliance with the emission limits under this section is determined on a 30-day rolling average basis.

(j) Compliance with the emission limits under this section is determined on a 24-hour average basis for the initial performance test and on a 3-hour average basis for subsequent performance tests for any affected facilities that:

(1) Combust, alone or in combination, only natural gas, distillate oil, or residual oil with a nitrogen content of 0.30 weight percent or less;

(2) Have a combined annual capacity factor of 10 percent or less for natural gas, distillate oil, and residual oil with a nitrogen content of 0.30 weight percent or less; and

(3) Are subject to a federally enforceable requirement limiting operation of the affected facility to the firing of natural gas, distillate oil, and/or residual oil with a nitrogen content of 0.30 weight percent or less and limiting operation of the affected facility to a combined annual capacity factor of 10 percent or less for natural gas, distillate oil, and residual oil with a nitrogen content of 0.30 weight percent or less.

(k) Affected facilities that meet the criteria described in paragraphs (j)(1), (2), and (3) of this section, and that have a heat input capacity of 73 MW (250 MMBtu/hr) or less, are not subject to the NO_X emission limits under this section.

ITAFOS did not demonstrate that they meet these criteria and they were not included in the previous analysis.

(l) On and after the date on which the initial performance test is completed or is required to be completed under 60.8, whichever date is first, no owner or operator of an affected facility that commenced construction after July 9, 1997 shall cause to be discharged into the atmosphere from that affected facility any gases that contain NOx (expressed as NO2) in excess of the following limits:

ITFAS certified the standards in paragraph (a) apply, not these standards (Table 4 of application).

(1) 86 ng/J (0.20 lb/MMBtu) heat input if the affected facility combusts coal, oil, or natural gas (or any combination of the three), alone or with any other fuels. The affected facility is not subject to this limit if it is subject to and in compliance with a federally enforceable requirement that limits operation of the facility to an annual capacity factor of 10 percent (0.10) or less for coal, oil, and natural gas (or any combination of the three); or

(2) If the affected facility has a low heat release rate and combusts natural gas or distillate oil in excess of 30 percent of the heat input on a 30-day rolling average from the combustion of all fuels, a limit determined by use of the following formula:

$$E_n = \frac{(0.10 \times H_g) + (0.20 \times H_r)}{(H_g + H_r)}$$

Where:

E_n = NO_X emission limit, (lb/MMBtu);

H_{go} = 30-day heat input from combustion of natural gas or distillate oil; and

H_r = 30-day heat input from combustion of any other fuel.

(3) After February 27, 2006, units where more than 10 percent of total annual output is electrical or mechanical may comply with an optional limit of 270 ng/J (2.1 lb/MWh) gross energy output, based on a 30-day rolling average. Units complying with this output-based limit must demonstrate compliance according to the procedures of §60.48Da(i) of subpart Da of this part, and must monitor emissions according to §60.49Da(c), (k), through (n) of subpart Da of this part.

[72 FR 32742, June 13, 2007, as amended at 74 FR 5086, Jan. 28, 2009; 77 FR 9459, Feb. 16, 2012]

§60.45b Compliance and performance test methods and procedures for sulfur dioxide.

(a) The SO_2 emission standards in §60.42b apply at all times. Facilities burning coke oven gas alone or in combination with any other gaseous fuels or distillate oil are allowed to exceed the limit 30 operating days per calendar year for SO_2 control system maintenance.

(b) In conducting the performance tests required under §60.8, the owner or operator shall use the methods and procedures in appendix A (including fuel certification and sampling) of this part or the methods and procedures as specified in this section, except as provided in §60.8(b). Section 60.8(f) does not apply to this section. The 30-day notice required in §60.8(d) applies only to the initial performance test unless otherwise specified by the Administrator.

Does not apply see proceeding paragraph.

(c) The owner or operator of an affected facility shall conduct performance tests to determine compliance with the percent of potential SO_2 emission rate (% P_s) and the SO_2 emission rate (E_s) pursuant to §60.42b following the procedures listed below, except as provided under paragraph (d) and (k) of this section.

ITAFOS certified the exception at paragraph (k) applies.

(1) The initial performance test shall be conducted over 30 consecutive operating days of the steam generating unit. Compliance with the SO_2 standards shall be determined using a 30-day average. The first operating day included in the initial performance test shall be scheduled within 30 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of the facility.

(2) If only coal, only oil, or a mixture of coal and oil is combusted, the following procedures are used:

(i) The procedures in Method 19 of appendix A-7 of this part are used to determine the hourly SO_2 emission rate (E_{ho}) and the 30-day average emission rate (E_{ao}). The hourly averages used to compute the 30-day averages are obtained from the CEMS of §60.47b(a) or (b).

(ii) The percent of potential SO_2 emission rate ($\%P_s$) emitted to the atmosphere is computed using the following formula:

$$\%P_s = 100\left(1 - \frac{\%R_g}{100}\right)\left(1 - \frac{\%R_f}{100}\right)$$

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Where:

$\%P_s$ = Potential SO_2 emission rate, percent;

$\%R_g$ = SO_2 removal efficiency of the control device as determined by Method 19 of appendix A of this part, in percent; and

$\%R_f$ = SO_2 removal efficiency of fuel pretreatment as determined by Method 19 of appendix A of this part, in percent.

(3) If coal or oil is combusted with other fuels, the same procedures required in paragraph (c)(2) of this section are used, except as provided in the following:

(i) An adjusted hourly SO_2 emission rate (E_{ho}°) is used in Equation 19-19 of Method 19 of appendix A of this part to compute an adjusted 30-day average emission rate (E_{ao}°). The Eho° is computed using the following formula:

$$E_{ho}^{\circ} = \frac{E_{ho} - E_w(1 - X_k)}{X_k}$$

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Where:

E_{ho}° = Adjusted hourly SO_2 emission rate, ng/J (lb/MMBtu);

E_{ho} = Hourly SO_2 emission rate, ng/J (lb/MMBtu);

E_w = SO_2 concentration in fuels other than coal and oil combusted in the affected facility, as determined by the fuel sampling and analysis procedures in Method 19 of appendix A of this part, ng/J (lb/MMBtu). The value E_w for each fuel lot is used for each hourly average during the time that the lot is being combusted; and

X_k = Fraction of total heat input from fuel combustion derived from coal, oil, or coal and oil, as determined by applicable procedures in Method 19 of appendix A of this part.

(ii) To compute the percent of potential SO_2 emission rate ($\%P_s$), an adjusted $\%R_g$ ($\%R_g^{\circ}$) is computed from the adjusted E_{ao}° from paragraph (b)(3)(i) of this section and an adjusted average SO_2 inlet rate (E_{ai}°) using the following formula:

$$\%R_f^\circ = 100\left(1.0 - \frac{E_{ao}^\circ}{E_{ai}^\circ}\right)$$

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To compute E_{ai}°, an adjusted hourly SO_2 inlet rate (E_{hi}°) is used. The E_{hi}° is computed using the following formula:

$$E_{hi}^\circ = \frac{E_{hi} - E_w(1 - X_k)}{X_k}$$

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Where:

E_{hi}° = Adjusted hourly SO_2 inlet rate, ng/J (lb/MMBtu); and

E_{hi} = Hourly SO_2 inlet rate, ng/J (lb/MMBtu).

(4) The owner or operator of an affected facility subject to paragraph (c)(3) of this section does not have to measure parameters E_w or X_k if the owner or operator elects to assume that X_k = 1.0. Owners or operators of affected facilities who assume X_k = 1.0 shall:

(i) Determine $\%P_s$ following the procedures in paragraph (c)(2) of this section; and

(ii) Sulfur dioxide emissions (E_s) are considered to be in compliance with SO_2 emission limits under §60.42b.

(5) The owner or operator of an affected facility that qualifies under the provisions of §60.42b(d) does not have to measure parameters E_w or X_k in paragraph (c)(3) of this section if the owner or operator of the affected facility elects to measure SO_2 emission rates of the coal or oil following the fuel sampling and analysis procedures in Method 19 of appendix A-7 of this part.

(d) Except as provided in paragraph (j) of this section, the owner or operator of an affected facility that combusts only very low sulfur oil, natural gas, or a mixture of these fuels, has an annual capacity factor for oil of 10 percent (0.10) or less, and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor for oil of 10 percent (0.10) or less shall:

ITAFOS does not a limit on annual capacity; this paragraph does not apply.

(1) Conduct the initial performance test over 24 consecutive steam generating unit operating hours at full load;

(2) Determine compliance with the standards after the initial performance test based on the arithmetic average of the hourly emissions data during each steam generating unit operating day if a CEMS is used,

or based on a daily average if Method 6B of appendix A of this part or fuel sampling and analysis procedures under Method 19 of appendix A of this part are used.

(e) The owner or operator of an affected facility subject to §60.42b(d)(1) shall demonstrate the maximum design capacity of the steam generating unit by operating the facility at maximum capacity for 24 hours. This demonstration will be made during the initial performance test and a subsequent demonstration may be requested at any other time. If the 24-hour average firing rate for the affected facility is less than the maximum design capacity provided by the manufacturer of the affected facility, the 24-hour average firing rate shall be used to determine the capacity utilization rate for the affected facility, otherwise the maximum design capacity provided by the manufacturer is used.

§60.42b(d)(1) does not apply.

(f) For the initial performance test required under §60.8, compliance with the SO_2 emission limits and percent reduction requirements under §60.42b is based on the average emission rates and the average percent reduction for SO_2 for the first 30 consecutive steam generating unit operating days, except as provided under paragraph (d) of this section. The initial performance test is the only test for which at least 30 days prior notice is required unless otherwise specified by the Administrator. The initial performance test is to be scheduled so that the first steam generating unit operating day of the 30 successive steam generating unit operating days is completed within 30 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of the facility. The boiler load during the 30-day period does not have to be the maximum design load, but must be representative of future operating conditions and include at least one 24-hour period at full load.

ITAFOS is not subject to an SO_2 emission rate limit and testing is not required.

(g) After the initial performance test required under §60.8, compliance with the SO_2 emission limits and percent reduction requirements under §60.42b is based on the average emission rates and the average percent reduction for SO_2 for 30 successive steam generating unit operating days, except as provided under paragraph (d). A separate performance test is completed at the end of each steam generating unit operating day after the initial performance test, and a new 30-day average emission rate and percent reduction for SO_2 are calculated to show compliance with the standard.

ITAFOS is not subject to an SO_2 emission rate limit and testing is not required.

(h) Except as provided under paragraph (i) of this section, the owner or operator of an affected facility shall use all valid SO_2 emissions data in calculating $\%P_s$ and E_{ho} under paragraph (c), of this section whether or not the minimum emissions data requirements under §60.46b are achieved. All valid emissions data, including valid SO_2 emission data collected during periods of startup, shutdown and malfunction, shall be used in calculating $\%P_s$ and E_{ho} pursuant to paragraph (c) of this section.

Paragraph (c) doesn't apply, therefore this paragraph then doesn't apply.

(i) During periods of malfunction or maintenance of the SO_2 control systems when oil is combusted as provided under §60.42b(i), emission data are not used to calculate $\%P_s$ or E_s under §60.42b(a), (b) or (c), however, the emissions data are used to determine compliance with the emission limit under §60.42b(i).

ITAFOS does not operate a control system.

(j) The owner or operator of an affected facility that only combusts very low sulfur oil, natural gas, or a mixture of these fuels with any other fuels not subject to an SO_2 standard is not subject to the compliance and performance testing requirements of this section if the owner or operator obtains fuel receipts as described in §60.49b(r).

(k) The owner or operator of an affected facility seeking to demonstrate compliance in §§60.42b(d)(4), 60.42b(j), 60.42b(k)(2), and 60.42b(k)(3) (when not burning coal) shall follow the applicable procedures in §60.49b(r).

[72 FR 32742, June 13, 2007, as amended at 74 FR 5086, Jan. 28, 2009]

§60.46b Compliance and performance test methods and procedures for particulate matter and nitrogen oxides.

Since the boilers combust natural gas, PM and opacity standards do not apply.

The NOx source testing under this subsection relates to the initial performance test which was required within 180 days of startup (40 CFR 60.8). That deadline has long passed. These initial test requirements are not included in the permit. The permittee determines compliance with the NOx limits through continuous monitoring required in subsection 49b.

The following paragraphs under this subsection do not apply since the boilers combust natural gas (meaning there are not opacity or PM limits to test for), and because the initial source test for compliance with NOx tests were due over 10 years ago.

(a) The PM emission standards and opacity limits under §60.43b apply at all times except during periods of startup, shutdown, or malfunction. The NO_X emission standards under §60.44b apply at all times.

(b) Compliance with the PM emission standards under §60.43b shall be determined through performance testing as described in paragraph (d) of this section, except as provided in paragraph (i) of this section.

(c) Compliance with the NO_X emission standards under §60.44b shall be determined through performance testing under paragraph (e) or (f), or under paragraphs (g) and (h) of this section, as applicable.

(d) To determine compliance with the PM emission limits and opacity limits under §60.43b, the owner or operator of an affected facility shall conduct an initial performance test as required under §60.8, and

shall conduct subsequent performance tests as requested by the Administrator, using the following procedures and reference methods:

(1) Method 3A or 3B of appendix A-2 of this part is used for gas analysis when applying Method 5 of appendix A-3 of this part or Method 17 of appendix A-6 of this part.

(2) Method 5, 5B, or 17 of appendix A of this part shall be used to measure the concentration of PM as follows:

(i) Method 5 of appendix A of this part shall be used at affected facilities without wet flue gas desulfurization (FGD) systems; and

(ii) Method 17 of appendix A-6 of this part may be used at facilities with or without wet scrubber systems provided the stack gas temperature does not exceed a temperature of 160 °C (320 °F). The procedures of sections 8.1 and 11.1 of Method 5B of appendix A-3 of this part may be used in Method 17 of appendix A-6 of this part only if it is used after a wet FGD system. Do not use Method 17 of appendix A-6 of this part after wet FGD systems if the effluent is saturated or laden with water droplets.

(iii) Method 5B of appendix A of this part is to be used only after wet FGD systems.

(3) Method 1 of appendix A of this part is used to select the sampling site and the number of traverse sampling points. The sampling time for each run is at least 120 minutes and the minimum sampling volume is 1.7 dscm (60 dscf) except that smaller sampling times or volumes may be approved by the Administrator when necessitated by process variables or other factors.

(4) For Method 5 of appendix A of this part, the temperature of the sample gas in the probe and filter holder is monitored and is maintained at 160±14 °C (320±25 °F).

(5) For determination of PM emissions, the oxygen (O_2) or CO_2 sample is obtained simultaneously with each run of Method 5, 5B, or 17 of appendix A of this part by traversing the duct at the same sampling location.

(6) For each run using Method 5, 5B, or 17 of appendix A of this part, the emission rate expressed in ng/J heat input is determined using:

(i) The O_2 or CO_2 measurements and PM measurements obtained under this section;

(ii) The dry basis F factor; and

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

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

(e) To determine compliance with the emission limits for NO_X required under §60.44b, the owner or operator of an affected facility shall conduct the performance test as required under §60.8 using the continuous system for monitoring NO_X under §60.48(b).

(1) For the initial compliance test, NO_X from the steam generating unit are monitored for 30 successive steam generating unit operating days and the 30-day average emission rate is used to determine compliance with the NO_X emission standards under §60.44b. The 30-day average emission rate is calculated as the average of all hourly emissions data recorded by the monitoring system during the 30-day test period.

(2) Following the date on which the initial performance test is completed or is required to be completed in §60.8, whichever date comes first, the owner or operator of an affected facility which combusts coal (except as specified under §60.46b(e)(4)) or which combusts residual oil having a nitrogen content greater than 0.30 weight percent shall determine compliance with the NO_X emission standards in §60.44b on a continuous basis through the use of a 30-day rolling average emission rate. A new 30-day rolling average emission rate is calculated for each steam generating unit operating day as the average of all of the hourly NO_X emission data for the preceding 30 steam generating unit operating days.

(3) Following the date on which the initial performance test is completed or is required to be completed under §60.8, whichever date comes first, the owner or operator of an affected facility that has a heat input capacity greater than 73 MW (250 MMBtu/hr) and that combusts natural gas, distillate oil, or residual oil having a nitrogen content of 0.30 weight percent or less shall determine compliance with the NO_X standards under §60.44b on a continuous basis through the use of a 30-day rolling average emission rate. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly NO_X emission data for the preceding 30 steam generating unit operating days.

(4) Following the date on which the initial performance test is completed or required to be completed under §60.8, whichever date comes first, the owner or operator of an affected facility that has a heat input capacity of 73 MW (250 MMBtu/hr) or less and that combusts natural gas, distillate oil, gasified coal, or residual oil having a nitrogen content of 0.30 weight percent or less shall upon request determine compliance with the NO_X standards in §60.44b through the use of a 30-day performance test. During periods when performance tests are not requested, NO_X emissions data collected pursuant to §60.48b(g)(1) or §60.48b(g)(2) are used to calculate a 30-day rolling average emission rate on a daily basis and used to prepare excess emission reports, but will not be used to determine compliance with the NO_X emission standards. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly NO_X emission data for the preceding 30 steam generating unit operating days.

(5) If the owner or operator of an affected facility that combusts residual oil does not sample and analyze the residual oil for nitrogen content, as specified in §60.49b(e), the requirements of §60.48b(g)(1) apply and the provisions of §60.48b(g)(2) are inapplicable.

(f) To determine compliance with the emissions limits for NO_X required by §60.44b(a)(4) or §60.44b(l) for duct burners used in combined cycle systems, either of the procedures described in paragraph (f)(1) or (2) of this section may be used:

(1) The owner or operator of an affected facility shall conduct the performance test required under §60.8 as follows:

(i) The emissions rate (E) of NO_X shall be computed using Equation 1 in this section:

$$E = E_{sg} + \left(\frac{H_g}{H_b}\right)\left(E_{sg} - E_g\right) \qquad \text{(Eq.1)}$$

Where:

E = Emissions rate of NO_X from the duct burner, ng/J (lb/MMBtu) heat input;

E_{sg} = Combined effluent emissions rate, in ng/J (lb/MMBtu) heat input using appropriate F factor as described in Method 19 of appendix A of this part;

H_g = Heat input rate to the combustion turbine, in J/hr (MMBtu/hr);

H_b = Heat input rate to the duct burner, in J/hr (MMBtu/hr); and

E_g = Emissions rate from the combustion turbine, in ng/J (lb/MMBtu) heat input calculated using appropriate F factor as described in Method 19 of appendix A of this part.

(ii) Method 7E of appendix A of this part or Method 320 of appendix A of part 63 shall be used to determine the NO_X concentrations. Method 3A or 3B of appendix A of this part shall be used to determine O_2 concentration.

(iii) The owner or operator shall identify and demonstrate to the Administrator's satisfaction suitable methods to determine the average hourly heat input rate to the combustion turbine and the average hourly heat input rate to the affected duct burner.

(iv) Compliance with the emissions limits under §60.44b(a)(4) or §60.44b(l) is determined by the three-run average (nominal 1-hour runs) for the initial and subsequent performance tests; or

(2) The owner or operator of an affected facility may elect to determine compliance on a 30-day rolling average basis by using the CEMS specified under §60.48b for measuring NO_X and O_2 and meet the requirements of §60.48b. The sampling site shall be located at the outlet from the steam generating unit. The NO_X emissions rate at the outlet from the steam generating unit shall constitute the NO_X emissions rate from the duct burner of the combined cycle system.

(g) The owner or operator of an affected facility described in §60.44b(j) or §60.44b(k) shall demonstrate the maximum heat input capacity of the steam generating unit by operating the facility at maximum capacity for 24 hours. The owner or operator of an affected facility shall determine the maximum heat input capacity using the heat loss method or the heat input method described in sections 5 and 7.3 of the ASME *Power Test Codes* 4.1 (incorporated by reference, see §60.17). This demonstration of maximum heat input capacity shall be made during the initial performance test for affected facilities that meet the criteria of §60.44b(j). It shall be made within 60 days after achieving the maximum

production rate at which the affected facility will be operated, but not later than 180 days after initial start-up of each facility, for affected facilities meeting the criteria of §60.44b(k). Subsequent demonstrations may be required by the Administrator at any other time. If this demonstration indicates that the maximum heat input capacity of the affected facility is less than that stated by the manufacturer of the affected facility, the maximum heat input capacity determined during this demonstration shall be used to determine the capacity utilization rate for the affected facility. Otherwise, the maximum heat input capacity provided by the manufacturer is used.

(h) The owner or operator of an affected facility described in §60.44b(j) that has a heat input capacity greater than 73 MW (250 MMBtu/hr) shall:

(1) Conduct an initial performance test as required under §60.8 over a minimum of 24 consecutive steam generating unit operating hours at maximum heat input capacity to demonstrate compliance with the NO_X emission standards under §60.44b using Method 7, 7A, or 7E of appendix A of this part, Method 320 of appendix A of part 63 of this chapter, or other approved reference methods; and

(2) Conduct subsequent performance tests once per calendar year or every 400 hours of operation (whichever comes first) to demonstrate compliance with the NO_X emission standards under §60.44b over a minimum of 3 consecutive steam generating unit operating hours at maximum heat input capacity using Method 7, 7A, or 7E of appendix A of this part, Method 320 of appendix A of part 63, or other approved reference methods.

(i) The owner or operator of an affected facility seeking to demonstrate compliance with the PM limit in paragraphs §60.43b(a)(4) or §60.43b(h)(5) shall follow the applicable procedures in §60.49b(r).

(j) In place of PM testing with Method 5 or 5B of appendix A-3 of this part, or Method 17 of appendix A-6 of this part, an owner or operator may elect to install, calibrate, maintain, and operate a CEMS for monitoring PM emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility who elects to continuously monitor PM emissions instead of conducting performance testing using Method 5 or 5B of appendix A-3 of this part or Method 17 of appendix A-6 of this part shall comply with the requirements specified in paragraphs (j)(1) through (j)(14) of this section.

(1) Notify the Administrator one month before starting use of the system.

(2) Notify the Administrator one month before stopping use of the system.

(3) The monitor shall be installed, evaluated, and operated in accordance with §60.13 of subpart A of this part.

(4) The initial performance evaluation shall be completed no later than 180 days after the date of initial startup of the affected facility, as specified under §60.8 of subpart A of this part or within 180 days of notification to the Administrator of use of the CEMS if the owner or operator was previously determining compliance by Method 5, 5B, or 17 of appendix A of this part performance tests, whichever is later.

(5) The owner or operator of an affected facility shall conduct an initial performance test for PM emissions as required under §60.8 of subpart A of this part. Compliance with the PM emission limit shall be determined by using the CEMS specified in paragraph (j) of this section to measure PM and calculating a 24-hour block arithmetic average emission concentration using EPA Reference Method 19 of appendix A of this part, section 4.1.

(6) Compliance with the PM emission limit shall be determined based on the 24-hour daily (block) average of the hourly arithmetic average emission concentrations using CEMS outlet data.

(7) At a minimum, valid CEMS hourly averages shall be obtained as specified in paragraphs (j)(7)(i) of this section for 75 percent of the total operating hours per 30-day rolling average.

(i) At least two data points per hour shall be used to calculate each 1-hour arithmetic average.

(ii) [Reserved]

(8) The 1-hour arithmetic averages required under paragraph (j)(7) of this section shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the boiler operating day daily arithmetic average emission concentrations. The 1-hour arithmetic averages shall be calculated using the data points required under §60.13(e)(2) of subpart A of this part.

(9) All valid CEMS data shall be used in calculating average emission concentrations even if the minimum CEMS data requirements of paragraph (j)(7) of this section are not met.

(10) The CEMS shall be operated according to Performance Specification 11 in appendix B of this part.

(11) During the correlation testing runs of the CEMS required by Performance Specification 11 in appendix B of this part, PM and O_2 (or CO_2) data shall be collected concurrently (or within a 30-to 60-minute period) by both the continuous emission monitors and performance tests conducted using the following test methods.

(i) For PM, Method 5 or 5B of appendix A-3 of this part or Method 17 of appendix A-6 of this part shall be used; and

(ii) For O_2 (or CO_2), Method 3A or 3B of appendix A-2 of this part, as applicable shall be used.

(12) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with procedure 2 in appendix F of this part. Relative Response Audit's must be performed annually and Response Correlation Audits must be performed every 3 years.

(13) When PM emissions data are not obtained because of CEMS breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained by using other monitoring systems as approved by the Administrator or EPA Reference Method 19 of appendix A of this part to provide, as necessary, valid emissions data for a minimum of 75 percent of total operating hours per 30-day rolling average.

(14) As of January 1, 2012, and within 90 days after the date of completing each performance test, as defined in §60.8, conducted to demonstrate compliance with this subpart, you must submit relative accuracy test audit (*i.e.,* reference method) data and performance test (*i.e.,* compliance test) data, except opacity data, electronically to EPA's Central Data Exchange (CDX) by using the Electronic Reporting Tool (ERT) (see *http://www.epa.gov/ttn/chief/ert/ert_tool.html/*) or other compatible electronic spreadsheet. Only data collected using test methods compatible with ERT are subject to this requirement to be submitted electronically into EPA's WebFIRE database.

[72 FR 32742, June 13, 2007, as amended at 74 FR 5086, Jan. 28, 2009; 76 FR 3523, Jan. 20, 2011; 77 FR 9460, Feb. 16, 2012; 79 FR 11249, Feb. 27, 2014]

§60.47b Emission monitoring for sulfur dioxide.

(a) Except as provided in paragraphs (b) and (f) of this section, the owner or operator of an affected facility subject to the SO_2 standards in §60.42b shall install, calibrate, maintain, and operate CEMS for measuring SO_2 concentrations and either O_2 or CO_2 concentrations and shall record the output of the systems. For units complying with the percent reduction standard, the SO_2 and either O_2 or CO_2 concentrations shall both be monitored at the inlet and outlet of the SO_2 control device. If the owner or operator has installed and certified SO_2 and O_2 or CO_2 CEMS according to the requirements of §75.20(c)(1) of this chapter and appendix A to part 75 of this chapter, and is continuing to meet the ongoing quality assurance requirements of §75.21 of this chapter and appendix B to part 75 of this chapter, those CEMS may be used to meet the requirements of this section, provided that:

The exception at paragraph (f) applies to ITAFOS. See that paragraph for monitoring requirements for SO_2.

(1) When relative accuracy testing is conducted, SO_2 concentration data and CO_2 (or O_2) data are collected simultaneously; and

(2) In addition to meeting the applicable SO_2 and CO_2 (or O_2) relative accuracy specifications in Figure 2 of appendix B to part 75 of this chapter, the relative accuracy (RA) standard in section 13.2 of Performance Specification 2 in appendix B to this part is met when the RA is calculated on a lb/MMBtu basis; and

(3) The reporting requirements of §60.49b are met. SO_2 and CO_2 (or O_2) data used to meet the requirements of §60.49b shall not include substitute data values derived from the missing data procedures in subpart D of part 75 of this chapter, nor shall the SO_2 data have been bias adjusted according to the procedures of part 75 of this chapter.

(b) As an alternative to operating CEMS as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO_2 emissions and percent reduction by:

(1) Collecting coal or oil samples in an as-fired condition at the inlet to the steam generating unit and analyzing them for sulfur and heat content according to Method 19 of appendix A of this part. Method

19 of appendix A of this part provides procedures for converting these measurements into the format to be used in calculating the average SO_2 input rate, or

(2) Measuring SO_2 according to Method 6B of appendix A of this part at the inlet or outlet to the SO_2 control system. An initial stratification test is required to verify the adequacy of the sampling location for Method 6B of appendix A of this part. The stratification test shall consist of three paired runs of a suitable SO_2 and CO_2 measurement train operated at the candidate location and a second similar train operated according to the procedures in Section 3.2 and the applicable procedures in Section 7 of Performance Specification 2. Method 6B of appendix A of this part, Method 6A of appendix A of this part, or a combination of Methods 6 and 3 or 3B of appendix A of this part or Methods 6C or Method 320 of appendix A of part 63 of this chapter and 3A of appendix A of this part are suitable measurement techniques. If Method 6B of appendix A of this part is used for the second train, sampling time and timer operation may be adjusted for the stratification test as long as an adequate sample volume is collected; however, both sampling trains are to be operated similarly. For the location to be adequate for Method 6B of appendix A of this part, 24-hour tests, the mean of the absolute difference between the three paired runs must be less than 10 percent.

(3) A daily SO_2 emission rate, E_D, shall be determined using the procedure described in Method 6A of appendix A of this part, section 7.6.2 (Equation 6A-8) and stated in ng/J (lb/MMBtu) heat input.

(4) The mean 30-day emission rate is calculated using the daily measured values in ng/J (lb/MMBtu) for 30 successive steam generating unit operating days using equation 19-20 of Method 19 of appendix A of this part.

(c) The owner or operator of an affected facility shall obtain emission data for at least 75 percent of the operating hours in at least 22 out of 30 successive boiler operating days. If this minimum data requirement is not met with a single monitoring system, the owner or operator of the affected facility shall supplement the emission data with data collected with other monitoring systems as approved by the Administrator or the reference methods and procedures as described in paragraph (b) of this section.

(d) The 1-hour average SO_2 emission rates measured by the CEMS required by paragraph (a) of this section and required under §60.13(h) is expressed in ng/J or lb/MMBtu heat input and is used to calculate the average emission rates under §60.42(b). Each 1-hour average SO_2 emission rate must be based on 30 or more minutes of steam generating unit operation. The hourly averages shall be calculated according to §60.13(h)(2). Hourly SO_2 emission rates are not calculated if the affected facility is operated less than 30 minutes in a given clock hour and are not counted toward determination of a steam generating unit operating day.

(e) The procedures under §60.13 shall be followed for installation, evaluation, and operation of the CEMS.

(1) Except as provided for in paragraph (e)(4) of this section, all CEMS shall be operated in accordance with the applicable procedures under Performance Specifications 1, 2, and 3 of appendix B of this part.

(2) Except as provided for in paragraph (e)(4) of this section, quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 1 of appendix F of this part.

(3) For affected facilities combusting coal or oil, alone or in combination with other fuels, the span value of the SO_2 CEMS at the inlet to the SO_2 control device is 125 percent of the maximum estimated hourly potential SO_2 emissions of the fuel combusted, and the span value of the CEMS at the outlet to the SO_2 control device is 50 percent of the maximum estimated hourly potential SO_2 emissions of the fuel combusted. Alternatively, SO_2 span values determined according to section 2.1.1 in appendix A to part 75 of this chapter may be used.

(4) As an alternative to meeting the requirements of requirements of paragraphs (e)(1) and (e)(2) of this section, the owner or operator may elect to implement the following alternative data accuracy assessment procedures:

(i) For all required CO_2 and O_2 monitors and for SO_2 and NO_X monitors with span values greater than or equal to 100 ppm, the daily calibration error test and calibration adjustment procedures described in sections 2.1.1 and 2.1.3 of appendix B to part 75 of this chapter may be followed instead of the CD assessment procedures in Procedure 1, section 4.1 of appendix F to this part.

(ii) For all required CO_2 and O_2 monitors and for SO_2 and NO_X monitors with span values greater than 30 ppm, quarterly linearity checks may be performed in accordance with section 2.2.1 of appendix B to part 75 of this chapter, instead of performing the cylinder gas audits (CGAs) described in Procedure 1, section 5.1.2 of appendix F to this part. If this option is selected: The frequency of the linearity checks shall be as specified in section 2.2.1 of appendix B to part 75 of this chapter; the applicable linearity specifications in section 3.2 of appendix A to part 75 of this chapter shall be met; the data validation and out-of-control criteria in section 2.2.3 of appendix B to part 75 of this chapter shall be followed instead of the excessive audit inaccuracy and out-of-control criteria in Procedure 1, section 5.2 of appendix F to this part; and the grace period provisions in section 2.2.4 of appendix B to part 75 of this chapter shall apply. For the purposes of data validation under this subpart, the cylinder gas audits described in Procedure 1, section 5.1.2 of appendix F to this part shall be performed for SO_2 and NO_X span values less than or equal to 30 ppm; and

(iii) For SO_2, CO_2, and O_2 monitoring systems and for NO_X emission rate monitoring systems, RATAs may be performed in accordance with section 2.3 of appendix B to part 75 of this chapter instead of following the procedures described in Procedure 1, section 5.1.1 of appendix F to this part. If this option is selected: The frequency of each RATA shall be as specified in section 2.3.1 of appendix B to part 75 of this chapter; the applicable relative accuracy specifications shown in Figure 2 in appendix B to part 75 of this chapter shall be met; the data validation and out-of-control criteria in section 2.3.2 of appendix B to part 75 of this chapter shall be followed instead of the excessive audit inaccuracy and out-of-control criteria in Procedure 1, section 5.2 of appendix F to this part; and the grace period provisions in section 2.3.3 of appendix B to part 75 of this chapter shall apply. For the purposes of data validation under this subpart, the relative accuracy specification in section 13.2 of Performance Specification 2 in appendix B to this part shall be met on a lb/MMBtu basis for SO_2 (regardless of the SO_2 emission level during the

RATA), and for NO_X when the average NO_X emission rate measured by the reference method during the RATA is less than 0.100 lb/MMBtu.

(f) The owner or operator of an affected facility that combusts very low sulfur oil or is demonstrating compliance under §60.45b(k) is not subject to the emission monitoring requirements under paragraph (a) of this section if the owner or operator maintains fuel records as described in §60.49b(r).

[72 FR 32742, June 13, 2007, as amended at 74 FR 5087, Jan. 28, 2009; 79 FR 11249, Feb. 27, 2014]

§60.48b Emission monitoring for particulate matter and nitrogen oxides.

Since the facility combusts natural gas exclusively, particulate matter/opacity standards do not apply and monitoring is not required. Paragraph (a) does not apply.

(a) Except as provided in paragraph (j) of this section, the owner or operator of an affected facility subject to the opacity standard under §60.43b shall install, calibrate, maintain, and operate a continuous opacity monitoring systems (COMS) for measuring the opacity of emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility subject to an opacity standard under §60.43b and meeting the conditions under paragraphs (j)(1), (2), (3), (4), (5), or (6) of this section who elects not to use a COMS shall conduct a performance test using Method 9 of appendix A-4 of this part and the procedures in §60.11 to demonstrate compliance with the applicable limit in §60.43b by April 29, 2011, within 45 days of stopping use of an existing COMS, or within 180 days after initial startup of the facility, whichever is later, and shall comply with either paragraphs (a)(1), (a)(2), or (a)(3) of this section. The observation period for Method 9 of appendix A-4 of this part performance tests may be reduced from 3 hours to 60 minutes if all 6-minute averages are less than 10 percent and all individual 15-second observations are less than or equal to 20 percent during the initial 60 minutes of observation.

(1) Except as provided in paragraph (a)(2) and (a)(3) of this section, the owner or operator shall conduct subsequent Method 9 of appendix A-4 of this part performance tests using the procedures in paragraph (a) of this section according to the applicable schedule in paragraphs (a)(1)(i) through (a)(1)(iv) of this section, as determined by the most recent Method 9 of appendix A-4 of this part performance test results.

(i) If no visible emissions are observed, a subsequent Method 9 of appendix A-4 of this part performance test must be completed within 12 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later;

(ii) If visible emissions are observed but the maximum 6-minute average opacity is less than or equal to 5 percent, a subsequent Method 9 of appendix A-4 of this part performance test must be completed within 6 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later;

(iii) If the maximum 6-minute average opacity is greater than 5 percent but less than or equal to 10 percent, a subsequent Method 9 of appendix A-4 of this part performance test must be completed within 3 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later; or

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

(2) If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 of appendix A-4 of this part performance test, the owner or operator may, as an alternative to performing subsequent Method 9 of appendix A-4 of this part performance tests, elect to perform subsequent monitoring using Method 22 of appendix A-7 of this part according to the procedures specified in paragraphs (a)(2)(i) and (ii) of this section.

(i) The owner or operator shall conduct 10 minute observations (during normal operation) each operating day the affected facility fires fuel for which an opacity standard is applicable using Method 22 of appendix A-7 of this part and demonstrate that the sum of the occurrences of any visible emissions is not in excess of 5 percent of the observation period (*i.e.*, 30 seconds per 10 minute period). If the sum of the occurrence of any visible emissions is greater than 30 seconds during the initial 10 minute observation, immediately conduct a 30 minute observation. If the sum of the occurrence of visible emissions is greater than 5 percent of the observation period (*i.e.*, 90 seconds per 30 minute period), the owner or operator shall either document and adjust the operation of the facility and demonstrate within 24 hours that the sum of the occurrence of visible emissions is equal to or less than 5 percent during a 30 minute observation (*i.e.*, 90 seconds) or conduct a new Method 9 of appendix A-4 of this part performance test using the procedures in paragraph (a) of this section within 45 calendar days according to the requirements in §60.46d(d)(7).

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

(3) If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 of appendix A-4 of this part performance test, the owner or operator may, as an alternative to performing subsequent Method 9 of appendix A-4 performance tests, elect to perform subsequent monitoring using a digital opacity compliance system according to a site-specific monitoring plan approved by the Administrator. The observations shall be similar, but not necessarily identical, to the requirements in paragraph (a)(2) of this section. For reference purposes in preparing the monitoring plan, see OAQPS "Determination of Visible Emission Opacity from Stationary Sources Using Computer-Based Photographic Analysis Systems." This document is available from the U.S. Environmental Protection Agency (U.S. EPA); Office of Air Quality and Planning Standards; Sector Policies and Programs Division; Measurement Policy Group (D243-02), Research Triangle Park, NC 27711. This document is also

available on the Technology Transfer Network (TTN) under Emission Measurement Center Preliminary Methods.

(b) Except as provided under paragraphs (g), (h), and (i) of this section, the owner or operator of an affected facility subject to a NO_X standard under §60.44b shall comply with either paragraphs (b)(1) or (b)(2) of this section.

Previous permitting actions have determined that paragraph (g) applies and that is the paragraph that is included in the permit.

(1) Install, calibrate, maintain, and operate CEMS for measuring NO_X and O_2 (or CO_2) emissions discharged to the atmosphere, and shall record the output of the system; or

(2) If the owner or operator has installed a NO_X emission rate CEMS to meet the requirements of part 75 of this chapter and is continuing to meet the ongoing requirements of part 75 of this chapter, that CEMS may be used to meet the requirements of this section, except that the owner or operator shall also meet the requirements of §60.49b. Data reported to meet the requirements of §60.49b shall not include data substituted using the missing data procedures in subpart D of part 75 of this chapter, nor shall the data have been bias adjusted according to the procedures of part 75 of this chapter.

(c) The CEMS required under paragraph (b) of this section shall be operated and data recorded during all periods of operation of the affected facility except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.

(d) The 1-hour average NO_X emission rates measured by the continuous NO_X monitor required by paragraph (b) of this section and required under §60.13(h) shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the average emission rates under §60.44b. The 1-hour averages shall be calculated using the data points required under §60.13(h)(2).

(e) The procedures under §60.13 shall be followed for installation, evaluation, and operation of the continuous monitoring systems.

(1) For affected facilities combusting coal, wood or municipal-type solid waste, the span value for a COMS shall be between 60 and 80 percent.

(2) For affected facilities combusting coal, oil, or natural gas, the span value for NO_X is determined using one of the following procedures:

(i) Except as provided under paragraph (e)(2)(ii) of this section, NO_X span values shall be determined as follows:

Fuel	Span values for NO_X (ppm)

Natural gas	500.
Oil	500.
Coal	1,000.
Mixtures	500 (x + y) + 1,000z.

Where:

x = Fraction of total heat input derived from natural gas;

y = Fraction of total heat input derived from oil; and

z = Fraction of total heat input derived from coal.

(ii) As an alternative to meeting the requirements of paragraph (e)(2)(i) of this section, the owner or operator of an affected facility may elect to use the NO_X span values determined according to section 2.1.2 in appendix A to part 75 of this chapter.

(3) All span values computed under paragraph (e)(2)(i) of this section for combusting mixtures of regulated fuels are rounded to the nearest 500 ppm. Span values computed under paragraph (e)(2)(ii) of this section shall be rounded off according to section 2.1.2 in appendix A to part 75 of this chapter.

(f) When NO_X emission data are not obtained because of CEMS breakdowns, repairs, calibration checks and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7 of appendix A of this part, Method 7A of appendix A of this part, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days.

(g) The owner or operator of an affected facility that has a heat input capacity of 73 MW (250 MMBtu/hr) or less, and that has an annual capacity factor for residual oil having a nitrogen content of 0.30 weight percent or less, natural gas, distillate oil, gasified coal, or any mixture of these fuels, greater than 10 percent (0.10) shall:

(1) Comply with the provisions of paragraphs (b), (c), (d), (e)(2), (e)(3), and (f) of this section; or

(2) Monitor steam generating unit operating conditions and predict NO_X emission rates as specified in a plan submitted pursuant to §60.49b(c).

(h) The owner or operator of a duct burner, as described in §60.41b, that is subject to the NO_X standards in §60.44b(a)(4), §60.44b(e), or §60.44b(l) is not required to install or operate a continuous emissions monitoring system to measure NO_X emissions.

ITAFOS has not indicated they have a duct burner.

(i) The owner or operator of an affected facility described in §60.44b(j) or §60.44b(k) is not required to install or operate a CEMS for measuring NO_X emissions.

ITAFOS has not demonstrated §60.44b(j) or §60.44b(k) apply.

(j) The owner or operator of an affected facility that meets the conditions in either paragraph (j)(1), (2), (3), (4), (5), (6), or (7) of this section is not required to install or operate a COMS if:

Opacity standards do not apply, a COMS is not required.

(1) The affected facility uses a PM CEMS to monitor PM emissions; or

(2) The affected facility burns only liquid (excluding residual oil) or gaseous fuels with potential SO_2 emissions rates of 26 ng/J (0.060 lb/MMBtu) or less and does not use a post-combustion technology to reduce SO_2 or PM emissions. The owner or operator must maintain fuel records of the sulfur content of the fuels burned, as described under §60.49b(r); or

(3) The affected facility burns coke oven gas alone or in combination with fuels meeting the criteria in paragraph (j)(2) of this section and does not use a post-combustion technology to reduce SO_2 or PM emissions; or

(4) The affected facility does not use post-combustion technology (except a wet scrubber) for reducing PM, SO_2, or carbon monoxide (CO) emissions, burns only gaseous fuels or fuel oils that contain less than or equal to 0.30 weight percent sulfur, and is operated such that emissions of CO to the atmosphere from the affected facility are maintained at levels less than or equal to 0.15 lb/MMBtu on a steam generating unit operating day average basis. Owners and operators of affected facilities electing to comply with this paragraph must demonstrate compliance according to the procedures specified in paragraphs (j)(4)(i) through (iv) of this section; or

(i) You must monitor CO emissions using a CEMS according to the procedures specified in paragraphs (j)(4)(i)(A) through (D) of this section.

(A) The CO CEMS must be installed, certified, maintained, and operated according to the provisions in §60.58b(i)(3) of subpart Eb of this part.

(B) Each 1-hour CO emissions average is calculated using the data points generated by the CO CEMS expressed in parts per million by volume corrected to 3 percent oxygen (dry basis).

(C) At a minimum, valid 1-hour CO emissions averages must be obtained for at least 90 percent of the operating hours on a 30-day rolling average basis. The 1-hour averages are calculated using the data points required in §60.13(h)(2).

(D) Quarterly accuracy determinations and daily calibration drift tests for the CO CEMS must be performed in accordance with procedure 1 in appendix F of this part.

(ii) You must calculate the 1-hour average CO emissions levels for each steam generating unit operating day by multiplying the average hourly CO output concentration measured by the CO CEMS times the corresponding average hourly flue gas flow rate and divided by the corresponding average hourly heat input to the affected source. The 24-hour average CO emission level is determined by calculating the arithmetic average of the hourly CO emission levels computed for each steam generating unit operating day.

(iii) You must evaluate the preceding 24-hour average CO emission level each steam generating unit operating day excluding periods of affected source startup, shutdown, or malfunction. If the 24-hour average CO emission level is greater than 0.15 lb/MMBtu, you must initiate investigation of the relevant equipment and control systems within 24 hours of the first discovery of the high emission incident and, take the appropriate corrective action as soon as practicable to adjust control settings or repair equipment to reduce the 24-hour average CO emission level to 0.15 lb/MMBtu or less.

(iv) You must record the CO measurements and calculations performed according to paragraph (j)(4) of this section and any corrective actions taken. The record of corrective action taken must include the date and time during which the 24-hour average CO emission level was greater than 0.15 lb/MMBtu, and the date, time, and description of the corrective action.

(5) The affected facility uses a bag leak detection system to monitor the performance of a fabric filter (baghouse) according to the most current requirements in section §60.48Da of this part; or

(6) The affected facility uses an ESP as the primary PM control device and uses an ESP predictive model to monitor the performance of the ESP developed in accordance and operated according to the most current requirements in section §60.48Da of this part; or

(7) The affected facility burns only gaseous fuels or fuel oils that contain less than or equal to 0.30 weight percent sulfur and operates according to a written site-specific monitoring plan approved by the permitting authority. This monitoring plan must include procedures and criteria for establishing and monitoring specific parameters for the affected facility indicative of compliance with the opacity standard.

(k) Owners or operators complying with the PM emission limit by using a PM CEMS must calibrate, maintain, operate, and record the output of the system for PM emissions discharged to the atmosphere as specified in §60.46b(j). The CEMS specified in paragraph §60.46b(j) shall be operated and data recorded during all periods of operation of the affected facility except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.

PM limits don't apply.

(l) An owner or operator of an affected facility that is subject to an opacity standard under §60.43b(f) is not required to operate a COMS provided that the unit burns only gaseous fuels and/or liquid fuels (excluding residue oil) with a potential SO_2 emissions rate no greater than 26 ng/J (0.060 lb/MMBtu), and the unit operates according to a written site-specific monitoring plan approved by the permitting

authority is not required to operate a COMS. This monitoring plan must include procedures and criteria for establishing and monitoring specific parameters for the affected facility indicative of compliance with the opacity standard. For testing performed as part of this site-specific monitoring plan, the permitting authority may require as an alternative to the notification and reporting requirements specified in §§60.8 and 60.11 that the owner or operator submit any deviations with the excess emissions report required under §60.49b(h).

The opacity Standard does not apply.

[72 FR 32742, June 13, 2007, as amended at 74 FR 5087, Jan. 28, 2009; 76 FR 3523, Jan. 20, 2011; 77 FR 9460, Feb. 16, 2012]

§60.49b Reporting and recordkeeping requirements.

(a) The owner or operator of each affected facility shall submit notification of the date of initial startup, as provided by §60.7. This notification shall include:

This occurred decades ago and is not included in the permit.

(1) The design heat input capacity of the affected facility and identification of the fuels to be combusted in the affected facility;

(2) If applicable, a copy of any federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under §60.42b(d)(1), §60.43b(a)(2), (a)(3)(iii), (c)(2)(ii), (d)(2)(iii), §60.44b(c), (d), (e), (i), (j), (k), §60.45b(d), (g), §60.46b(h), or §60.48b(i);

(3) The annual capacity factor at which the owner or operator anticipates operating the facility based on all fuels fired and based on each individual fuel fired; and

(4) Notification that an emerging technology will be used for controlling emissions of SO_2. The Administrator will examine the description of the emerging technology and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The affected facility is subject to the provisions of §60.42b(a) unless and until this determination is made by the Administrator.

(b) The owner or operator of each affected facility subject to the SO_2, PM, and/or NO_x emission limits under §§60.42b, 60.43b, and 60.44b shall submit to the Administrator the performance test data from the initial performance test and the performance evaluation of the CEMS using the applicable performance specifications in appendix B of this part. The owner or operator of each affected facility described in §60.44b(j) or §60.44b(k) shall submit to the Administrator the maximum heat input capacity data from the demonstration of the maximum heat input capacity of the affected facility.

This was required decades ago and is not included in the permit.

(c) The owner or operator of each affected facility subject to the NO_X standard in §60.44b who seeks to demonstrate compliance with those standards through the monitoring of steam generating unit operating conditions in the provisions of §60.48b(g)(2) shall submit to the Administrator for approval a plan that identifies the operating conditions to be monitored in §60.48b(g)(2) and the records to be maintained in §60.49b(g). This plan shall be submitted to the Administrator for approval within 360 days of the initial startup of the affected facility. An affected facility burning coke oven gas alone or in combination with other gaseous fuels or distillate oil shall submit this plan to the Administrator for approval within 360 days of the initial startup of the affected facility or by November 30, 2009, whichever date comes later. If the plan is approved, the owner or operator shall maintain records of predicted nitrogen oxide emission rates and the monitored operating conditions, including steam generating unit load, identified in the plan. The plan shall:

(1) Identify the specific operating conditions to be monitored and the relationship between these operating conditions and NO_X emission rates (*i.e.*, ng/J or lbs/MMBtu heat input). Steam generating unit operating conditions include, but are not limited to, the degree of staged combustion (*i.e.*, the ratio of primary air to secondary and/or tertiary air) and the level of excess air (*i.e.*, flue gas O_2 level);

(2) Include the data and information that the owner or operator used to identify the relationship between NO_X emission rates and these operating conditions; and

(3) Identify how these operating conditions, including steam generating unit load, will be monitored under §60.48b(g) on an hourly basis by the owner or operator during the period of operation of the affected facility; the quality assurance procedures or practices that will be employed to ensure that the data generated by monitoring these operating conditions will be representative and accurate; and the type and format of the records of these operating conditions, including steam generating unit load, that will be maintained by the owner or operator under §60.49b(g).

ITAFOS operates PEMs.

(d) Except as provided in paragraph (d)(2) of this section, the owner or operator of an affected facility shall record and maintain records as specified in paragraph (d)(1) of this section.

(1) The owner or operator of an affected facility shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor individually for coal, distillate oil, residual oil, natural gas, wood, and municipal-type solid waste for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.

(2) As an alternative to meeting the requirements of paragraph (d)(1) of this section, the owner or operator of an affected facility that is subject to a federally enforceable permit restricting fuel use to a single fuel such that the facility is not required to continuously monitor any emissions (excluding opacity) or parameters indicative of emissions may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

Each boiler is limited to combusting natural gas exclusively.

(e) For an affected facility that combusts residual oil and meets the criteria under §60.46b(e)(4), §60.44b(j), or (k), the owner or operator shall maintain records of the nitrogen content of the residual oil combusted in the affected facility and calculate the average fuel nitrogen content for the reporting period. The nitrogen content shall be determined using ASTM Method D4629 (incorporated by reference, see §60.17), or fuel suppliers. If residual oil blends are being combusted, fuel nitrogen specifications may be prorated based on the ratio of residual oils of different nitrogen content in the fuel blend.

ITAFOS does not combust residual oil.

(f) For an affected facility subject to the opacity standard in §60.43b, the owner or operator shall maintain records of opacity. In addition, an owner or operator that elects to monitor emissions according to the requirements in §60.48b(a) shall maintain records according to the requirements specified in paragraphs (f)(1) through (3) of this section, as applicable to the visible emissions monitoring method used.

ITAFOS is not subject to an opacity standard.

(1) For each performance test conducted using Method 9 of appendix A-4 of this part, the owner or operator shall keep the records including the information specified in paragraphs (f)(1)(i) through (iii) of this section.

(i) Dates and time intervals of all opacity observation periods;

(ii) Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and

(iii) Copies of all visible emission observer opacity field data sheets;

(2) For each performance test conducted using Method 22 of appendix A-4 of this part, the owner or operator shall keep the records including the information specified in paragraphs (f)(2)(i) through (iv) of this section.

(i) Dates and time intervals of all visible emissions observation periods;

(ii) Name and affiliation for each visible emission observer participating in the performance test;

(iii) Copies of all visible emission observer opacity field data sheets; and

(iv) Documentation of any adjustments made and the time the adjustments were completed to the affected facility operation by the owner or operator to demonstrate compliance with the applicable monitoring requirements.

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

(g) Except as provided under paragraph (p) of this section, the owner or operator of an affected facility subject to the NO_x standards under §60.44b shall maintain records of the following information for each steam generating unit operating day:

(1) Calendar date;

(2) The average hourly NO_x emission rates (expressed as NO_2) (ng/J or lb/MMBtu heat input) measured or predicted;

(3) The 30-day average NO_x emission rates (ng/J or lb/MMBtu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days;

(4) Identification of the steam generating unit operating days when the calculated 30-day average NO_x emission rates are in excess of the NO_x emissions standards under §60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken;

(5) Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken;

(6) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data;

(7) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted;

(8) Identification of the times when the pollutant concentration exceeded full span of the CEMS;

(9) Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3; and

(10) Results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1 of this part.

(h) The owner or operator of any affected facility in any category listed in paragraphs (h)(1) or (2) of this section is required to submit excess emission reports for any excess emissions that occurred during the reporting period.

(1) Any affected facility subject to the opacity standards in §60.43b(f) or to the operating parameter monitoring requirements in §60.13(i)(1).

(2) Any affected facility that is subject to the NO_x standard of §60.44b, and that:

(i) Combusts natural gas, distillate oil, gasified coal, or residual oil with a nitrogen content of 0.3 weight percent or less; or

(ii) Has a heat input capacity of 73 MW (250 MMBtu/hr) or less and is required to monitor NO_X emissions on a continuous basis under §60.48b(g)(1) or steam generating unit operating conditions under §60.48b(g)(2).

(3) For the purpose of §60.43b, excess emissions are defined as all 6-minute periods during which the average opacity exceeds the opacity standards under §60.43b(f).

(4) For purposes of §60.48b(g)(1), excess emissions are defined as any calculated 30-day rolling average NO_X emission rate, as determined under §60.46b(e), that exceeds the applicable emission limits in §60.44b.

(i) The owner or operator of any affected facility subject to the continuous monitoring requirements for NO_X under §60.48(b) shall submit reports containing the information recorded under paragraph (g) of this section.

(j) The owner or operator of any affected facility subject to the SO_2 standards under §60.42b shall submit reports.

(k) For each affected facility subject to the compliance and performance testing requirements of §60.45b and the reporting requirement in paragraph (j) of this section, the following information shall be reported to the Administrator:

60.45b does not apply

(1) Calendar dates covered in the reporting period;

(2) Each 30-day average SO_2 emission rate (ng/J or lb/MMBtu heat input) measured during the reporting period, ending with the last 30-day period; reasons for noncompliance with the emission standards; and a description of corrective actions taken; For an exceedance due to maintenance of the SO_2 control system covered in paragraph 60.45b(a), the report shall identify the days on which the maintenance was performed and a description of the maintenance;

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

(4) Identification of the steam generating unit operating days that coal or oil was combusted and for which SO_2 or diluent (O_2 or CO_2) data have not been obtained by an approved method for at least 75 percent of the operating hours in the steam generating unit operating day; justification for not obtaining sufficient data; and description of corrective action taken;

(5) Identification of the times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and description of corrective action taken if data have

been excluded for periods other than those during which coal or oil were not combusted in the steam generating unit;

(6) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted;

(7) Identification of times when hourly averages have been obtained based on manual sampling methods;

(8) Identification of the times when the pollutant concentration exceeded full span of the CEMS;

(9) Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3;

(10) Results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1 of this part; and

(11) The annual capacity factor of each fired as provided under paragraph (d) of this section.

(l) For each affected facility subject to the compliance and performance testing requirements of §60.45b(d) and the reporting requirements of paragraph (j) of this section, the following information shall be reported to the Administrator:

§60.45b(d) and the reporting requirements of paragraph (j) do not apply.

(1) Calendar dates when the facility was in operation during the reporting period;

(2) The 24-hour average SO_2 emission rate measured for each steam generating unit operating day during the reporting period that coal or oil was combusted, ending in the last 24-hour period in the quarter; reasons for noncompliance with the emission standards; and a description of corrective actions taken;

(3) Identification of the steam generating unit operating days that coal or oil was combusted for which SO_2 or diluent (O_2 or CO_2) data have not been obtained by an approved method for at least 75 percent of the operating hours; justification for not obtaining sufficient data; and description of corrective action taken;

(4) Identification of the times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and description of corrective action taken if data have been excluded for periods other than those during which coal or oil were not combusted in the steam generating unit;

(5) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted;

(6) Identification of times when hourly averages have been obtained based on manual sampling methods;

(7) Identification of the times when the pollutant concentration exceeded full span of the CEMS;

(8) Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3; and

(9) Results of daily CEMS drift tests and quarterly accuracy assessments as required under Procedure 1 of appendix F 1 of this part. If the owner or operator elects to implement the alternative data assessment procedures described in §§60.47b(e)(4)(i) through (e)(4)(iii), each data assessment report shall include a summary of the results of all of the RATAs, linearity checks, CGAs, and calibration error or drift assessments required by §§60.47b(e)(4)(i) through (e)(4)(iii).

(m) For each affected facility subject to the SO_2 standards in §60.42(b) for which the minimum amount of data required in §60.47b(c) were not obtained during the reporting period, the following information is reported to the Administrator in addition to that required under paragraph (k) of this section:

ITAFOS is not subject to an SO_2 standard.

(1) The number of hourly averages available for outlet emission rates and inlet emission rates;

(2) The standard deviation of hourly averages for outlet emission rates and inlet emission rates, as determined in Method 19 of appendix A of this part, section 7;

(3) The lower confidence limit for the mean outlet emission rate and the upper confidence limit for the mean inlet emission rate, as calculated in Method 19 of appendix A of this part, section 7; and

(4) The ratio of the lower confidence limit for the mean outlet emission rate and the allowable emission rate, as determined in Method 19 of appendix A of this part, section 7.

(n) If a percent removal efficiency by fuel pretreatment (*i.e.*, $\%R_f$) is used to determine the overall percent reduction (*i.e.*, $\%R_o$) under §60.45b, the owner or operator of the affected facility shall submit a signed statement with the report.

Removal efficiency does not apply.

(1) Indicating what removal efficiency by fuel pretreatment (*i.e.*, $\%R_f$) was credited during the reporting period;

(2) Listing the quantity, heat content, and date each pre-treated fuel shipment was received during the reporting period, the name and location of the fuel pretreatment facility; and the total quantity and total heat content of all fuels received at the affected facility during the reporting period;

(3) Documenting the transport of the fuel from the fuel pretreatment facility to the steam generating unit; and

(4) Including a signed statement from the owner or operator of the fuel pretreatment facility certifying that the percent removal efficiency achieved by fuel pretreatment was determined in accordance with

the provisions of Method 19 of appendix A of this part and listing the heat content and sulfur content of each fuel before and after fuel pretreatment.

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

Title V permits require keeping records for 5 years.

(p) The owner or operator of an affected facility described in §60.44b(j) or (k) shall maintain records of the following information for each steam generating unit operating day:

As described above (j) and (k) don't apply.

(1) Calendar date;

(2) The number of hours of operation; and

(3) A record of the hourly steam load.

(q) The owner or operator of an affected facility described in §60.44b(j) or §60.44b(k) shall submit to the Administrator a report containing:

(j) and (k) don't apply.

(1) The annual capacity factor over the previous 12 months;

(2) The average fuel nitrogen content during the reporting period, if residual oil was fired; and

(3) If the affected facility meets the criteria described in §60.44b(j), the results of any NO_X emission tests required during the reporting period, the hours of operation during the reporting period, and the hours of operation since the last NO_X emission test.

(r) The owner or operator of an affected facility who elects to use the fuel based compliance alternatives in §60.42b or §60.43b shall either:

(1) The owner or operator of an affected facility who elects to demonstrate that the affected facility combusts only very low sulfur oil, natural gas, wood, a mixture of these fuels, or any of these fuels (or a mixture of these fuels) in combination with other fuels that are known to contain an insignificant amount of sulfur in §60.42b(j) or §60.42b(k) shall obtain and maintain at the affected facility fuel receipts (such as a current, valid purchase contract, tariff sheet, or transportation contract) from the fuel supplier that certify that the oil meets the definition of distillate oil and gaseous fuel meets the definition of natural gas as defined in §60.41b and the applicable sulfur limit. For the purposes of this section, the distillate oil need not meet the fuel nitrogen content specification in the definition of distillate oil. Reports shall be submitted to the Administrator certifying that only very low sulfur oil meeting this definition, natural gas, wood, and/or other fuels that are known to contain insignificant amounts of sulfur were combusted in the affected facility during the reporting period; or

(2) The owner or operator of an affected facility who elects to demonstrate compliance based on fuel analysis in §60.42b or §60.43b shall develop and submit a site-specific fuel analysis plan to the Administrator for review and approval no later than 60 days before the date you intend to demonstrate compliance. Each fuel analysis plan shall include a minimum initial requirement of weekly testing and each analysis report shall contain, at a minimum, the following information:

ITAFOS did not indicate they elect this alternative.

(i) The potential sulfur emissions rate of the representative fuel mixture in ng/J heat input;

(ii) The method used to determine the potential sulfur emissions rate of each constituent of the mixture. For distillate oil and natural gas a fuel receipt or tariff sheet is acceptable;

(iii) The ratio of different fuels in the mixture; and

(iv) The owner or operator can petition the Administrator to approve monthly or quarterly sampling in place of weekly sampling.

(s) Facility specific NO_X standard for Cytec Industries Fortier Plant's C.AOG incinerator located in Westwego, Louisiana:

(1) *Definitions.*

Oxidation zone is defined as the portion of the C.AOG incinerator that extends from the inlet of the oxidizing zone combustion air to the outlet gas stack.

Reducing zone is defined as the portion of the C.AOG incinerator that extends from the burner section to the inlet of the oxidizing zone combustion air.

Total inlet air is defined as the total amount of air introduced into the C.AOG incinerator for combustion of natural gas and chemical by-product waste and is equal to the sum of the air flow into the reducing zone and the air flow into the oxidation zone.

(2) *Standard for nitrogen oxides.* (i) When fossil fuel alone is combusted, the NO_X emission limit for fossil fuel in §60.44b(a) applies.

(ii) When natural gas and chemical by-product waste are simultaneously combusted, the NO_X emission limit is 289 ng/J (0.67 lb/MMBtu) and a maximum of 81 percent of the total inlet air provided for combustion shall be provided to the reducing zone of the C.AOG incinerator.

(3) *Emission monitoring.* (i) The percent of total inlet air provided to the reducing zone shall be determined at least every 15 minutes by measuring the air flow of all the air entering the reducing zone and the air flow of all the air entering the oxidation zone, and compliance with the percentage of total inlet air that is provided to the reducing zone shall be determined on a 3-hour average basis.

(ii) The NO_X emission limit shall be determined by the compliance and performance test methods and procedures for NO_X in §60.46b(i).

(iii) The monitoring of the NO_X emission limit shall be performed in accordance with §60.48b.

(4) *Reporting and recordkeeping requirements.* (i) The owner or operator of the C.AOG incinerator shall submit a report on any excursions from the limits required by paragraph (a)(2) of this section to the Administrator with the quarterly report required by paragraph (i) of this section.

(ii) The owner or operator of the C.AOG incinerator shall keep records of the monitoring required by paragraph (a)(3) of this section for a period of 2 years following the date of such record.

(iii) The owner of operator of the C.AOG incinerator shall perform all the applicable reporting and recordkeeping requirements of this section.

(t) Facility-specific NO_X standard for Rohm and Haas Kentucky Incorporated's Boiler No. 100 located in Louisville, Kentucky:

(1) *Definitions.*

Air ratio control damper is defined as the part of the low NO_X burner that is adjusted to control the split of total combustion air delivered to the reducing and oxidation portions of the combustion flame.

Flue gas recirculation line is defined as the part of Boiler No. 100 that recirculates a portion of the boiler flue gas back into the combustion air.

(2) *Standard for nitrogen oxides.* (i) When fossil fuel alone is combusted, the NO_X emission limit for fossil fuel in §60.44b(a) applies.

(ii) When fossil fuel and chemical by-product waste are simultaneously combusted, the NO_X emission limit is 473 ng/J (1.1 lb/MMBtu), and the air ratio control damper tee handle shall be at a minimum of 5 inches (12.7 centimeters) out of the boiler, and the flue gas recirculation line shall be operated at a minimum of 10 percent open as indicated by its valve opening position indicator.

(3) *Emission monitoring for nitrogen oxides.* (i) The air ratio control damper tee handle setting and the flue gas recirculation line valve opening position indicator setting shall be recorded during each 8-hour operating shift.

(ii) The NO_X emission limit shall be determined by the compliance and performance test methods and procedures for NO_X in §60.46b.

(iii) The monitoring of the NO_X emission limit shall be performed in accordance with §60.48b.

(4) *Reporting and recordkeeping requirements.* (i) The owner or operator of Boiler No. 100 shall submit a report on any excursions from the limits required by paragraph (b)(2) of this section to the Administrator with the quarterly report required by §60.49b(i).

(ii) The owner or operator of Boiler No. 100 shall keep records of the monitoring required by paragraph (b)(3) of this section for a period of 2 years following the date of such record.

(iii) The owner of operator of Boiler No. 100 shall perform all the applicable reporting and recordkeeping requirements of §60.49b.

(u) *Site-specific standard for Merck & Co., Inc.'s Stonewall Plant in Elkton, Virginia.* (1) This paragraph (u) applies only to the pharmaceutical manufacturing facility, commonly referred to as the Stonewall Plant, located at Route 340 South, in Elkton, Virginia ("site") and only to the natural gas-fired boilers installed as part of the powerhouse conversion required pursuant to 40 CFR 52.2454(g). The requirements of this paragraph shall apply, and the requirements of §§60.40b through 60.49b(t) shall not apply, to the natural gas-fired boilers installed pursuant to 40 CFR 52.2454(g).

(i) The site shall equip the natural gas-fired boilers with low NO_X technology.

(ii) The site shall install, calibrate, maintain, and operate a continuous monitoring and recording system for measuring NO_X emissions discharged to the atmosphere and opacity using a continuous emissions monitoring system or a predictive emissions monitoring system.

(iii) Within 180 days of the completion of the powerhouse conversion, as required by 40 CFR 52.2454, the site shall perform a performance test to quantify criteria pollutant emissions.

(2) [Reserved]

(v) The owner or operator of an affected facility may submit electronic quarterly reports for SO_2 and/or NO_X and/or opacity in lieu of submitting the written reports required under paragraphs (h), (i), (j), (k) or (l) of this section. The format of each quarterly electronic report shall be coordinated with the permitting authority. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the owner or operator, indicating whether compliance with the applicable emission standards and minimum data requirements of this subpart was achieved during the reporting period. Before submitting reports in the electronic format, the owner or operator shall coordinate with the permitting authority to obtain their agreement to submit reports in this alternative format.

(w) The reporting period for the reports required under this subpart is each 6 month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.

(x) Facility-specific NO_X standard for Weyerhaeuser Company's No. 2 Power Boiler located in New Bern, North Carolina:

(1) *Standard for nitrogen oxides.* (i) When fossil fuel alone is combusted, the NO_X emission limit for fossil fuel in §60.44b(a) applies.

(ii) When fossil fuel and chemical by-product waste are simultaneously combusted, the NO_X emission limit is 215 ng/J (0.5 lb/MMBtu).

(2) *Emission monitoring for nitrogen oxides.* (i) The NO_X emissions shall be determined by the compliance and performance test methods and procedures for NO_X in §60.46b.

(ii) The monitoring of the NO_X emissions shall be performed in accordance with §60.48b.

(3) *Reporting and recordkeeping requirements.* (i) The owner or operator of the No. 2 Power Boiler shall submit a report on any excursions from the limits required by paragraph (x)(2) of this section to the Administrator with the quarterly report required by §60.49b(i).

(ii) The owner or operator of the No. 2 Power Boiler shall keep records of the monitoring required by paragraph (x)(3) of this section for a period of 2 years following the date of such record.

(iii) The owner or operator of the No. 2 Power Boiler shall perform all the applicable reporting and recordkeeping requirements of §60.49b.

(y) Facility-specific NO_X standard for INEOS USA's AOGI located in Lima, Ohio:

(1) *Standard for NO_X.* (i) When fossil fuel alone is combusted, the NO_X emission limit for fossil fuel in §60.44b(a) applies.

(ii) When fossil fuel and chemical byproduct/waste are simultaneously combusted, the NO_X emission limit is 645 ng/J (1.5 lb/MMBtu).

(2) *Emission monitoring for NO_X.* (i) The NO_X emissions shall be determined by the compliance and performance test methods and procedures for NO_X in §60.46b.

(ii) The monitoring of the NO_X emissions shall be performed in accordance with §60.48b.

(3) *Reporting and recordkeeping requirements.* (i) The owner or operator of the AOGI shall submit a report on any excursions from the limits required by paragraph (y)(2) of this section to the Administrator with the quarterly report required by paragraph (i) of this section.

(ii) The owner or operator of the AOGI shall keep records of the monitoring required by paragraph (y)(3) of this section for a period of 2 years following the date of such record.

(iii) The owner or operator of the AOGI shall perform all the applicable reporting and recordkeeping requirements of this section.

Appendix C – 40 CFR 60 Subpart JJJJ

Subpart JJJJ—Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

What This Subpart Covers

§60.4230 Am I subject to this subpart?

(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary spark ignition (SI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (6) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

(1) Manufacturers of stationary SI ICE with a maximum engine power less than or equal to 19 kilowatt (KW) (25 horsepower (HP)) that are manufactured on or after July 1, 2008.

Only applies to manufacturers

(2) Manufacturers of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) that are gasoline fueled or that are rich burn engines fueled by liquefied petroleum gas (LPG), where the date of manufacture is:

(i) On or after July 1, 2008; or

(ii) On or after January 1, 2009, for emergency engines.

(3) Manufacturers of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) that are not gasoline fueled and are not rich burn engines fueled by LPG, where the manufacturer participates in the voluntary manufacturer certification program described in this subpart and where the date of manufacture is:

Only applies to manufacturers

(i) On or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP);

(ii) On or after January 1, 2008, for lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP;

(iii) On or after July 1, 2008, for engines with a maximum engine power less than 500 HP; or

(iv) On or after January 1, 2009, for emergency engines.

(4) Owners and operators of stationary SI ICE that commence construction after June 12, 2006, where the stationary SI ICE are manufactured:

For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

The #11 Well Pump Aux Engine (132 Hp- Propane) was installed in 2001 (ordered before June 12, 2006)

The #3 Potable Water Pump (95 Hp-NG) was installed in 2003 (ordered before June 12, 2006)

The #11 Well Generator (33.5 Hp – Propane) was installed in May 2008 and is the only engine that may meet the above criteria. ITAFOS certified in the application that this engine is subject to this subpart.

(i) On or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP);

The #11 Well Generator engine is a 33.5 Hp engine, therefore this paragraph does not apply.

(ii) on or after January 1, 2008, for lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP;

The #11 Well Generator is a 33.5 Hp, therefore this paragraph does not apply.

(iii) on or after July 1, 2008, for engines with a maximum engine power less than 500 HP; or

#11 Well Generator was installed in May of 2008 so this does not apply

(iv) on or after January 1, 2009, for emergency engines with a maximum engine power greater than 19 KW (25 HP).

#11 Well Generator was installed in May of 2008 so this does not apply

(5) Owners and operators of stationary SI ICE that are modified or reconstructed after June 12, 2006, and any person that modifies or reconstructs any stationary SI ICE after June 12, 2006.

The #11 Well Pump Aux Engine (132 Hp- Propane) may potentially be applicable to this paragraph because changes were made to this unit. However, DEQ Sate office reviewed Agruim's August 28, 2017[1] regulatory review and determined that the unit was not modified or reconstructed. "...**based upon the information provided by the applicant the IC engine is not subject to NSPS Subpart JJJJ and is instead subject to NESHAP Subpart ZZZZ, National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines."[2]**

(6) The provisions of §60.4236 of this subpart are applicable to all owners and operators of stationary SI ICE that commence construction after June 12, 2006.

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[1] HPE Content Manager record number 2017AAI2211
[2] HPE Content Manager record number 2018AAG342

ITAFOS has certified that the #11 Well Generator (33.5 Hp – Propane) is subject to this paragraph.

(b) The provisions of this subpart are not applicable to stationary SI ICE being tested at an engine test cell/stand.

ITAFOS does not have an engine test stand

(c) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart as applicable.

ITAFOS is a major source

(d) For the purposes of this subpart, stationary SI ICE using alcohol-based fuels are considered gasoline engines.

ITAFOS did not indicate that any of the stationary engines combust gasoline.

(e) Stationary SI ICE may be eligible for exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C (or the exemptions described in 40 CFR parts 90 and 1048, for engines that would need to be certified to standards in those parts), except that owners and operators, as well as manufacturers, may be eligible to request an exemption for national security.

ITAFOS has not pursued this exemption.

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

ITAFOS has not indicated any engines meet these criteria.

[73 FR 3591, Jan. 18, 2008, as amended at 76 FR 37972, June 28, 2011]

In summary, the only subsequent subsection that applies to ITAFOS is §60.4236 (see 40 CFR 60.4230(a)(6) above). Therefore the remaining subsections of this subpart are not repeated here. Even though §60.4236 applies there are no requirements for the #11 Well Generator (33.5 Hp – Propane), installed in May 2008, listed in §60.4236.

§60.4236 What is the deadline for importing or installing stationary SI ICE produced in previous model years?

(a) After July 1, 2010, owners and operators may not install stationary SI ICE with a maximum engine power of less than 500 HP that do not meet the applicable requirements in §60.4233.

The #11 Well Generator (33.5 Hp – Propane) was installed in May 2008. This paragraph applies only to future engines that are added to the facility.

(b) After July 1, 2009, owners and operators may not install stationary SI ICE with a maximum engine power of greater than or equal to 500 HP that do not meet the applicable requirements in §60.4233, except that lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP that do not meet the applicable requirements in §60.4233 may not be installed after January 1, 2010.

The #11 Well Generator (33.5 Hp – Propane) was installed in May 2008 does not meet the criteria for this paragraph. This paragraph applies only to future engines that are added to the facility.

(c) For emergency stationary SI ICE with a maximum engine power of greater than 19 KW (25 HP), owners and operators may not install engines that do not meet the applicable requirements in §60.4233 after January 1, 2011.

The #11 Well Generator (33.5 Hp – Propane) was installed in May 2008 does not meet the criteria for this paragraph. This paragraph applies only to future engines that are added to the facility.

(d) In addition to the requirements specified in §§60.4231 and 60.4233, it is prohibited to import stationary SI ICE less than or equal to 19 KW (25 HP), stationary rich burn LPG SI ICE, and stationary gasoline SI ICE that do not meet the applicable requirements specified in paragraphs (a), (b), and (c) of this section, after the date specified in paragraph (a), (b), and (c) of this section.

The #11 Well Generator (33.5 Hp – Propane) installed in May 2008 does not meet the criteria for this paragraph. This paragraph applies only to future engines that are added to the facility.

(e) The requirements of this section do not apply to owners and operators of stationary SI ICE that have been modified or reconstructed, and they do not apply to engines that were removed from one existing location and reinstalled at a new location.

Compliance Requirements for Owners and Operators

Does not apply

Testing Requirements for Owners and Operators

Does not apply

Notification, Reports, and Records for Owners and Operators

Does not apply

There are no requirements applicable to the #11 Well Generator (33.5 Hp – Propane) installed in May 2008 for owners or operators.

Appendix D – 40 CFR 63 Subpart AA

Subpart AA—National Emission Standards for Hazardous Air Pollutants from Phosphoric Acid Manufacturing Plants

§63.600 Applicability.

(a) Except as provided in paragraphs (c) and (d) of this section, you are subject to the requirements of this subpart if you own or operate a phosphoric acid manufacturing plant that is a major source as defined in §63.2. You must comply with the emission limitations, work practice standards, and operating parameter requirements specified in this subpart at all times.

(b) The requirements of this subpart apply to emissions of hazardous air pollutants (HAP) emitted from the following affected sources at a phosphoric acid manufacturing plant:

(1) Each wet-process phosphoric acid process line.

(2) Each evaporative cooling tower.

(3) Each phosphate rock dryer.

(4) Each phosphate rock calciner.

(5) Each superphosphoric acid process line.

(6) Each purified phosphoric acid process line.

(7) Each gypsum dewatering stack.

(8) Each cooling pond.

(c) The requirements of this subpart do not apply to a phosphoric acid manufacturing plant that is an area source as defined in §63.2.

(d) The provisions of this subpart do not apply to research and development facilities as defined in §63.601.

§63.601 Definitions.

Terms used in this subpart are defined in §63.2 of the Clean Air Act and in this section as follows:

Active gypsum dewatering stack means a gypsum dewatering stack that is currently receiving gypsum, received gypsum within the last year, or is part of the facility's water management system. A gypsum dewatering stack that is considered closed by a state authority is not considered an active gypsum dewatering stack.

Breakthrough means the point in time when the level of mercury detected at the outlet of an adsorber system is 90 percent of the highest concentration allowed to be discharged consistent with the applicable emission limit.

Cooling pond means a natural or artificial open reservoir that is primarily used to collect and cool water that comes into direct contact with raw materials, intermediate products, by-products, waste products, or finished products from a phosphoric acid manufacturing plant. The water in the cooling pond is often used at phosphoric acid manufacturing plants as filter wash water, absorber water for air pollution control absorbers, and/or to transport phosphogypsum as slurry to a gypsum dewatering stack(s).

Equivalent P_2O_5 feed means the quantity of phosphorus, expressed as phosphorus pentoxide (P_2O_5), fed to the process.

Evaporative cooling tower means an open-water, re-circulating device that uses fans or natural draft to draw or force ambient air through the device to remove heat from process water by direct contact.

Exceedance means a departure from an indicator range established for monitoring under this subpart, consistent with any averaging period specified for averaging the results of the monitoring.

Existing source depends on the date that construction or reconstruction of an affected source commenced. A wet-process phosphoric acid process line, superphosphoric acid process line, phosphate rock dryer, phosphate rock calciner, evaporative cooling tower, or purified acid process line is an existing source if construction or reconstruction of the affected source commenced on or before December 27, 1996. A gypsum dewatering stack or cooling pond is an existing source if it meets one of two criteria:

(1) It was constructed or reconstructed on or before August 19, 2015; or

(2) It was constructed or reconstructed after August 19, 2015 and it was not required to obtain a permit by a state authority for the construction or reconstruction.

Gypsum dewatering stack means any defined geographic area associated with a phosphoric acid manufacturing plant in which gypsum is disposed of or stored, other than within a fully enclosed building, container, or tank.

Gypsum dewatering stack system means the gypsum dewatering stack, together with all pumps, piping, ditches, drainage conveyances, water control structures, collection pools, cooling ponds, surge ponds, auxiliary holding ponds, regional holding ponds and any other collection or conveyance system associated with the transport of gypsum from the plant to the gypsum dewatering stack, its management at the gypsum dewatering stack, and the process wastewater return to the phosphoric acid production or other process.

HAP metals mean those metals and their compounds (in particulate or volatile form) that are included on the list of hazardous air pollutants in section 112 of the Clean Air Act. HAP metals include, but are not limited to: Antimony, arsenic, beryllium, cadmium, chromium, lead, manganese, nickel, and selenium expressed as particulate matter as measured by the methods and procedures in this subpart or an approved alternative method. For the purposes of this subpart, HAP metals (except mercury) are expressed as particulate matter as measured by Method 5 at 40 CFR part 60, appendix A-3.

New source depends on the date that construction or reconstruction of an affected source commences. A wet-process phosphoric acid process line, superphosphoric acid process line, phosphate rock dryer, phosphate rock calciner, evaporative cooling tower, or purified acid process line is a new source if construction or reconstruction of the affected source commenced after December 27, 1996. A gypsum dewatering stack or cooling pond is a new source if it meets two criteria:

(1) It was constructed or reconstructed after August 19, 2015; and

(2) It was required to obtain a permit by a state authority for the construction or reconstruction.

Oxidation reactor means any equipment or step that uses an oxidizing agent (*e.g.,* nitric acid, ammonium nitrate, or potassium permanganate) to treat superphosphoric acid.

Phosphate rock calciner means the equipment used to remove moisture and organic matter from phosphate rock through direct or indirect heating.

Phosphate rock dryer means the equipment used to reduce the moisture content of phosphate rock through direct or indirect heating.

Phosphate rock feed means all material entering any phosphate rock dryer or phosphate rock calciner including moisture and extraneous material as well as the following ore materials: Fluorapatite, hydroxylapatite, chlorapatite, and carbonateapatite.

Purified phosphoric acid process line means any process line that uses a HAP as a solvent in the separation of impurities from the product acid for the purposes of rendering that product suitable for industrial, manufacturing, or food grade uses. A purified phosphoric acid process line includes: solvent extraction process equipment, solvent stripping and recovery equipment, seal tanks, carbon treatment equipment, cooling towers, storage tanks, pumps, and process piping.

Raffinate stream means the aqueous stream containing the impurities that are removed during the purification of wet-process phosphoric acid using solvent extraction.

Research and development facility means research or laboratory operations whose primary purpose is to conduct research and development into new processes and products, where the operations are under the close supervision of technically trained personnel, and where the facility is not engaged in the manufacture of products for commercial sale in commerce or other off-site distribution, except in a de minimis manner.

Rim ditch (cell) building technique means a gypsum dewatering stack construction technique that utilizes inner and outer dikes to direct gypsum slurry flow around the perimeter of the stack before directing the flow and allowing settling of finer materials into the settling compartment. For the purpose of this definition, the rim ditch (cell) building technique includes the compartment startup phase when gypsum is deposited directly into the settling compartment in preparation for ditch construction as well as the step-in or terminal phases when most solids must be directed to the settling compartment prior to stack closure. Decant return ditches are not rim ditches.

Shutdown commences when feed materials cease to be added to an affected source and ends when the affected source is deactivated, regardless of whether feed material is present in the affected source.

Startup commences when any feed material is first introduced into an affected source and ends when feed material is fully loaded into the affected source.

Superphosphoric acid process line means any process line that concentrates wet-process phosphoric acid to 66 percent or greater P_2O_5 content by weight. A superphosphoric acid process line includes: evaporators, hot wells, acid sumps, oxidation reactors, and cooling tanks.

Total fluorides means elemental fluorine and all fluoride compounds, including the HAP HF, as measured by reference methods specified in 40 CFR part 60, appendix A, Method 13 A or B, or by equivalent or alternative methods approved by the Administrator pursuant to §63.7(f).

Wet-process phosphoric acid process line means any process line manufacturing phosphoric acid by reacting phosphate rock and acid. A wet-process phosphoric acid process line includes: reactors, filters, evaporators, and hot wells.

§63.602 Standards and compliance dates.

(a) On and after the dates specified in paragraphs (a)(1) through (6) of this section, for each wet-process phosphoric acid process line, superphosphoric acid process line, phosphate rock dryer, and phosphate rock calciner, you must comply with the emission limits as specified in paragraphs (a)(1) through (6) of this section. If a process line contains more than one emission point, you must sum the emissions from all emission points in a process line to determine compliance with the specified emission limits.

(1) For each existing wet-process phosphoric acid process line, superphosphoric acid process line, and phosphate rock dryer that commenced construction or reconstruction on or before December 27, 1996, you must comply with the emission limits specified in Table 1 to this subpart beginning on June 10, 2002.

(2) For each existing phosphate rock calciner that commenced construction or reconstruction on or before December 27, 1996, you must comply with the emission limits as specified in paragraphs (a)(2)(i) through (iii) of this section.

(i) You must comply with the total particulate emission limit specified in Table 1 to this subpart beginning on June 10, 2002.

(ii) You must comply with the mercury emission limit specified in Table 1 to this subpart beginning on August 19, 2015.

(iii) You must comply with the total fluorides emission limit specified in Table 1 to this subpart beginning on August 19, 2015.

(3) For each new wet-process phosphoric acid process line, superphosphoric acid process line, and phosphate rock dryer that commences construction or reconstruction after December 27, 1996 and on

or before August 19, 2015, you must comply with the emission limits specified in Table 2 to this subpart beginning on June 10, 1999 or at startup, whichever is later.

In the original application submittal ITAFOS certified that the "...Phosphoric acid process and superphosphoric acid process were constructed or reconstructed after December 27, 1996; therefore, this equipment is subject to the standards for new sources, rather than the existing source standards established under this section." The process lines were in existence on August 19, 2015.

(4) For each new wet-process phosphoric acid process line, superphosphoric acid process line, and phosphate rock dryer that commences construction or reconstruction after August 19, 2015, you must comply with the emission limits specified in Table 2 to this subpart immediately upon startup.

ITAFOS indicated that construction or reconstruction occurred after December 27, 1996.

(5) For each new phosphate rock calciner that commences construction or reconstruction after December 27, 1996 and on or before August 19, 2015, you must comply with the emission limits as specified in paragraphs (a)(5)(i) through (iii) of this section.

ITAFOS did not indicate that they have a calciner at the facility.

(i) You must comply with the total particulate emission limit specified in Table 2 to this subpart beginning on June 10, 1999 or at startup, whichever is later.

(ii) You must comply with the mercury emission limit specified in Table 2 to this subpart beginning on August 19, 2015, or upon startup, whichever is later.

(iii) You must comply with the total fluorides emission limit specified in Table 2 to this subpart beginning on August 19, 2015, or upon startup, whichever is later.

(6) For each new phosphate rock calciner that commences construction or reconstruction after August 19, 2015, you must comply with the emission limits specified in Table 2 to this subpart immediately upon startup.

ITAFOS did not indicate that they have a calciner at the facility.

(b) For each existing purified phosphoric acid process line that commenced construction or reconstruction on or before December 27, 1996, you must comply with the provisions of subpart H of this part and paragraphs (b)(1) through (3) of this section beginning on June 10, 2002. For each new purified phosphoric acid process line that commences construction or reconstruction after December 27, 1996, you must comply with the provisions of subpart H of this part and paragraphs (b)(1) through (3) of this section beginning on June 10, 1999 or at startup, whichever is later.

Phosphoric acid process and superphosphoric acid process were constructed or reconstructed after December 27, 1996

(1) Maintain a 30-day rolling average of daily concentration measurements of methyl isobutyl ketone equal to or below 20 parts per million by weight (ppmw) for each product acid stream.

(2) Maintain a 30-day rolling average of daily concentration measurements of methyl isobutyl ketone equal to or below 30 ppmw for each raffinate stream.

(3) Maintain the daily average temperature of the exit gas stream from the chiller stack below 50 degrees Fahrenheit.

ITAFOS stated that they currently do not produce purified phosphoric acid.

(c) Beginning on June 10, 2002, you must not introduce into an existing evaporative cooling tower that commenced construction or reconstruction on or before December 27, 1996, any liquid effluent from any absorber installed to control emissions from process equipment. Beginning on June 10, 1999 or at startup, whichever is later, you must not introduce into a new evaporative cooling tower that commences construction or reconstruction after December 27, 1996, any liquid effluent from any absorber installed to control emissions from process equipment.

(d) For each gypsum dewatering stack system, you must prepare, and operate in accordance with, a gypsum dewatering stack and cooling pond management plan that contains the information specified in paragraph (e) of this section beginning on August 19, 2016.

On 2/17/16 a plan was submitted for gyp stacks 0, 1, & 2 - Content manager record number 2016AAI408. On January 10, 2017 DEQ received an updated plan with the permit to construct application for gyp stack 3 - Content manager record number 2017AAG56.

(e) The gypsum dewatering stack and cooling pond management plan must include the information specified in paragraphs (e)(1) through (3) of this section. You must submit the gypsum dewatering stack and cooling pond management plan for approval to the Administrator as specified in paragraph (e)(4) of this section.

(1) Location (including latitude and longitude of centroid in decimal degrees to four decimal places) of each gypsum dewatering stack and each cooling pond in the gypsum dewatering stack system.

(2) Permitted maximum footprint acreage of each gypsum dewatering stack and each cooling pond in the gypsum dewatering stack system.

(3) Control measures that you use to minimize fugitive hydrogen fluoride emissions from the gypsum dewatering stack system. If you operate one or more active gypsum dewatering stacks or cooling ponds that are considered new sources as defined in §63.601, then you must use, and include in the management plan, at least two of the control measures listed in paragraphs (e)(3)(i) through (vii) of this section for your gypsum dewatering stack system. If you only operate active gypsum dewatering stacks and cooling ponds that are considered existing sources as defined in §63.601, then you must use, and include in the management plan, at least one of the control measures listed in paragraphs (e)(3)(i) through (vii) of this section for your gypsum dewatering stack system.

(i) For at least one cooling pond that is considered part of your gypsum dewatering stack system, you may choose to submerge the discharge pipe to a level below the surface of the cooling pond.

(ii) For at least one cooling pond that is considered part of your gypsum dewatering stack system, you may choose to use lime (or any other caustic substance) to raise the pH of the liquid (*e.g.*, the condensed vapors from the flash cooler and evaporators, and scrubbing liquid) discharged into the cooling pond. If you choose this control measure, then you must include in the plan the method used to raise the pH of the liquid discharged into the cooling pond, the target pH value (of the liquid discharged into the cooling pond) expected to be achieved by using the method, and the analyses used to determine and support the raise in pH.

(iii) For all cooling ponds that are considered part of your gypsum dewatering stack system, you may choose to reduce the total cooling pond surface area based on a facility specific evaluation plan. If you choose this control measure, then you must include in the facility specific evaluation plan certified by an independent licensed professional engineer or similarly qualified individual. You must also include in the plan the method used to reduce total cooling pond footprint, the analyses used to determine and support the reduction in the total cooling pond surface area, and the amount of total cooling pond surface area that was reduced due to the facility specific evaluation plan.

(iv) For at least one gypsum dewatering stack that is considered part of your gypsum dewatering stack system, you may choose to minimize the surface area of the gypsum pond associated with the active gypsum dewatering stack by using a rim ditch (cell) building technique or other building technique.

(v) For at least one gypsum dewatering stack that is considered part of your gypsum dewatering stack system, you may choose to apply slaked lime to the active gypsum dewatering stack surfaces. If you choose this control measure, then you must include in the plan the method used to determine the specific locations slaked lime is applied. The plan must also include the methods used to determine the quantity of, and when to apply, slaked lime (*e.g.*, slaked lime may be applied to achieve a state ambient air standard for fluorides, measured as hydrogen fluoride).

(vi) For at least one gypsum dewatering stack that is considered part of your gypsum dewatering stack system, you may choose to apply soil caps and vegetation, or a synthetic cover, to a portion of side slopes of the active gypsum dewatering stack. If you choose this control measure, then you must include in the plan the method used to determine the specific locations of soil caps and vegetation, or synthetic cover; and specify the acreage and locations where soil caps and vegetation, or synthetic cover, is applied. The plan must also include a schedule describing when soil caps and vegetation, or synthetic cover, is to be applied.

(vii) For all gypsum dewatering stacks that are considered part of your gypsum dewatering stack system, you may choose to establish closure requirements that at a minimum, contain requirements for the specified items in paragraphs (e)(3)(vii)(A) and (B) of this section.

(A) A specific trigger mechanism for when you must begin the closure process on the gypsum dewatering stack; and

(B) A requirement to install a final cover. For purposes of this paragraph, final cover means the materials used to cover the top and sides of a gypsum dewatering stack upon closure.

(4) You must submit your plan for approval to the Administrator at least 6 months prior to the compliance date specified in §63.602(d), or with the permit application for modification, construction, or reconstruction. The plan must include details on how you will implement and show compliance with the control technique(s) that you have selected to use. The Administrator will approve or disapprove your plan within 90 days after receipt of the plan. To change any of the information submitted in the plan, you must submit a revised plan 60 days before the planned change is to be implemented in order to allow time for review and approval by the Administrator before the change is implemented.

On 2/17/16 a plan was submitted for gyp stacks 0, 1, & 2 - Content manager record number 2016AAI408. On January 10, 2017 DEQ received an updated plan with the permit to construct application for gyp stack 3 - Content manager record number 2017AAG56.

(f) Beginning on August 19, 2015, during periods of startup and shutdown (as defined in §63.601), you must comply with the work practice specified in this paragraph in lieu of the emission limits specified in paragraph (a) of this section. During periods of startup and shutdown, you must operate any control device(s) being used at the affected source, monitor the operating parameters specified in Table 3 of this subpart, and comply with the operating limits specified in Table 4 of this subpart.

§§63.603-63.604 [Reserved]

§63.605 Operating and monitoring requirements.

(a) For each wet-process phosphoric acid process line or superphosphoric acid process line subject to the provisions of this subpart, you must comply with the monitoring requirements specified in paragraphs (a)(1) and (2) of this section.

(1) Install, calibrate, maintain, and operate a continuous monitoring system (CMS) according to your site-specific monitoring plan specified in §63.608(c). The CMS must have an accuracy of ±5 percent over its operating range and must determine and permanently record the mass flow of phosphorus-bearing material fed to the process.

(2) Maintain a daily record of equivalent P_2O_5 feed. Calculate the equivalent P_2O_5 feed by determining the total mass rate, in metric ton/hour of phosphorus bearing feed, using the monitoring system specified in paragraph (a)(1) of this section and the procedures specified in §63.606(f)(3).

(b) For each phosphate rock dryer or phosphate rock calciner subject to the provisions of this subpart, you must comply with the monitoring requirements specified in paragraphs (b)(1) and (2) of this section.

ITAFOS did not indicate they have a rock dryer or calciner.

(1) Install, calibrate, maintain, and operate a CMS according to your site-specific monitoring plan specified in §63.608(c). The CMS must have an accuracy of ±5 percent over its operating range and must determine and permanently record either:

(i) The mass flow of phosphorus-bearing feed material to the phosphate rock dryer or calciner, or

(ii) The mass flow of product from the phosphate rock dryer or calciner.

(2) Maintain the records specified in paragraphs (b)(2)(i) and (ii) of this section.

(i) If you monitor the mass flow of phosphorus-bearing feed material to the phosphate rock dryer or calciner as specified in paragraph (b)(1)(i) of this section, maintain a daily record of phosphate rock feed by determining the total mass rate in metric tons/hour of phosphorus-bearing feed.

(ii) If you monitor the mass flow of product from the phosphate rock dryer or calciner as specified in paragraph (b)(1)(ii) of this section, maintain a daily record of product by determining the total mass rate in metric ton/hour of product.

(c) For each purified phosphoric acid process line, you must comply with the monitoring requirements specified in paragraphs (c)(1) and (2) of this section.

ITAFOS stated that they do not currently produce purified phosphoric acid.

(1) Install, calibrate, maintain, and operate a CMS according to your site-specific monitoring plan specified in §63.608(c). The CMS must continuously measure and permanently record the stack gas exit temperature for each chiller stack.

(2) Measure and record the concentration of methyl isobutyl ketone in each product acid stream and each raffinate stream once each day.

(d) If you use a control device(s) to comply with the emission limits specified in Table 1 or 2 of this subpart, you must install a continuous parameter monitoring system (CPMS) and comply with the requirements specified in paragraphs (d)(1) through (5) of this section.

(1) You must monitor the operating parameter(s) applicable to the control device that you use as specified in Table 3 to this subpart and establish the applicable limit or range for the operating parameter limit as specified in paragraphs (d)(1)(i) and (ii) of this section, as applicable.

(i) Except as specified in paragraph (d)(1)(ii) of this section, determine the value(s) as the arithmetic average of operating parameter measurements recorded during the three test runs conducted for the most recent performance test.

(ii) If you use an absorber or a wet electrostatic precipitator to comply with the emission limits in Table 1 or 2 to this subpart and you monitor pressure drop across the absorber or secondary voltage for a wet electrostatic precipitator, you must establish allowable ranges using the methodology specified in paragraphs (d)(1)(ii)(A) and (B) of this section.

(A) The allowable range for the daily averages of the pressure drop across an absorber and of the flow rate of the absorber liquid to each absorber in the process absorbing system, or secondary voltage for a wet electrostatic precipitator, is ±20 percent of the baseline average value determined in paragraph (d)(1)(i) of this section. The Administrator retains the right to reduce the ±20 percent adjustment to the baseline average values of operating ranges in those instances where performance test results indicate that a source's level of emissions is near the value of an applicable emissions standard. However, the adjustment must not be reduced to less than ±10 percent under any instance.

(B) As an alternative to paragraph (d)(1)(ii)(A) of this section, you may establish allowable ranges for the daily averages of the pressure drop across an absorber, or secondary voltage for an electrostatic precipitator, for the purpose of assuring compliance with this subpart using the procedures described in this paragraph. You must establish the allowable ranges based on the baseline average values recorded during previous performance tests, or the results of performance tests conducted specifically for the purposes of this paragraph. You must conduct all performance tests using the methods specified in §63.606. You must certify that the control devices and processes have not been modified since the date of the performance test from which you obtained the data used to establish the allowable ranges. When a source using the methodology of this paragraph is retested, you must determine new allowable ranges of baseline average values unless the retest indicates no change in the operating parameters outside the previously established ranges.

(2) You must monitor, record, and demonstrate continuous compliance using the minimum frequencies specified in Table 4 to this subpart.

(3) You must comply with the calibration and quality control requirements that are applicable to the operating parameter(s) you monitor as specified in Table 5 to this subpart.

(4) If you use a non-regenerative adsorption system to achieve the mercury emission limits specified in Table 1 or 2 to this subpart, you must comply with the requirements specified in paragraph (e) of this section.

Mercury emission limits only apply to calciners and ITAFOS has not indicated they have a calciner.

(5) If you use a sorbent injection system to achieve the mercury emission limits specified in Table 1 or 2 to this subpart and you use a fabric filter to collect the associated particulate matter, the system must meet the requirements for fabric filters specified in paragraph (f) of this section.

Mercury emission limits only apply to calciners and ITAFOS has not indicated they have a calciner.

(e) If you use a non-regenerative adsorption system to achieve the mercury emission limits specified in Table 1 or 2 to this subpart, you must comply with the requirements specified in paragraphs (e)(1) through (3) of this section.

Mercury emission limits only apply to calciners and ITAFOS has not indicated they have a calciner.

(1) Determine the adsorber bed life (*i.e.,* the expected life of the sorbent in the adsorption system) using the procedures specified in paragraphs (e)(1)(i) through (iv) of this section.

(i) If the adsorber bed is expected (designed) to have a life of less than 2 years, determine the outlet concentration of mercury on a quarterly basis until breakthrough occurs for the first three adsorber bed change-outs. The adsorber bed life shall equal the average length of time between each of the three change-outs.

(ii) If the adsorber bed is expected (designed) to have a life of 2 years or greater, determine the outlet concentration of mercury on a semi-annual basis until breakthrough occurs for the first two adsorber bed change-outs. The adsorber bed life must equal the average length of time between each of the two change-outs.

(iii) If more than one adsorber is operated in parallel, or there are several identical operating lines controlled by adsorbers, you may determine the adsorber bed life by measuring the outlet concentration of mercury from one of the adsorbers or adsorber systems rather than determining the bed life for each adsorber.

(iv) The adsorber or adsorber system you select for the adsorber bed life test must have the highest expected inlet gas mercury concentration and the highest operating rate of any adsorber in operation at the affected source. During the test to determine adsorber bed life, you must use the fuel that contains the highest level of mercury in any fuel-burning unit associated with the adsorption system being tested.

(2) You must replace the sorbent in each adsorber on or before the end of the adsorbent bed life, calculated in paragraph (e)(1) of this section.

(3) You must re-establish the adsorber bed life if the sorbent is replaced with a different brand or type, or if any process changes are made that would lead to a shorter bed lifetime.

(f) Beginning August 19, 2016, if you use a fabric filter system to comply with the emission limits specified in Table 1 or 2 to this subpart, then the fabric filter must be equipped with a bag leak detection system that is installed, calibrated, maintained, and continuously operated according to the requirements in paragraphs (f)(1) through (10) of this section.

ITAFOS stated that they do not use a fabric filter to comply with emission limits.

(1) Install a bag leak detection sensor(s) in a position(s) that will be representative of the relative or absolute particulate matter loadings for each exhaust stack, roof vent, or compartment (*e.g.,* for a positive-pressure fabric filter) of the fabric filter.

(2) Use a bag leak detection system certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 1 milligram per actual cubic meter (0.00044 grains per actual cubic feet) or less.

(3) Use a bag leak detection system equipped with a device to continuously record the output signal from the system sensor.

(4) Use a bag leak detection system equipped with a system that will trigger an alarm when an increase in relative particulate matter emissions over a preset level is detected. The alarm must be located such that the alert is observed readily by plant operating personnel.

(5) Install a bag leak detection system in each compartment or cell for positive-pressure fabric filter systems that do not duct all compartments or cells to a common stack. Install a bag leak detector downstream of the fabric filter if a negative-pressure or induced-air filter system is used. If multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.

(6) Calibration of the bag leak detection system must, at a minimum, consist of establishing the baseline output level by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.

(7) After initial adjustment, you must not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time except as established in your site-specific monitoring plan required in §63.608(c). In no event may the sensitivity be increased more than 100 percent or decreased by more than 50 percent over a 365-day period unless such adjustment follows a complete inspection of the fabric filter system that demonstrates that the system is in good operating condition.

(8) Operate and maintain each fabric filter and bag leak detection system such that the alarm does not sound more than 5 percent of the operating time during a 6-month period. If the alarm sounds more than 5 percent of the operating time during a 6-month period, it is considered an operating parameter exceedance. Calculate the alarm time (*i.e.,* time that the alarm sounds) as specified in paragraphs (f)(8)(i) through (iii) of this section.

(i) If inspection of the fabric filter demonstrates that corrective action is not required, the alarm duration is not counted in the alarm time calculation.

(ii) If corrective action is required, each alarm time is counted as a minimum of 1 hour.

(iii) If it takes longer than 1 hour to initiate corrective action, each alarm time is counted as the actual amount of time taken to initiate corrective action.

(9) If the alarm on a bag leak detection system is triggered, you must initiate procedures within 1 hour of an alarm to identify the cause of the alarm and then initiate corrective action, as specified in §63.608(d)(2), no later than 48 hours after an alarm. Failure to take these actions within the prescribed time periods is considered a violation.

(10) Retain records of any bag leak detection system alarm, including the date, time, duration, and the percent of the total operating time during each 6-month period that the alarm sounds, with a brief explanation of the cause of the alarm, the corrective action taken, and the schedule and duration of the corrective action.

(g) If you choose to directly monitor mercury emissions instead of using CPMS as specified in paragraph (d) of this section, then you must install and operate a mercury CEMS in accordance with Performance Specification 12A of appendix B to part 60 of this chapter, or a sorbent trap-based integrated monitoring system in accordance with Performance Specification 12B of appendix B to part 60 of this chapter. You must continuously monitor mercury emissions as specified in paragraphs (g)(1) through (4) of this section.

Mercury standards only apply to calciners, which ITAFOS does not have.

(1) The span value for any mercury CEMS must include the intended upper limit of the mercury concentration measurement range during normal operation, which may be exceeded during other short-term conditions lasting less than 24 consecutive operating hours. However, the span should be at least equivalent to approximately two times the emissions standard. You may round the span value to the nearest multiple of 10 micrograms per cubic meter of total mercury.

(2) You must operate and maintain each mercury CEMS or sorbent trap-based integrated monitoring system according to the quality assurance requirements specified in Procedure 5 of appendix F to part 60 of this chapter.

(3) You must conduct relative accuracy testing of mercury monitoring systems, as specified in Performance Specification 12A, Performance Specification 12B, or Procedure 5 of appendix B to part 60 of this chapter, at normal operating conditions.

(4) If you use a mercury CEMS, you must install, operate, calibrate, and maintain an instrument for continuously measuring and recording the exhaust gas flow rate to the atmosphere according to your site-specific monitoring plan specified in §63.608(c).

[80 FR 50436, Aug. 19, 2015, as amended at 82 FR 45199, Sept. 28, 2017]

§63.606 Performance tests and compliance provisions.

(a) You must conduct an initial performance test to demonstrate compliance with the applicable emission limits specified in Tables 1 and 2 to this subpart, within 180 days of the applicable compliance date specified in §63.602.

(b) After you conduct the initial performance test specified in paragraph (a) of this section, you must conduct a performance test once per calendar year.

(c) For affected sources (as defined in §63.600) that have not operated since the previous annual performance test was conducted and more than 1 year has passed since the previous performance test, you must conduct a performance test no later than 180 days after the re-start of the affected source according to the applicable provisions in §63.7(a)(2).

(d)(1) You must conduct the performance tests specified in this section at representative (normal) conditions for the process. Representative (normal) conditions means those conditions that:

(i) Represent the range of combined process and control measure conditions under which the facility expects to operate (regardless of the frequency of the conditions); and

(ii) Are likely to most challenge the emissions control measures of the facility with regard to meeting the applicable emission standards, but without creating an unsafe condition. Operations during startup, shutdown, and malfunction do not constitute representative (normal) operating conditions for purposes of conducting a performance test.

(2) You must record the process information that is necessary to document the operating conditions during the test and include in such record an explanation to support that such conditions represent representative (normal) conditions. Upon request, you must make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

(e) In conducting all performance tests, you must use as reference methods and procedures the test methods in 40 CFR part 60, appendix A, or other methods and procedures as specified in this section, except as provided in §63.7(f).

(f) You must determine compliance with the applicable total fluorides standards specified in Tables 1 and 2 to this subpart as specified in paragraphs (f)(1) through (3) of this section.

(1) Compute the emission rate (E) of total fluorides for each run using Equation AA-1:

$$E = \left(\sum_{i=1}^{N} C_i Q_i \right) / (PK) \qquad \text{(Eq. AA-1)}$$

Where:

E = Emission rate of total fluorides, gram/metric ton (pound/ton) of equivalent P_2O_5 feed.

C_i = Concentration of total fluorides from emission point "i," milligram/dry standard cubic meter (milligram/dry standard cubic feet).

Q_i = Volumetric flow rate of effluent gas from emission point "i," dry standard cubic meter/hour (dry standard cubic feet/hour).

N = Number of emission points associated with the affected facility.

P = Equivalent P_2O_5 feed rate, metric ton/hour (ton/hour).

K = Conversion factor, 1000 milligram/gram (453,600 milligram/pound).

(2) You must use Method 13A or 13B (40 CFR part 60, appendix A) to determine the total fluorides concentration (C_i) and the volumetric flow rate (Q_i) of the effluent gas at each emission point. The sampling time for each run at each emission point must be at least 60 minutes. The sampling volume for each run at each emission point must be at least 0.85 dscm (30 dscf). If Method 13B is used, the fusion

of the filtered material described in Section 7.3.1.2 and the distillation of suitable aliquots of containers 1 and 2, described in section 7.3.3 and 7.3.4 in Method 13 A, may be omitted.

(3) Compute the equivalent P_2O_5 feed rate (P) using Equation AA-2:

$$P = M_p R_p \qquad \text{(Eq. AA-2)}$$

Where:

P = P_2O_5 feed rate, metric ton/hr (ton/hour).

M_p = Total mass flow rate of phosphorus-bearing feed, metric ton/hour (ton/hour).

R_p = P_2O_5 content, decimal fraction.

(i) Determine the mass flow rate (M_p) of the phosphorus-bearing feed using the measurement system described in §63.605(a).

(ii) Determine the P_2O_5 content (R_p) of the feed using, as appropriate, the following methods specified in Methods Used and Adopted By The Association of Florida Phosphate Chemists (incorporated by reference, see §63.14) where applicable:

(A) Section IX, Methods of Analysis for Phosphate Rock, No. 1 Preparation of Sample.

(B) Section IX, Methods of Analysis for Phosphate Rock, No. 3 Phosphorus-P_2O_5 or $Ca_3(PO_4)_2$, Method A—Volumetric Method.

(C) Section IX, Methods of Analysis for Phosphate Rock, No. 3 Phosphorus-P_2O_5 or $Ca_3(PO_4)_2$, Method B—Gravimetric Quimociac Method.

(D) Section IX, Methods of Analysis for Phosphate Rock, No. 3 Phosphorus-P_2O_5 or $Ca_3(PO_4)_2$, Method C—Spectrophotometric Method.

(E) Section XI, Methods of Analysis for Phosphoric Acid, Superphosphate, Triple Superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P_2O_5, Method A—Volumetric Method.

(F) Section XI, Methods of Analysis for Phosphoric Acid, Superphosphate, Triple Superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P_2O_5, Method B—Gravimetric Quimociac Method.

(G) Section XI, Methods of Analysis for Phosphoric Acid, Superphosphate, Triple Superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P_2O_5, Method C—Spectrophotometric Method.

(g) You must demonstrate compliance with the applicable particulate matter standards specified in Tables 1 and 2 to this subpart as specified in paragraphs (g)(1) through (3) of this section.

ITAFOS does not have particulate matter standards because they don't have a rock dryer or calciner.

(1) Compute the emission rate (E) of particulate matter for each run using Equation AA-3:

$E = (C\ Q)/(P\ K)$ (Eq. AA-3)

Where:

E = Emission rate of particulate matter, kilogram/megagram (pound/ton) of phosphate rock feed.

C = Concentration of particulate matter, gram/dry standard cubic meter (gram/dry standard cubic feet).

Q = Volumetric flow rate of effluent gas, dry standard cubic meter/hour (dry standard cubic feet/hour).

P = Phosphate rock feed rate, megagram/hour (ton/hour).

K = Conversion factor, 1000 grams/kilogram (453.6 grams/pound).

(2) Use Method 5 at 40 CFR part 60, appendix A-3 to determine the particulate matter concentration (C) and volumetric flow rate (Q) of the effluent gas. Except as specified in paragraph (h) of this section, the sampling time and sample volume for each run must be at least 60 minutes and 0.85 dry standard cubic meter (30 dry standard cubic feet).

(3) Use the CMS described in §63.605(b) to determine the phosphate rock feed rate (P) for each run.

(h) To demonstrate compliance with the particulate matter standards for phosphate rock calciners specified in Tables 1 and 2 to this subpart, you must use Method 5 at 40 CFR part 60, appendix A-3 to determine the particulate matter concentration. The sampling volume for each test run must be at least 1.70 dry standard cubic meter.

ITAFOS does not have particulate matter standards because they don't have a rock dryer or calciner.

(i) To demonstrate compliance with the mercury emission standards for phosphate rock calciners specified in Tables 1 and 2 to this subpart, you must use Method 30B at 40 CFR part 60, appendix A-8 to determine the mercury concentration, unless you use a CEMS to demonstrate compliance. If you use a non-regenerative adsorber to control mercury emissions, you must use this test method to determine the expected bed life as specified in §63.605(e)(1).

(j) If you choose to monitor the mass flow of product from the phosphate rock dryer or calciner as specified in §63.605(b)(1)(ii), you must either:

(1) Simultaneously monitor the feed rate and output rate of the phosphate rock dryer or calciner during the performance test, or

(2) Monitor the output rate and the input and output moisture contents of the phosphate rock dryer or calciner during the performance test and calculate the corresponding phosphate rock dryer or calciner input rate.

(k) For sorbent injection systems, you must conduct the performance test at the outlet of the fabric filter used for sorbent collection. You must monitor and record operating parameter values for the fabric

filter during the performance test. If the sorbent is replaced with a different brand or type of sorbent than was used during the performance test, you must conduct a new performance test.

ITAFOS stated that they do not use a fabric filter to comply with standards.

(l) If you use a mercury CEMS as specified in §63.605(g), or paragraph (i) of this section, you must demonstrate initial compliance based on the first 30 operating days during which you operate the affected source using a CEMS. You must obtain hourly mercury concentration and stack gas volumetric flow rate data.

ITAFOS is not subject a mercury standard.

(m) If you use a CMS, you must conduct a performance evaluation, as specified in §63.8(e), in accordance with your site-specific monitoring plan in §63.608(c). For fabric filters, you must conduct a performance evaluation of the bag leak detection system consistent with the guidance provided in Office Of Air Quality Planning And Standards (OAQPS), Fabric Filter Bag Leak Detection Guidance (incorporated by reference, see §63.14). You must record the sensitivity of the bag leak detection system to detecting changes in particulate matter emissions, range, averaging period, and alarm set points during the performance test.

§63.607 Notification, recordkeeping, and reporting requirements.

(a) You must comply with the notification requirements specified in §63.9. During the most recent performance test, if you demonstrate compliance with the emission limit while operating your control device outside the previously established operating limit, you must establish a new operating limit based on that most recent performance test and notify the Administrator that the operating limit changed based on data collected during the most recent performance test. When a source is retested and the performance test results are submitted to the Administrator pursuant to paragraph (b)(1) of this section, §63.7(g)(1), or §63.10(d)(2), you must indicate whether the operating limit is based on the new performance test or the previously established limit. Upon establishment of a new operating limit, you must thereafter operate under the new operating limit. If the Administrator determines that you did not conduct the compliance test in accordance with the applicable requirements or that the operating limit established during the performance test does not correspond to representative (normal) conditions, you must conduct a new performance test and establish a new operating limit.

(b) You must comply with the reporting and recordkeeping requirements in §63.10 as specified in paragraphs (b)(1) through (5) of this section.

(1) You must comply with the general recordkeeping requirements in §63.10(b)(1).

(2) As required by §63.10(d), you must report the results of the initial and subsequent performance tests as part of the notification of compliance status required in §63.9(h). You must verify in the performance test reports that the operating limits for each process have not changed or provide documentation of revised operating limits established according to §63.605, as applicable. In the notification of compliance status, you must also:

(i) Certify to the Administrator annually that you have complied with the evaporative cooling tower requirements specified in §63.602(c).

(ii) Submit analyses and supporting documentation demonstrating conformance with the Office Of Air Quality Planning And Standards (OAQPS), Fabric Filter Bag Leak Detection Guidance (incorporated by reference, see §63.14) and specifications for bag leak detection systems as part of the notification of compliance status report.

A fabric filter is not used to comply with standards, as stated by ITAFOS.

(iii) Submit the gypsum dewatering stack and cooling pond management plan specified in §63.602(e).

(iv) If you elect to demonstrate compliance by following the procedures in §63.605(d)(1)(ii)(B), certify to the Administrator annually that the control devices and processes have not been modified since the date of the performance test from which you obtained the data used to establish the allowable ranges.

(v) Each time a gypsum dewatering stack is closed, certify to the Administrator within 90 days of closure, that the final cover of the closed gypsum dewatering stack is a drought resistant vegetative cover that includes a barrier soil layer that will sustain vegetation.

(3) As required by §63.10(e)(3), you must submit an excess emissions report for any exceedance of an emission limit, work practice standard, or operating parameter limit if the total duration of the exceedances for the reporting period is 1 percent of the total operating time for the reporting period or greater. The report must contain the information specified in §63.10 and paragraph (b)(4) of this section. When exceedances of an emission limit or operating parameter have not occurred, you must include such information in the report. You must submit the report semiannually and the report must be delivered or postmarked by the 30th day following the end of the calendar half. If you report exceedances, you must submit the excess emissions report quarterly until a request to reduce reporting frequency is approved as described in §63.10(e)(3)(ii).

(4) In the event that an affected unit fails to meet an applicable standard, record and report the following information for each failure:

(i) The date, time and duration of the failure.

(ii) A list of the affected sources or equipment for which a failure occurred.

(iii) An estimate of the volume of each regulated pollutant emitted over any emission limit.

(iv) A description of the method used to estimate the emissions.

(v) A record of actions taken to minimize emissions in accordance with §63.608(b), and any corrective actions taken to return the affected unit to its normal or usual manner of operation.

(5) You must submit a summary report containing the information specified in §63.10(e)(3)(vi). You must submit the summary report semiannually and the report must be delivered or postmarked by the 30th day following the end of the calendar half.

(c) Your records must be in a form suitable and readily available for expeditious review. You must keep each record for 5 years following the date of each recorded action. You must keep each record on site, or accessible from a central location by computer or other means that instantly provides access at the site, for at least 2 years after the date of each recorded action. You may keep the records off site for the remaining 3 years.

(d) In computing averages to determine compliance with this subpart, you must exclude the monitoring data specified in paragraphs (d)(1) and (2) of this section.

(1) Periods of non-operation of the process unit;

(2) Periods of no flow to a control device; and any monitoring data recorded during CEMS or continuous parameter monitoring system (CPMS) breakdowns, out-of-control periods, repairs, maintenance periods, instrument adjustments or checks to maintain precision and accuracy, calibration checks, and zero (low-level), mid-level (if applicable), and high-level adjustments.

(e) Within 60 days after the date of completing each performance test (as defined in §63.2) required by this subpart, you must submit the results of the performance tests, including any associated fuel analyses, following the procedure specified in either paragraph (e)(1) or (2) of this section.

(1) For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT Web site (*http://www.epa.gov/ttn/chief/ert/index.html*), you must submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (*http://cdx.epa.gov/epa_home.asp*). Performance test data must be submitted in a file format generated through the use of the EPA's ERT. Alternatively, you may submit performance test data in an electronic file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT Web site once the XML schema is available. If you claim that some of the performance test information being submitted is confidential business information (CBI), you must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT Web site, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph.

(2) For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT Web site, you must submit the results of the performance test to the Administrator at the appropriate address listed in §63.13.

(f) Within 60 days after the date of completing each continuous emissions monitoring system performance evaluation (as defined in §63.2), you must submit the results of the performance evaluation following the procedure specified in either paragraph (f)(1) or (2) of this section.

ITAFOS does not utilize a CEM to demonstrated compliance.

(1) For performance evaluations of continuous monitoring systems measuring relative accuracy test audit (RATA) pollutants that are supported by the EPA's ERT as listed on the EPA's ERT Web site, you must submit the results of the performance evaluation to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) Performance evaluation data must be submitted in a file format generated through the use of the EPA's ERT. Alternatively, you may submit performance evaluation data in an electronic file format consistent with the XML schema listed on the EPA's ERT Web site once the XML schema is available. If you claim that some of the performance evaluation information being transmitted is CBI, you must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT Web site, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage media to the EPA. The electronic storage media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph.

(2) For any performance evaluations of continuous monitoring systems measuring RATA pollutants that are not supported by the EPA's ERT as listed on the EPA's ERT Web site, you must submit the results of the performance evaluation to the Administrator at the appropriate address listed in §63.13.

§63.608 General requirements and applicability of general provisions of this part.

(a) You must comply with the general provisions in subpart A of this part as specified in appendix A to this subpart.

(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 by the Administrator of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(c) For each CMS (including CEMS or CPMS) used to demonstrate compliance with any applicable emission limit or work practice, you must develop, and submit to the Administrator for approval upon request, a site-specific monitoring plan according to the requirements specified in paragraphs (c)(1) through (3) of this section. You must submit the site-specific monitoring plan, if requested by the Administrator, at least 60 days before the initial performance evaluation of the CMS. The requirements

of this paragraph also apply if a petition is made to the Administrator for alternative monitoring parameters under §63.8(f).

(1) You must include the information specified in paragraphs (c)(1)(i) through (vi) of this section in the site-specific monitoring plan.

(i) Location of the CMS sampling probe or other interface. You must include a justification demonstrating that the sampling probe or other interface is at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (*e.g.*, on or downstream of the last control device).

(ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems.

(iii) Performance evaluation procedures and acceptance criteria (*e.g.*, calibrations).

(iv) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1)(ii), (c)(3), (c)(4)(ii), and Table 4 to this subpart.

(v) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d)(1) and (2) and Table 5 to this subpart.

(vi) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c), (e)(1), and (e)(2)(i).

(2) You must include a schedule for conducting initial and subsequent performance evaluations in the site-specific monitoring plan.

(3) You must keep the site-specific monitoring plan on site for the life of the affected source or until the affected source is no longer subject to the provisions of this part, to be made available for inspection, upon request, by the Administrator. If you revise the site-specific monitoring plan, you must keep previous (*i.e.*, superseded) versions of the plan on site to be made available for inspection, upon request, by the Administrator, for a period of 5 years after each revision to the plan. You must include the program of corrective action required under §63.8(d)(2) in the plan.

(d) For each bag leak detection system installed to comply with the requirements specified in §63.605(f), you must include the information specified in paragraphs (d)(1) and (2) of this section in the site-specific monitoring plan specified in paragraph (c) of this section.

ITAFOS stated they don't use a fabric filter to comply with standards.

(1) Performance evaluation procedures and acceptance criteria (*e.g.*, calibrations), including how the alarm set point will be established.

(2) A corrective action plan describing corrective actions to be taken and the timing of those actions when the bag leak detection alarm sounds. Corrective actions may include, but are not limited to, the actions specified in paragraphs (d)(2)(i) through (vi) of this section.

(i) Inspecting the fabric filter for air leaks, torn or broken bags or filter media, or any other conditions that may cause an increase in regulated material emissions.

(ii) Sealing off defective bags or filter media.

(iii) Replacing defective bags or filter media or otherwise repairing the control device.

(iv) Sealing off a defective fabric filter compartment.

(v) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system.

(vi) Shutting down the process controlled by the fabric filter.

(e) If you use blower design capacity to determine the gas flow rate through the absorber for use in the liquid-to-gas ratio as specified in Table 3 to this subpart, then you must include in the site-specific monitoring plan specified in paragraph (c) of this section calculations showing how you determined the maximum possible gas flow rate through the absorber based on the blower's specifications (including any adjustments you made for pressure drop).

(f) If you use a regression model to determine the gas flow rate through the absorber for use in the liquid-to-gas ratio as specified in Table 3 to this subpart, then you must include in the site-specific monitoring plan specified in paragraph (c) of this section the calculations that were used to develop the regression model, including the calculations you use to convert amperage of the blower to brake horsepower. You must describe any constants included in the equations (e.g., efficiency, power factor), and describe how these constants were determined. If you want to change a constant in your calculation, then you must conduct a regression model verification to confirm the new value of the constant. In addition, the site-specific monitoring plan must be updated annually to reflect the data used in the annual regression model verification that is described in Table 3 to this subpart.

[80 FR 50436, Aug. 19, 2015, as amended at 82 FR 45199, Sept. 28, 2017]

§63.609 [Reserved]

§63.610 Exemption from new source performance standards.

Any affected source subject to the provisions of this subpart is exempted from any otherwise applicable new source performance standard contained in 40 CFR part 60, subpart T, subpart U, or subpart NN. To be exempt, a source must have a current operating permit pursuant to title V of the Clean Air Act and the source must be in compliance with all requirements of this subpart. For each affected source, this exemption is upon the date that you demonstrate to the Administrator that the requirements of §§63.605 and 63.606 have been met.

§63.611 Implementation and enforcement.

(a) This subpart is implemented and enforced by the U.S. EPA, or a delegated authority such as the applicable state, local, or Tribal agency. If the U.S. EPA Administrator has delegated authority to a state, local, or Tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. Contact the applicable U.S. EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to a state, local, or Tribal agency.

(b) The authorities specified in paragraphs (b)(1) through (5) of this section are retained by the Administrator of U.S. EPA and cannot be delegated to State, local, or Tribal agencies.

(1) Approval of alternatives to the requirements in §§63.600, 63.602, 63.605, and 63.610.

(2) Approval of requests under §§63.7(e)(2)(ii) and 63.7 (f) for alternative requirements or major changes to the test methods specified in this subpart, as defined in §63.90.

(3) Approval of requests under §63.8(f) for alternative requirements or major changes to the monitoring requirements specified in this subpart, as defined in §63.90.

(4) Waiver or approval of requests under §63.10(f) for alternative requirements or major changes to the recordkeeping and reporting requirements specified in this subpart, as defined in §63.90.

(5) Approval of an alternative to any electronic reporting to the EPA required by this subpart.

Table 1 to Subpart AA of Part 63—Existing Source Emission Limits[ab]

For the following existing sources . . .	You must meet the emission limits for the specified pollutant . . .		
	Total fluorides	Total particulate	Mercury
Wet-Process Phosphoric Acid Line	0.020 lb/ton of equivalent P_2O_5 feed		
Superphosphoric Acid Process Line[c]	0.010 lb/ton of equivalent P_2O_5 feed		
Superphosphoric Acid Submerged Line with a Submerged Combustion Process	0.20 lb/ton of equivalent P_2O_5 feed		

Phosphate Rock Dryer		0.2150 lb/ton of phosphate rock feed	
Phosphate Rock Calciner	9.0E-04 lb/ton of rock feed[d]	0.181 g/dscm	0.14 mg/dscm corrected to 3 percent oxygen[d]

[a]The existing source compliance date is June 10, 2002, except as noted.

[b]During periods of startup and shutdown, for emission limits stated in terms of pounds of pollutant per ton of feed, you are subject to the work practice standards specified in §63.602(f).

[c]Beginning on August 19, 2018, you must include oxidation reactors in superphosphoric acid process lines when determining compliance with the total fluorides limit.

[d]Compliance date is August 19, 2015.

[80 FR 50436, Aug. 19, 2015, as amended at 82 FR 45199, Sept. 28, 2017]

Table 2 to Subpart AA of Part 63—New Source Emission Limits[ab]

For the following new sources . . .	You must meet the emissions limits for the specified pollutant . . .		
	Total fluorides	Total particulate	Mercury
Wet-Process Phosphoric Acid Line	0.0135 lb/ton of equivalent P_2O_5 feed		
Superphosphoric Acid Process Line[c]	0.00870 lb/ton of equivalent P_2O_5 feed		
Phosphate Rock Dryer		0.060 lb/ton of phosphate rock feed	
Phosphate Rock Calciner	9.0E-04 lb/ton of rock feed	0.092 g/dscm	0.014 mg/dscm corrected to 3 percent oxygen

[a]The new source compliance dates are based on date of construction or reconstruction as specified in §63.602(a).

[b]During periods of startup and shutdown, for emission limits stated in terms of pounds of pollutant per ton of feed, you are subject to the work practice standards specified in §63.602(f).

[c]Beginning on August 19, 2018, you must include oxidation reactors in superphosphoric acid process lines when determining compliance with the total fluorides limit.

[80 FR 50436, Aug. 19, 2015, as amended at 82 FR 45199, Sept. 28, 2017]

Table 3 to Subpart AA of Part 63—Monitoring Equipment Operating Parameters

You must . . .	If . . .	And you must monitor . . .[a]	And . . .[a]
Absorbers (Wet Scrubbers)			
Install a continuous parameter monitoring system (CPMS) for liquid flow at the inlet of the absorber	Your absorber is designed and operated with pressure drops of 5 inches of water column or more; and you choose to monitor only the influent liquid flow, rather than the liquid-to-gas ratio	Influent liquid flow	
Install CPMS for liquid and gas flow at the inlet of the absorber[b]	Your absorber is designed and operated with pressure drops of 5 inches of water column or less; or Your absorber is designed and operated with pressure drops of 5 inches of water column or more, and you choose to monitor the liquid-to-gas ratio, rather than only the influent liquid flow, and you want the ability to lower liquid flow with changes in gas flow	Liquid-to-gas ratio as determined by dividing the influent liquid flow rate by the gas flow rate through the absorber. The units of measure must be consistent with those used to calculate this ratio during the performance test	You must determine the gas flow rate through the absorber by: Measuring the gas flow rate at the absorber inlet or outlet; Using the blower design capacity, with appropriate adjustments for pressure drop;[c] or Using a regression model.[d]
Install CPMS for pressure at the gas stream inlet and outlet of the absorber	Your absorber is designed and operated with pressure drops of 5 inches of water column or more	Pressure drop through the absorber	You may measure the pressure of the inlet gas using amperage on the blower if a correlation between

			pressure and amperage is established
Sorbent Injection ***(application did not indicate that a sorbent is used)***			
Install a CPMS for flow rate		Sorbent injection rate	
Install a CPMS for flow rate		Sorbent injection carrier gas flow rate	
Wet Electrostatic Precipitators			
Install secondary voltage meter	You control mercury or metal HAP (particulate matter) using an electrostatic precipitator	Secondary voltage	

[a]To monitor an operating parameter that is not specified in this table (including process-specific techniques not specified in this table to determine gas flow rate through an absorber), you must request, on a site-specific basis, an alternative monitoring method under the provisions of 40 CFR 63.8(f).

[b]For new sources that commence construction or reconstruction after August 19, 2015, the compliance date is immediately upon startup. For existing sources, and new sources that commence construction or reconstruction after December 27, 1996, and on or before August 19, 2015, if your absorber is designed and operated with pressure drops of 5 inches of water column or less, then the compliance date is August 19, 2018. In the interim, for existing sources, and new sources that commence construction or reconstruction after December 27, 1996, and on or before August 19, 2015, with an absorber designed and operated with pressure drops of 5 inches of water column or less, you must comply with one of the following: (i) The monitoring requirements in this Table 3 for absorbers designed and operated with pressure drops of 5 inches of water column or less; (ii) the applicable monitoring provisions included in a permit issued under 40 CFR part 70 to assure compliance with subpart AA; (iii) the applicable monitoring provisions of an Alternative Monitoring Plan approved pursuant to §63.8(f); or (iv) install CPMS for pressure at the gas stream inlet and outlet of the absorber, and monitor pressure drop through the absorber.

[c]If you select this option, then you must comply with §63.608(e). The option to use blower design capacity is intended to establish the maximum possible gas flow through the absorber; and is available regardless of the location of the blower (influent or effluent), as long as the gas flow rate through the absorber can be established. Establish the minimum liquid-to-gas ratio operating limit by dividing the

minimum liquid flow rate to the absorber (determined during a performance test) by the maximum possible gas flow rate through the absorber (determined using blower design capacity).

[d]If you select this option, then you must comply with §63.608(f). The regression model must be developed using direct measurements of gas flow rate, and design fan curves that correlate gas flow rate to static pressure (*i.e.,* fan suction pressure) and brake horsepower of the blower. You must conduct an annual regression model verification using direct measurements of gas flow rate to ensure the correlation remains accurate. Direct measurements of gas flow rate used to develop or verify regression models may be collected during, or separately from, the annual performance testing that is required in §63.606(b).

[80 FR 50436, Aug. 19, 2015, as amended at 82 FR 45199, Sept. 28, 2017]

Table 4 to Subpart AA of Part 63—Operating Parameters, Operating Limits and Data Monitoring, Recordkeeping and Compliance Frequencies

For the operating parameter applicable to you, as specified in Table 3 . . .	You must establish the following operating limit . . .	And you must monitor, record, and demonstrate continuous compliance using these minimum frequencies . . .		
		Data measurement	Data recording	Data averaging period for compliance
Absorbers (Wet Scrubbers)				
Influent liquid flow	Minimum inlet liquid flow	Continuous	Every 15 minutes	Daily.
Influent liquid flow rate and gas stream flow rate	Minimum influent liquid-to-gas ratio[a]	Continuous	Every 15 minutes	Daily.
Pressure drop	Pressure drop range	Continuous	Every 15 minutes	Daily.
Sorbent Injection ***Application did not indicate that a sorbent is used.***				
Sorbent injection rate	Minimum injection rate	Continuous	Every 15 minutes	Daily.

Sorbent injection carrier gas flow rate	Minimum carrier gas flow rate	Continuous	Every 15 minutes	Daily.
Fabric Filters				
Alarm time	Maximum alarm time is not established on a site-specific basis but is specified in §63.605(f)(9)	Continuous	Each date and time of alarm start and stop	Maximum alarm time specified in §63.605(f)(9).
Wet Electrostatic Precipitator				
Secondary voltage	Secondary voltage range	Continuous	Every 15 minutes	Daily.

Table 5 to Subpart AA of Part 63—Calibration and Quality Control Requirements for Continuous Parameter Monitoring System (CPMS)

If you monitor this parameter . . .	**Your accuracy requirements are . . .**	**And your calibration requirements are . . .**
Temperature	±1 percent over the normal range of temperature measured or 2.8 degrees Celsius (5 degrees Fahrenheit), whichever is greater, for non-cryogenic temperature ranges ±2.5 percent over the normal range of temperature measured or 2.8 degrees Celsius (5 degrees Fahrenheit), whichever is greater, for cryogenic temperature ranges	Performance evaluation annually and following any period of more than 24 hours throughout which the temperature exceeded the maximum rated temperature of the sensor, or the data recorder was off scale. Visual inspections and checks of CPMS operation every 3 months, unless the CPMS has a redundant temperature sensor. Selection of a representative measurement location.
Flow Rate	±5 percent over the normal range of flow measured or 1.9 liters per minute (0.5 gallons per minute), whichever is greater, for liquid flow rate ±5 percent over the normal range of flow measured or 280 liters per minute (10 cubic feet per minute), whichever	Performance evaluation annually and following any period of more than 24 hours throughout which the flow rate exceeded the maximum rated flow rate of the sensor, or the data recorder was off scale. Checks of all mechanical connections for leakage monthly.

	is greater, for gas flow rate ±5 percent over the normal range measured for mass flow rate	Visual inspections and checks of CPMS operation every 3 months, unless the CPMS has a redundant flow sensor. Selection of a representative measurement location where swirling flow or abnormal velocity distributions due to upstream and downstream disturbances at the point of measurement are minimized.
Pressure	±5 percent over the normal range measured or 0.12 kilopascals (0.5 inches of water column), whichever is greater	Checks for obstructions (*e.g.*, pressure tap pluggage) at least once each process operating day. Performance evaluation annually and following any period of more than 24 hours throughout which the pressure exceeded the maximum rated pressure of the sensor, or the data recorder was off scale. Checks of all mechanical connections for leakage monthly. Visual inspection of all components for integrity, oxidation and galvanic corrosion every 3 months, unless the CPMS has a redundant pressure sensor. Selection of a representative measurement location that minimizes or eliminates pulsating pressure, vibration, and internal and external corrosion.
Sorbent Injection Rate	±5 percent over the normal range measured	Performance evaluation annually. Visual inspections and checks of CPMS operation every 3 months, unless the CPMS has a redundant sensor. Select a representative measurement location that provides measurement of total sorbent injection.
Secondary voltage	±1kV	

[a]If you select the regression model option to monitor influent liquid-to-gas ratio as described in Table 3 to this subpart, then you must also continuously monitor (*i.e.*, record every 15 minutes, and use a daily

averaging period) blower amperage, blower static pressure (*i.e.,* fan suction pressure), and any other parameters used in the regression model that are not constants.

[80 FR 50436, Aug. 19, 2015, as amended at 82 FR 45200, Sept. 28, 2017]

Appendix A to Subpart AA of Part 63—Applicability of General Provisions (40 CFR Part 63, Subpart A) to Subpart AA

40 CFR citation	Requirement	Applies to subpart AA	Comment
§63.1(a)(1) through (4)	General Applicability	Yes	None.
§63.1(a)(5)		No	[Reserved].
§63.1(a)(6)	Contact information	Yes	None.
§63.1(a)(7)-(9)		No	[Reserved].
§63.1(a)(10) through (12)	Time periods	Yes	None.
§63.1(b)	Initial Applicability Determination	Yes	None.
§63.1(c)(1)	Applicability After Standard Established	Yes	None.
§63.1(c)(2)	Permits	Yes	Some plants may be area sources.
§63.1(c)(3)-(4)		No	[Reserved].
§63.1(c)(5)	Area to Major source change	Yes	None.
§63.1(d)		No	[Reserved].
§63.1(e)	Applicability of Permit Program	Yes	None.
§63.2	Definitions	Yes	Additional definitions in §63.601.

§63.3	Units and Abbreviations	Yes	None.
§63.4(a)(1) and (2)	Prohibited Activities	Yes	None.
§63.4(a)(3) through (5)		No	[Reserved].
§63.4(b) and (c)	Circumvention/Fragmentation	Yes	None.
§63.5(a)	Construction/Reconstruction Applicability	Yes	None.
§63.5(b)(1)	Existing, New, Reconstructed Sources Requirements	Yes	None.
§63.5(b)(2)		No	[Reserved].
§63.5(b)(3), (4), and (6)	Construction/Reconstruction approval and notification	Yes	None.
§63.5(b)(5)		No	[Reserved].
§63.5(c)		No	[Reserved].
§63.5(d)	Application for Approval of Construction/Reconstruction	Yes	None.
§63.5(e)	Approval of Construction/Reconstruction	Yes	None.
§63.5(f)	Approval of Construction/Reconstruction Based on State Review	Yes	None.
§63.6(a)	Compliance with Standards and Maintenance Applicability	Yes	None.
§63.6(b)(1)	New and Reconstructed Sources Dates	Yes	See also §63.602.

through (5)			
§63.6(b)(6)		No	[Reserved].
§63.6(b)(7)	Area to major source change	Yes	None.
§63.6(c)(1)and (2)	Existing Sources Dates	Yes	§63.602 specifies dates.
§63.6(c)(3) and (4)		No	[Reserved].
§63.6(c)(5)	Area to major source change	Yes	None.
§63.6(d)		No	[Reserved].
§63.6(e)(1)(i) and (ii)	Operation & Maintenance Requirements	No	See §63.608(b) for general duty requirement.
§63.6(e)(iii)		Yes	None.
§63.6(e)(2)		No	[Reserved].
§63.6(e)(3)	Startup, Shutdown, and Malfunction Plan	No	None.
§63.6(f)	Compliance with Emission Standards	No	See general duty at §63.608(b).
§63.6(g)	Alternative Standard	Yes	None.
§63.6(h)	Compliance with Opacity/VE Standards	No	Subpart AA does not include VE/opacity standards.
§63.6(i)(1) through (14)	Extension of Compliance	Yes	None.
§63.6(i)(15)		No	[Reserved].
§63.6(i)(16)		Yes	None.

§63.6(j)	Exemption from Compliance	Yes	None.
§63.7(a)	Performance Test Requirements Applicability	Yes	None.
§63.7(b)	Notification	Yes	None.
§63.7(c)	Quality Assurance/Test Plan	Yes	None.
§63.7(d)	Testing Facilities	Yes	None.
§63.7(e)(1)	Conduct of Tests; startup, shutdown, and malfunction provisions	No	§63.606 specifies additional requirements.
§63.7(e)(2) through (4)	Conduct of Tests	Yes	§63.606 specifies additional requirements.
§63.7(f)	Alternative Test Method	Yes	None.
§63.7(g)	Data Analysis	Yes	None.
§63.7(h)	Waiver of Tests	Yes	None.
§63.8(a)	Monitoring Requirements Applicability	Yes	None.
§63.8(b)	Conduct of Monitoring	Yes	None.
§63.8(c)(1)(i)	General duty to minimize emissions and CMS operation	No	See 63.608(b) for general duty requirement.
§63.8(c)(1)(ii)		Yes	None.
§63.8(c)(1)(iii)	Requirement to develop SSM Plan for CMS	No	None.
§63.8(c)(2) through (4)	CMS Operation/Maintenance	Yes	None.

§63.8(c)(5)	COMS Operation	No	Subpart AA does not require COMS.
§63.8(c)(6) through (8)	CMS requirements	Yes	None.
§63.8(d)(1) and (2)	Quality Control	Yes	None.
§63.8(d)(3)	Written procedure for CMS	No	See §63.608 for requirement.
§63.8(e)	CMS Performance Evaluation	Yes	None.
§63.8(f)(1) through (5)	Alternative Monitoring Method	Yes	None.
§63.8(f)(6)	Alternative to RATA Test	Yes	None.
§63.8(g)(1)	Data Reduction	Yes	None.
§63.8(g)(2)		Yes	None.
§63.8(g)(3) through (5)		Yes	None.
§63.9(a)	Notification Requirements Applicability	Yes	None.
§63.9(b)	Initial Notifications	Yes	None.
§63.9(c)	Request for Compliance Extension	Yes	None.
§63.9(d)	New Source Notification for Special Compliance Requirements	Yes	None.
§63.9(e)	Notification of Performance Test	Yes	None.
§63.9(f)	Notification of VE/Opacity Test	No	Subpart AA does not include VE/opacity standards.

§63.9(g)	Additional CMS Notifications	Yes	Subpart AA does not require CMS performance evaluation, COMS, or CEMS.
§63.9(h)(1) through (3)	Notification of Compliance Status	Yes	None.
§63.9(h)(4)		No	[Reserved].
§63.9(h)(5) and (6)		Yes	None.
§63.9(i)	Adjustment of Deadlines	Yes	None.
§63.9(j)	Change in Previous Information	Yes	None.
§63.10(a)	Recordkeeping/Reporting-Applicability	Yes	None.
§63.10(b)(1)	General Recordkeeping Requirements	Yes	None.
§63.10(b)(2)(i)	Startup or shutdown duration	No	None.
§63.10(b)(2)(ii)	Malfunction	No	See §63.607 for recordkeeping and reporting requirement.
§63.10(b)(2)(iii)	Maintenance records	Yes	None.
§63.10(b)(2)(iv) and (v)	Startup, shutdown, malfunction actions	No	None.
§63.10(b)(2)(vi) through (xiv)	General Recordkeeping Requirements	Yes	None.
§63.10(b)(3)	General Recordkeeping Requirements	Yes	None.
§63.10(c)(1)	Additional CMS Recordkeeping	Yes	None.
§63.10(c)(2) through (4)		No	[Reserved].

§63.10(c)(5)		Yes	None.
§63.10(c)(6)		Yes	None.
§63.10(c)(7) and (8)		Yes	None.
§63.10(c)(9)		No	[Reserved].
§63.10(c)(10) through (13)		Yes	None.
§63.10(c)(14)		Yes	None.
§63.10(c)(15)	Startup Shutdown Malfunction Plan Provisions	No	None.
§63.10(d)(1)	General Reporting Requirements	Yes	None.
§63.10(d)(2)	Performance Test Results	Yes	None.
§63.10(d)(3)	Opacity or VE Observations	No	Subpart AA does not include VE/opacity standards.
§63.10(d)(4)	Progress Reports	Yes	None.
§63.10(d)(5)	Startup, Shutdown, and Malfunction Reports	No	See §63.607 for reporting of excess emissions.
§63.10(e)(1) and (2)	Additional CMS Reports	Yes	None.
§63.10(e)(3)	Excess Emissions/CMS Performance Reports	Yes	None.
§63.10(e)(4)	COMS Data Reports	No	Subpart AA does not require COMS.

§63.10(f)	Recordkeeping/Reporting Waiver	Yes	None.
§63.11	Control Device and Work Practice Requirements	Yes	None.
§63.12	State Authority and Delegations	Yes	None.
§63.13	Addresses	Yes	None.
§63.14	Incorporation by Reference	Yes	None.
§63.15	Information Availability/Confidentiality	Yes	None.
§63.16	Performance Track Provisions	No	Terminated.

Appendix E – 40 CFR 63 Subpart BB

Subpart BB—National Emission Standards for Hazardous Air Pollutants from Phosphate Fertilizers Production Plants

§63.620 Applicability.

(a) Except as provided in paragraphs (c) and (d) of this section, you are subject to the requirements of this subpart if you own or operate a phosphate fertilizer production plant that is a major source as defined in §63.2. You must comply with the emission limitations, work practice standards, and operating parameter requirements specified in this subpart at all times.

(b) The requirements of this subpart apply to emissions of hazardous air pollutants (HAP) emitted from the following affected sources at a phosphate fertilizer production plant:

(1) Each phosphate fertilizer process line (*e.g.,* diammonium and/or monoammonium phosphate process line).

Nu-West's monoammonium phosphate (MAP) fertilizer production line, specifically the granulator, dryer, and cooler are subject to emission limits and other requirements under Subpart BB.

(2) Each granular triple superphosphate process line.

ITAFOS certified that they do not produce or store triple superphosphate.

(3) Each granular triple superphosphate storage building.

ITAFOS certified that they do not produce or store triple superphosphate.

(4) Evaporative cooling tower.

(c) The requirements of this subpart do not apply to a phosphate fertilizer production plant that is an area source as defined in §63.2.

ITAFOS is a major source with 123 tons per year of HF.

(d) The provisions of this subpart do not apply to research and development facilities as defined in §63.621.

§63.621 Definitions.

Terms used in this subpart are defined in §63.2 of the Clean Air Act and in this section as follows:

Diammonium and/or monoammonium phosphate process line means any process line manufacturing granular diammonium and/or monoammonium phosphate by reacting ammonia with phosphoric acid that has been derived from or manufactured by reacting phosphate rock and acid. A diammonium and/or monoammonium phosphate process line includes: Reactors, granulators, dryers, coolers, screens, and mills.

Equivalent P_2O_5 feed means the quantity of phosphorus, expressed as phosphorus pentoxide (P_2O_5), fed to the process.

Equivalent P_2O_5 stored means the quantity of phosphorus, expressed as phosphorus pentoxide, being cured or stored in the affected facility.

Evaporative cooling tower means an open-water, re-circulating device that uses fans or natural draft to draw or force ambient air through the device to remove heat from process water by direct contact.

Exceedance means a departure from an indicator range established for monitoring under this subpart, consistent with any averaging period specified for averaging the results of the monitoring.

Existing source depends on the date that construction or reconstruction of an affected source commenced. A phosphate fertilizer process line (*e.g.,* diammonium and/or monoammonium phosphate process line), granular triple superphosphate process line, or granular triple superphosphate storage is an existing source if construction or reconstruction of the affected source commenced on or before December 27, 1996.

Fresh granular triple superphosphate means granular triple superphosphate produced within the preceding 72 hours.

Granular triple superphosphate process line means any process line, not including storage buildings, that manufactures granular triple superphosphate by reacting phosphate rock with phosphoric acid. A granular triple superphosphate process line includes: mixers, curing belts (dens), reactors, granulators, dryers, coolers, screens, and mills.

Granular triple superphosphate storage building means any building curing or storing fresh granular triple superphosphate. A granular triple superphosphate storage building includes: storage or curing buildings, conveyors, elevators, screens, and mills.

New source depends on the date that construction or reconstruction of an affected source commences. A phosphate fertilizer process line (*e.g.,* diammonium and/or monoammonium phosphate process line), granular triple superphosphate process line, or granular triple superphosphate storage is a new source if construction or reconstruction of the affected source commenced after December 27, 1996.

Phosphate fertilizer process line means any process line that manufactures a granular phosphate fertilizer by reacting phosphoric acid with ammonia. A phosphate fertilizer process line includes: reactors, granulators, dryers, coolers, screens, and mills.

Phosphate fertilizer production plant means any production plant that manufactures a granular phosphate fertilizer by reacting phosphoric acid with ammonia.

Research and development facility means research or laboratory operations whose primary purpose is to conduct research and development into new processes and products, where the operations are under the close supervision of technically trained personnel, and where the facility is not engaged in the

manufacture of products for commercial sale in commerce or other off-site distribution, except in a de minimis manner.

Shutdown commences when feed materials cease to be added to an affected source and ends when the affected source is deactivated, regardless of whether feed material is present in the affected source.

Startup commences when any feed material is first introduced into an affected source and ends when feed material is fully loaded into the affected source.

Total fluorides means elemental fluorine and all fluoride compounds, including the HAP hydrogen fluoride, as measured by reference methods specified in 40 CFR part 60, appendix A, Method 13 A or B, or by equivalent or alternative methods approved by the Administrator pursuant to §63.7(f).

§63.622 Standards and compliance dates.

(a) On and after the dates specified in paragraphs (a)(1) through (3) of this section, for each phosphate fertilizer process line (*e.g.,* diammonium and/or monoammonium phosphate process line), granular triple superphosphate process line, and granular triple superphosphate storage building, you must comply with the emission limits as specified in paragraphs (a)(1) through (3) of this section. If a process line contains more than one emission point, you must sum the emissions from all emission points in a process line to determine compliance with the specified emission limits.

(1) For each existing phosphate fertilizer process line (*e.g.,* diammonium and/or monoammonium phosphate process line), granular triple superphosphate process line, and granular triple superphosphate storage building that commenced construction or reconstruction on or before December 27, 1996, you must comply with the emission limits specified in Table 1 to this subpart beginning on June 10, 2002.

(2) For each new phosphate fertilizer process line (*e.g.,* diammonium and/or monoammonium phosphate process line), granular triple superphosphate process line, and granular triple superphosphate storage building that commences construction or reconstruction after December 27, 1996 and on or before August 19, 2015, you must comply with the emission limits specified in Table 2 to this subpart beginning on June 10, 1999 or at startup, whichever is later.

Nu-West's MAP fertilizer production plant (and associated product handling equipment) was reconstructed after December 27, 1996; therefore, this equipment is subject to the standards for new sources, rather than the existing source standards established under this section. ITAFOS indicated this is the applicable standard.

(3) For each new phosphate fertilizer process line (*e.g.,* diammonium and/or monoammonium phosphate process line), granular triple superphosphate process line, and granular triple superphosphate storage building that commences construction or reconstruction after August 19, 2015, you must comply with the emission limits specified in Table 2 to this subpart immediately upon startup.

(b) Beginning on June 10, 2002, you must not ship fresh granular triple superphosphate from your existing granular triple superphosphate storage building that commenced construction or reconstruction on or before December 27, 1996. Beginning on June 10, 1999 or at startup, whichever is later, you must not ship fresh granular triple superphosphate from your new granular triple superphosphate storage building that commences construction or reconstruction after December 27, 1996.

(c) Beginning on August 19, 2015, you must not introduce into any evaporative cooling tower any liquid effluent from any absorber installed to control emissions from process equipment.

(d) Beginning on August 19, 2015, during periods of startup and shutdown (as defined in §63.621), you must comply with the work practice specified in this paragraph in lieu of the emission limits specified in paragraph (a) of this section. During periods of startup and shutdown, you must operate any control device(s) being used at the affected source, monitor the operating parameters specified in Table 3 of this subpart, and comply with the operating limits specified in Table 4 of this subpart.

§§63.624 [Reserved]

§63.625 Operating and monitoring requirements.

(a) For each phosphate fertilizer process line (*e.g.*, diammonium and/or monoammonium phosphate process line), or granular triple superphosphate process line subject to the provisions of this subpart, you must comply with the monitoring requirements specified in paragraphs (a)(1) and (2) of this section.

(1) Install, calibrate, maintain, and operate a continuous monitoring system (CMS) according to your site-specific monitoring plan specified in §63.628(c). The CMS must have an accuracy of ±5 percent over its operating range and must determine and permanently record the mass flow of phosphorus-bearing material fed to the process.

(2) Maintain a daily record of equivalent P_2O_5 feed. Calculate the equivalent P_2O_5 feed by determining the total mass rate in metric ton/hour of phosphorus bearing feed using the procedures specified in §63.626(f)(3).

(b) For each granular triple superphosphate storage building subject to the provisions of this subpart, you must maintain an accurate record of the mass of granular triple superphosphate in storage to permit the determination of the amount of equivalent P_2O_5 stored.

(c) For each granular triple superphosphate storage building subject to the provisions of this subpart, you must comply with the requirements specified in paragraphs (c)(1) and (2) of this section.

(1) Maintain a daily record of total equivalent P_2O_5 stored by multiplying the percentage P_2O_5 content, as determined by §63.626(f)(3)(ii), by the total mass of granular triple superphosphate stored as specified in paragraph (b) of this section.

(2) Develop for approval by the Administrator a site-specific methodology including sufficient recordkeeping for the purposes of demonstrating compliance with §63.622(b).

(d) If you use a control device(s) to comply with the emission limits specified in Table 1 or 2 of this subpart, you must install a continuous parameter monitoring system (CPMS) and comply with the requirements specified in paragraphs (d)(1) through (4) of this section.

(1) You must monitor the operating parameter(s) applicable to the control device that you use as specified in Table 3 to this subpart and establish the applicable limit or range for the operating parameter limit as specified in paragraphs (d)(1)(i) and (ii) of this section, as applicable.

(i) Except as specified in paragraph (d)(1)(ii) of this section, determine the value(s) as the arithmetic average of operating parameter measurements recorded during the three test runs conducted for the most recent performance test.

(ii) If you use an absorber to comply with the emission limits in Table 1 or 2 to this subpart and you monitor pressure drop across the absorber, you must establish allowable ranges using the methodology specified in paragraphs (d)(1)(ii)(A) and (B) of this section.

(A) The allowable range for the daily averages of the pressure drop across an absorber and of the flow rate of the absorber liquid to each absorber in the process absorbing system, or secondary voltage for a wet electrostatic precipitator, is ±20 percent of the baseline average value determined in paragraph (d)(1)(i) of this section. The Administrator retains the right to reduce the ±20 percent adjustment to the baseline average values of operating ranges in those instances where performance test results indicate that a source's level of emissions is near the value of an applicable emissions standard. However, the adjustment must not be reduced to less than ±10 percent under any instance.

(B) As an alternative to paragraph (d)(1)(ii)(A) of this section, you may establish allowable ranges for the daily averages of the pressure drop across an absorber for the purpose of assuring compliance with this subpart using the procedures described in this paragraph. You must establish the allowable ranges based on the baseline average values recorded during previous performance tests or the results of performance tests conducted specifically for the purposes of this paragraph. You must conduct all performance tests using the methods specified in §63.626. You must certify that the control devices and processes have not been modified since the date of the performance test from which you obtained the data used to establish the allowable ranges. When a source using the methodology of this paragraph is retested, you must determine new allowable ranges of baseline average values unless the retest indicates no change in the operating parameters outside the previously established ranges.

(2) You must monitor, record, and demonstrate continuous compliance using the minimum frequencies specified in Table 4 to this subpart.

(3) You must comply with the calibration and quality control requirements that are applicable to the operating parameter(s) you monitor as specified in Table 5 to this subpart.

(4) If you use a fabric filter system to comply with the emission limits specified in Table 1 or 2 to this subpart, the system must meet the requirements for fabric filters specified in paragraph (e) of this section.

ITAFOS stated that they do not use a fabric filter system to control total fluorides. The fabric filter they use is for process purposes, it is not a total fluoride control device. The facility has been inspected by DEQ and during those inspections this same determination has been made[1].

(e) Beginning August 19, 2016, if you use a fabric filter system to comply with the emission limits specified in Table 1 or 2 to this subpart, then the fabric filter must be equipped with a bag leak detection system that is installed, calibrated, maintained and continuously operated according to the requirements in paragraphs (e)(1) through (10) of this section.

(1) Install a bag leak detection sensor(s) in a position(s) that will be representative of the relative or absolute particulate matter loadings for each exhaust stack, roof vent, or compartment (*e.g.,* for a positive-pressure fabric filter) of the fabric filter.

(2) Use a bag leak detection system certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 1 milligram per actual cubic meter (0.00044 grains per actual cubic feet) or less.

(3) Use a bag leak detection system equipped with a device to continuously record the output signal from the system sensor.

(4) Use a bag leak detection system equipped with a system that will trigger an alarm when an increase in relative particulate material emissions over a preset level is detected. The alarm must be located such that the alert is observed readily by plant operating personnel.

(5) Install a bag leak detection system in each compartment or cell for positive-pressure fabric filter systems that do not duct all compartments or cells to a common stack. Install a bag leak detector downstream of the fabric filter if a negative-pressure or induced-air filter is used. If multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.

(6) Calibration of the bag leak detection system must, at a minimum, consist of establishing the baseline output level by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.

(7) After initial adjustment, you must not adjust the sensitivity or range, averaging period, alarm set points or alarm delay time, except as established in your site-specific monitoring plan required in §63.628(c). In no event may the sensitivity be increased more than 100 percent or decreased by more than 50 percent over a 365-day period unless such adjustment follows a complete inspection of the fabric filter system that demonstrates that the system is in good operating condition.

(8) Operate and maintain each fabric filter and bag leak detection system such that the alarm does not sound more than 5 percent of the operating time during a 6-month period. If the alarm sounds more than 5 percent of the operating time during a 6-month period, it is considered an operating parameter

[1] The facility has been inspected by DEQ and during those inspections this same determination has been made (Reviewers discussion with Tom Anderson, DEQ February 2018).

exceedance. Calculate the alarm time (*i.e.,* time that the alarm sounds) as specified in paragraphs (e)(8)(i) through (iii) of this section.

(i) If inspection of the fabric filter demonstrates that corrective action is not required, the alarm duration is not counted in the alarm time calculation.

(ii) If corrective action is required, each alarm time is counted as a minimum of 1 hour.

(iii) If it takes longer than 1 hour to initiate corrective action, each alarm time (*i.e.,* time that the alarm sounds) is counted as the actual amount of time taken by you to initiate corrective action.

(9) If the alarm on a bag leak detection system is triggered, you must initiate procedures within 1 hour of an alarm to identify the cause of the alarm and then initiate corrective action, as specified in §63.628(d)(2), no later than 48 hours after an alarm. Failure to take these actions within the prescribed time periods is considered a violation.

(10) Retain records of any bag leak detection system alarm, including the date, time, duration, and the percent of the total operating time during each 6-month period that the alarm triggers, with a brief explanation of the cause of the alarm, the corrective action taken, and the schedule and duration of the corrective action.

[80 FR 50450, Aug. 19, 2015, as amended at 82 FR 45200, Sept. 28, 2017]

§63.626 Performance tests and compliance provisions.

(a) You must conduct an initial performance test to demonstrate compliance with the emission limits specified in Tables 1 and 2 to this subpart, within 180 days of the applicable compliance date specified in §63.622.

ITAFOS certified compliance with this requirement

(b) After you conduct the initial performance test specified in paragraph (a) of this section, you must conduct a performance test once per calendar year.

(c) For affected sources (as defined in §63.620) that have not operated since the previous annual performance test was conducted and more than 1 year has passed since the previous performance test, you must conduct a performance test no later than 180 days after the re-start of the affected source according to the applicable provisions in §63.7(a)(2).

(d)(1) You must conduct the performance tests specified in this section at representative (normal) conditions for the process. Representative (normal) conditions means those conditions that:

(i) Represent the range of combined process and control measure conditions under which the facility expects to operate (regardless of the frequency of the conditions); and

(ii) Are likely to most challenge the emissions control measures of the facility with regard to meeting the applicable emission standards, but without creating an unsafe condition.

(2) Operations during startup, shutdown, and malfunction do not constitute representative (normal) operating conditions for purposes of conducting a performance test. You must record the process information that is necessary to document the operating conditions during the test and include in such record an explanation to support that such conditions represent representative (normal) conditions. Upon request, you must make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

(e) In conducting all performance tests, you must use as reference methods and procedures the test methods in 40 CFR part 60, appendix A, or other methods and procedures as specified in this section, except as provided in §63.7(f).

(f) For each phosphate fertilizer process line (*e.g.,* diammonium and/or monoammonium phosphate process line), and granular triple superphosphate process line, you must determine compliance with the applicable total fluorides standards specified in Tables 1 and 2 to this subpart as specified in paragraphs (f)(1) through (3) of this section.

(1) Compute the emission rate (E) of total fluorides for each run using Equation BB-1:

$$E = \left(\sum_{i=1}^{N} C_i Q_i \right) / (PK) \qquad \text{(Eq. BB-1)}$$

Where:

E = Emission rate of total fluorides, gram/metric ton (pound/ton) of equivalent P_2O_5 feed.

Ci = Concentration of total fluorides from emission point "i," milligram/dry standard cubic meter (milligram/dry standard cubic feet).

Qi = Volumetric flow rate of effluent gas from emission point "i," dry standard cubic meter/hour (dry standard cubic feet/hour).

N = Number of emission points associated with the affected facility.

P = Equivalent P_2O_5 feed rate, metric ton/hour (ton/hour).

K = Conversion factor, 1000 milligram/gram (453,600 milligram/pound).

(2) You must use Method 13A or 13B (40 CFR part 60, appendix A) to determine the total fluorides concentration (C_i) and the volumetric flow rate (Q_i) of the effluent gas at each emission point. The sampling time for each run at each emission point must be at least 60 minutes. The sampling volume for each run at each emission point must be at least 0.85 dscm (30 dscf). If Method 13B is used, the fusion of the filtered material described in Section 7.3.1.2 and the distillation of suitable aliquots of containers 1 and 2, described in section 7.3.3 and 7.3.4 in Method 13 A, may be omitted.

(3) Compute the equivalent P_2O_5 feed rate (P) using Equation BB-2:

$$P = M_p R_p \qquad \text{(Eq. BB-2)}$$

Where:

P = P_2O_5 feed rate, metric ton/hour (ton/hour).

M_p = Total mass flow rate of phosphorus-bearing feed, metric ton/hour (ton/hour).

R_p = P_2O_5 content, decimal fraction.

(i) Determine the mass flow rate (M_p) of the phosphorus-bearing feed using the measurement system described in §63.625(a).

(ii) Determine the P_2O_5 content (R_p) of the feed using, as appropriate, the following methods specified in the Book of Methods Used and Adopted By The Association of Florida Phosphate Chemists (incorporated by reference, see §63.14) where applicable:

(A) Section IX, Methods of Analysis for Phosphate Rock, No. 1 Preparation of Sample.

(B) Section IX, Methods of Analysis for Phosphate Rock, No. 3 Phosphorus-P_2O_5 or $Ca_3(PO_4)_2$, Method A—Volumetric Method.

(C) Section IX, Methods of Analysis for Phosphate Rock, No. 3 Phosphorus-P_2O_5 or $Ca_3(PO_4)_2$, Method B—Gravimetric Quimociac Method.

(D) Section IX, Methods of Analysis for Phosphate Rock, No. 3 Phosphorus-P_2O_5 or Ca3$(PO_4)_2$, Method C—Spectrophotometric Method.

(E) Section XI, Methods of Analysis for Phosphoric Acid, Superphosphate, Triple superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P_2O_5, Method A—Volumetric Method.

(F) Section XI, Methods of Analysis for Phosphoric Acid, Superphosphate, Triple Superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P_2O_5, Method B—Gravimetric Quimociac Method.

(G) Section XI, Methods of Analysis for Phosphoric Acid, Superphosphate, Triple Superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P_2O_5, Method C—Spectrophotometric Method.

(g) For each granular triple superphosphate storage building, you must determine compliance with the applicable total fluorides standards specified in Tables 1 and 2 to this subpart as specified in paragraphs (g)(1) through (7) of this section.

(1) You must conduct performance tests only when the following quantities of product are being cured or stored in the facility:

(i) Total granular triple superphosphate is at least 10 percent of the building capacity, and

(ii) Fresh granular triple superphosphate is at least six percent of the total amount of granular triple superphosphate, or

(iii) If the provision in paragraph (g)(1)(ii) of this section exceeds production capabilities for fresh granular triple superphosphate, the fresh granular triple superphosphate is equal to at least 5 days maximum production.

(2) Compute the emission rate (E) of total fluorides for each run using Equation BB-3:

$$E = \left(\sum_{i=1}^{N} C_i Q_i \right) / (PK) \qquad \text{(Eq. BB-3)}$$

Where:

E = Emission rate of total fluorides, gram/hour/metric ton (pound/hour/ton) of equivalent P_2O_5 stored.

C_i = Concentration of total fluorides from emission point "i", milligram/dry standard cubic meter (milligram/dry standard cubic feet).

Q_i = Volumetric flow rate of effluent gas from emission point "i", dry standard cubic meter/hour (dry standard cubic feet/hour).

N = Number of emission points in the affected facility.

P = Equivalent P_2O_5 stored, metric tons (tons).

K = Conversion factor, 1000 milligram/gram (453,600 milligram/pound).

(3) You must use Method 13A or 13B (40 CFR part 60, appendix A) to determine the total fluorides concentration (C_i) and the volumetric flow rate (Q_i) of the effluent gas at each emission point. The sampling time for each run at each emission point must be at least 60 minutes. The sampling volume for each run at each emission point must be at least 0.85 dscm (30 dscf). If Method 13B is used, the fusion of the filtered material described in Section 7.3.1.2 and the distillation of suitable aliquots of containers 1 and 2, described in section 7.3.3 and 7.3.4 in Method 13A, may be omitted.

(4) Compute the equivalent P_2O_5 stored (P) using Equation BB-4:

$$P = M_p R_p \qquad \text{(Eq. BB-4)}$$

Where:

P = P_2O_5 stored (ton).

M_p = Amount of product in storage, metric ton (ton).

R_p = P_2O_5 content of product in storage, weight fraction.

(5) Determine the amount of product (M_p) in storage using the measurement system described in §63.625(b) and (c).

(6) Determine the P_2O_5 content (R_p) of the product stored using, as appropriate, the following methods specified in the Book of Methods Used and Adopted By The Association of Florida Phosphate Chemists (incorporated by reference, see §63.14) where applicable:

(i) Section XI, Methods of Analysis For Phosphoric Acid, Superphosphate, Triple superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P_2O_5, Method A—Volumetric Method.

(ii) Section XI, Methods of Analysis For Phosphoric Acid, Superphosphate, Triple superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P_2O_5, Method B—Gravimetric Quimociac Method.

(iii) Section XI, Methods of Analysis For Phosphoric Acid, Superphosphate, Triple superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P_2O_5, Method C—Spectrophotometric Method, or,

(7) Determine the P_2O_5 content (R_p) of the product stored using, as appropriate, the following methods specified in the Official Methods of Analysis of AOAC International (incorporated by reference, see §63.14) where applicable:

(i) AOAC Official Method 957.02 Phosphorus (Total) In Fertilizers, Preparation of Sample Solution.

(ii) AOAC Official Method 929.01 Sampling of Solid Fertilizers.

(iii) AOAC Official Method 929.02 Preparation of Fertilizer Sample.

(iv) AOAC Official Method 978.01 Phosphorus (Total) in Fertilizers, Automated Method.

(v) AOAC Official Method 969.02 Phosphorus (Total) in Fertilizers, Alkalimetric Quinolinium Molybdophosphate Method.

(vi) AOAC Official Method 962.02 Phosphorus (Total) in Fertilizers, Gravimetric Quinolinium Molybdophosphate Method.

(vii) AOAC Official Method 958.01 Phosphorus (Total) in Fertilizers, Spectrophotometric Molybdovanadophosphate Method.

(h) If you use a CMS, you must conduct a performance evaluation, as specified in §63.8(e), in accordance with your site-specific monitoring plan in §63.628(c). For fabric filters, you must conduct a performance evaluation of the bag leak detection system consistent with the guidance provided in Office Of Air Quality Planning And Standards (OAQPS), Fabric Filter Bag Leak Detection Guidance (incorporated by reference, see §63.14). You must record the sensitivity of the bag leak detection system to detecting changes in particulate matter emissions, range, averaging period, and alarm set points during the performance test.

§63.627 Notification, recordkeeping, and reporting requirements.

(a) You must comply with the notification requirements specified in §63.9. During the most recent performance test, if you demonstrate compliance with the emission limit while operating your control device outside the previously established operating limit, you must establish a new operating limit based on that most recent performance test and notify the Administrator that the operating limit changed based on data collected during the most recent performance test. When a source is retested and the performance test results are submitted to the Administrator pursuant to paragraph (b)(1) of this section, §63.7(g)(1), or §63.10(d)(2), you must indicate whether the operating limit is based on the new performance test or the previously established limit. Upon establishment of a new operating limit, you must thereafter operate under the new operating limit. If the Administrator determines that you did not conduct the compliance test in accordance with the applicable requirements or that the operating limit established during the performance test does not correspond to representative (normal) conditions, you must conduct a new performance test and establish a new operating limit.

(b) You must comply with the reporting and recordkeeping requirements in §63.10 as specified in paragraphs (b)(1) through (5) of this section.

(1) You must comply with the general recordkeeping requirements in §63.10(b)(1); and

(2) As required by §63.10(d), you must report the results of the initial and subsequent performance tests as part of the notification of compliance status required in §63.9(h). You must verify in the performance test reports that the operating limits for each process have not changed or provide documentation of revised operating limits established according to §63.625, as applicable. In the notification of compliance status, you must also:

(i) Certify to the Administrator that you have not shipped fresh granular triple superphosphate from an affected facility.

ITAFOS did not describe production of triple superphosphate in the application. It is presumed they don't produce it.

(ii) Certify to the Administrator annually that you have complied with the evaporative cooling tower requirements specified in §63.622(c).

(iii) Submit analyses and supporting documentation demonstrating conformance with the Office Of Air Quality Planning And Standards (OAQPS), Fabric Filter Bag Leak Detection Guidance (incorporated by reference, see §63.14) and specifications for bag leak detection systems as part of the notification of compliance status report.

ITAFOS stated they do not use a fabric filter meet standards and this has been confirmed during on-site inspections.

(iv) If you elect to demonstrate compliance by following the procedures in §63.625(d)(1)(ii)(B), certify to the Administrator annually that the control devices and processes have not been modified since the date of the performance test from which you obtained the data used to establish the allowable ranges.

(3) As required by §63.10(e)(1), you must submit an excess emissions report for any exceedance of an emission or operating parameter limit if the total duration of the exceedances for the reporting period is 1 percent of the total operating time for the reporting period or greater. The report must contain the information specified in §63.10 and paragraph (b)(4) of this section. When exceedances of an emission limit or operating parameter have not occurred, you must include such information in the report. You must submit the report semiannually and the report must be delivered or postmarked by the 30th day following the end of the calendar half. If exceedances are reported, you must submit the excess emissions report quarterly until a request to reduce reporting frequency is approved as described in §63.10(e)(3).

(4) In the event that an affected unit fails to meet an applicable standard, record and report the following information for each failure:

(i) The date, time and duration of the failure.

(ii) A list of the affected sources or equipment for which a failure occurred.

(iii) An estimate of the volume of each regulated pollutant emitted over any emission limit.

(iv) A description of the method used to estimate the emissions.

(v) A record of actions taken to minimize emissions in accordance with §63.628(b), and any corrective actions taken to return the affected unit to its normal or usual manner of operation.

(5) You must submit a summary report containing the information specified in §63.10(e)(3)(vi). You must submit the summary report semiannually and the report must be delivered or postmarked by the 30th day following the end of the calendar half.

(c) Your records must be in a form suitable and readily available for expeditious review. You must keep each record for 5 years following the date of each recorded action. You must keep each record on site, or accessible from a central location by computer or other means that instantly provide access at the site, for at least 2 years after the date of each recorded action. You may keep the records off site for the remaining 3 years.

(d) In computing averages to determine compliance with this subpart, you must exclude the monitoring data specified in paragraphs (d)(1) through (3) of this section.

(1) Periods of non-operation of the process unit;

(2) Periods of no flow to a control device; and

(3) Any monitoring data recorded during continuous parameter monitoring system (CPMS) breakdowns, out-of-control periods, repairs, maintenance periods, instrument adjustments or checks to maintain precision and accuracy, calibration checks, and zero (low-level), mid-level (if applicable), and high-level adjustments.

(e) Within 60 days after the date of completing each performance test (as defined in §63.2) required by this subpart, you must submit the results of the performance tests, including any associated fuel analyses, following the procedure specified in either paragraph (e)(1) or (2) of this section.

(1) For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT Web site (*http://www.epa.gov/ttn/chief/ert/index.html*), you must submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (*http://cdx.epa.gov/epa_home.asp*). Performance test data must be submitted in a file format generated through the use of the EPA's ERT. Alternatively, you may submit performance test data in an electronic file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT Web site once the XML schema is available. If you claim that some of the performance test information being submitted is confidential business information (CBI), you must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT Web site, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph.

(2) For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT Web site, you must submit the results of the performance test to the Administrator at the appropriate address listed in §63.13.

§63.628 General requirements and applicability of general provisions of this part.

(a) You must comply with the general provisions in subpart A of this part as specified in appendix A to this subpart.

(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 by the Administrator of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(c) For each CMS used to demonstrate compliance with any applicable emission limit, you must develop, and submit to the Administrator for approval upon request, a site-specific monitoring plan according to the requirements specified in paragraphs (c)(1) through (3) of this section. You must submit the site-specific monitoring plan, if requested by the Administrator, at least 60 days before the initial

performance evaluation of the CMS. The requirements of this paragraph also apply if a petition is made to the Administrator for alternative monitoring parameters under §63.8(f).

(1) You must include the information specified in paragraphs (c)(1)(i) through (vi) of this section in the site-specific monitoring plan.

(i) Location of the CMS sampling probe or other interface. You must include a justification demonstrating that the sampling probe or other interface is at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (*e.g.*, on or downstream of the last control device).

(ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems.

(iii) Performance evaluation procedures and acceptance criteria (*e.g.*, calibrations).

(iv) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1)(ii), (c)(3), (c)(4)(ii), and Table 4 to this subpart.

(v) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d)(1) and (2) and Table 5 to this subpart.

(vi) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c), (e)(1), (e)(2)(i).

(2) You must include a schedule for conducting initial and subsequent performance evaluations in the site-specific monitoring plan.

(3) You must keep the site-specific monitoring plan on site for the life of the affected source or until the affected source is no longer subject to the provisions of this part, to be made available for inspection, upon request, by the Administrator. If you revise the site-specific monitoring plan, you must keep previous (*i.e.*, superseded) versions of the plan on site to be made available for inspection, upon request, by the Administrator, for a period of 5 years after each revision to the plan. You must include the program of corrective action required under §63.8(d)(2) in the plan.

(d) For each bag leak detection system installed to comply with the requirements specified in §63.625(e), you must include the information specified in paragraphs (d)(1) and (2) of this section in the site-specific monitoring plan specified in paragraph (c) of this section.

(1) Performance evaluation procedures and acceptance criteria (*e.g.*, calibrations), including how the alarm set-point will be established.

(2) A corrective action plan describing corrective actions to be taken and the timing of those actions when the bag leak detection alarm sounds. Corrective actions may include, but are not limited to, the actions specified in paragraphs (d)(2)(i) through (vi) of this section.

(i) Inspecting the fabric filter for air leaks, torn or broken bags or filter media, or any other conditions that may cause an increase in regulated material emissions.

(ii) Sealing off defective bags or filter media.

(iii) Replacing defective bags or filter media or otherwise repairing the control device.

(iv) Sealing off a defective fabric filter compartment.

(v) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system.

(vi) Shutting down the process controlled by the fabric filter.

(e) If you use blower design capacity to determine the gas flow rate through the absorber for use in the liquid-to-gas ratio as specified in Table 3 to this subpart, then you must include in the site-specific monitoring plan specified in paragraph (c) of this section calculations showing how you determined the maximum possible gas flow rate through the absorber based on the blower's specifications (including any adjustments you made for pressure drop).

ITAFOS has indicated that they are not electing to use the liquid-to-gas ratio as a means of assuring compliance.

(f) If you use a regression model to determine the gas flow rate through the absorber for use in the liquid-to-gas ratio as specified in Table 3 to this subpart, then you must include in the site-specific monitoring plan specified in paragraph (c) of this section the calculations that were used to develop the regression model, including the calculations you use to convert amperage of the blower to brake horsepower. You must describe any constants included in the equations (e.g., efficiency, power factor), and describe how these constants were determined. If you want to change a constant in your calculation, then you must conduct a regression model verification to confirm the new value of the constant. In addition, the site-specific monitoring plan must be updated annually to reflect the data used in the annual regression model verification that is described in Table 3 to this subpart.

ITAFOS has indicated that they are electing to use the liquid-to-gas ratio as a means of assuring compliance.

[80 FR 50450, Aug. 19, 2015, as amended at 82 FR 45200, Sept. 28, 2017]

§63.629 Miscellaneous requirements.

The Administrator retains the authority to approve site-specific test plans for uncontrolled granular triple superphosphate storage buildings developed pursuant to §63.7(c)(2)(i).

§63.630 [Reserved]

§63.631 Exemption from new source performance standards.

Any affected source subject to the provisions of this subpart is exempted from any otherwise applicable new source performance standard contained in 40 CFR part 60, subpart V, subpart W, or subpart X. To be exempt, a source must have a current operating permit pursuant to title V of the Clean Air Act and the source must be in compliance with all requirements of this subpart. For each affected source, this exemption is upon the date that you demonstrate to the Administrator that the requirements of §§63.625 and 63.626 have been met.

§63.632 Implementation and enforcement.

(a) This subpart is implemented and enforced by the U.S. EPA, or a delegated authority such as the applicable state, local, or Tribal agency. If the U.S. EPA Administrator has delegated authority to a state, local, or Tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. Contact the applicable U.S. EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to a state, local, or Tribal agency.

(b) The authorities specified in paragraphs (b)(1) through (5) of this section are retained by the Administrator of U.S. EPA and cannot be delegated to State, local, or Tribal agencies.

(1) Approval of alternatives to the requirements in §§63.620, 63.622, 63.625, 63.629, and 63.631.

(2) Approval of requests under §§63.7(e)(2)(ii) and 63.7 (f) for alternative requirements or major changes to the test methods specified in this subpart, as defined in §63.90.

(3) Approval of requests under §63.8(f) for alternative requirements or major changes to the monitoring requirements specified in this subpart, as defined in §63.90.

(4) Waiver or approval of requests under §63.10(f) for alternative requirements or major changes to the recordkeeping and reporting requirements specified in this subpart, as defined in §63.90.

(5) Approval of an alternative to any electronic reporting to the EPA required by this subpart.

Table 1 to Subpart BB of Part 63—Existing Source Emission Limits[ab]

	You must meet the emission limits for the specified pollutant . . .
For the following existing sources . . .	**Total fluorides**
Phosphate Fertilizer Process Line (*e.g.,* Diammonium and/or Monoammonium Phosphate Process Line)	0.060 lb/ton of equivalent P_2O_5 feed.
Granular Triple Superphosphate Process Line	0.150 lb/ton of equivalent P_2O_5 feed.

GTSP storage building	5.0×10^{-4} lb/hr/ton of equivalent P_2O_5 stored.

[a]The existing source compliance date is June 10, 2002.

[b]During periods of startup and shutdown, for emission limits stated in terms of pounds of pollutant per ton of feed, you are subject to the work practice standards specified in §63.622(d).

Table 2 to Subpart BB of Part 63—New Source Emission Limits[ab]

For the following new sources . . .	You must meet the emission limits for the specified pollutant . . .
	Total fluorides
Phosphate Fertilizer Process Line (*e.g.*, Diammonium and/or Monoammonium Phosphate Process Line)	0.0580 lb/ton of equivalent P_2O_5 feed.
Granular Triple Superphosphate Process Line	0.1230 lb/ton of equivalent P_2O_5 feed.
GTSP storage building	5.0×10^{-4} lb/hr/ton of equivalent P_2O_5 stored.

[a]The new source compliance dates are based on date of construction or reconstruction as specified in §63.622(a).

[b]During periods of startup and shutdown, for emission limits stated in terms of pounds of pollutant per ton of feed, you are subject to the work practice standards specified in §63.622(d).

Table 3 to Subpart BB of Part 63—Monitoring Equipment Operating Parameters

You must . . .	If . . .	And you must monitor . . .[a]	And . . .[a]
Absorbers (Wet Scrubbers)			
Install a continuous parameter monitoring system (CPMS) for liquid flow at the inlet of the	Your absorber is designed and operated with pressure drops of 5 inches of water column or more; and you choose to monitor only the influent liquid flow, rather	Influent liquid flow.	

absorber.	than the liquid-to-gas ratio		
Install CPMS for liquid and gas flow at the inlet of the absorber[b]	Your absorber is designed and operated with pressure drops of 5 inches of water column or less; or Your absorber is designed and operated with pressure drops of 5 inches of water column or more, and you choose to monitor the liquid-to-gas ratio, rather than only the influent liquid flow, and you want the ability to lower liquid flow with changes in gas flow	Liquid-to-gas ratio as determined by dividing the influent liquid flow rate by the gas flow rate through the absorber. The units of measure must be consistent with those used to calculate this ratio during the performance test	You must determine the gas flow rate through the absorber by: Measuring the gas flow rate at the absorber inlet or outlet; Using the blower design capacity, with appropriate adjustments for pressure drop;[c] or Using a regression model.[d]
Install CPMS for pressure at the gas stream inlet and outlet of the absorber	Your absorber is designed and operated with pressure drops of 5 inches of water column or more ***ITAFOS stated pressure is over 5 inches of water column***	Pressure drop through the absorber	You may measure the pressure of the inlet gas using amperage on the blower if a correlation between pressure and amperage is established.

[a]To monitor an operating parameter that is not specified in this table (including process-specific techniques not specified in this table to determine gas flow rate through an absorber), you must request, on a site-specific basis, an alternative monitoring method under the provisions of §63.8(f).

[b]For new sources that commence construction or reconstruction after August 19, 2015, the compliance date is immediately upon startup. For existing sources, and new sources that commence construction or reconstruction after December 27, 1996, and on or before August 19, 2015, if your absorber is designed and operated with pressure drops of 5 inches of water column or less, then the compliance date is August 19, 2018. In the interim, for existing sources, and new sources that commence construction or reconstruction after December 27, 1996, and on or before August 19, 2015, with an absorber designed and operated with pressure drops of 5 inches of water column or less, you must comply with one of the following: (i) The monitoring requirements in this Table 3 for absorbers designed and operated with pressure drops of 5 inches of water column or less; (ii) the applicable monitoring provisions included in a

permit issued under 40 CFR part 70 to assure compliance with subpart BB; (iii) the applicable monitoring provisions of an Alternative Monitoring Plan approved pursuant to §63.8(f); or (iv) install CPMS for pressure at the gas stream inlet and outlet of the absorber, and monitor pressure drop through the absorber.

[c]If you select this option, then you must comply with §63.628(e). The option to use blower design capacity is intended to establish the maximum possible gas flow through the absorber; and is available regardless of the location of the blower (influent or effluent), as long as the gas flow rate through the absorber can be established. Establish the minimum liquid-to-gas ratio operating limit by dividing the minimum liquid flow rate to the absorber (determined during a performance test) by the maximum possible gas flow rate through the absorber (determined using blower design capacity).

[d]If you select this option, then you must comply with §63.628(f). The regression model must be developed using direct measurements of gas flow rate, and design fan curves that correlate gas flow rate to static pressure (*i.e.*, fan suction pressure) and brake horsepower of the blower. You must conduct an annual regression model verification using direct measurements of gas flow rate to ensure the correlation remains accurate. Direct measurements of gas flow rate used to develop or verify regression models may be collected during, or separately from, the annual performance testing that is required in §63.626(b).

[80 FR 50450, Aug. 19, 2015, as amended at 82 FR 45200, Sept. 28, 2017]

Table 4 to Subpart BB of Part 63—Operating Parameters, Operating Limits and Data Monitoring, Recordkeeping and Compliance Frequencies

For the operating parameter applicable to you, as specified in Table 3 . . .	**You must establish the following operating limit during your performance test . . .**	**And you must monitor, record, and demonstrate continuous compliance using these minimum frequencies . . .**		
		Data measurement	**Data recording**	**Data averaging period for compliance**
Absorbers (Wet Scrubbers)				
Influent liquid flow	Minimum inlet liquid flow	Continuous	Every 15 minutes	Daily.
Influent liquid flow rate and gas stream flow rate	Minimum influent liquid-to-gas ratio[a]	Continuous	Every 15 minutes	Daily.

For the operating parameter applicable to you, as specified in Table 3	You must establish the following operating limit	And you must monitor, record, and demonstrate continuous compliance using these minimum frequencies . . .		
		Data measurement	Data recording	Data averaging period for compliance.
Pressure drop	Pressure drop range	Continuous	Every 15 minutes	Daily.
Sorbent Injection				
Sorbent injection rate ***If used***	Minimum injection rate	Continuous	Every 15 minutes	Daily.
Sorbent injection carrier gas flow rate ***If used***	Minimum carrier gas flow rate	Continuous	Every 15 minutes	Daily.
Fabric Filters				
Alarm time	Maximum alarm time is not established on a site-specific basis but is specified in §63.605(f)(9)	Continuous	Each date and time of alarm start and stop	Maximum alarm time specified in §63.605(f)(9).
Wet Electrostatic Precipitator				
Secondary voltage	Secondary voltage range	Continuous	Every 15 minutes	Daily.

[82 FR 45201, Sept. 28, 2017]

Table 5 to Subpart BB of Part 63—Calibration and Quality Control Requirements for Continuous Parameter Monitoring Systems (CPMS)

If you monitor this parameter . . .	Your accuracy requirements are . . .	And your calibration requirements are . . .
Flow Rate	±5 percent over the normal range of flow measured or 1.9 liters per minute (0.5 gallons per minute), whichever is greater, for liquid flow rate. ±5 percent over the normal range of flow measured or 28 liters per minute (10 cubic feet per minute), whichever is greater, for gas flow rate. ±5 percent over the normal range measured for mass flow rate.	Performance evaluation annually and following any period of more than 24 hours throughout which the flow rate exceeded the maximum rated flow rate of the sensor, or the data recorder was off scale. Checks of all mechanical connections for leakage monthly. Visual inspections and checks of CPMS operation every 3 months, unless the CPMS has a redundant flow sensor. Selection of a representative measurement location where swirling flow or abnormal velocity distributions due to upstream and downstream disturbances at the point of measurement are minimized.
Pressure	±5 percent over the normal range measured or 0.12 kilopascals (0.5 inches of water column), whichever is greater.	Checks for obstructions (*e.g.*, pressure tap pluggage) at least once each process operating day. Performance evaluation annually and following any period of more than 24 hours throughout which the pressure exceeded the maximum rated pressure of the sensor, or the data recorder was off scale. Checks of all mechanical connections for leakage monthly. Visual inspection of all components for integrity, oxidation and galvanic corrosion every 3 months, unless the CPMS has a redundant pressure sensor. Selection of a representative measurement location that minimizes or eliminates pulsating pressure, vibration, and internal and external corrosion.

Appendix A to Subpart BB of Part 63—Applicability of General Provisions (40 CFR Part 63, Subpart A) to Subpart BB

40 CFR citation	Requirement	Applies to subpart BB	Comment
§63.1(a)(1) through	General Applicability	Yes	None.

(4)			
§63.1(a)(5)		No	[Reserved].
§63.1(a)(6)	Contact information	Yes	None.
§63.1(a)(7) through (9)		No	[Reserved].
§63.1(a)(10) through (12)	Time periods	Yes	None.
§63.1(b)	Initial Applicability Determination	Yes	None.
§63.1(c)(1)	Applicability After Standard Established	Yes	None.
§63.1(c)(2)	Permits	Yes	Some plants may be area sources.
§63.1(c)(3) through (4)		No	[Reserved].
§63.1(c)(5)	Area to Major source change	Yes	None.
§63.1(d)		No	[Reserved].
§63.1(e)	Applicability of Permit Program	Yes	None.
§63.2	Definitions	Yes	Additional definitions in §63.621.
§63.3	Units and Abbreviations	Yes	None.
§63.4(a)(1) and (2)	Prohibited Activities	Yes	None.
§63.4(a)(3) through (5)		No	[Reserved].

§63.4(b) and (c)	Circumvention/Fragmentation	Yes	None.
§63.5(a)	Construction/Reconstruction Applicability	Yes	None.
§63.5(b)(1)	Existing, New, Reconstructed Sources Requirements	Yes	None.
§63.5(b)(2)		No	[Reserved].
§63.5(b)(3), (4), and (6)	Construction/Reconstruction approval and notification	Yes	None.
§63.5(b)(5)		No	[Reserved].
§63.5(c)		No	[Reserved].
§63.5(d)	Application for Approval of Construction/Reconstruction	Yes	None.
§63.5(e)	Approval of Construction/Reconstruction	Yes	None.
§63.5(f)	Approval of Construction/Reconstruction Based on State Review	Yes	None.
§63.6(a)	Compliance with Standards and Maintenance Applicability	Yes	None.
§63.6(b)(1) through (5)	New and Reconstructed Sources Dates	Yes	See also §63.622.
§63.6(b)(6)		No	[Reserved].
§63.6(b)(7)	Area to major source change	Yes	None.
§63.6(c)(1) and (2)	Existing Sources Dates	Yes	§63.622 specifies dates.
§63.6(c)(3) and (4)		No	[Reserved].

§63.6(c)(5)	Area to major source change	Yes	None.
§63.6(d)		No	[Reserved].
§63.6(e)(1)(i) and (ii)	Operation & Maintenance Requirements	No	See §63.628(b) for general duty requirement.
§63.6(e)(iii)		Yes	None.
§63.6(e)(2)		No	[Reserved].
§63.6(e)(3)	Startup, Shutdown, and Malfunction Plan	No	None.
§63.6(f)	Compliance with Emission Standards	No	See general duty at §63.628(b).
§63.6(g)	Alternative Standard	Yes	None.
§63.6(h)	Compliance with Opacity/VE Standards	No	Subpart BB does not include VE/opacity standards.
§63.6(i)(1) through (14)	Extension of Compliance	Yes	None.
§63.6(i)(15)		No	[Reserved].
§63.6(i)(16)		Yes	None.
§63.6(j)	Exemption from Compliance	Yes	None.
§63.7(a)	Performance Test Requirements Applicability	Yes	None.
§63.7(b)	Notification	Yes	None.
§63.7(c)	Quality Assurance/Test Plan	Yes	None.
§63.7(d)	Testing Facilities	Yes	None.

§63.7(e)(1)	Conduct of Tests; startup, shutdown and malfunction provisions	No	§63.626 specifies additional requirements.
§63.7(e)(2) through (4)	Conduct of Tests	Yes	§63.626 specifies additional requirements.
§63.7(f)	Alternative Test Method	Yes	None.
§63.7(g)	Data Analysis	Yes	None.
§63.7(h)	Waiver of Tests	Yes	None.
§63.8(a)	Monitoring Requirements Applicability	Yes	None.
§63.8(b)	Conduct of Monitoring	Yes	None.
§63.8(c)(1)(i)	General duty to minimize emissions and CMS operation	No	See §63.628(b) for general duty requirement.
§63.8(c)(1)(ii)		Yes	None.
§63.8(c)(1)(iii)	Requirement to develop SSM Plan for CMS	No	None.
§63.8(c)(2) through (4)	CMS Operation/Maintenance	Yes	None.
§63.8(c)(5)	COMS Operation	No	Subpart BB does not require COMS.
§63.8(c)(6) through (8)	CMS requirements	Yes	None.
§63.8(d)(1) and (2)	Quality Control	Yes	None.
§63.8(d)(3)	Written procedure for CMS	No	See §63.628 for requirement.

§63.8(e)	CMS Performance Evaluation	Yes	None.
§63.8(f)(1) through (5)	Alternative Monitoring Method	Yes	None.
§63.8(f)(6)	Alternative to RATA Test	No	Subpart BB does not require CEMS.
§63.8(g)(1)	Data Reduction	Yes	None.
§63.8(g)(2)		No	Subpart BB does not require COMS or CEMS.
§63.8(g)(3) through (5)		Yes	None.
§63.9(a)	Notification Requirements Applicability	Yes	None.
§63.9(b)	Initial Notifications	Yes	None.
§63.9(c)	Request for Compliance Extension	Yes	None.
§63.9(d)	New Source Notification for Special Compliance Requirements	Yes	None.
§63.9(e)	Notification of Performance Test	Yes	None.
§63.9(f)	Notification of VE/Opacity Test	No	Subpart BB does not include VE/opacity standards.
§63.9(g)	Additional CMS Notifications	Yes	None.
§63.9(h)(1) through (3)	Notification of Compliance Status	Yes	None.
§63.9(h)(4)		No	[Reserved].
§63.9(h)(5) and (6)		Yes	None.

§63.9(i)	Adjustment of Deadlines	Yes	None.
§63.9(j)	Change in Previous Information	Yes	None.
§63.10(a)	Recordkeeping/Reporting-Applicability	Yes	None.
§63.10(b)(1)	General Recordkeeping Requirements	Yes	None.
§63.10(b)(2)(i)	Startup or shutdown duration	No	None.
§63.10(b)(2)(ii)	Malfunction	No	See §63.627 for recordkeeping and reporting requirement.
§63.10(b)(2)(iii)	Maintenance records	Yes	None.
§63.10(b)(2)(iv) and (v)	Startup, shutdown, malfunction actions	No	None.
§63.10(b)(2)(vi) through (xiv)	General Recordkeeping Requirements	Yes	None.
§63.10(b)(3)	General Recordkeeping Requirements	Yes	None.
§63.10(c)(1)	Additional CMS Recordkeeping	Yes	None.
§63.10(c)(2) through (4)		No	[Reserved].
§63.10(c)(5)		Yes	None.
§63.10(c)(6)		Yes	None.
§63.10(c)(7) and (8)		Yes	None.
§63.10(c)(9)		No	[Reserved].
§63.10(c)(10)		Yes	None.

through (13)			
§63.10(c)(14)		Yes	None.
§63.10(c)(15)	Startup Shutdown Malfunction Plan Provisions	No	None.
§63.10(d)(1)	General Reporting Requirements	Yes	None.
§63.10(d)(2)	Performance Test Results	Yes	None.
§63.10(d)(3)	Opacity or VE Observations	No	Subpart BB does not include VE/opacity standards.
§63.10(d)(4)	Progress Reports	Yes	None.
§63.10(d)(5)	Startup, Shutdown, and Malfunction Reports	No	See §63.627 for reporting of excess emissions.
§63.10(e)(1) and (2)	Additional CMS Reports	Yes	None.
§63.10(e)(3)	Excess Emissions/CMS Performance Reports	Yes	None.
§63.10(e)(4)	COMS Data Reports	No	Subpart BB does not require COMS.
§63.10(f)	Recordkeeping/Reporting Waiver	Yes	None.
§63.11	Control Device and Work Practice Requirements	Yes	None.
§63.12	State Authority and Delegations	Yes	None.
§63.13	Addresses	Yes	None.
§63.14	Incorporation by Reference	Yes	None.

§63.15	Information Availability/Confidentiality	Yes	None.
§63.16	Performance Track Provisions	No	Terminated.

Appendix F – 40 CFR 63 Subpart ZZZZ

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

What This Subpart Covers

§63.6580 What is the purpose of subpart ZZZZ?

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

[73 FR 3603, Jan. 18, 2008]

§63.6585 Am I subject to this subpart?

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

(a) A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

RICE at the facility are listed in the following table.

Source Code	*Engine*
EU ID 08-11-502	***North Sulfuric Emergency Generator – Caterpillar model 3512 DITA 1,545 bhp diesel emergency engine installed in 1995***
EU ID 35-11-502	***South Firewater Pump Engine – diesel, John Deere 300 hp, emergency, installed in 2001***
EU ID 09-11-501	***#11 Well Pump Aux Engine – Propane, 109 hp, emergency SI, installed in 2001***
EU ID 09-11-502	***#3 Potable Water Pump – NG, 95 hp, emergency SI, installed may 2003***
EU ID 09-11-503	***#11 Well Generator – Propane, 33.5 hp, emergency, SI, installed May 2008, (JJJJ Engine)***
EU ID 09-11-504	***Rollover Generator – diesel, Caterpillar118 hp, emergency, Installed before 1990***

(b) A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site.

ITAFOS is a major source.

(c) An area source of HAP emissions is a source that is not a major source.

(d) If you are an owner or operator of an area source subject to this subpart, your status as an entity subject to a standard or other requirements under this subpart does not subject you to the obligation to obtain a permit under 40 CFR part 70 or 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart as applicable.

(e) If you are an owner or operator of a stationary RICE used for national security purposes, you may be eligible to request an exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C.

ITAFOS did not indicate this paragraph applies.

(f) The emergency stationary RICE listed in paragraphs (f)(1) through (3) of this section are not subject to this subpart. The stationary RICE must meet the definition of an emergency stationary RICE in §63.6675, which includes operating according to the provisions specified in §63.6640(f).

ITAFOS does not qualify for any of the exemptions.

(1) Existing residential emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in §63.6640(f)(4)(ii).

(2) Existing commercial emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in §63.6640(f)(4)(ii).

(3) Existing institutional emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in §63.6640(f)(4)(ii).

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

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§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.

Source Code	*Engine*	*Existing or New.*
EU ID 08-11-502	***North Sulfuric Emergency Generator – Caterpillar model 3512 DITA 1,545 bhp diesel emergency engine installed in 1995***	***Existing***
EU ID 35-11-502	***South Firewater Pump Engine – diesel, John Deere 300 hp, emergency, installed in 2001***	***Existing***
EU ID 09-11-501	***#11 Well Pump Aux Engine – Propane, 109 hp, emergency SI, installed in 2001***	***Existing***
EU ID 09-11-502	***#3 Potable Water Pump – NG, 95 hp, emergency SI, installed may 2003***	***Existing***
EU ID 09-11-503	***#11 Well Generator – Propane, 33.5 hp, emergency, SI, installed May 2008***	***New***
EU ID 09-11-504	***Rollover Generator – diesel, Caterpillar118 hp, emergency, Installed before 1990***	***Existing***

(1) *Existing stationary RICE.*

(i) For stationary RICE with a site rating of more than 500 brake horsepower (HP) located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before December 19, 2002.

ITAFOS N. Sulfuric acid 1,545 Hp emergency engine was installed in 1995 (Caterpillar)

(ii) For stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

#3 Potable Water Pump 95 Hp SI engine, installed 2003, emergency only

South Firewater Pump Engine, diesel, installed 2001, 300 Hp

Rollover Generator, diesel, installed 1990, 118 Hp

#11 Well Pump Aux Engine – Propane, 109 hp, emergency SI, installed in 2001

(iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

(iv) A change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE.

(2) *New stationary RICE*. (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after December 19, 2002.

(ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

#11 Well Generator – Propane, 33.5 hp, emergency, SI, installed May 2008

(iii) A stationary RICE located at an area source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

ITAFOS is a major source.

(3) *Reconstructed stationary RICE.* (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after December 19, 2002.

ITAFOS did not indicate they have a reconstructed engine in this size range.

(ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.

ITAFOS engines do not meet these criteria. See Content Manager record #2017AAI2211 and #2018AAG342

(iii) A stationary RICE located at an area source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.

ITAFOS is a major source.

(b) *Stationary RICE subject to limited requirements*. (1) An affected source which meets either of the criteria in paragraphs (b)(1)(i) through (ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.6645(f).

(i) The stationary RICE is a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii).

The only new RICE has a rated hp of 33.5 – this paragraph does not apply.

(ii) The stationary RICE is a new or reconstructed limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

ITAFOS has not indicated that this paragraph applies.

(2) A new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis must meet the initial notification requirements of §63.6645(f) and the requirements of §§63.6625(c), 63.6650(g), and 63.6655(c). These stationary RICE do not have to meet the emission limitations and operating limitations of this subpart.

ITAFOS engines do not combust landfill gas – this paragraph does not apply.

(3) The following stationary RICE do not have to meet the requirements of this subpart and of subpart A of this part, including initial notification requirements:

(i) Existing spark ignition 2 stroke lean burn (2SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

No engines meet these criteria.

(ii) Existing spark ignition 4 stroke lean burn (4SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

No engines meet these criteria.

(iii) Existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii).

The North Sulfuric Emergency Generator – Caterpillar model 3512 DITA 1,545 bhp diesel emergency engine installed in 1995- meets this paragraph.

(iv) Existing limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

No engines meet these criteria.

(v) Existing stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;

No engines meet these criteria.

(c) *Stationary RICE subject to Regulations under 40 CFR Part 60.* An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

(1) A new or reconstructed stationary RICE located at an area source;

ITAFOS is a major source.

(2) A new or reconstructed 2SLB stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;

If the #11 Well Generator – Propane, 33.5 hp, emergency, SI, installed May 2008 is a 2SLB engine it would meet this exclusion. It is noted that this engine meets the exclusion at (c)(6).

(3) A new or reconstructed 4SLB stationary RICE with a site rating of less than 250 brake HP located at a major source of HAP emissions;

As indicated in the application ITAFOS has no new or reconstructed engines.

(4) A new or reconstructed spark ignition 4 stroke rich burn (4SRB) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;

If the #11 Well Generator – Propane, 33.5 hp, emergency, SI, installed May 2008 is a 4SRB engine it would meet this exclusion - It is noted that this engine meets the exclusion at (c)(6).

(5) A new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;

As indicated in the application ITAFOS has no new or reconstructed engines that meet his criteria.

(6) A new or reconstructed emergency or limited use stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;

The #11 Well Generator – Propane, 33.5 hp, emergency engine, SI, installed May 2008 meets these criteria. It is subject to the requirements of 40 CFR 60 Subpart JJJJ.

(7) A new or reconstructed compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.

As indicated in the application ITAFOS has no new or reconstructed engines that meet his criteria.

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

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

(a) *Affected sources.* (1) If you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations, operating limitations and other requirements no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of

HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than October 19, 2013.

All of these dates have passed and they are not included in the Tier I permit. Affected units must comply at this time.

(2) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart no later than August 16, 2004.

ITAFOS engines do not meet these criteria.

(3) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions after August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

ITAFOS engines do not meet these criteria.

(4) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.

Source Code	*Engine*	*Existing or New.*
EU ID 08-11-502	*North Sulfuric Emergency Generator – Caterpillar model 3512 DITA 1,545 bhp diesel emergency engine installed in 1995*	*Existing*
EU ID 35-11-502	*South Firewater Pump Engine – diesel, John Deere 300 hp, emergency, installed in 2001*	*Existing*
EU ID 09-11-501	*#11 Well Pump Aux Engine – Propane, 109 hp, emergency SI, installed in 2001*	*Existing*
EU ID 09-11-502	*#3 Potable Water Pump – NG, 95 hp, emergency SI, installed may 2003*	*Existing*
EU ID 09-11-503	*#11 Well Generator – Propane, 33.5 hp, emergency, SI, installed May 2008*	*New*
EU ID 09-11-504	*Rollover Generator – diesel, Caterpillar118 hp, emergency, Installed before 1990*	*Existing*

None of the engines meet these criteria.

(5) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

#11 Well Generator – Propane, 33.5 hp, emergency, SI, installed May 2008. This unit complies with 63 Subpart ZZZZ by complying with 60 Subpart JJJJ requirements.

(6) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.

ITAFOS is a major source.

(7) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

ITAFOS is a major source.

(b) *Area sources that become major sources.* If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, the compliance dates in paragraphs (b)(1) and (2) of this section apply to you.

ITAFOS is a major source.

(1) Any stationary RICE for which construction or reconstruction is commenced after the date when your area source becomes a major source of HAP must be in compliance with this subpart upon startup of your affected source.

(2) Any stationary RICE for which construction or reconstruction is commenced before your area source becomes a major source of HAP must be in compliance with the provisions of this subpart that are applicable to RICE located at major sources within 3 years after your area source becomes a major source of HAP.

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

Affected sources are listed in the following table. However, the The North Sulfuric Emergency Generator – Caterpillar model 3512 DITA 1,545 bhp diesel emergency engine is specifically exempted from notification requirements at §63.6590(b)(3)(iii). The #11 Well Generator – Propane, 33.5 hp, emergency, SI, installed May 2008 is a 4SRB engine meet the requirements of this Subpart by complying with 40 CFR 60 Subpart JJJJ (the notification requirements of this subpart do not apply).

Source Code	*Engine*	*Existing or New.*	*Notification applies?*
EU ID 08-11-502	*North Sulfuric Emergency Generator – Caterpillar model 3512 DITA 1,545 bhp diesel emergency engine installed in 1995*	*Existing*	*No*
EU ID 35-11-502	*South Firewater Pump Engine – diesel, John Deere 300 hp, emergency, installed in 2001*	*Existing*	*Yes*
EU ID 09-11-501	*#11 Well Pump Aux Engine – Propane, 109 hp, emergency SI, installed in 2001*	*Existing*	*yes*
EU ID 09-11-502	*#3 Potable Water Pump – NG, 95 hp, emergency SI, installed may 2003*	*Existing*	*Yes*
EU ID 09-11-503	*#11 Well Generator – Propane, 33.5 hp, emergency, SI, installed May 2008*	*New*	*No*
EU ID 09-11-504	*Rollover Generator – diesel, Caterpillar118 hp, emergency, Installed before 1990*	*Existing*	*Yes*

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

Emission and Operating Limitations

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

The North Sulfuric Emergency Generator – Caterpillar model 3512 DITA 1,545 bhp diesel emergency engine installed in 1995- meets this paragraph. However, per §63.6590(b)(3)(iii) this RICE does not have to meet the requirements of this subpart and of subpart A of this part, including initial notification requirements.

No other units are greater than 500 brake hp. The following paragraphs do not apply.

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

(a) If you own or operate an existing, new, or reconstructed spark ignition 4SRB stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 1a to this subpart and the operating limitations in Table 1b to this subpart which apply to you.

(b) If you own or operate a new or reconstructed 2SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, a new or reconstructed 4SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, or a new or reconstructed CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2a to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

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

(d) If you own or operate an existing non-emergency stationary CI RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2c to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

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

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

RICE at the facility are listed in the following table.

Source Code	*Engine*	*Existing or New.*
EU ID 08-11-502	*North Sulfuric Emergency Generator – Caterpillar model 3512 DITA 1,545 bhp diesel emergency engine installed in 1995*	*Existing*
EU ID 35-11-502	*South Firewater Pump Engine – diesel, John Deere 300 hp, emergency, installed in 2001*	*Existing*
EU ID 09-11-501	*##11 Well Pump Aux Engine – Propane, 109 hp, emergency SI, installed in 2001*	*Existing*
EU ID 09-11-502	*#3 Potable Water Pump – NG, 95 hp, emergency SI, installed may 2003*	*Existing*
EU ID 09-11-503	*#11 Well Generator – Propane, 33.5 hp, emergency, SI, installed May 2008*	*New*
EU ID 09-11-504	*Rollover Generator – diesel, Caterpillar118 hp, emergency, Installed before 1990*	*Existing*

There are no new units that meet the criteria of this paragraph.

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

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

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

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

[78 FR 6701, Jan. 30, 2013]

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

ITAFOS is a major source. The following paragraphs do not apply.

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

(a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 2b to this subpart that apply to you.

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

(1) The area source is located in an area of Alaska that is not accessible by the Federal Aid Highway System (FAHS).

(2) The stationary RICE is located at an area source that meets paragraphs (b)(2)(i), (ii), and (iii) of this section.

(i) The only connection to the FAHS is through the Alaska Marine Highway System (AMHS), or the stationary RICE operation is within an isolated grid in Alaska that is not connected to the statewide electrical grid referred to as the Alaska Railbelt Grid.

(ii) At least 10 percent of the power generated by the stationary RICE on an annual basis is used for residential purposes.

(iii) The generating capacity of the area source is less than 12 megawatts, or the stationary RICE is used exclusively for backup power for renewable energy.

(c) If you own or operate an existing stationary non-emergency CI RICE with a site rating of more than 300 HP located on an offshore vessel that is an area source of HAP and is a nonroad vehicle that is an Outer Continental Shelf (OCS) source as defined in 40 CFR 55.2, you do not have to meet the numerical CO emission limitations specified in Table 2d of this subpart. You must meet all of the following management practices:

(1) Change oil every 1,000 hours of operation or annually, whichever comes first. Sources have the option to utilize an oil analysis program as described in §63.6625(i) in order to extend the specified oil change requirement.

(2) Inspect and clean air filters every 750 hours of operation or annually, whichever comes first, and replace as necessary.

(3) Inspect fuel filters and belts, if installed, every 750 hours of operation or annually, whichever comes first, and replace as necessary.

(4) Inspect all flexible hoses every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.

(d) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 1 or Tier 2 emission standards in Table 1 of 40 CFR 89.112 and that is subject to an enforceable state or local standard that requires the engine to be replaced no later than June 1, 2018, you may until January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018, choose to comply with the management practices that are shown for stationary non-emergency CI RICE with a site rating of less than or equal to 300 HP in Table 2d of this subpart instead of the applicable emission limitations in Table 2d, operating limitations in Table 2b, and crankcase ventilation system requirements in §63.6625(g). You must comply with the emission limitations in Table 2d and operating limitations in Table 2b that apply for non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions by January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018. You must also comply with the crankcase

ventilation system requirements in §63.6625(g) by January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018.

(e) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 3 (Tier 2 for engines above 560 kilowatt (kW)) emission standards in Table 1 of 40 CFR 89.112, you may comply with the requirements under this part by meeting the requirements for Tier 3 engines (Tier 2 for engines above 560 kW) in 40 CFR part 60 subpart IIII instead of the emission limitations and other requirements that would otherwise apply under this part for existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions.

(f) An existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP must meet the definition of remote stationary RICE in §63.6675 on the initial compliance date for the engine, October 19, 2013, in order to be considered a remote stationary RICE under this subpart. Owners and operators of existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that meet the definition of remote stationary RICE in §63.6675 of this subpart as of October 19, 2013 must evaluate the status of their stationary RICE every 12 months. Owners and operators must keep records of the initial and annual evaluation of the status of the engine. If the evaluation indicates that the stationary RICE no longer meets the definition of remote stationary RICE in §63.6675 of this subpart, the owner or operator must comply with all of the requirements for existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that are not remote stationary RICE within 1 year of the evaluation.

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

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

(a) If you own or operate an existing non-emergency, non-black start CI stationary RICE with a site rating of more than 300 brake HP with a displacement of less than 30 liters per cylinder that uses diesel fuel, you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel.

ITAFOS does not operate non-emergency engines.

(b) Beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in §63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

ITAFOS certified they do not operate for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in §63.6640(f)(4)(ii)

(c) Beginning January 1, 2015, if you own or operate a new emergency CI stationary RICE with a site rating of more than 500 brake HP and a displacement of less than 30 liters per cylinder located at a major source of HAP that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

ITAFOS certified they do not operate for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii)

(d) Existing CI stationary RICE located in Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, at area sources in areas of Alaska that meet either §63.6603(b)(1) or §63.6603(b)(2), or are on offshore vessels that meet §63.6603(c) are exempt from the requirements of this section.

[78 FR 6702, Jan. 30, 2013]

General Compliance Requirements

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

(a) You must be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply to you at all times.

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

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

Testing and Initial Compliance Requirements

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

The North Sulfuric Emergency Generator – Caterpillar model 3512 DITA 1,545 bhp diesel emergency engine installed in 1995- meets this paragraph. However, per §63.6590(b)(3)(iii) this RICE does not

have to meet the requirements of this subpart and of subpart A of this part, including initial notification requirements.

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

(a) You must conduct the initial performance test or other initial compliance demonstrations in Table 4 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions in §63.7(a)(2).

(b) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004 and own or operate stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must demonstrate initial compliance with either the proposed emission limitations or the promulgated emission limitations no later than February 10, 2005 or no later than 180 days after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(c) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004 and own or operate stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, and you chose to comply with the proposed emission limitations when demonstrating initial compliance, you must conduct a second performance test to demonstrate compliance with the promulgated emission limitations by December 13, 2007 or after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(d) An owner or operator is not required to conduct an initial performance test on units for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (d)(1) through (5) of this section.

(1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.

(2) The test must not be older than 2 years.

(3) The test must be reviewed and accepted by the Administrator.

(4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

(5) The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load.

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

§63.6611 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a new or reconstructed 4SLB SI stationary RICE with a site rating of

greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions?

ITAFOS does not have engines that meet this criteria.

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

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

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

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

The North Sulfuric Emergency Generator – Caterpillar model 3512 DITA 1,545 bhp diesel emergency engine installed in 1995- meets this paragraph. However this engine is exempt from this subpart at 63.6590(b)(3)(iii). The following paragraphs do not apply.

(a) You must conduct any initial performance test or other initial compliance demonstration according to Tables 4 and 5 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions in §63.7(a)(2).

(b) An owner or operator is not required to conduct an initial performance test on a unit for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (b)(1) through (4) of this section.

(1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.

(2) The test must not be older than 2 years.

(3) The test must be reviewed and accepted by the Administrator.

(4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

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

§63.6615 When must I conduct subsequent performance tests?

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

This paragraph does not apply because ITAFOS is not subject to any emission limitations or operating limitations that require source testing.

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

This paragraph does not apply because ITAFOS is not subject to any emission limitations or operating limitations that require source testing.

(a) You must conduct each performance test in Tables 3 and 4 of this subpart that applies to you.

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

(1) Non-emergency 4SRB stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.

(2) New non-emergency 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP located at a major source of HAP emissions.

(3) New non-emergency 2SLB stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.

(4) New non-emergency CI stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.

(c) [Reserved]

(d) You must conduct three separate test runs for each performance test required in this section, as specified in §63.7(e)(3). Each test run must last at least 1 hour, unless otherwise specified in this subpart.

(e)(1) You must use Equation 1 of this section to determine compliance with the percent reduction requirement:

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

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Where:

C_i = concentration of carbon monoxide (CO), total hydrocarbons (THC), or formaldehyde at the control device inlet,

C_o = concentration of CO, THC, or formaldehyde at the control device outlet, and

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

(2) You must normalize the CO, THC, or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO_2). If pollutant concentrations are to be corrected to 15 percent oxygen and CO_2 concentration is measured in lieu of oxygen concentration measurement, a CO_2 correction factor is needed. Calculate the CO_2 correction factor as described in paragraphs (e)(2)(i) through (iii) of this section.

(i) Calculate the fuel-specific F_o value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:

$$F_o = \frac{0.209\ F_d}{F_c} \quad (Eq.\ 2)$$

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Where:

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

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

F_d = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm^3/J ($dscf/10^6$ Btu).

F_c = Ratio of the volume of CO_2 produced to the gross calorific value of the fuel from Method 19, dsm^3/J ($dscf/10^6$ Btu)

(ii) Calculate the CO_2 correction factor for correcting measurement data to 15 percent O_2, as follows:

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

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Where:

X_{CO2} = CO_2 correction factor, percent.

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

(iii) Calculate the CO, THC, and formaldehyde gas concentrations adjusted to 15 percent O_2 using CO_2 as follows:

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

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Where:

C_{adj} = Calculated concentration of CO, THC, or formaldehyde adjusted to 15 percent O_2.

C_d = Measured concentration of CO, THC, or formaldehyde, uncorrected.

X_{CO2} = CO_2 correction factor, percent.

$\%CO_2$ = Measured CO_2 concentration measured, dry basis, percent.

(f) If you comply with the emission limitation to reduce CO and you are not using an oxidation catalyst, if you comply with the emission limitation to reduce formaldehyde and you are not using NSCR, or if you comply with the emission limitation to limit the concentration of formaldehyde in the stationary RICE exhaust and you are not using an oxidation catalyst or NSCR, you must petition the Administrator for operating limitations to be established during the initial performance test and continuously monitored thereafter; or for approval of no operating limitations. You must not conduct the initial performance test until after the petition has been approved by the Administrator.

(g) If you petition the Administrator for approval of operating limitations, your petition must include the information described in paragraphs (g)(1) through (5) of this section.

(1) Identification of the specific parameters you propose to use as operating limitations;

(2) A discussion of the relationship between these parameters and HAP emissions, identifying how HAP emissions change with changes in these parameters, and how limitations on these parameters will serve to limit HAP emissions;

(3) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;

(4) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

(5) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

(h) If you petition the Administrator for approval of no operating limitations, your petition must include the information described in paragraphs (h)(1) through (7) of this section.

(1) Identification of the parameters associated with operation of the stationary RICE and any emission control device which could change intentionally (*e.g.,* operator adjustment, automatic controller adjustment, etc.) or unintentionally (*e.g.,* wear and tear, error, etc.) on a routine basis or over time;

(2) A discussion of the relationship, if any, between changes in the parameters and changes in HAP emissions;

(3) For the parameters which could change in such a way as to increase HAP emissions, a discussion of whether establishing limitations on the parameters would serve to limit HAP emissions;

(4) For the parameters which could change in such a way as to increase HAP emissions, a discussion of how you could establish upper and/or lower values for the parameters which would establish limits on the parameters in operating limitations;

(5) For the parameters, a discussion identifying the methods you could use to measure them and the instruments you could use to monitor them, as well as the relative accuracy and precision of the methods and instruments;

(6) For the parameters, a discussion identifying the frequency and methods for recalibrating the instruments you could use to monitor them; and

(7) A discussion of why, from your point of view, it is infeasible or unreasonable to adopt the parameters as operating limitations.

(i) The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.

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

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

(a) If you elect to install a CEMS as specified in Table 5 of this subpart, you must install, operate, and maintain a CEMS to monitor CO and either O_2 or CO_2 according to the requirements in paragraphs (a)(1) through (4) of this section. If you are meeting a requirement to reduce CO emissions, the CEMS must be

installed at both the inlet and outlet of the control device. If you are meeting a requirement to limit the concentration of CO, the CEMS must be installed at the outlet of the control device.

Emissions standards do not apply and ITAFOS has not elected to install a CEMS.

(1) Each CEMS must be installed, operated, and maintained according to the applicable performance specifications of 40 CFR part 60, appendix B.

(2) You must conduct an initial performance evaluation and an annual relative accuracy test audit (RATA) of each CEMS according to the requirements in §63.8 and according to the applicable performance specifications of 40 CFR part 60, appendix B as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.

(3) As specified in §63.8(c)(4)(ii), each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. You must have at least two data points, with each representing a different 15-minute period, to have a valid hour of data.

(4) The CEMS data must be reduced as specified in §63.8(g)(2) and recorded in parts per million or parts per billion (as appropriate for the applicable limitation) at 15 percent oxygen or the equivalent CO_2 concentration.

(b) If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of this subpart, you must install, operate, and maintain each CPMS according to the requirements in paragraphs (b)(1) through (6) of this section. For an affected source that is complying with the emission limitations and operating limitations on March 9, 2011, the requirements in paragraph (b) of this section are applicable September 6, 2011.

Table 5 does not apply to ITAFOS.

(1) You must prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in paragraphs (b)(1)(i) through (v) of this section and in §63.8(d). As specified in §63.8(f)(4), you may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in paragraphs (b)(1) through (5) of this section in your site-specific monitoring plan.

(i) The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;

(ii) Sampling interface (*e.g.,* thermocouple) location such that the monitoring system will provide representative measurements;

(iii) Equipment performance evaluations, system accuracy audits, or other audit procedures;

(iv) Ongoing operation and maintenance procedures in accordance with provisions in §63.8(c)(1)(ii) and (c)(3); and

(v) Ongoing reporting and recordkeeping procedures in accordance with provisions in §63.10(c), (e)(1), and (e)(2)(i).

(2) You must install, operate, and maintain each CPMS in continuous operation according to the procedures in your site-specific monitoring plan.

(3) The CPMS must collect data at least once every 15 minutes (see also §63.6635).

(4) For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger.

(5) You must conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in your site-specific monitoring plan at least annually.

(6) You must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.

(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must monitor and record your fuel usage daily with separate fuel meters to measure the volumetric flow rate of each fuel. In addition, you must operate your stationary RICE in a manner which reasonably minimizes HAP emissions.

ITAFOS does not fire with landfill gas or digester gas.

(d) If you are operating a new or reconstructed emergency 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must install a non-resettable hour meter prior to the startup of the engine.

ITAFOS engines do not meet these criteria.

(e) If you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:

(1) An existing stationary RICE with a site rating of less than 100 HP located at a major source of HAP emissions;

(2) An existing emergency or black start stationary RICE with a site rating of less than or equal to 500 HP located at a major source of HAP emissions;

(3) An existing emergency or black start stationary RICE located at an area source of HAP emissions;

(4) An existing non-emergency, non-black start stationary CI RICE with a site rating less than or equal to 300 HP located at an area source of HAP emissions;

(5) An existing non-emergency, non-black start 2SLB stationary RICE located at an area source of HAP emissions;

(6) An existing non-emergency, non-black start stationary RICE located at an area source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis.

(7) An existing non-emergency, non-black start 4SLB stationary RICE with a site rating less than or equal to 500 HP located at an area source of HAP emissions;

(8) An existing non-emergency, non-black start 4SRB stationary RICE with a site rating less than or equal to 500 HP located at an area source of HAP emissions;

(9) An existing, non-emergency, non-black start 4SLB stationary RICE with a site rating greater than 500 HP located at an area source of HAP emissions that is operated 24 hours or less per calendar year; and

(10) An existing, non-emergency, non-black start 4SRB stationary RICE with a site rating greater than 500 HP located at an area source of HAP emissions that is operated 24 hours or less per calendar year.

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

(g) If you own or operate an existing non-emergency, non-black start CI engine greater than or equal to 300 HP that is not equipped with a closed crankcase ventilation system, you must comply with either paragraph (g)(1) or paragraph (2) of this section. Owners and operators must follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filters, or can request the Administrator to approve different maintenance requirements that are as protective as manufacturer requirements. Existing CI engines located at area sources in areas of Alaska that meet either §63.6603(b)(1) or §63.6603(b)(2) do not have to meet the requirements of this paragraph (g). Existing CI engines located on offshore vessels that meet §63.6603(c) do not have to meet the requirements of this paragraph (g).

ITAFOS does not operate non-emergency egines.

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

(2) Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates and metals.

(h) If you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply.

(i) If you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to this subpart or in items 1 or 4 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

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

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

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

(a) You must demonstrate initial compliance with each emission limitation, operating limitation, and other requirement that applies to you according to Table 5 of this subpart.

Table 5 does not apply to ITAFOS.

(b) During the initial performance test, you must establish each operating limitation in Tables 1b and 2b of this subpart that applies to you.

Table 1b and 2b do not apply to ITAFOS

(c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.6645.

63.6645 does not apply to ITAFOS, it is not subject to numerical limitations.

(d) Non-emergency 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more can demonstrate initial compliance with the formaldehyde emission limit by testing for THC instead of formaldehyde. The testing must be conducted according to the requirements in Table 4 of this subpart. The average reduction of emissions of THC determined from the performance test must be equal to or greater than 30 percent.

ITAFOS does not operate non-emergency engines.

(e) The initial compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to the following requirements:

ITAFOS does not operate non-emergency engines.

(1) The compliance demonstration must consist of at least three test runs.

(2) Each test run must be of at least 15 minute duration, except that each test conducted using the method in appendix A to this subpart must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.

(3) If you are demonstrating compliance with the CO concentration or CO percent reduction requirement, you must measure CO emissions using one of the CO measurement methods specified in Table 4 of this subpart, or using appendix A to this subpart.

(4) If you are demonstrating compliance with the THC percent reduction requirement, you must measure THC emissions using Method 25A, reported as propane, of 40 CFR part 60, appendix A.

(5) You must measure O_2 using one of the O_2 measurement methods specified in Table 4 of this subpart. Measurements to determine O_2 concentration must be made at the same time as the measurements for CO or THC concentration.

(6) If you are demonstrating compliance with the CO or THC percent reduction requirement, you must measure CO or THC emissions and O_2 emissions simultaneously at the inlet and outlet of the control device.

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

Continuous Compliance Requirements

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

(a) If you must comply with emission and operating limitations, you must monitor and collect data according to this section.

ITAFOS is not subject to emissions or operating limitations as those terms are used in this subpart. This section does not apply.

(b) Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, you must monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(c) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods.

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

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

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

Table 6 does not apply to ITAFOS; there are no testing requirements associated with the emergency engines.

(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.

ITAFOS is not subject to emissions or operating limitations as those terms are used in this subpart. This paragraph does not apply.

(c) The annual compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to the following requirements:

ITAFOS does not operate non-emergency engines.

(1) The compliance demonstration must consist of at least one test run.

(2) Each test run must be of at least 15 minute duration, except that each test conducted using the method in appendix A to this subpart must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.

(3) If you are demonstrating compliance with the CO concentration or CO percent reduction requirement, you must measure CO emissions using one of the CO measurement methods specified in Table 4 of this subpart, or using appendix A to this subpart.

(4) If you are demonstrating compliance with the THC percent reduction requirement, you must measure THC emissions using Method 25A, reported as propane, of 40 CFR part 60, appendix A.

(5) You must measure O_2 using one of the O_2 measurement methods specified in Table 4 of this subpart. Measurements to determine O_2 concentration must be made at the same time as the measurements for CO or THC concentration.

(6) If you are demonstrating compliance with the CO or THC percent reduction requirement, you must measure CO or THC emissions and O_2 emissions simultaneously at the inlet and outlet of the control device.

(7) If the results of the annual compliance demonstration show that the emissions exceed the levels specified in Table 6 of this subpart, the stationary RICE must be shut down as soon as safely possible, and appropriate corrective action must be taken (e.g., repairs, catalyst cleaning, catalyst replacement). The stationary RICE must be retested within 7 days of being restarted and the emissions must meet the levels specified in Table 6 of this subpart. If the retest shows that the emissions continue to exceed the specified levels, the stationary RICE must again be shut down as soon as safely possible, and the stationary RICE may not operate, except for purposes of startup and testing, until the owner/operator demonstrates through testing that the emissions do not exceed the levels specified in Table 6 of this subpart.

(d) For new, reconstructed, and rebuilt stationary RICE, deviations from the emission or operating limitations that occur during the first 200 hours of operation from engine startup (engine burn-in period) are not violations. Rebuilt stationary RICE means a stationary RICE that has been rebuilt as that term is defined in 40 CFR 94.11(a).

(e) You must also report each instance in which you did not meet the requirements in Table 8 to this subpart that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.

(f) If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1) through (4) of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (4) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (4) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

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

(2) You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

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

local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

(ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(iii) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(4) Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraphs (f)(4)(i) and (ii) of this section, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) Prior to May 3, 2014, the 50 hours per year for non-emergency situations can be used for peak shaving or non-emergency demand response to generate income for a facility, or to otherwise supply power as part of a financial arrangement with another entity if the engine is operated as part of a peak shaving (load management program) with the local distribution system operator and the power is provided only to the facility itself or to support the local distribution system.

(ii) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

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

Notifications, Reports, and Records

§63.6645 What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;

(1) An existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.

(2) An existing stationary RICE located at an area source of HAP emissions.

(3) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(4) A new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 HP located at a major source of HAP emissions.

(5) This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards.

These notification do not apply. All engines are emergency engines and none have numerical emission standards.

(b) As specified in §63.9(b)(2), if you start up your stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart, you must submit an Initial Notification not later than December 13, 2004.

The North Sulfuric Emergency Generator – Caterpillar model 3512 DITA 1,545 bhp diesel emergency engine installed in 1995- meets this paragraph. However this engine is exempt from this subpart at 63.6590(b)(3)(iii). The following paragraphs do not apply.

(c) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions on or after August 16, 2004, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

ITAFOS does not have an affected engine.

(d) As specified in §63.9(b)(2), if you start up your stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart and you are required to submit an initial notification, you must submit an Initial Notification not later than July 16, 2008.

This requirement is not included in the permit it was required over a decade ago.

(e) If you start up your new or reconstructed stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions on or after March 18, 2008 and you are required to submit an initial notification, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

ITAFOS does not have any new or reconstructed RICE.

(f) If you are required to submit an Initial Notification but are otherwise not affected by the requirements of this subpart, in accordance with §63.6590(b), your notification should include the information in §63.9(b)(2)(i) through (v), and a statement that your stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions).

(g) If you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in §63.7(b)(1).

(h) If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to this subpart, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii).

(1) For each initial compliance demonstration required in Table 5 to this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.

(2) For each initial compliance demonstration required in Table 5 to this subpart that includes a performance test conducted according to the requirements in Table 3 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to §63.10(d)(2).

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

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

§63.6650 What reports must I submit and when?

(a) You must submit each report in Table 7 of this subpart that applies to you.

ITAFOS is not subject to any of the provisions in Table 7.

(b) Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date in Table 7 of this subpart and according to the requirements in paragraphs (b)(1) through (b)(9) of this section.

ITAFOS is not subject to any of the provisions in Table 7.

(1) For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in §63.6595.

(2) For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in §63.6595.

(3) For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(5) For each stationary RICE that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6 (a)(3)(iii)(A), you may submit the first and subsequent Compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (b)(4) of this section.

(6) For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on December 31.

(7) For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in §63.6595.

(8) For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.

(9) For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.

(c) The Compliance report must contain the information in paragraphs (c)(1) through (6) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.6605(b), including actions taken to correct a malfunction.

(5) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

(6) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.

(d) For each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CMS to comply with the emission or operating limitations in this subpart, the Compliance report must contain the information in paragraphs (c)(1) through (4) of this section and the information in paragraphs (d)(1) and (2) of this section.

ITAFOS is not subject to emissions or operating limitation as those terms are used in this Subpart.

(1) The total operating time of the stationary RICE at which the deviation occurred during the reporting period.

(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(e) For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission and operating limitations in this subpart, you must include information in paragraphs (c)(1) through (4) and (e)(1) through (12) of this section.

(1) The date and time that each malfunction started and stopped.

(2) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out-of-control, including the information in §63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.

(5) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.

(8) An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.

(9) A brief description of the stationary RICE.

(10) A brief description of the CMS.

(11) The date of the latest CMS certification or audit.

(12) A description of any changes in CMS, processes, or controls since the last reporting period.

(f) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect

any obligation the affected source may have to report deviations from permit requirements to the permit authority.

ITAFOS is not subject to emissions or operating limitation as those terms are used in this Subpart.

(g) If you are operating as a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must submit an annual report according to Table 7 of this subpart by the date specified unless the Administrator has approved a different schedule, according to the information described in paragraphs (b)(1) through (b)(5) of this section. You must report the data specified in (g)(1) through (g)(3) of this section.

ITAFOS does not combust landfill or digester gas.

(1) Fuel flow rate of each fuel and the heating values that were used in your calculations. You must also demonstrate that the percentage of heat input provided by landfill gas or digester gas is equivalent to 10 percent or more of the total fuel consumption on an annual basis.

(2) The operating limits provided in your federally enforceable permit, and any deviations from these limits.

(3) Any problems or errors suspected with the meters.

(h) If you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in §63.6640(f)(4)(ii), you must submit an annual report according to the requirements in paragraphs (h)(1) through (3) of this section.

ITAFOS does not operate for the purposes specified in §63.6640(f)(2)(ii) and (iii) or for the purpose specified in §63.6640(f)(4)(ii)

(1) The report must contain the following information:

(i) Company name and address where the engine is located.

(ii) Date of the report and beginning and ending dates of the reporting period.

(iii) Engine site rating and model year.

(iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

(v) Hours operated for the purposes specified in §63.6640(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in §63.6640(f)(2)(ii) and (iii).

(vi) Number of hours the engine is contractually obligated to be available for the purposes specified in §63.6640(f)(2)(ii) and (iii).

(vii) Hours spent for operation for the purpose specified in §63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in §63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

(viii) If there were no deviations from the fuel requirements in §63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.

(ix) If there were deviations from the fuel requirements in §63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.

(2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

(3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (*www.epa.gov/cdx*). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in §63.13.

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

§63.6655 What records must I keep?

(a) If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(5), (b)(1) through (b)(3) and (c) of this section.

ITAFOS is not subject to emissions or operating limitation as those terms are used in this Subpart. Paragraphs (a), (b) and (c) do not apply.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in §63.10(b)(2)(xiv).

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

(3) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).

(4) Records of all required maintenance performed on the air pollution control and monitoring equipment.

(5) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

(b) For each CEMS or CPMS, you must keep the records listed in paragraphs (b)(1) through (3) of this section.

(1) Records described in §63.10(b)(2)(vi) through (xi).

(2) Previous (*i.e.,* superseded) versions of the performance evaluation plan as required in §63.8(d)(3).

(3) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in §63.8(f)(6)(i), if applicable.

(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must keep the records of your daily fuel usage monitors.

(d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.

ITAFOS is not subject to emissions or operating limitation as those terms are used in this Subpart.

(e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE;

(1) An existing stationary RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions.

(2) An existing stationary emergency RICE.

(3) An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.

(f) If you own or operate any of the stationary RICE in paragraphs (f)(1) through (2) of this section, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in §63.6640(f)(2)(ii) or (iii) or §63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

(1) An existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions that does not meet the standards applicable to non-emergency engines.

(2) An existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines.

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

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

(a) Your records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1).

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

Other Requirements and Information

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

Table 8 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with any of the requirements of the General Provisions specified in Table 8: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing stationary RICE that combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in the General Provisions specified in Table 8 except for the initial notification requirements: A new stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new emergency stationary RICE, or a new limited use stationary RICE.

[75 FR 9678, Mar. 3, 2010]

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§63.6670 Who implements and enforces this subpart?

(a) This subpart is implemented and enforced by the U.S. EPA, or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency (as well as the U.S. EPA) has the authority to implement and enforce this

subpart. You should contact your U.S. EPA Regional Office to find out whether this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are:

(1) Approval of alternatives to the non-opacity emission limitations and operating limitations in §63.6600 under §63.6(g).

(2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90.

(3) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

(5) Approval of a performance test which was conducted prior to the effective date of the rule, as specified in §63.6610(b).

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§63.6675 What definitions apply to this subpart?

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

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

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

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

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

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

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

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

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

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

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

(1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation or operating limitation;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limitation or operating limitation in this subpart during malfunction, regardless or whether or not such failure is permitted by this subpart.

(4) Fails to satisfy the general duty to minimize emissions established by §63.6(e)(1)(i).

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

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is fuel oil number 2. Diesel fuel also includes any non-distillate fuel with comparable physical and chemical properties (*e.g.* biodiesel) that is suitable for use in compression ignition engines.

Digester gas means any gaseous by-product of wastewater treatment typically formed through the anaerobic decomposition of organic waste materials and composed principally of methane and CO_2.

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

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

(1) The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc.

(2) The stationary RICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in §63.6640(f).

(3) The stationary RICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in §63.6640(f)(2)(ii) or (iii) and §63.6640(f)(4)(i) or (ii).

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

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

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

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

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

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

Institutional emergency stationary RICE means an emergency stationary RICE used in institutional establishments such as medical centers, nursing homes, research centers, institutions of higher

education, correctional facilities, elementary and secondary schools, libraries, religious establishments, police stations, and fire stations.

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

Landfill gas means a gaseous by-product of the land application of municipal refuse typically formed through the anaerobic decomposition of waste materials and composed principally of methane and CO_2.

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

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

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

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

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

(1) Emissions from any oil or gas exploration or production well (with its associated equipment (as defined in this section)) and emissions from any pipeline compressor station or pump station shall not be aggregated with emissions from other similar units, to determine whether such emission points or stations are major sources, even when emission points are in a contiguous area or under common control;

(2) For oil and gas production facilities, emissions from processes, operations, or equipment that are not part of the same oil and gas production facility, as defined in §63.1271 of subpart HHH of this part, shall not be aggregated;

(3) For production field facilities, only HAP emissions from glycol dehydration units, storage vessel with the potential for flash emissions, combustion turbines and reciprocating internal combustion engines shall be aggregated for a major source determination; and

(4) Emissions from processes, operations, and equipment that are not part of the same natural gas transmission and storage facility, as defined in §63.1271 of subpart HHH of this part, shall not be aggregated.

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

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

Non-selective catalytic reduction (NSCR) means an add-on catalytic nitrogen oxides (NO_X) control device for rich burn engines that, in a two-step reaction, promotes the conversion of excess oxygen, NO_X, CO, and volatile organic compounds (VOC) into CO_2, nitrogen, and water.

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

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

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

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

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

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

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

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

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

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

(2) Stationary RICE located on a pipeline segment that meets both of the criteria in paragraphs (2)(i) and (ii) of this definition.

(i) A pipeline segment with 10 or fewer buildings intended for human occupancy and no buildings with four or more stories within 220 yards (200 meters) on either side of the centerline of any continuous 1-mile (1.6 kilometers) length of pipeline. Each separate dwelling unit in a multiple dwelling unit building is counted as a separate building intended for human occupancy.

(ii) The pipeline segment does not lie within 100 yards (91 meters) of either a building or a small, well-defined outside area (such as a playground, recreation area, outdoor theater, or other place of public assembly) that is occupied by 20 or more persons on at least 5 days a week for 10 weeks in any 12-month period. The days and weeks need not be consecutive. The building or area is considered occupied for a full day if it is occupied for any portion of the day.

(iii) For purposes of this paragraph (2), the term pipeline segment means all parts of those physical facilities through which gas moves in transportation, including but not limited to pipe, valves, and other appurtenance attached to pipe, compressor units, metering stations, regulator stations, delivery stations, holders, and fabricated assemblies. Stationary RICE located within 50 yards (46 meters) of the pipeline segment providing power for equipment on a pipeline segment are part of the pipeline segment. Transportation of gas means the gathering, transmission, or distribution of gas by pipeline, or the storage of gas. A building is intended for human occupancy if its primary use is for a purpose involving the presence of humans.

(3) Stationary RICE that are not located on gas pipelines and that have 5 or fewer buildings intended for human occupancy and no buildings with four or more stories within a 0.25 mile radius around the engine. A building is intended for human occupancy if its primary use is for a purpose involving the presence of humans.

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

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

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

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

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

Stationary reciprocating internal combustion engine (RICE) means any reciprocating internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

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

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

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

Subpart means 40 CFR part 63, subpart ZZZZ.

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

Two-stroke engine means a type of engine which completes the power cycle in single crankshaft revolution by combining the intake and compression operations into one stroke and the power and

exhaust operations into a second stroke. This system requires auxiliary scavenging and inherently runs lean of stoichiometric.

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

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

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

For each . . .	You must meet the following emission limitation, except during periods of startup . . .	During periods of startup you must . . .
1. 4SRB stationary RICE	a. Reduce formaldehyde emissions by 76 percent or more. If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may reduce formaldehyde emissions by 75 percent or more until June 15, 2007 or	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.[1]
	b. Limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O_2	

[1] Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

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

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

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

For each . . .	You must meet the following operating limitation, except during periods of startup . . .
1. existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and using NSCR; or existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O_2 and using NSCR;	a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst measured during the initial performance test; and b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 750 °F and less than or equal to 1250 °F.[1]
2. existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and not using NSCR; or	Comply with any operating limitations approved by the Administrator.
existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O_2 and not using NSCR.	

[1]Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.8(f) for a different temperature range.

[78 FR 6706, Jan. 30, 2013]

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

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

For each . . .	You must meet the following emission limitation, except during periods of startup . . .	During periods of startup you must . . .
1. 2SLB stationary RICE	a. Reduce CO emissions by 58 percent or more; or b. Limit concentration of formaldehyde in the stationary RICE exhaust to 12 ppmvd or less at 15 percent O_2. If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may limit concentration of formaldehyde to 17 ppmvd or less at 15 percent O_2 until June 15, 2007	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.[1]
2. 4SLB stationary RICE	a. Reduce CO emissions by 93 percent or more; or	
	b. Limit concentration of formaldehyde in the stationary RICE exhaust to 14 ppmvd or less at 15 percent O_2	
3. CI stationary RICE	a. Reduce CO emissions by 70 percent or more; or	
	b. Limit concentration of formaldehyde in the stationary RICE exhaust to 580 ppbvd or less at 15 percent O_2	

[1]Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[75 FR 9680, Mar. 3, 2010]

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

Stationary RICE ≥250 HP Located at a Major Source of HAP Emissions, Existing CI Stationary RICE >500 HP

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

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

with the requirement to reduce CO emissions and not using an oxidation catalyst; and	
New and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and not using an oxidation catalyst; and	
existing CI stationary RICE >500 HP complying with the requirement to limit or reduce the concentration of CO in the stationary RICE exhaust and not using an oxidation catalyst.	

[1]Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.8(f) for a different temperature range.

[78 FR 6707, Jan. 30, 2013]

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

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

For each . . .	You must meet the following requirement, except during periods of startup . . .	During periods of startup you must . . .
1. Emergency stationary CI RICE and black start stationary CI RICE[1]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first.[2] b. Inspect air cleaner every 1,000 hours of operation or	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission

	annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.[3]	limitations apply.[3]
2. Non-Emergency, non-black start stationary CI RICE <100 HP	a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first.[2] b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.[3]	
3. Non-Emergency, non-black start CI stationary RICE 100≤HP≤300 HP	Limit concentration of CO in the stationary RICE exhaust to 230 ppmvd or less at 15 percent O_2.	
4. Non-Emergency, non-black start CI stationary RICE 300<HP≤500	a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd or less at 15 percent O_2; or b. Reduce CO emissions by 70 percent or more.	
5. Non-Emergency, non-black start stationary CI RICE >500 HP	a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd or less at 15 percent O_2; or	

	b. Reduce CO emissions by 70 percent or more.	
6. Emergency stationary SI RICE and black start stationary SI RICE.[1]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[2] b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.[3]	
7. Non-Emergency, non-black start stationary SI RICE <100 HP that are not 2SLB stationary RICE	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first;[2] b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary;	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.[3]	
8. Non-Emergency, non-black start 2SLB stationary SI RICE <100 HP	a. Change oil and filter every 4,320 hours of operation or annually, whichever comes first;[2] b. Inspect spark plugs every 4,320 hours of operation or	

	annually, whichever comes first, and replace as necessary;	
	c. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary.[3]	
9. Non-emergency, non-black start 2SLB stationary RICE 100≤HP≤500	Limit concentration of CO in the stationary RICE exhaust to 225 ppmvd or less at 15 percent O_2.	
10. Non-emergency, non-black start 4SLB stationary RICE 100≤HP≤500	Limit concentration of CO in the stationary RICE exhaust to 47 ppmvd or less at 15 percent O_2.	
11. Non-emergency, non-black start 4SRB stationary RICE 100≤HP≤500	Limit concentration of formaldehyde in the stationary RICE exhaust to 10.3 ppmvd or less at 15 percent O_2.	
12. Non-emergency, non-black start stationary RICE 100≤HP≤500 which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis	Limit concentration of CO in the stationary RICE exhaust to 177 ppmvd or less at 15 percent O_2.	

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

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

[3]Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

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

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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 . . .
1. Non-Emergency, non-black start CI stationary RICE ≤300 HP	a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first;[1] b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.
2. Non-Emergency, non-black start CI stationary RICE 300<HP≤500	a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd at 15 percent O_2; or	
	b. Reduce CO emissions	

	by 70 percent or more.	
3. Non-Emergency, non-black start CI stationary RICE >500 HP	a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd at 15 percent O_2; or	
	b. Reduce CO emissions by 70 percent or more.	
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 replace as necessary; and	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	
5. Emergency stationary SI RICE; black start stationary SI RICE; non-emergency, non-black start 4SLB stationary RICE >500 HP that operate 24 hours or less per calendar year; non-emergency, non-black start 4SRB stationary RICE >500 HP that operate 24 hours or less per calendar year.[2]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[1]; b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and c. Inspect all hoses and belts every 500 hours of	

	operation or annually, whichever comes first, and replace as necessary.	
6. Non-emergency, non-black start 2SLB stationary RICE	a. Change oil and filter every 4,320 hours of operation or annually, whichever comes first;[1]	
	b. Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary.	
7. Non-emergency, non-black start 4SLB stationary RICE ≤500 HP	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first;[1]	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	

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

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

	and replace as necessary.	

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

[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.

[78 FR 6709, Jan. 30, 2013]

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

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

For each . . .	Complying with the requirement to . . .	You must . . .
1. New or reconstructed 2SLB stationary RICE >500 HP located at major sources; new or reconstructed 4SLB stationary RICE ≥250 HP located at major sources; and new or reconstructed CI stationary RICE >500 HP located at major sources	Reduce CO emissions and not using a CEMS	Conduct subsequent performance tests semiannually.[1]
2. 4SRB stationary RICE ≥5,000 HP located at major sources	Reduce formaldehyde emissions	Conduct subsequent performance tests semiannually.[1]
3. Stationary RICE >500 HP located at major sources and new or reconstructed 4SLB stationary RICE 250≤HP≤500 located at major sources	Limit the concentration of formaldehyde in the stationary RICE exhaust	Conduct subsequent performance tests semiannually.[1]
4. Existing non-emergency, non-black start CI	Limit or reduce CO	Conduct subsequent

stationary RICE >500 HP that are not limited use stationary RICE	emissions and not using a CEMS	performance tests every 8,760 hours or 3 years, whichever comes first.
5. Existing non-emergency, non-black start CI stationary RICE >500 HP that are limited use stationary RICE	Limit or reduce CO emissions and not using a CEMS	Conduct subsequent performance tests every 8,760 hours or 5 years, whichever comes first.

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

[78 FR 6711, Jan. 30, 2013]

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

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

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
1. 2SLB, 4SLB, and CI stationary RICE	a. reduce CO emissions	i. Select the sampling port location and the number/location of traverse points at the inlet and outlet of the control device; and		(a) For CO and O_2 measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line (`3-point long line'). If the duct is >12 inches in diameter *and* the sampling port location meets the two and half-

				diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A-1, the duct may be sampled at `3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A-4.
		ii. Measure the O_2 at the inlet and outlet of the control device; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A-2, or ASTM Method D6522-00 (Reapproved 2005)[ac] (heated probe not necessary)	(b) Measurements to determine O_2 must be made at the same time as the measurements for CO concentration.
		iii. Measure the CO at the inlet and the outlet of the control device	(1) ASTM D6522-00 (Reapproved 2005)[abc] (heated probe not necessary) or Method 10 of 40 CFR part 60, appendix A-4	(c) The CO concentration must be at 15 percent O_2, dry basis.
2. 4SRB stationary RICE	a. reduce formaldehyde emissions	i. Select the sampling port location and the number/location of traverse points at the inlet and outlet of the control device; and		(a) For formaldehyde, O_2, and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line (`3-point long line'). If the duct is >12 inches in diameter *and* the sampling port location meets

				the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A, the duct may be sampled at `3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A.
		ii. Measure O_2 at the inlet and outlet of the control device; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A-2, or ASTM Method D6522-00 (Reapproved 2005)[a] (heated probe not necessary)	(a) Measurements to determine O_2 concentration must be made at the same time as the measurements for formaldehyde or THC concentration.
		iii. Measure moisture content at the inlet and outlet of the control device; and	(1) Method 4 of 40 CFR part 60, appendix A-3, or Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03[a]	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde or THC concentration.
		iv. If demonstrating compliance with the formaldehyde percent reduction requirement, measure formalde-hyde at the inlet and the outlet of the control device	(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348-03[a], provided in ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or	(a) Formaldehyde concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

			equal to 130	
		v. If demonstrating compliance with the THC percent reduction requirement, measure THC at the inlet and the outlet of the control device	(1) Method 25A, reported as propane, of 40 CFR part 60, appendix A-7	(a) THC concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
3. Stationary RICE	a. limit the concentra-tion of formalde-hyde or CO in the stationary RICE exhaust	i. Select the sampling port location and the number/location of traverse points at the exhaust of the stationary RICE; and		(a) For formaldehyde, CO, O_2, and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line (`3-point long line'). If the duct is >12 inches in diameter *and* the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A, the duct may be sampled at `3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A. If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O_2 concentration of the	(1) Method 3 or 3A or 3B of 40 CFR part 60,	(a) Measurements to determine O_2 concentration

		stationary RICE exhaust at the sampling port location; and	appendix A-2, or ASTM Method D6522-00 (Reapproved 2005)[a] (heated probe not necessary)	must be made at the same time and location as the measurements for formaldehyde or CO concentration.
		iii. Measure moisture content of the station-ary RICE exhaust at the sampling port location; and	(1) Method 4 of 40 CFR part 60, appendix A-3, or Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03[a]	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde or CO concentration.
		iv. Measure formalde-hyde at the exhaust of the station-ary RICE; or	(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348-03[a], provided in ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130	(a) Formaldehyde concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
		v. measure CO at the exhaust of the station-ary RICE	(1) Method 10 of 40 CFR part 60, appendix A-4, ASTM Method D6522-00 (2005)[ac], Method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03[a]	(a) CO concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

[a]You may also use Methods 3A and 10 as options to ASTM-D6522-00 (2005). You may obtain a copy of ASTM-D6522-00 (2005) from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

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

[79 FR 11290, Feb. 27, 2014]

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

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

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if . . .
1. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Reduce CO emissions and using oxidation catalyst, and using a CPMS	i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
2. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Limit the concentration of CO, using oxidation catalyst, and using a CPMS	i. The average CO concentration determined from the initial performance test is less than or equal to the CO emission limitation; and
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and

		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
3. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Reduce CO emissions and not using oxidation catalyst	i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and iii. You have recorded the approved operating parameters (if any) during the initial performance test.
4. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Limit the concentration of CO, and not using oxidation catalyst	i. The average CO concentration determined from the initial performance test is less than or equal to the CO emission limitation; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.
5. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-	a. Reduce CO emissions, and using a CEMS	i. You have installed a CEMS to continuously monitor CO and either O_2 or CO_2 at both the inlet and outlet of the oxidation catalyst according to the requirements in §63.6625(a); and ii. You have conducted a performance evaluation of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B; and

emergency stationary CI RICE >500 HP located at an area source of HAP		
		iii. The average reduction of CO calculated using §63.6620 equals or exceeds the required percent reduction. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average percent reduction achieved during the 4-hour period.
6. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Limit the concentration of CO, and using a CEMS	i. You have installed a CEMS to continuously monitor CO and either O_2 or CO_2 at the outlet of the oxidation catalyst according to the requirements in §63.6625(a); and
		ii. You have conducted a performance evaluation of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B; and
		iii. The average concentration of CO calculated using §63.6620 is less than or equal to the CO emission limitation. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average concentration measured during the 4-hour period.
7. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde emissions and using NSCR	i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction, or the average reduction of emissions of THC determined from the initial performance test is equal to or greater

		than 30 percent; and
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
8. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde emissions and not using NSCR	i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction or the average reduction of emissions of THC determined from the initial performance test is equal to or greater than 30 percent; and
		ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.
9. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP, and existing non-emergency 4SRB stationary RICE >500 HP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR	i. The average formaldehyde concentration, corrected to 15 percent O_2, dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the

located at a major source of HAP		requirements in §63.6625(b); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
10. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP, and existing non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR	i. The average formaldehyde concentration, corrected to 15 percent O_2, dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.
11. Existing non-emergency stationary RICE 100≤HP≤500 located at a major source of HAP, and existing non-emergency stationary CI RICE 300<HP≤500 located at an area source of HAP	a. Reduce CO emissions	i. The average reduction of emissions of CO or formaldehyde, as applicable determined from the initial performance test is equal to or greater than the required CO or formaldehyde, as applicable, percent reduction.
12. Existing non-emergency stationary RICE 100≤HP≤500 located at a major source of HAP, and existing non-emergency stationary CI RICE 300<HP≤500 located at an area source of HAP	a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust	i. The average formaldehyde or CO concentration, as applicable, corrected to 15 percent O_2, dry basis, from the three test runs is less than or equal to the formaldehyde or CO emission limitation, as applicable.
13. Existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated	a. Install an oxidation catalyst	i. You have conducted an initial compliance demonstration as specified in §63.6630(e) to show that the average reduction of emissions of CO is

more than 24 hours per calendar year		93 percent or more, or the average CO concentration is less than or equal to 47 ppmvd at 15 percent O_2;
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b), or you have installed equipment to automatically shut down the engine if the catalyst inlet temperature exceeds 1350 °F.
14. Existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year	a. Install NSCR	i. You have conducted an initial compliance demonstration as specified in §63.6630(e) to show that the average reduction of emissions of CO is 75 percent or more, the average CO concentration is less than or equal to 270 ppmvd at 15 percent O_2, or the average reduction of emissions of THC is 30 percent or more;
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b), or you have installed equipment to automatically shut down the engine if the catalyst inlet temperature exceeds 1250 °F.

[78 FR 6712, Jan. 30, 2013]

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

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

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

3. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, new or reconstructed non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP	a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and using a CEMS	i. Collecting the monitoring data according to §63.6625(a), reducing the measurements to 1-hour averages, calculating the percent reduction or concentration of CO emissions according to §63.6620; and ii. Demonstrating that the catalyst achieves the required percent reduction of CO emissions over the 4-hour averaging period, or that the emission remain at or below the CO concentration limit; and
		iii. Conducting an annual RATA of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B, as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.
4. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde emissions and using NSCR	i. Collecting the catalyst inlet temperature data according to §63.6625(b); and
		ii. Reducing these data to 4-hour rolling averages; and
		iii. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		iv. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.

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

		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
8. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP and new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR	i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit[a]; and ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
9. Existing emergency and black start stationary RICE ≤500 HP located at a major source of HAP, existing non-emergency stationary RICE <100 HP located at a major source of HAP, existing emergency and black start stationary RICE located at an area source of HAP, existing non-emergency stationary CI RICE ≤300 HP located at an area source of HAP, existing non-emergency 2SLB stationary RICE located at an area source of HAP, existing non-emergency stationary SI RICE located at an area source of HAP which combusts landfill or digester gas equivalent to 10	a. Work or Management practices	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

percent or more of the gross heat input on an annual basis, existing non-emergency 4SLB and 4SRB stationary RICE ≤500 HP located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate 24 hours or less per calendar year, and existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that are remote stationary RICE		
10. Existing stationary CI RICE >500 HP that are not limited use stationary RICE	a. Reduce CO emissions, or limit the concentration of CO in the stationary RICE exhaust, and using oxidation catalyst	i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and
		ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during

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

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

area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year	catalyst	§63.6640(c) to show that the average reduction of emissions of CO is 93 percent or more, or the average CO concentration is less than or equal to 47 ppmvd at 15 percent O_2; and either ii. Collecting the catalyst inlet temperature data according to §63.6625(b), reducing these data to 4-hour rolling averages; and maintaining the 4-hour rolling averages within the limitation of greater than 450 °F and less than or equal to 1350 °F for the catalyst inlet temperature; or iii. Immediately shutting down the engine if the catalyst inlet temperature exceeds 1350 °F.
15. Existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year	a. Install NSCR	i. Conducting annual compliance demonstrations as specified in §63.6640(c) to show that the average reduction of emissions of CO is 75 percent or more, the average CO concentration is less than or equal to 270 ppmvd at 15 percent O_2, or the average reduction of emissions of THC is 30 percent or more; and either ii. Collecting the catalyst inlet temperature data according to §63.6625(b), reducing these data to 4-hour rolling averages; and maintaining the 4-hour rolling averages within the limitation of greater than or equal to 750 °F and less than or equal to 1250 °F for the catalyst inlet temperature; or iii. Immediately shutting down the engine if the catalyst inlet temperature exceeds 1250 °F.

[a]After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test

indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

[78 FR 6715, Jan. 30, 2013]

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

None of the provisions in Table 7 apply to the engines at ITAFOS.

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

For each . . .	You must submit a . . .	The report must contain . . .	You must submit the report . . .
1. Existing non-emergency, non-black start stationary RICE 100≤HP≤500 located at a major source of HAP; existing non-emergency, non-black start stationary CI RICE >500 HP located at a major source of HAP; existing non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP; existing non-emergency, non-black start stationary CI RICE >300 HP located at an area source of HAP; new or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP; and new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP	Compliance report	a. If there are no deviations from any emission limitations or operating limitations that apply to you, a statement that there were no deviations from the emission limitations or operating limitations during the reporting period. If there were no periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were not periods during which the CMS was out-of-control during the reporting period; or	i. Semiannually according to the requirements in §63.6650(b)(1)-(5) for engines that are not limited use stationary RICE subject to numerical emission limitations; and ii. Annually according to the requirements in §63.6650(b)(6)-(9) for engines that are limited use stationary RICE subject to numerical emission limitations.
		b. If you had a deviation from any emission limitation or operating limitation during the reporting period, the information in §63.6650(d). If there were periods during which	i. Semiannually according to the requirements in §63.6650(b).

Appendix G – 40 CFR 63 Subpart DDDDD

Subpart DDDDD—National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

What This Subpart Covers

§63.7480 What is the purpose of this subpart?

This subpart establishes national emission limitations and work practice standards for hazardous air pollutants (HAP) emitted from industrial, commercial, and institutional boilers and process heaters located at major sources of HAP. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and work practice standards.

§63.7485 Am I subject to this subpart?

You are subject to this subpart if you own or operate an industrial, commercial, or institutional boiler or process heater as defined in §63.7575 that is located at, or is part of, a major source of HAP, except as specified in §63.7491. For purposes of this subpart, a major source of HAP is as defined in §63.2, except that for oil and natural gas production facilities, a major source of HAP is as defined in §63.7575.

[78 FR 7162, Jan. 31, 2013]

§63.7490 What is the affected source of this subpart?

(a) This subpart applies to new, reconstructed, and existing affected sources as described in paragraphs (a)(1) and (2) of this section.

(1) The affected source of this subpart is the collection at a major source of all existing industrial, commercial, and institutional boilers and process heaters within a subcategory as defined in §63.7575.

ITAFOS has the following affected sources:

Nebraska Boiler (EU ID 08-11-501) 213.8 MMBtu/hr capacity, natural gas-fired, continuous oxygen trim

Cleaver-Brooks Boiler (EU ID 35-11-501) 180 MMBtu/hr capacity, natural gas-fired

#1 SPA Burner (EU ID 26-11-052) 25.55 MMBtu/hr capacity, indirect natural gas-fired

#2 SPA Burner (EU ID 26-11-053) 25.55 MMBtu/hr capacity, indirect natural gas-fired

(2) The affected source of this subpart is each new or reconstructed industrial, commercial, or institutional boiler or process heater, as defined in §63.7575, located at a major source.

(b) A boiler or process heater is new if you commence construction of the boiler or process heater after June 4, 2010, and you meet the applicability criteria at the time you commence construction.

(c) A boiler or process heater is reconstructed if you meet the reconstruction criteria as defined in §63.2, you commence reconstruction after June 4, 2010, and you meet the applicability criteria at the time you commence reconstruction.

(d) A boiler or process heater is existing if it is not new or reconstructed.

(e) An existing electric utility steam generating unit (EGU) that meets the applicability requirements of this subpart after the effective date of this final rule due to a change (e.g., fuel switch) is considered to be an existing source under this subpart.

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7162, Jan. 31, 2013]

§63.7491 Are any boilers or process heaters not subject to this subpart?

The types of boilers and process heaters listed in paragraphs (a) through (n) of this section are not subject to this subpart.

(a) An electric utility steam generating unit (EGU) covered by subpart UUUUU of this part or a natural gas-fired EGU as defined in subpart UUUUU of this part firing at least 85 percent natural gas on an annual heat input basis.

(b) A recovery boiler or furnace covered by subpart MM of this part.

(c) A boiler or process heater that is used specifically for research and development, including test steam boilers used to provide steam for testing the propulsion systems on military vessels. This does not include units that provide heat or steam to a process at a research and development facility.

(d) A hot water heater as defined in this subpart.

(e) A refining kettle covered by subpart X of this part.

(f) An ethylene cracking furnace covered by subpart YY of this part.

(g) Blast furnace stoves as described in EPA-453/R-01-005 (incorporated by reference, see §63.14).

(h) Any boiler or process heater that is part of the affected source subject to another subpart of this part, such as boilers and process heaters used as control devices to comply with subparts JJJ, OOO, PPP, and U of this part.

(i) Any boiler or process heater that is used as a control device to comply with another subpart of this part, or part 60, part 61, or part 65 of this chapter provided that at least 50 percent of the average annual heat input during any 3 consecutive calendar years to the boiler or process heater is provided by regulated gas streams that are subject to another standard.

(j) Temporary boilers and process heaters as defined in this subpart.

(k) Blast furnace gas fuel-fired boilers and process heaters as defined in this subpart.

(l) Any boiler or process heater specifically listed as an affected source in any standard(s) established under section 129 of the Clean Air Act.

(m) A unit that burns hazardous waste covered by Subpart EEE of this part. A unit that is exempt from Subpart EEE as specified in §63.1200(b) is not covered by Subpart EEE.

(n) Residential boilers as defined in this subpart.

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7162, Jan. 31, 2013; 80 FR 72806, Nov. 20, 2015]

§63.7495 When do I have to comply with this subpart?

(a) If you have a new or reconstructed boiler or process heater, you must comply with this subpart by April 1, 2013, or upon startup of your boiler or process heater, whichever is later.

(b) If you have an existing boiler or process heater, you must comply with this subpart no later than January 31, 2016, except as provided in §63.6(i).

(c) If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, paragraphs (c)(1) and (2) of this section apply to you.

(1) Any new or reconstructed boiler or process heater at the existing source must be in compliance with this subpart upon startup.

(2) Any existing boiler or process heater at the existing source must be in compliance with this subpart within 3 years after the source becomes a major source.

(d) You must meet the notification requirements in §63.7545 according to the schedule in §63.7545 and in subpart A of this part. Some of the notifications must be submitted before you are required to comply with the emission limits and work practice standards in this subpart.

(e) If you own or operate an industrial, commercial, or institutional boiler or process heater and would be subject to this subpart except for the exemption in §63.7491(l) for commercial and industrial solid waste incineration units covered by part 60, subpart CCCC or subpart DDDD, and you cease combusting solid waste, you must be in compliance with this subpart and are no longer subject to part 60, subparts CCCC or DDDD beginning on the effective date of the switch as identified under the provisions of §60.2145(a)(2) and (3) or §60.2710(a)(2) and (3).

(f) If you own or operate an existing EGU that becomes subject to this subpart after January 31, 2016, you must be in compliance with the applicable existing source provisions of this subpart on the effective date such unit becomes subject to this subpart.

(g) If you own or operate an existing industrial, commercial, or institutional boiler or process heater and would be subject to this subpart except for a exemption in §63.7491(i) that becomes subject to this subpart after January 31, 2013, you must be in compliance with the applicable existing source provisions of this subpart within 3 years after such unit becomes subject to this subpart.

(h) If you own or operate an existing industrial, commercial, or institutional boiler or process heater and have switched fuels or made a physical change to the boiler or process heater that resulted in the applicability of a different subcategory after the compliance date of this subpart, you must be in compliance with the applicable existing source provisions of this subpart on the effective date of the fuel switch or physical change.

(i) If you own or operate a new industrial, commercial, or institutional boiler or process heater and have switched fuels or made a physical change to the boiler or process heater that resulted in the applicability of a different subcategory, you must be in compliance with the applicable new source provisions of this subpart on the effective date of the fuel switch or physical change.

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7162, Jan. 31, 2013; 80 FR 72807, Nov. 20, 2015]

§63.7491 Are any boilers or process heaters not subject to this subpart?

The types of boilers and process heaters listed in paragraphs (a) through (n) of this section are not subject to this subpart.

(a) An electric utility steam generating unit (EGU) covered by subpart UUUUU of this part or a natural gas-fired EGU as defined in subpart UUUUU of this part firing at least 85 percent natural gas on an annual heat input basis.

(b) A recovery boiler or furnace covered by subpart MM of this part.

(c) A boiler or process heater that is used specifically for research and development, including test steam boilers used to provide steam for testing the propulsion systems on military vessels. This does not include units that provide heat or steam to a process at a research and development facility.

(d) A hot water heater as defined in this subpart.

(e) A refining kettle covered by subpart X of this part.

(f) An ethylene cracking furnace covered by subpart YY of this part.

(g) Blast furnace stoves as described in EPA-453/R-01-005 (incorporated by reference, see §63.14).

(h) Any boiler or process heater that is part of the affected source subject to another subpart of this part, such as boilers and process heaters used as control devices to comply with subparts JJJ, OOO, PPP, and U of this part.

(i) Any boiler or process heater that is used as a control device to comply with another subpart of this part, or part 60, part 61, or part 65 of this chapter provided that at least 50 percent of the average annual heat input during any 3 consecutive calendar years to the boiler or process heater is provided by regulated gas streams that are subject to another standard.

(j) Temporary boilers and process heaters as defined in this subpart.

(k) Blast furnace gas fuel-fired boilers and process heaters as defined in this subpart.

(l) Any boiler or process heater specifically listed as an affected source in any standard(s) established under section 129 of the Clean Air Act.

(m) A unit that burns hazardous waste covered by Subpart EEE of this part. A unit that is exempt from Subpart EEE as specified in §63.1200(b) is not covered by Subpart EEE.

(n) Residential boilers as defined in this subpart.

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7162, Jan. 31, 2013; 80 FR 72806, Nov. 20, 2015]

§63.7495 When do I have to comply with this subpart?

(a) If you have a new or reconstructed boiler or process heater, you must comply with this subpart by April 1, 2013, or upon startup of your boiler or process heater, whichever is later.

(b) If you have an existing boiler or process heater, you must comply with this subpart no later than January 31, 2016, except as provided in §63.6(i).

ITAFOS's application states all affected units are existing units.

(c) If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, paragraphs (c)(1) and (2) of this section apply to you.

ITAFOS is a major source.

(1) Any new or reconstructed boiler or process heater at the existing source must be in compliance with this subpart upon startup.

(2) Any existing boiler or process heater at the existing source must be in compliance with this subpart within 3 years after the source becomes a major source.

(d) You must meet the notification requirements in §63.7545 according to the schedule in §63.7545 and in subpart A of this part. Some of the notifications must be submitted before you are required to comply with the emission limits and work practice standards in this subpart.

(e) If you own or operate an industrial, commercial, or institutional boiler or process heater and would be subject to this subpart except for the exemption in §63.7491(l) for commercial and industrial solid waste incineration units covered by part 60, subpart CCCC or subpart DDDD, and you cease combusting solid waste, you must be in compliance with this subpart and are no longer subject to part 60, subparts CCCC or DDDD beginning on the effective date of the switch as identified under the provisions of §60.2145(a)(2) and (3) or §60.2710(a)(2) and (3).

ITAFOS does not fall into the exemption category.

(f) If you own or operate an existing EGU that becomes subject to this subpart after January 31, 2016, you must be in compliance with the applicable existing source provisions of this subpart on the effective date such unit becomes subject to this subpart.

ITAFOS does not have an EGU.

(g) If you own or operate an existing industrial, commercial, or institutional boiler or process heater and would be subject to this subpart except for a exemption in §63.7491(i) that becomes subject to this subpart after January 31, 2013, you must be in compliance with the applicable existing source provisions of this subpart within 3 years after such unit becomes subject to this subpart.

ITAFOS does not fall into the exemption category.

(h) If you own or operate an existing industrial, commercial, or institutional boiler or process heater and have switched fuels or made a physical change to the boiler or process heater that resulted in the applicability of a different subcategory after the compliance date of this subpart, you must be in compliance with the applicable existing source provisions of this subpart on the effective date of the fuel switch or physical change.

(i) If you own or operate a new industrial, commercial, or institutional boiler or process heater and have switched fuels or made a physical change to the boiler or process heater that resulted in the applicability of a different subcategory, you must be in compliance with the applicable new source provisions of this subpart on the effective date of the fuel switch or physical change.

ITAFOS affected emissions units are existing units.

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7162, Jan. 31, 2013; 80 FR 72807, Nov. 20, 2015]

Emission Limitations and Work Practice Standards

§63.7499 What are the subcategories of boilers and process heaters?

The subcategories of boilers and process heaters, as defined in §63.7575 are:

(a) Pulverized coal/solid fossil fuel units.

(b) Stokers designed to burn coal/solid fossil fuel.

(c) Fluidized bed units designed to burn coal/solid fossil fuel.

(d) Stokers/sloped grate/other units designed to burn kiln dried biomass/bio-based solid.

(e) Fluidized bed units designed to burn biomass/bio-based solid.

(f) Suspension burners designed to burn biomass/bio-based solid.

(g) Fuel cells designed to burn biomass/bio-based solid.

(h) Hybrid suspension/grate burners designed to burn wet biomass/bio-based solid.

(i) Stokers/sloped grate/other units designed to burn wet biomass/bio-based solid.

(j) Dutch ovens/pile burners designed to burn biomass/bio-based solid.

(k) Units designed to burn liquid fuel that are non-continental units.

(l) Units designed to burn gas 1 fuels.

(m) Units designed to burn gas 2 (other) gases.

(n) Metal process furnaces.

(o) Limited-use boilers and process heaters.

(p) Units designed to burn solid fuel.

(q) Units designed to burn liquid fuel.

(r) Units designed to burn coal/solid fossil fuel.

(s) Fluidized bed units with an integrated fluidized bed heat exchanger designed to burn coal/solid fossil fuel.

(t) Units designed to burn heavy liquid fuel.

(u) Units designed to burn light liquid fuel.

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7163, Jan. 31, 2013]

§63.7500 What emission limitations, work practice standards, and operating limits must I meet?

(a) You must meet the requirements in paragraphs (a)(1) through (3) of this section, except as provided in paragraphs (b), through (e) of this section. You must meet these requirements at all times the affected unit is operating, except as provided in paragraph (f) of this section.

(1) You must meet each emission limit and work practice standard in Tables 1 through 3, and 11 through 13 to this subpart that applies to your boiler or process heater, for each boiler or process heater at your source, except as provided under §63.7522. The output-based emission limits, in units of pounds per million Btu of steam output, in Tables 1 or 2 to this subpart are an alternative applicable only to boilers and process heaters that generate either steam, cogenerate steam with electricity, or both. The output-based emission limits, in units of pounds per megawatt-hour, in Tables 1 or 2 to this subpart are an alternative applicable only to boilers that generate only electricity. Boilers that perform multiple functions (cogeneration and electricity generation) or supply steam to common headers would calculate a total steam energy output using equation 21 of §63.7575 to demonstrate compliance with the output-based emission limits, in units of pounds per million Btu of steam output, in Tables 1 or 2 to this subpart. If you operate a new boiler or process heater, you can choose to comply with alternative limits as

discussed in paragraphs (a)(1)(i) through (iii) of this section, but on or after January 31, 2016, you must comply with the emission limits in Table 1 to this subpart.

(i) If your boiler or process heater commenced construction or reconstruction after June 4, 2010 and before May 20, 2011, you may comply with the emission limits in Table 1 or 11 to this subpart until January 31, 2016.

(ii) If your boiler or process heater commenced construction or reconstruction on or after May 20, 2011 and before December 23, 2011, you may comply with the emission limits in Table 1 or 12 to this subpart until January 31, 2016.

(iii) If your boiler or process heater commenced construction or reconstruction on or after December 23, 2011 and before April 1, 2013, you may comply with the emission limits in Table 1 or 13 to this subpart until January 31, 2016.

ITAFOS affected emission units are existing units and the units are not subject to emission limits in Tables 1,2 and 11-13.

(2) You must meet each operating limit in Table 4 to this subpart that applies to your boiler or process heater. If you use a control device or combination of control devices not covered in Table 4 to this subpart, or you wish to establish and monitor an alternative operating limit or an alternative monitoring parameter, you must apply to the EPA Administrator for approval of alternative monitoring under §63.8(f).

ITAFOS is not subject to the emissions limits or operating limits in the tables to this subpart.

(3) At all times, you must operate and maintain any affected source (as defined in §63.7490), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator 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.

(b) As provided in §63.6(g), EPA may approve use of an alternative to the work practice standards in this section.

ITAFOS has not proposed alternatives to the work practice standards.

(c) Limited-use boilers and process heaters must complete a tune-up every 5 years as specified in §63.7540. They are not subject to the emission limits in Tables 1 and 2 or 11 through 13 to this subpart, the annual tune-up, or the energy assessment requirements in Table 3 to this subpart, or the operating limits in Table 4 to this subpart.

ITAFOS did not indicate they have limited used boilers and process heaters.

(d) Boilers and process heaters with a heat input capacity of less than or equal to 5 million Btu per hour in the units designed to burn gas 2 (other) fuels subcategory or units designed to burn light liquid fuels subcategory must complete a tune-up every 5 years as specified in §63.7540.

ITAFOS boilers are greater than 5 MMBtu.

(e) Boilers and process heaters in the units designed to burn gas 1 fuels subcategory with a heat input capacity of less than or equal to 5 million Btu per hour must complete a tune-up every 5 years as specified in §63.7540. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory with a heat input capacity greater than 5 million Btu per hour and less than 10 million Btu per hour must complete a tune-up every 2 years as specified in §63.7540. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory are not subject to the emission limits in Tables 1 and 2 or 11 through 13 to this subpart, or the operating limits in Table 4 to this subpart.

All boilers and process heaters are design to burn gas 1 fuels.

- ***EU ID 08-11-501 - Nebraska Boiler***
- ***EU ID 35-11-501 - Cleaver-Brooks Boiler***
- ***EU ID 26-11-052 - #1 SPA Burner***
- ***EU ID 26-11-053 - #2 SPA Burner***

(f) These standards apply at all times the affected unit is operating, except during periods of startup and shutdown during which time you must comply only with items 5 and 6 of Table 3 to this subpart.

Items 5 and 6 do not apply because the affected units do not have emission limits.

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7163, Jan. 31, 2013; 80 FR 72807, Nov. 20, 2015]

§63.7501 [Reserved]

General Compliance Requirements

§63.7505 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limits, work practice standards, and operating limits in this subpart. These emission and operating limits apply to you at all times the affected unit is operating except for the periods noted in §63.7500(f).

The remainder of this subsection includes requirements if the affected units are subject to emission limits. Since all units designed to burn gas 1 fuel they are not subject to emission limits they are not repeated in this statement of basis.

Testing, Fuel Analyses, and Initial Compliance Requirements

§63.7510 What are my initial compliance requirements and by what date must I conduct them?

Paragraphs (a) through (f) includes requirements if the affected units are subject to emission limits. Since all units designed to burn gas 1 fuel they are not subject to emission limits they are not repeated in this statement of basis.

(g) For new or reconstructed affected sources (as defined in §63.7490), you must demonstrate initial compliance with the applicable work practice standards in Table 3 to this subpart within the applicable annual, biennial, or 5-year schedule as specified in §63.7515(d) following the initial compliance date specified in §63.7495(a). Thereafter, you are required to complete the applicable annual, biennial, or 5-year tune-up as specified in §63.7515(d).

ITFAFOS indicates that all boilers and process heaters are existing units; therefore the new or reconstructed requirements of this section do not apply.

(h) For affected sources (as defined in §63.7490) that ceased burning solid waste ...

ITAFOS does not burn solid waste and this section is not repeated here.

(i) For an existing EGU ...

ITAFOS does not have an electric utility steam generating unit (EGU) and this section is not repeated here.

(j) For existing affected sources (as defined in §63.7490) that have not operated between the effective date of the rule and the compliance date ...

ITAFOS did not indicate that any affected source has not operated between the effective date of the rule and the compliance date.

(k) For affected sources, as defined in §63.7490, that switch subcategories consistent with §63.7545(h) after the initial compliance date, you must demonstrate compliance within 60 days of the effective date of the switch, unless you had previously conducted your compliance demonstration for this subcategory within the previous 12 months.

[78 FR 7164, Jan. 31, 2013, as amended at 80 FR 72808, Nov. 20, 2015]

Testing, Fuel Analyses, and Initial Compliance Requirements

§63.7510 What are my initial compliance requirements and by what date must I conduct them?

(a) For each boiler or process heater that is required or that you elect to demonstrate compliance with any of the applicable emission limits in Tables 1 or 2 or 11 through 13 of this subpart through performance (stack) testing, your initial compliance requirements include all the following:

ITAFOS is not subject to emission limits and the remainder of paragraph (a) is not repeated.

(b) For each boiler or process heater that you elect to demonstrate compliance with the applicable emission limits in Tables 1 or 2 or 11 through 13 to this subpart for HCl, ...

ITAFOS is not subject to emission limits and the remainder of paragraph (b) is not repeated.

(c) If your boiler or process heater is subject to a carbon monoxide (CO) limit, ...

ITAFOS is not subject to emission limits and the remainder of paragraph (c) is not repeated.

(d) If your boiler or process heater is subject to a PM limit, your initial compliance demonstration for PM is to conduct a performance test in accordance with §63.7520 and Table 5 to this subpart.

ITAFOS is not subject to emission limits.

(e) For existing affected sources (as defined in §63.7490), you must complete the initial compliance demonstrations, as specified in paragraphs (a) through (d) of this section, no later than 180 days after the compliance date that is specified for your source in §63.7495 and according to the applicable provisions in §63.7(a)(2) as cited in Table 10 to this subpart, except as specified in paragraph (j) of this section. You must complete an initial tune-up by following the procedures described in §63.7540(a)(10)(i) through (vi) no later than the compliance date specified in §63.7495 (January 31, 2016), except as specified in paragraph (j) of this section. You must complete the one-time energy assessment specified in Table 3 to this subpart no later than the compliance date specified in §63.7495(January 31, 2016),

These requirements are not included in the Tier I permit as they were obligations that must have been met over two years ago.

(f) For new or reconstructed affected sources (as defined in §63.7490), you must complete the initial compliance demonstration with the emission limits ...

ITAFOS is does not have new or reconstructed sources, therefore it is not subject to emission limits and the remainder of paragraph (f) is not repeated.

(g) For new or reconstructed affected sources ...

ITAFOS indicated that all affected units are existing units.

(h) For affected sources (as defined in §63.7490) that ceased burning solid waste ...

ITAFOS does not burn solid waste.

(i) For an existing EGU that becomes subject after January 31, 2016, you must demonstrate compliance within 180 days after becoming an affected source.

ITAFOS does not have an EGU.

(j) For existing affected sources (as defined in §63.7490) that have not operated between the effective date of the rule and the compliance date ...

ITAFOS did not indicate that any of the affected units are in a non-operating status.

(k) For affected sources, as defined in §63.7490, that switch subcategories consistent with §63.7545(h) after the initial compliance date, you must demonstrate compliance within 60 days of the effective date of the switch, unless you had previously conducted your compliance demonstration for this subcategory within the previous 12 months.

ITAFOS did not indicate they were switching subcategories.

[78 FR 7164, Jan. 31, 2013, as amended at 80 FR 72808, Nov. 20, 2015]

§63.7515 When must I conduct subsequent performance tests, fuel analyses, or tune-ups?

Paragraphs (a) – (c) only apply if performance tests are required. ITAFOS is not subject to emission limits and performance testing is not required. Paragraphs (a) – (c) are not repeated here.

(d) If you are required to meet an applicable tune-up work practice standard, you must conduct an annual, biennial, or 5-year performance tune-up according to §63.7540(a)(10), (11), or (12), respectively. Each annual tune-up specified in §63.7540(a)(10) must be no more than 13 months after the previous tune-up. Each biennial tune-up specified in §63.7540(a)(11) must be conducted no more than 25 months after the previous tune-up. Each 5-year tune-up specified in §63.7540(a)(12) (with a continuous oxygen trim system) must be conducted no more than 61 months after the previous tune-up. For a new or reconstructed affected source (as defined in §63.7490), the first annual, biennial, or 5-year tune-up must be no later than 13 months, 25 months, or 61 months, respectively, after April 1, 2013 or the initial startup of the new or reconstructed affected source, whichever is later.

(e) If you demonstrate compliance with the mercury, HCl, or TSM based on fuel analysis, you must conduct a monthly fuel analysis according to §63.7521 for each type of fuel burned that is subject to an emission limit ...

ITAFOS is not subject to emission limits and the remainder of paragraph (e) is not repeated.

(f) You must report the results of performance tests ...

ITAFOS is not subject to emission limits or testing and the remainder of paragraph (f) is not repeated.

(g) For affected sources (as defined in §63.7490) that have not operated since the previous compliance demonstration and more than one year has passed since the previous compliance demonstration, you must complete the subsequent compliance demonstration, if subject to the emission limits in Tables 1, 2, or 11 through 13 to this subpart, no later than 180 days after the re-start of the affected source and according to the applicable provisions in §63.7(a)(2) as cited in Table 10 to this subpart. You must complete a subsequent tune-up by following the procedures described in §63.7540(a)(10)(i) through (vi) and the schedule described in §63.7540(a)(13) for units that are not operating at the time of their scheduled tune-up.

(h) If your affected boiler or process heater is in the unit designed to burn light liquid subcategory ...

ITAQFOS does not have a boiler or process heater in this category and the remainder of paragraph (h) is not repeated.

(i) If you operate a CO CEMS ...

ITAFOS is not subject to emission limits or CEMS requirements and the remainder of paragraph (i) is not repeated.

[78 FR 7165, Jan. 31, 2013, as amended at 80 FR 72808, Nov. 20, 2015]

§63.7520 What stack tests and procedures must I use?

ITAFOS is not subject to emissions limits or testing requirements and this subsection is not repeated here.

§63.7521 What fuel analyses, fuel specification, and procedures must I use?

ITAFOS is not subject to fuel analysis requirements and this subsection is not repeated here.

§63.7522 Can I use emissions averaging to comply with this subpart?

ITAFOS is not subject to emission limits and this subsection does not apply and is not repeated here.

§63.7525 What are my monitoring, installation, operation, and maintenance requirements?

ITAFOS is not subject to emission limits or associated monitoring requirements and the remainder of this subsection is not repeated here.

§63.7530 How do I demonstrate initial compliance with the emission limitations, fuel specifications and work practice standards?

ITAFOS is not subject to emissions limits or testing requirements as specified in paragraphs (a) through (d) and (h) do not apply and are not repeated here.

(e) You must include with the Notification of Compliance Status a signed certification that either the energy assessment was completed according to Table 3 to this subpart, and that the assessment is an accurate depiction of your facility at the time of the assessment, or that the maximum number of on-site technical hours specified in the definition of energy assessment applicable to the facility has been expended.

This notification was due approximately two years ago and is not repeated in the Tier I permit.

(g) If you elect to demonstrate that a gaseous fuel meets the specifications of another gas 1 fuel...

ITAFOS does not burn other gas 1 fuel and this paragraph is not repeated.

§63.7533 Can I use efficiency credits earned from implementation of energy conservation measures to comply with this subpart?

ITAFOS is not subject to emissions standards and is not pursuing efficiency credits to comply. This subsection is not repeated here.

CONTINUOUS COMPLIANCE REQUIREMENTS

§63.7535 Is there a minimum amount of monitoring data I must obtain?

ITAFOS is not subject to an emission limit and monitoring is not required as that term is used in this subpart. This subsection is not repeated in the statement of basis.

§63.7540 How do I demonstrate continuous compliance with the emission limitations, fuel specifications and work practice standards?

(a) You must demonstrate continuous compliance with each emission limit in Tables 1 and 2 or 11 through 13 to this subpart, the work practice standards in Table 3 to this subpart, and the operating limits in Table 4 to this subpart that applies to you according to the methods specified in Table 8 to this subpart and paragraphs (a)(1) through (19) of this section.

ITAFOS is not subject to emission limits in Tables 1 and 2 or 11 through 13 to this subpart, the operating limits in Table 4, or the methods specified in Table 8 which are operating limits and methods of demonstrating compliance with emission limits.

Paragraphs (a)(1) though (a)(9) do not apply because ITAFOS is not subject to emissions limits or operating requirements. These paragraphs are not repeated here.

(10) If your boiler or process heater has a heat input capacity of 10 million Btu per hour or greater, you must conduct an annual tune-up of the boiler or process heater to demonstrate continuous compliance as specified in paragraphs (a)(10)(i) through (vi) of this section. You must conduct the tune-up while burning the type of fuel (or fuels in case of units that routinely burn a mixture) that provided the majority of the heat input to the boiler or process heater over the 12 months prior to the tune-up. This frequency does not apply to limited-use boilers and process heaters, as defined in §63.7575, or units with continuous oxygen trim systems that maintain an optimum air to fuel ratio.

(i) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment;

(ii) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;

(iii) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection;

(iv) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the unit is subject;

(v) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and

(vi) Maintain on-site and submit, if requested by the Administrator, a report containing the information in paragraphs (a)(10)(vi)(A) through (C) of this section,

(A) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;

(B) A description of any corrective actions taken as a part of the tune-up; and

(C) The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit.

Paragraphs (11) does not apply because the boilers and process heaters are greater than 10 MMBtu and 5 MMBtu respectively.

(12) If your boiler or process heater has a continuous oxygen trim system that maintains an optimum air to fuel ratio, or a heat input capacity of less than or equal to 5 million Btu per hour and the unit is in the units designed to burn gas 1; units designed to burn gas 2 (other); or units designed to burn light liquid subcategories, or meets the definition of limited-use boiler or process heater in §63.7575, you must conduct a tune-up of the boiler or process heater every 5 years as specified in paragraphs (a)(10)(i) through (vi) of this section to demonstrate continuous compliance. You may delay the burner inspection specified in paragraph (a)(10)(i) of this section until the next scheduled or unscheduled unit shutdown, but you must inspect each burner at least once every 72 months. If an oxygen trim system is utilized on a unit without emission standards to reduce the tune-up frequency to once every 5 years, set the oxygen level no lower than the oxygen concentration measured during the most recent tune-up.

(13) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.

ITAFOS is not subject to an emission limit therefore paragraphs 14, 15, 16, 17, 18, 19 do not apply because they relate to units with emissions limits.

(b) You must report each instance in which you did not meet each emission limit and operating limit in Tables 1 through 4 or 11 through 13 to this subpart that apply to you. These instances are deviations from the emission limits or operating limits, respectively, in this subpart. These deviations must be reported according to the requirements in §63.7550.

ITAFOS is not subject to an emission limit therefore this paragraph does not apply.

(c) If you elected to demonstrate that the unit meets the specification for mercury for the unit designed to burn gas 1 subcategory, you must follow the sampling frequency specified in paragraphs (c)(1) through (4) of this section and conduct this sampling according to the procedures in §63.7521(f) through (i).

ITAFOS has not elected to demonstrate compliance in this way; therefore this paragraph does not apply.

(d) For startup and shutdown, you must meet the work practice standards according to items 5 and 6 of Table 3 of this subpart.

ITAFOS is not subject the an emission limits in Table 1 or 2 or 11 through 13 to this subpart therefore items 5 and 6 do not apply.

[78 FR 7179, Jan. 31, 2013, as amended at 80 FR 72813, Nov. 20, 2015]

§63.7541 How do I demonstrate continuous compliance under the emissions averaging provision?

This subsection does not apply to ITAFOS because none of the affected emission units have emissions limits and is not repeated here.

NOTIFICATION, REPORTS, AND RECORDS

§63.7545 What notifications must I submit and when?

(a) You must submit to the Administrator all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (6), and 63.9(b) through (h) that apply to you by the dates specified.

(b) As specified in §63.9(b)(2), if you startup your affected source before January 31, 2013, you must submit an Initial Notification not later than 120 days after January 31, 2013.

This requirement is not repeated in the Tier I permit as it was to be submitted over 5 years ago.

(c) As specified in §63.9(b)(4) and (5), if you startup your new or reconstructed affected source on or after January 31, 2013, you must submit an Initial Notification not later than 15 days after the actual date of startup of the affected source.

ITAFOS has not indicated they have a new or reconstructed source, therefore this is not repeated in the Tier I permit.

(d) If you are required to conduct a performance test you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin.

ITAFOS is not required to conduct a performance test.

(e) If you are required to conduct an initial compliance demonstration as specified in §63.7530, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii). For the initial compliance demonstration for each boiler or process heater, you must submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of all performance test and/or other initial compliance demonstrations for all boiler or process heaters at the facility according to §63.10(d)(2). The Notification of Compliance Status report must contain all the information specified in paragraphs (e)(1) through (8) of this section, as applicable. If you are not required to conduct an initial compliance demonstration as specified in §63.7530(a), the Notification of Compliance Status must only contain the information specified in paragraphs (e)(1) and (8) of this section and must be submitted within 60 days of the compliance date specified at §63.7495(b).

This report was due 60 days after the January 31, 2016 compliance date. Since that was over two years ago it is not included in the Tier I permit.

(1) A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit to comply with this subpart, description of the fuel(s) burned, including whether the fuel(s) were a secondary material determined by you or the EPA through a petition process to be a non-waste under §241.3 of this chapter, whether the fuel(s) were a secondary material processed from discarded non-hazardous secondary materials within the meaning of §241.3 of this chapter, and justification for the selection of fuel(s) burned during the compliance demonstration.

(2) Summary of the results of all performance tests and fuel analyses, and calculations conducted to demonstrate initial compliance including all established operating limits, and including:

(i) Identification of whether you are complying with the PM emission limit or the alternative TSM emission limit.

(ii) Identification of whether you are complying with the output-based emission limits or the heat input-based (i.e., lb/MMBtu or ppm) emission limits,

(iii) Identification of whether you are complying the arithmetic mean of all valid hours of data from the previous 30 operating days or of the previous 720 hours. This identification shall be specified separately for each operating parameter.

(3) A summary of the maximum CO emission levels recorded during the performance test to show that you have met any applicable emission standard in Tables 1, 2, or 11 through 13 to this subpart, if you are not using a CO CEMS to demonstrate compliance.

(4) Identification of whether you plan to demonstrate compliance with each applicable emission limit through performance testing, a CEMS, or fuel analysis.

(5) Identification of whether you plan to demonstrate compliance by emissions averaging and identification of whether you plan to demonstrate compliance by using efficiency credits through energy conservation:

(i) If you plan to demonstrate compliance by emission averaging, report the emission level that was being achieved or the control technology employed on January 31, 2013.

(ii) [Reserved]

(6) A signed certification that you have met all applicable emission limits and work practice standards.

(7) If you had a deviation from any emission limit, work practice standard, or operating limit, you must also submit a description of the deviation, the duration of the deviation, and the corrective action taken in the Notification of Compliance Status report.

(8) In addition to the information required in §63.9(h)(2), your notification of compliance status must include the following certification(s) of compliance, as applicable, and signed by a responsible official:

(i) "This facility completed the required initial tune-up for all of the boilers and process heaters covered by 40 CFR part 63 subpart DDDDD at this site according to the procedures in §63.7540(a)(10)(i) through (vi)."

(ii) "This facility has had an energy assessment performed according to §63.7530(e)."

(iii) Except for units that burn only natural gas, refinery gas, or other gas 1 fuel, or units that qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act, include the following: "No secondary materials that are solid waste were combusted in any affected unit."

(f) If you operate a unit designed to burn natural gas, refinery gas, or other gas 1 fuels that is subject to this subpart, and you intend to use a fuel other than natural gas, refinery gas, gaseous fuel subject to another subpart of this part, part 60, 61, or 65, or other gas 1 fuel to fire the affected unit during a period of natural gas curtailment or supply interruption, as defined in §63.7575, you must submit a notification of alternative fuel use within 48 hours of the declaration of each period of natural gas curtailment or supply interruption, as defined in §63.7575. The notification must include the information specified in paragraphs (f)(1) through (5) of this section.

ITAFOS has not indicated that they intend to use a fuel other than natural gas; therefore this paragraph does not apply.

(1) Company name and address.

(2) Identification of the affected unit.

(3) Reason you are unable to use natural gas or equivalent fuel, including the date when the natural gas curtailment was declared or the natural gas supply interruption began.

(4) Type of alternative fuel that you intend to use.

(5) Dates when the alternative fuel use is expected to begin and end.

(g) If you intend to commence or recommence combustion of solid waste, you must provide 30 days prior notice of the date upon which you will commence or recommence combustion of solid waste. The notification must identify:

ITAFOS has not indicated that they intend to use solid waste fuel; therefore this paragraph does not apply.

(1) The name of the owner or operator of the affected source, as defined in §63.7490, the location of the source, the boiler(s) or process heater(s) that will commence burning solid waste, and the date of the notice.

(2) The currently applicable subcategories under this subpart.

(3) The date on which you became subject to the currently applicable emission limits.

(4) The date upon which you will commence combusting solid waste.

(h) If you have switched fuels or made a physical change to the boiler or process heater and the fuel switch or physical change resulted in the applicability of a different subcategory, you must provide notice of the date upon which you switched fuels or made the physical change within 30 days of the switch/change. The notification must identify:

(1) The name of the owner or operator of the affected source, as defined in §63.7490, the location of the source, the boiler(s) and process heater(s) that have switched fuels, were physically changed, and the date of the notice.

(2) The currently applicable subcategory under this subpart.

(3) The date upon which the fuel switch or physical change occurred.

ITAFOS has not indicated that they intend to change fuels and these paragraphs are not included in the Tier I permit.

[76 FR 15664, Mar. 21, 2011, as amended at 78 FR 7183, Jan. 31, 2013; 80 FR 72814, Nov. 20, 2015]

OTHER REQUIREMENTS AND INFORMATION

§63.7565 What parts of the General Provisions apply to me?

Table 10 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

Tables

Tables 1,2, 4,5, 6, 7, and 8 do not apply to ITAFOS because there are no emissions limits or operating limits that apply.

Table 3 to Subpart DDDDD of Part 63—Work Practice Standards

As stated in §63.7500, you must comply with the following applicable work practice standards:

If your unit is . . .	You must meet the following . . .
1. A new or existing boiler or process heater with a continuous oxygen trim system that maintains an optimum air to fuel ratio, or a heat input capacity of **less than or equal to 5 million Btu per** hour in any of the following subcategories: unit designed to burn gas 1; unit designed to burn gas 2 (other); or unit designed to burn light liquid, or a limited use boiler or process heater	Conduct a tune-up of the boiler or process heater every 5 years as specified in §63.7540.
2. A new or existing boiler or process heater without a continuous oxygen trim system and with heat input capacity **of less than 10 million** Btu per hour in the unit designed to burn heavy liquid or unit designed to burn solid fuel subcategories; or a new or existing boiler or process heater with heat input capacity of less than 10 million Btu per hour, but greater than 5 million Btu per hour, in any of the following subcategories: unit designed to burn gas 1; unit designed to burn gas 2 (other); or unit designed to burn light liquid	Conduct a tune-up of the boiler or process heater biennially as specified in §63.7540.
3. A new or existing boiler or process heater without a continuous oxygen trim system and with heat input capacity of 10 million Btu per hour or greater	Conduct a tune-up of the boiler or process heater annually as specified in §63.7540. Units in either the Gas 1 or Metal Process Furnace subcategories will conduct this tune-up as a work practice for all regulated emissions under this subpart. Units in all other subcategories will conduct this tune-up as a work practice for dioxins/furans.
4. An existing boiler or process heater located at a	Must have a one-time energy assessment performed

major source facility, not including limited use units	by a qualified energy assessor. An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements in this table, satisfies the energy assessment requirement. A facility that operated under an energy management program developed according to the ENERGY STAR guidelines for energy management or compatible with ISO 50001 for at least one year between January 1, 2008 and the compliance date specified in §63.7495 that includes the affected units also satisfies the energy assessment requirement. The energy assessment must include the following with extent of the evaluation for items a. to e. appropriate for the on-site technical hours listed in §63.7575:
	a. A visual inspection of the boiler or process heater system.
	b. An evaluation of operating characteristics of the boiler or process heater systems, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints.
	c. An inventory of major energy use systems consuming energy from affected boilers and process heaters and which are under the control of the boiler/process heater owner/operator.
	d. A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage.
	e. A review of the facility's energy management program and provide recommendations for improvements consistent with the definition of energy management program, if identified.
	f. A list of cost-effective energy conservation

	measures that are within the facility's control.
	g. A list of the energy savings potential of the energy conservation measures identified.
	h. A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.
5. An existing or new boiler or process heater subject to emission limits in Table 1 or 2 or 11 through 13 to this subpart during startup ***ITAFOS is not subject to emission limits in Table 1 or 2 or 11 through 13***	a. You must operate all CMS during startup. b. For startup of a boiler or process heater, you must use one or a combination of the following clean fuels: Natural gas, synthetic natural gas, propane, other Gas 1 fuels, distillate oil, syngas, ultra-low sulfur diesel, fuel oil-soaked rags, kerosene, hydrogen, paper, cardboard, refinery gas, liquefied petroleum gas, clean dry biomass, and any fuels meeting the appropriate HCl, mercury and TSM emission standards by fuel analysis. c. You have the option of complying using either of the following work practice standards. (1) If you choose to comply using definition (1) of "startup" in §63.7575, once you start firing fuels that are not clean fuels, you must vent emissions to the main stack(s) and engage all of the applicable control devices except limestone injection in fluidized bed combustion (FBC) boilers, dry scrubber, fabric filter, and selective catalytic reduction (SCR). You must start your limestone injection in FBC boilers, dry scrubber, fabric filter, and SCR systems as expeditiously as possible. Startup ends when steam or heat is supplied for any purpose, OR (2) If you choose to comply using definition (2) of "startup" in §63.7575, once you start to feed fuels that are not clean fuels, you must vent emissions to the main stack(s) and engage all of the applicable control devices so as to comply with the emission limits within 4 hours of start of supplying useful thermal energy. You must engage and operate PM control within one hour of first feeding fuels that are

	not clean fuels[a]. You must start all applicable control devices as expeditiously as possible, but, in any case, when necessary to comply with other standards applicable to the source by a permit limit or a rule other than this subpart that require operation of the control devices. You must develop and implement a written startup and shutdown plan, as specified in §63.7505(e). d. You must comply with all applicable emission limits at all times except during startup and shutdown periods at which time you must meet this work practice. You must collect monitoring data during periods of startup, as specified in §63.7535(b). You must keep records during periods of startup. You must provide reports concerning activities and periods of startup, as specified in §63.7555.
6. An existing or new boiler or process heater subject to emission limits in Tables 1 or 2 or 11 through 13 to this subpart during shutdown ***ITAFOS is not subject to emission limits in Table 1 or 2 or 11 through 13***	You must operate all CMS during shutdown. While firing fuels that are not clean fuels during shutdown, you must vent emissions to the main stack(s) and operate all applicable control devices, except limestone injection in FBC boilers, dry scrubber, fabric filter, and SCR but, in any case, when necessary to comply with other standards applicable to the source that require operation of the control device. If, in addition to the fuel used prior to initiation of shutdown, another fuel must be used to support the shutdown process, that additional fuel must be one or a combination of the following clean fuels: Natural gas, synthetic natural gas, propane, other Gas 1 fuels, distillate oil, syngas, ultra-low sulfur diesel, refinery gas, and liquefied petroleum gas. You must comply with all applicable emissions limits at all times except for startup or shutdown periods conforming with this work practice. You must collect monitoring data during periods of shutdown, as specified in §63.7535(b). You must keep records during periods of shutdown. You must provide reports concerning activities and periods of

	shutdown, as specified in §63.7555.

[a]As specified in §63.7555(d)(13), the source may request an alternative timeframe with the PM controls requirement to the permitting authority (state, local, or tribal agency) that has been delegated authority for this subpart by EPA. The source must provide evidence that (1) it is unable to safely engage and operate the PM control(s) to meet the "fuel firing + 1 hour" requirement and (2) the PM control device is appropriately designed and sized to meet the filterable PM emission limit. It is acknowledged that there may be another control device that has been installed other than ESP that provides additional PM control (*e.g.*, scrubber).

ITAFOS is not subject to emission limits in Tables 11 through 3

Appendix H - Facility Comments on Draft Permit

Listed Below is ITAFOS' comments on the facility draft permit. Following each comment is DEQ's response in bold text.

1. ITAFOS' Tier I renewal application requested flexibility to operate with an increased SO_2 monitoring span value at the East Sulfuric Acid Plant during startup operations (cf. Condition 5.11). However, the draft permit does not provide comment on whether IDEQ approves the flexibility. A span value of 1,000 ppm is used during normal facility operations as required by 40 CFR 60.84. However, SO_2 emissions from the East Sulfuric Acid Plant may exceed 1,000 ppm during start-up operations. To quantify emissions accurately for the purpose of assessing compliance with the SO_2 emission limit established by PTC No. P-2010.0002 (Condition 5.1 of the draft Tier I permit), ITAFOS requested an allowance to adjust to a 10,000 ppm span value when SO_2 readings exceed 1,000 ppm from the East Sulfuric Acid Plant during startup operations. This strategy allows ITAFOS to track startup operations' increased SO_2 emissions accurately, while maintaining the accuracy of the 1,000 ppm span during normal facility operations as required by 40 CFR 60.84. This requested change will not reduce the stringency of the monitoring method, but rather will make the SO_2 monitoring more accurate by accommodating source-specific observations regarding operation of the CPO facility's East Sulfuric Acid Plant. Accordingly, the delegated Administrator of NSPS Subpart H for the CPO facility (i.e., DEQ) has the authority to approve this source-specific minor alternative monitoring method per 40 CFR 60.13(i).

   DEQ is not delegated Subpart 40 CFR 60.13(i) and cannot make the requested change. However, ITAFOS may pursue this change with the EPA who retains authority of this paragraph. DEQ's delegation letter from EPA was provided to ITAFOS, it specifically describes that 40 CFR 60.13(i) is not delegated.

2. Emergency generators, as well as other engines regulated under New Source Performance Standards (NSPS) and National Emissions Standards for Hazardous Air Pollutants (NESHAP), are not listed in Table 2.1, Regulated Sources. Since these pieces of equipment are subject to federal rules with applicable requirements (cf. Section 12 of the draft permit), they are not considered insignificant activities and should be included in the list of sources this permit covers.

   Table 2.1 has been updated to include the engines as requested.

3. In Condition 3.34, the final terms of each equation (0.6 in equation 'a;' 0.25 in equation 'b') are exponents of the process weight. They should be written in superscript.

   The permit has been corrected as requested.

4. Likewise, in Condition 3.34.a, "PW" should be two capital letters representing a single "Process Weight" variable.

   The permit has been corrected as requested.

5. In Section 4 of the permit, several regulatory references to 40 CFR 63 §§ 63.622 or 63.623 are incorrectly listed as "662" or "663."

   The permit has been corrected as requested.

6. The first regulatory reference of Condition 4.6 should read "63.625(d)," not "63.63.625(d)."

   The permit has been corrected as requested.

7. Table 6-2 for the Nebraska Boiler lists an allowable NOx limit of 0.079 lb/MMBtu. This limit was not in the previous Tier I permit, and should be removed. The applicable NOx limits, as contained in the previous Tier I permit are 0.20 lb/MMBtu (NSPS NOx limit), a NOx hourly limit of 16.84 lb/hr, and a NOx annual limit of 70.71 t/yr.

   The draft permit provided to ITAFOS included the NOx limit of 0.079 lb/MMBtu because it had occurred in underlying PTC No. 2018.0001 revised on January 12, 2018. Based on this comment DEQ reviewed the history of the NOx limit of 0.079 lb/MMBtu and determined that it was included in that PTC as an oversight. The NOx limit of 0.079 lb/MMBtu was actually changed via a 1996 DEQ letter[1] to the NSPS standard of 0.20 lb/MMBtu. DEQ has made a correction to the underlying permit to construct, PTC No. P-2018.0001, issued 10/15/18, and the Tier I permit now includes the correct limit.

8. In table 9.1 change the control device for #1 SPA Process Heater to NA instead of Continuous Oxygen trim.

   DEQ updated the permit as requested.

9. Ideally, Table 10.2 should include an indication, such as a footnote, that the emission standards from 40 CFR 63 Subpart AA continue to apply, as described in Condition 10.9.

   DEQ updated Table 10.2 to include 40 CFR 63 Subpart AA as requested.

10. Table 11.2 (gyp stack applicable requirements) is incorrectly numbered "Table 10.2."

    The table has been corrected as requested.

11. Ideally, Table 11.2 should include an indication, such as a footnote, that the emission standards from 40 CFR 61 Subpart R continue to apply, as described in Condition 11.12.

    DEQ updated Table 11.2 to include 40 CFR 61 Subpart R as requested.

12. In Table 14.1, it appears that the "4" in the "Description" column for "One 250-gallon propane storage tank" should be removed.

    DEQ corrected the permit as requested.

13. The Statement of Basis contains two references to Nu-West; please update to ITAFOS Conda LLC.

    DEQ corrected the permit as requested.

14. ITAFOS has determined that the #1 Therminol Heater is not equipped with an oxygen trim system. The description of this unit in Section 9 should be modified to note that this unit does not have a continuous oxygen trim system.

    DEQ updated the permit as requested.

15. There are certain insignificant activities that were listed in the previous Tier I permit but that are not listed in Table 14-1 of the draft permit. This includes ore unloading, ore storage, wash plant, and molten sulfur rail cars. We believe these should be added to Table 14-1, as these units are all still in place at the facility.

    In accordance with IDAPA 58.01.01.317.01, "...no emission unit or activity subject to an applicable requirement shall qualify as an insignificant emission unit..." The requirement to reasonably control fugitive dust (IDAPA 58.01.01.651) applies as does the visible emission

[1] DEQ letter to the facility dated August 14, 1996. Content Manager Record #2018AAG206

standard of IDAPA 58.01.01.625. Therefore, these units do not qualify as insignificant activities.

16. Condition 10.13 contains excerpts from Table 3 of Subpart AA. The table should be expanded to include the operating scenario that reads "Your absorber is designed and operated with pressure drops of 5 inches of water column or less".

    DEQ updated the permit as requested.

17. In Condition 2.2 on page 4, IDEQ has a list of permits that are incorporated into the Tier I permit. We believe the permit number for Gyp Stacks 0, 1, and 2 is reversed with the permit number for the East Sulfuric Acid plant (Gyp Stacks 0, 1, and 2 should be P-2009-0002 and ESP should be P-2010-0002).

    DEQ corrected the permit to reflect the appropriate permit numbers.

18. In Condition 2.3 on page 4, Table 2.1 has a list of regulated sources at the site. We believe that Emergency IC Engines should also be on this list (they appear in Section 12 of the permit).

    DEQ updated the permit as requested.

19. In Condition 3.12 on page 8 of the draft permit, the reference to Conditions 3.13 and 3.14 in the 4th bullet should be changed to 3.14 and 3.15.

    DEQ corrected the permit.

20. In Condition 4.1, the word "paragraphs", which appears twice, should be changed to "paragraph".

    DEQ corrected the permit.

21. In Condition 4.5, the reference to 40 CFR 63.63.625(a) should be changed to 40 CFR 63.625(a). A similar change should be made in Condition 4.6.

    DEQ corrected the permit.

22. Condition 4.6 contains language from 40 CFR Part 63, Subpart BB, and includes references to Tables 3, 4, and 5 from the rule. Tables 3 and 4 are reproduced in the permit, however Table 5 is not. For consistency, we suggest including Table 5 as well.

    DEQ updated the permit to include Table 5.

23. Condition 2.2 includes a reference to the "amended Consent Decree issued October 24, 1973 regarding the West Sulfuric Acid Plant". We believe that this reference should be removed from the permit.

    This consent order is still in effect and remains in the permit. ITAFOS will need to work with the DEQ Pocatello Regional Office to amend the consent order as described in DEQ's October 16, 2015 letter to the facility.

24. Subpart AA on page 9 states that Itafos currently produces PPA, need to delete this statement.

    DEQ corrected the regulatory review to reflect that PPA is not currently produced.

25. Subpart BB on page 12 change Itafow to Itafos, on page 16 delete the statement that Itafos has indicated that they are electing to use the liquid to gas ratio as a means of assuring compliance.

    DEQ corrected the regulatory review as requested.

26. Subpart DDDDD, Change the language to state #1 SPA doesn't have a continuous oxygen trim.

    DEQ updated the regulatory review as requested.

27. Section 10, need to add conditions relating to low pressure scrubbers.

DEQ updated the permit as requested.