White Springs Agricultural Chemicals, Inc.
Suwannee River/Swift Creek Complex
Facility ID No.: 0470002
Hamilton County

Title V Air Operation Permit Revision

Permit No. 0470002-080-AV
Revision of Title V Air Operation Permit No. 0470002-077-AV

Permitting & Compliance Authority:
State of Florida
Department of Environmental Protection
Northeast District
8800 Baymeadows Way West, Suite 100
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Title V Air Operation Permit Revision
Permit No. 0470002-080-AV

Table of Contents

Section **Page Number**

I. Facility Information.
A. Facility Description. 2
B. Summary of Emissions Units. 2
C. Applicable Regulations. 2

II. Facility-wide Conditions. 3

III. Emissions Units and Conditions.

Sub -section	E.U. ID No.	Brief Description	
A.	001	#2 Phosphate Rock Grinder	7
B.	003	"A" Defluorinated Phosphate (DFP) Plant	9
C.	004	"X"-Train (Monocal/Dical process)	13
D.	008	"Y" Train-#1 MAP/DAP Plant	20
E.	010	#1 Storage and Shipping Building	25
F.	015	Granular Product Shipping and Screening Facility	27
G.	020	"B" Phosphoric Acid Plant	29
H.	021	"C" Sulfuric Acid Plant	34
I.	022	"D" Sulfuric Acid Plant	41
J.	032	"Z"-Train #2 MAP/DAP Plant	47
K.	034	South Phosphoric Acid Filters	53
L.	035	North Phosphoric Acid Filters	55
M.	036	"B" Superphosphoric Acid Plant	57
N.	038	"B" Defluorinated Phosphate (DFP) Plant	61
O.	039	"C" Auxiliary Boiler	64
P.	040	"D" Auxiliary Boiler	68
Q.	042	Defluorinated Phosphate (DFP) Feed Prep	72
R.	044	"A" and "B" DFP Coolers	78
S.	054	Molten Sulfur System	81
T.	061	Green Superphosphoric Acid Plant	82
U.	062	Defluorinated Phosphate (DFP) Silos	84
V.	064	Swift Creek Mine (SCM) Rock Dryer	86
W.	065	Swift Creek Mine Silos Mineral Storage and Conveyor System	89
X.	066	"E" Sulfuric Acid Plant	91

Table of Contents – Cont'd

Sub -section	E.U. ID No.	Brief Description	Page
Y.	067	"F" Sulfuric Acid Plant	97
Z.	068	"E" Auxiliary Boiler	103
AA.	069	"D" Phosphoric Acid Plant	107
BB.	070	"C" and "D" Superphosphoric Acid Plants	112
CC.	071	Acid Clarification Plant	117
DD.	072	Molten Sulfur System	119
EE.	---	Common Conditions – Used Oil/Lead	120
FF.	---	Common Conditions – F.A.C. Test Requirements	122
GG.	---	Common Conditions – 40 CFR 63 Subpart AA Monitoring and Testing Requirements	133
HH.	---	Common Conditions – 40 CFR 63 Subpart BB Monitoring and Testing Requirements	140
II	---	Common Conditions – F.A.C. Excess Emissions Rules	145
JJ	075	Relocatable Concrete Batch Plant	148
KK	076	15 Emergency Engines	150
LL	039,040,068	40 CFR 63 Subpart DDDDD	155

Please Note that Defluorinated Phosphate (DFP) is the new name for Pollyphos, which is a registered trademark of Occidental Chemical and, therefore, can no longer be used by White Springs Agricultural Chemicals.

IV. Appendices. 292

Appendix A, Glossary.
Appendix CAM, Compliance Assurance Monitoring Plan.
Appendix CP3, Compliance Plan.
Appendix I, List of Insignificant Emissions Units and/or Activities.
Appendix ICE, Requirements for Internal Combustion Engines.
Appendix NESHAP, Subpart A – General Provisions.
Appendix NESHAP, AA, BB, ZZZZ.
Appendix NSPS, Subpart A – General Provisions.
Appendix NSPS, Subpart T, U, V, JJJJ.
Appendix RR, Facility-wide Reporting Requirements.
Appendix TR, Facility-wide Testing Requirements.
Appendix TV, Title V General Conditions.
Appendix U, List of Unregulated Emissions Units and/or Activities.

Referenced Attachments. ..... At End
Figure 1, Summary Report-Gaseous and Opacity Excess Emission and
Monitoring System Performance (40 CFR 60, July, 1996).
Table H, Permit History.
Table 1, Summary of Air Pollutant Standards and Terms.
Table 2, Compliance Requirements.

FINAL PERMIT

PERMITTEE:
White Springs Agricultural Chemicals, Inc.
P. O. Box 300
White Springs, Florida 32096

Permit No. 0470002-080-AV FINAL
Suwannee River/Swift Creek Complex
Facility Id No. 0470002
Title V Air Operation Permit Revision

The purpose of this permit is to incorporate Air Construction Permit No. 0470002-079-AC, which authorizes the streamlining of recordkeeping for EUs 008 "Y" Train and EU032 "Z" Train to limit the capacity based on P_2O_5 input; to allow flexibility to operate with an ammonia vaporizer on EUs 008 and 032; to add a temporary, portable Ammoniated Polyphosphate Plant to manufacture liquid fertilizer to the Unregulated List; to allow the tail gas scrubber pressure drop for EU032 to be reported based on the entire scrubber. The facility conducted a test to determine the feasibility of using re-circulating fresh water liquid stream to be cooled with non contact heat exchangers in lieu of the once through pond water currently used on the dryer cooler scrubbers in the MAP plants. The facility changed the scrubber liquid in one or more of the following: EU032 "Z"-Train Reaction Cooler Scrubber, "Z"-Train Dryer Cooler Scrubber, "Z"-Train Dust Cooler Scrubber, EU008 "Y"-Train Reaction Cooler Scrubber, Fluorine Abatement Scrubber from once-through pond water to re-circulating fresh water for EUs 008 and 032; the addition of heat exchanger(s) and water tanks for the indirect contact cooling of the re-circulating water. The existing White Springs Agricultural Chemicals, Inc.- Suwannee River/Swift Creek Complex is located in Hamilton County at 15843 SE 78th Street, White Springs, Florida. UTM Coordinates are: Zone 17, 328.3 km East and 3368.8 km North; and, Latitude: 30° 26' 27" North and Longitude: 82° 47' 16" West.

The Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213. The above named permittee is hereby authorized to operate the facility in accordance with the terms and conditions of this permit.

Effective Date: March 5, 2013
Renewal Application Due Date: December 17, 2016
Expiration Date: July 30, 2017

Khalid Al-Nahdy

Khalid Al-Nahdy, P.E.
District Program Administrator

KAA: lm

Subsection A. Facility Description.

This facility processes phosphate rock to produce several products at the Suwannee River/Swift Creek Complex (two plants). The facility consists of one rock grinder, two phosphoric acid plants, two defluorinated phosphate (DFP) plants, one monocal/dical process, two monoammonium/diammonium phosphate (MAP/DAP) plants, one Storage and Shipping building, one screening/shipping building, four sulfuric acid plants, two phosphoric acid filters, three superphosphoric acid plants, one green superphosphoric plant, the Swift Creek Mine (SCM) rock dryer, and one acid clarification plant. The facility also has storage silos associated with the Swift Creek Mine and the DFP plant.

Also included in this permit are miscellaneous unregulated emissions units and/or activities.

Subsection B. Summary of Emissions Units.

Sub-section	E.U. ID No.	Brief Description
A.	001	#2 Phosphate Rock Grinder
B.	003	“A” Defluorinated Phosphate (DFP) Plant
C.	004	“X”-Train (Monocal/Dical process)
D.	008	“Y” Train-#1 MAP/DAP Plant
E.	010	#1 Storage and Shipping Building
F.	015	Granular Product Shipping and Screening Facility
G.	020	“B” Phosphoric Acid Plant
H.	021	“C” Sulfuric Acid Plant
I.	022	“D” Sulfuric Acid Plant
J.	032	“Z”-Train #2 MAP/ DAP
K.	034	South Phosphoric Acid Filter
L.	035	North Phosphoric Acid Filter
M.	036	“B” Superphosphoric Acid Plant
N.	038	“B” Defluorinated Phosphate (DFP) Plant
O.	039	“C” Auxiliary Boiler
P.	040	“D” Auxiliary Boiler
Q.	042	DFP Feed Prep
R.	044	“A” and “B” DFP Coolers
S.	054	Molten Sulfur System
T.	061	Green Superphosphoric Plant
U.	062	Defluorinated Phosphate (DFP) Silos

V.	064	Swift Creek Mine (SCM) Rock Dryer
W.	065	Swift Creek Mine Silos Mineral Storage and Conveyor System
X.	066	"E" Sulfuric Acid Plant
Y.	067	"F" Sulfuric Acid Plant
Z.	068	"E" Auxiliary Boiler
AA.	069	"D" Phosphoric Acid Plant
BB.	070	"C" and "D" Superphosphoric Acid Plants
CC.	071	Acid Clarification Plant
DD.	072	Molten Sulfur System for "E" & "F" Sulfuric Acid Plants
EE.	---	Common Conditions - Used Oil/Lead
FF.	---	Common Conditions - F.A.C. Test Requirements`
GG.	---	Common Conditions – 40 CFR 63 Subpart AA Monitoring and Testing Requirements
HH.	---	Common Conditions – 40 CFR 63 Subpart BB Monitoring and Testing Requirements
II.	---	Common Conditions – F.A.C. Excess Emissions Rules
JJ	075	Relocatable Concrete Batch Plant
KK	076	15 Emergency Engines

Permitting Note: The following emissions units are permanently shutdown: EU-006 (SRM silos), EU-009 (SRM East Dryer), EU-013 (SRM Rock Grinder), EU-016 (#1 SRCC Phosphate Rock Grinder, EU-017 (SRM West Rock Dryer), and EU-041 (Dical Acid Prep).

Subsection C. Applicable Regulations.

Based on the Title V air operation permit renewal application received December 6, 2011, this facility **is a major source of hazardous air pollutants (HAP)**. Because this facility operates stationary reciprocating internal combustion engines, it is subject to regulation under 40 CFR 63, Subpart ZZZZ, - National Emissions Standards For Hazardous Air Pollutants For Stationary Reciprocating Internal Combustion Engines. The existing facility **is a** PSD major source of air pollutants in accordance with Rule 62-212.400, F.A.C. A summary of applicable regulations is shown in the following table.

Regulation	EU No(s).
40 CFR 60, Subpart A, NSPS General Provisions	020, 021, 022, 066, 067, 069, 070
40 CFR 60, Subpart H	021, 022, 066, 067
40 CFR 60, Subpart V	008, 032
40 CFR 60, Subpart T	020, 069
40 CFR 60, Subpart U	036, 070
40 CFR 63, Subpart A, NESHAPS General Provisions	020, 032, 036, 064, 068, 069, 070
40 CFR 63, Subpart AA	020, 036, 064, 069, 070
40 CFR 63, Subpart BB	008, 032
40 CFR 63, Subpart ZZZZ & JJJJ	076
40 CFR 63, Subpart DDDDD	039, 040, 068
State Rule Citations: BACT, Rule 62-296.320, F.A.C., Rule 62-297.401, F.A.C Rule 62-296.403, F.A.C., Rule 62-297.620(4), F.A.C.; Rule 62-212.400, F.A.C., Rule 62-296.411, F.A.C.	001, 003, 004, 008, 020, 021, 022, 032, 034, 035, 036, 038, 039, 040, 042, 044, 054, 061, 062, 064, 065, 066, 067, 068, 069, 070, 071, 072, 075

The following conditions apply facility-wide to all emission units and activities:

FW1. Appendices. The permittee shall comply with all documents identified in Section IV, Appendices, listed in the Table of Contents. Each document is an enforceable part of this permit unless otherwise indicated. [Rule 62-213.440, F.A.C.]

Emissions and Controls

FW2. Not federally Enforceable. Objectionable Odor Prohibited. No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rule 62-296.320(2) and 62-210.200(Definitions), F.A.C.]

FW3. General Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed-necessary and ordered by the Department.

{Permitting Note: Nothing is deemed necessary and ordered at this time.}

FW4. General Visible Emissions. No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C.]

FW5. Unconfined Particulate Matter. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction; alteration; demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:
[Rule 62-296.320(4)(c), F.A.C.]

Annual Reports and Fees

See Appendix RR, Facility-wide Reporting Requirements for additional details.

FW6. Annual Operating Report. The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by April 1st of each year. [Rule 62-210.370(3), F.A.C.]

FW7. Annual Emissions Fee Form and Fee. The annual Title V emissions fees are due (postmarked) by March 1st of each year. The completed form and calculated fee shall be submitted to: Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070. The forms are available for download by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: http://www.dep.state.fl.us/air/emission/tvfee.htm. [Rule 62-213.205, F.A.C.]

FW8. Annual Statement of Compliance. The permittee shall submit an annual statement of compliance to the compliance authority at the address shown on the cover of this permit within 60 days after the end of each calendar year during which the Title V permit was effective. [Rules 62-213.440(3)(a)2. & 3. and (3)(b), F.A.C.]

FW9. Prevention of Accidental Releases (Section 112(r) of CAA). If and when the facility becomes subject to 112(r), the permittee shall:

a. Submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to: RMP Reporting Center, Post Office Box 10162, Fairfax, VA 22038, Telephone: (703) 227-7650.

b. Submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.

[40 CFR 68]

FW10. For the Emissions Units subject to monitoring of indicator ranges under MACT, upon successful compliance testing at a new indicator range, the permittee shall operate under the new indicator ranges. Under no circumstance is the NED/DEP authorizing the facility to operate outside of the MACT Rule or out of compliance. [Rule 62-4.070, F. A. C.]

FW11. Compliance Plan CP-4. EU008 & EU032- Project 0470002-079-AC: Upon completion of construction the emissions units shall be tested to demonstrate initial compliance with the emissions standards for Fluoride and PM/PM_{10}. The initial tests shall be conducted within 60 days after achieving permitted capacity, but not later than 180 days after initial operation of the unit. Facility subject to the attached Appendix CP-4.

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
001	#2 Phosphate Rock Grinder

#2 Phosphate Rock Grinder is controlled by a Bag Collector to control particulate matter. CAM does not apply for particulate matter.

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

A.1. Permitted Capacity. The rate shall not exceed the Maximum 12-MRA Hourly Rate = 40 TPH of Phosphate Rock, Dry Basis or Maximum Daily 1-Hour Average Rate = 45 TPH of Phosphate Rock, Dry Basis.

12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Permit No. AO24-20269; Permit No. AO24-166153; Permit No. 0470002-034-AC]

A.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year (8784 in any Leap Year).

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Permit No. AO24-166153]

EMISSION LIMITATIONS AND STANDARDS

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

A.3. Particulate Matter Emissions. Particulate Matter Emissions shall not exceed 22.03 lbs/hr and 96.5 TPY.

[Permit No. AO24-20269; Permit No. AO24-166153]

A.4. Visible Emissions. Visible Emissions shall not exceed 5% opacity.

[Rule 62-297.620(4), F.A.C.; Permit No. AO24-20269; Permit No. AO24-166153]

TEST METHODS AND PROCEDURES

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

A.5. Test Methods. Particulate Matter Emissions stack test method shall be EPA Method 5 incorporated and adopted by reference in Chapter 62-297, F.A.C., and be performed on request.

[Rule 62-296.320(4)(a), F.A.C.; Rule 62-297.401, F.A.C.; Permit No. AO24-90783; Permit No. AO24-166153]

A.6. Test Methods. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296. 320(4)(b), F.A.C.; Rule 62-297.401, F.A.C.; Permit No. AO24-20269]

COMMON CONDITIONS - F.A.C. TEST REQUIREMENTS

A.7. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

Subsection B. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
003	"A" Defluorinated Phosphate (DFP) Plant

"A" DFP Plant with fluoride and particulate matter emissions are controlled by a Cross-Flow Packed Scrubber (13A). CAM does apply to this emission unit for fluoride, particulate matter and sulfur dioxide.

{Permitting note: This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards; Compliance Assurance Monitoring (CAM), adopted and incorporated by reference in Rule 62-204.800, F.A.C.}

The following specific conditions apply to the emissions unit(s) listed above:

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

B.0. In accordance with Rule 62-210.300(2)(a)3.c., F.A.C., the operation permit for an emissions unit which has been shut down for five years or more prior to the expiration date of the current operation permit shall be renewed for a maximum period not to exceed ten years from the date of shutdown, even if the emissions unit is not maintained in operational condition, provided the conditions given in sub-subparagraph 62-210.300(2)(a)3.b., F.A.C., are met and the owner or operator demonstrates to the Department that failure to renew the permit would constitute a hardship, which may include economic hardship:

(I) The owner or operator of the emissions unit demonstrates to the Department that the emissions unit may need to be reactivated and used, or that it is the owner's or operator's intent to apply to the Department for a permit to construct a new emissions unit at the facility before the end of the extension period; and

(II) The owner or operator of the emissions unit agrees to and is legally prohibited from providing the allowable emission permitted by the renewed permit as an emissions offset to any other person under Rule 62-212.500, F.A.C.; and

(III) The emissions unit was operating in compliance with all applicable rules as of the time the source was shut down.

***EU003 was last operated in July 2005. Therefore, Permit No. 0470002-077-AV extends EU003 expiration date only until July 2015.**

[Rule 62-210.300(2)(a)3.b and (a)3.c.]

B.1. Permitted Capacity. The rate shall not exceed the Maximum 12-MRA Hourly Rate = 8.25 tons of product or Maximum Daily 1-Hour Average Rate = 10 tons of product.

12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Permit 0470002-034-AC]

B.2. Methods of Operation. Natural gas shall be the fuel fired in this emissions unit.

[Rule 62-213.410, F.A.C.]

B.3. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year (8784 in any Leap Year).

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

EMISSION LIMITATIONS AND STANDARDS

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

B.4. Total Fluoride. Total Fluoride emissions shall not exceed 2.5 lbs/hr and 10.5 TPY.

[Rule 62-296.403(2), F.A.C.; Construction Permit No. AC24-255802]

B.5. Particulate Matter. Particulate Matter Emissions shall not exceed 14.05 lbs/hr and 59.00 TPY.

[Rule 62-296.320(4)(a), F.A.C.; Construction Permit No. AC24-255802]

B.6. Sulfur Dioxide. Sulfur Dioxide Emissions shall not exceed 8.00 lbs/hr and 35.04 TPY.

[Construction Permit No. AC24-255802]

B.7. Visible Emissions. Visible Emissions shall not exceed 40% opacity.

[Rule 62-296.320(4)(b)2., F.A.C.; Construction Permit No. AC24-15084 amended 6/28/88; Construction Permit No. AC24-255802]

COMPLIANCE ASSURANCE MONITORING (CAM) REQUIREMENTS

B.8. Compliance Assurance Monitoring (CAM). This emissions unit is subject to the CAM requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C.

[40 CFR 64; and, Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

EXCESS EMISSIONS

B.9. The Permittee shall meet the Excess Emissions Rules stated in Common Conditions II.1., II.4.- II.6.

TEST METHODS AND PROCEDURES

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

B.10. Total Fluoride. Fluoride emissions stack test method shall be EPA Method 13A or 13B incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually, once each federal fiscal year.

[Rule 62-296.403(3), F.A.C.; Rule 62-297.401, F.A.C.; Construction Permit No. AC24-255802]

B.11. Particulate Matter. Particulate Matter Emissions stack test method shall be EPA Method 5 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(a), F.A.C.; Rule 62-297.310(7)(a)4., F.A.C.; Rule 62-297.401, F.A.C.; Construction Permit No. AC24-255802]

B.12. Sulfur Dioxide. Sulfur Dioxide Emissions stack test method shall be EPA Method 6/6C incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed every 5 years prior to operation permit renewal.

The 5-year testing frequency is justified by the low emission rate documented in previous emissions tests. The applicant has consistently presented test results that are more than 97% below the applicable standards. Furthermore, in accordance with Rule 62-297.310(7)(a)4.b., F.A.C., an annual Sulfur Dioxide compliance test is required if there is an applicable standard and if the emissions unit has a potential to emit 100 tons per year or greater. The permitted Sulfur Dioxide limit for Emissions Unit Number 003 is 8.00 pounds per hour and 35.04 tons per year.

[Rule 62-297.310(7)(a), F.A.C.; Rule 62-297.401(6), F.A.C.; Air Construction Permit No. 0470002-040-AC; Admin. Correction No. 0470002-035-AV]

B.13. **Visible Emissions**. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; Rule 62-297.401, F.A.C.]

COMMON CONDITIONS - F.A.C. TEST REQUIREMENTS

B.14. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

Subsection C. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
004	"X"-Train (Monocal/Dical Process)

"X"-Train (Monocal/Dical Process) with emissions controlled from EP (Emissions Points) by the following control devices: 1) "X"-Train with Venturi and Cyclonic Scrubbers, 2) Dedust bin with Baghouse, 3) Shipping area with Baghouse, 4) Limestone silo with Baghouse, EP04 Unloading of limestone from the existing limestone storage silo back into trucks for other uses, 5) Reclaim bin with Baghouse, and 6) Material Handling with Baghouse. CAM does not apply for particulate matter or fluoride.

Limestone Storage Silo: Operation of the limestone storage silo located in EU No. 004, identified as Emission Point No. 04. The silo receives limestone pneumatically from a tanker truck, stores the limestone and then discharges the limestone to the "X"-Train process. This process also e unloads limestone from the silo into a tanker truck for other uses. Displaced air and PM emissions from the truck loading will be vented back into the silo. Particulate matter (PM) emissions from displaced air in the silo are controlled by a Flex-Kleen Baghouse, Model No. 100-WRB-48, with a stated cloth area of 576 square feet, and a nominal air flow of 2750 actual cubic feet per minute (ACFM).

[Application No. 0470002-072-AC]

{Permitting note: This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards}

The following specific conditions apply to the emissions unit(s) listed above:

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

C.1. Permitted Capacity. The rate shall not exceed the Maximum 12-MRA Hourly Rate = 40 tons of product or Maximum Daily 1-Hour Average Rate = 45 tons of product.

12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. 0470002-034-AC]

C.2. Methods of Operation are as follows:

Mode 1 - Dical (dicalcium phosphate) with 18.5% P is produced.
Mode 2 – Monocal (monocalcium phosphate) with 21.0% P is produced.
Mode 3 - The transfer of Monocal or Dical from railcar to trucks.

Fuels fired are natural gas or fuel oil with a maximum sulfur content of 1.50%.

Mode 3. This is a non-production Mode involving the transfer of Monocal or Dical from railcars to the Dical silos for further transfer to trucks using a portion of the existing X-Train transfer equipment. The associated pollution control equipment **shall be operated normally during any loading operations**.

[Rule 62-213.410, F.A.C., Air Construction Permit No. 0470002-066-AC and Air Construction Permit No. 0470002-072-AC]

C.3. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year (8784 in any Leap Year).

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

EMISSION LIMITATIONS AND STANDARDS

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}
{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

Emission Point 01 (X-Train)
Mode 1:

C.4. Total Fluoride. Total Fluoride emissions shall not exceed 0.63 lb/hr and 2.76 TPY.

[Rule 62-296.403(2), F.A.C.]

C.5. Particulate Matter. Particulate Matter Emissions shall not exceed 46.11 lbs/hr and 201.96 TPY.

[Rule 62-296.320(4)(a), F.A.C.]

C.6. Sulfur Dioxide. Sulfur Dioxide Emissions shall not exceed 11.10 lbs/hr and 48.62 TPY.

[From PSD FL-083]

C.7. Visible Emissions. Visible Emissions shall not be equal to or greater than 20% opacity.

[Rule 62-296.320(4)(b), F.A.C.]

Emission Point 01 (X-Train)
Mode 2:

C.8. Total Fluoride. Total Fluoride emissions shall not exceed 0.63 lb/hr and 2.76 TPY.

[Rule 62-296.403(2), F.A.C.]

C.9. Particulate Matter. Particulate Matter Emissions shall not exceed 45.11 lbs/hr and 197.62 TPY.

[Rule 62-296.320(4)(a), F.A.C.]

C.10. Sulfur Dioxide. Sulfur Dioxide Emissions shall not exceed 11.10 lbs/hr and 48.62 TPY.

[From PSD FL-083]

C.11. Visible Emissions. Visible Emissions shall not be equal to or greater than 20% opacity.

[Rule 62-296.320(4)(b), F.A.C.]

Emission Point 02 (Dedust)
Modes 1 and 2:

C.12. Visible Emissions. Visible Emissions shall not exceed 5% opacity.

[Rule 62-297.620(4), F.A.C.]

Emission Point 03 (Shipping)
Modes 1 and 2:

C.13. Visible Emissions. Visible Emissions shall not exceed 5% opacity.

[Rule 62-297.620(4), F.A.C.]

Emission Point 04 (X-Train)

The silo has a storage capacity of 2000 tons of limestone. The applicant shall operate the baghouse (including the fan) at all times that the limestone is being loaded into the silo, unloaded from the silo, or discharged into the X-Train process.

[Rule 62-4.070(3), F.A.C. and Application No. 0470002-072-AC]

C.14. Visible Emissions. Visible Emissions shall not exceed 5% opacity.

[Rule 62-297.620(4), F.A.C., Air Permit No. 0470002-072-AC]

Emission Point 05 (Reclaim Bin)
Modes 1 and 2:

C.15. Visible Emissions. Visible Emissions shall not exceed 5% opacity.

[Rule 62-297.620(4), F.A.C.]

Emission Point 06 (Fugitive Dust)
Modes 1 and 2:

C.16. Visible Emissions. Visible Emissions shall not exceed 5% opacity.

[Air Construction Permit No. 0470002-038-AC; Rule 62-296.320(4)(b), F.A.C.; and Rule 62-297.620(4), F.A.C.]

TEST METHODS AND PROCEDURES

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

Emission Point 01 (X-Train)
Modes 1 and 2:

C.17. Total Fluoride. Fluoride emissions stack test method shall be EPA Method 13A or 13B incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.403(3), F.A.C.; Rule 62-297.401, F.A.C.]

C.18. Particulate Matter. Particulate Matter Emissions stack test method shall be EPA Method 5 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(a), F.A.C.; Rule 62-297.401, F.A.C.]

C.19. Sulfur Dioxide. In lieu of stack testing, the Permittee shall comply with the applicable requirements in Rule 62-297.440(1), F.A.C. or maintain a record of acceptable, certified analyses of all fuel oil fired and report annually prior to March 1 of each year.

C.20. Visible Emissions. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.401, F.A.C.]

Emission Point 02 (Dedust)
Modes 1 and 2:

C.21. Visible Emissions. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.401, F.A.C.]

Emission Point 03 (Shipping)
Modes 1 and 2:

C.22. Visible Emissions. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.401, F.A.C.]

Emission Point 04 (Limestone Silo)
Modes 1 and 2:

C.23. Visible Emissions. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year. Annual VE testing shall be performed for a minimum period of 30 minutes while the silo is being loaded from a tanker truck or during the loading of a tanker truck from the silo.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.401, F.A.C., Rule 62-4.070, F.A.C., and Air Permit No. 0470002-072-AC]

Emission Point 05 (Reclaim Bin)
Modes 1 and 2:

C.24. Visible Emissions. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.401, F.A.C.]

Emission Point 06 (Fugitive Dust)
Modes 1 and 2:

C.25. Visible Emissions. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.401, F.A.C.]

COMMON CONDITIONS - ON-SPEC USED OIL/LEAD

C.26. This emissions unit is also subject to the On-Spec Used Oil/Lead conditions in Subsection EE**.**

COMMON CONDITIONS - F.A.C. TEST REQUIREMENTS

C.27. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

Emission Point 01 (X-Train)
Mode 3:

C.28. Visible Emissions. Visible Emissions shall not exceed 5% opacity.

{Permitting Note: The railcar Monocal or Dical will be a finished product that has already been screened for dust prior to shipment. There should be little dust associated with this Mode of operation.}

[Rule 62-297.620(4), F.A.C., Air Construction Permit No. 0470002-066-AC]

C.29. Visible Emissions. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.401, F.A.C.]

Subsection D. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
008	"Y"-Train No. 1 MAP/DAP Plant

The "Y" Train DAP/MAP Plant is permitted for input rate of 36.33 TPH of P_2O_5 feed (daily average) and 290,112 TPY of P_20_5 input basis, 12-month rolling total. The plant is capable of producing fertilizer by five different modes (Mode 1: DAP by Split Flows of 30% & 50% P_2O_5 phosphoric acid; Mode 2: DAP by 40% P_2O_5 acid; Mode 3: Triplesuperphosphate (TSP) – *no longer produced or permitted*; Mode 4: MAP by Split Flows of 30% & 50% P_2O_5 acid; Mode 5: MAP by 40% P_2O_5 acid; Mode 6: MAP by reacting ammonia and acid in two pipe reactors**.** The plant consists of the two separate pipe reactors (Mode 6), a tank reactor for the other modes, two pug mills, dryer, cooler, screens, mills, and other associated process equipment. Particulate matter, fluoride, and sulfur dioxide emissions are controlled by cyclones, venturi and cyclonic scrubbers. Emissions from the pipe reactors are vented to the reactor scrubber for ammonia removal and then to a scrubber for fluoride control. The permittee conducted testing on the pond water scrubbers for CAM applicability. CAM does not apply for this emissions unit. Fluoride emissions are covered by the 40 CFR 63 Subpart BB and testing was done by the permittee to show the pond water scrubbers are not designed for PM control.

{Permitting note(s): These emissions units are regulated under NSPS - 40 CFR 60, Subpart V, Standards of Performance for the Phosphate Fertilizer Industry: Diammonium Phosphate Plants, adopted and incorporated by reference in Rule 62-204.800(7)(b)28., F.A.C.; Rule 62-212.300, F.A.C., General Preconstruction Review Requirements; 62-212.400, F.A.C., Prevention of Significant Deterioration; Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards; and Rule 62-296.403, F.A.C., Phosphate Processing; 40 CFR 63, Subpart A - General Provisions; 40 CFR 63, Subpart BB - National Emission Standards for Hazardous Air Pollutants From Phosphate Fertilizers Production Plants. The inclusion of project 0470002-050-AC makes EU 008 subject to 40 CFR 60 Subpart V for DAP production. **The Part 40 CFR 63 Subparts A and BB take precedence, however these units are subject to all applicable State Implementation Plan (SIP) rules if these units are out of compliance with the NESHAP**}.

The following specific conditions apply to the emissions unit(s) listed above:

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

D.1. Permitted Capacity.

The P_2O_5 feed shall not exceed 36.33 tons per hour (daily average) and 290,112 TPY of P_20_5 input basis, 12-month rolling total.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. 0470002-034-AC; Construction Permit No. 0470002-050-AC; and 0470002-079-AC]

D.2. Methods of Operation are as follows:

Mode 1 -DAP (Diammonium Phosphate) produced by Split Acid (30% & 50% P_2O_5 INPUT) phosphoric acid.
Mode 2 - DAP (Diammonium Phosphate) produced by 40% P_2O_5 INPUT phosphoric acid.
Mode 4 - MAP (Monoammonium Phosphate) produced by Split Acid (30% & 50% P_2O_5 INPUT) phosphoric acid.
Mode 5 - MAP (Monoammonium Phosphate) produced by 40% P_2O_5 INPUT phosphoric acid.
Mode 6 – MAP produced by reacting ammonia and acid in two pipe reactors.

Only one of the five operating modes shall be in operation at one time. Process fuels fired are natural gas or fuel oil with a maximum sulfur content of 1.0%.

[Rule 62-213.410, F.A.C.; Construction Permit No. 0470002-050-AC]

D.3. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year (8784 in any Leap Year).
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. 0470002-050-AC]

EMISSION LIMITATIONS AND STANDARDS

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

Emission Point 01

ALL MODES:

D.4. Total Fluorides. Total Fluoride emissions shall not exceed 30 grams/metric ton of equivalent P_2O_5 feed (0.060 lb/ton), 2.18 lb/hr, and 9.54 TPY.

[40 CFR 63.622(a) and Air Construction Permit 0470002-050-AC]

MODES 1-2, 4- 5:

D.5. Sulfur Dioxide. Sulfur Dioxide Emissions shall not exceed 11.10 lbs/hr and 48.62 TPY.

[From 11/82 PSD model]

ALL MODES:

D.6. Visible Emissions. Visible Emissions shall not be equal to or greater than 20% opacity.

[Rule 62-296.320(4)(b), F.A.C.]

MODES 1 or 2:

D.7. Particulate Matter. Particulate Matter Emissions shall not exceed 33.33 lbs/hr and 145.99 TPY.

[Rule 62-296.320(4)(a), F.A.C.]

MODES 4, 5, or 6:

D.8. Particulate Matter. For MAP production the Particulate Matter Emissions shall not exceed 45.15 lbs/hr and 197.74 TPY.

[Rule 62-296.320(4)(a), F.A.C., and Air Construction Permit 0470002-050-AC]

OPERATING REQUIREMENTS

D.9. Scrubber Parameter Daily Averages. The permittee shall maintain daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber within the allowable ranges established pursuant the requirements of **Condition HH.4.(1) or (2**).

[Rule 62-204.800, F.A.C.; 40 CFR 63.624]

MONITORING REQUIREMENTS

D.10. Phosphorus-Bearing Feed Material. The Permittee shall install, calibrate, maintain, and operate a monitoring system, which can be used to determine and permanently record the mass flow of phosphorus-bearing feed material to the process. The monitoring system shall have an accuracy of ±5 percent over its operating range.

[Rule 62-204.800, F.A.C.; 40 CFR 60.203(a)]

D.11. **P_2O_5 Feed**. The Permittee shall maintain a daily record of equivalent P_2O_5 feed.

[Rule 62-204.800, F.A.C.; 40 CFR 60.203(b)]

D.12. Scrubber Pressure Drop. The Permittee shall install, calibrate, maintain, and operate a monitoring system which continuously measures and permanently records the pressure drop across each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of ±5 percent over its operating range.

[Rule 62-204.800, F.A.C.; 40 CFR 60.203(c)]

D.13. The Permittee shall meet the 40 CFR 63 Subpart BB monitoring requirements stated in **Common Conditions HH.1 – HH.3.**

TEST METHODS AND PROCEDURES

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

Emission Point 01

ALL MODES:

D.14. Total Fluorides.

(a) The test method shall be EPA Method 13A or EPA Method 13B, incorporated and adopted by reference in Chapter 62-297, F.A.C. The minimum sample volume shall be 30 dry standard cubic feet.

(b) Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C.

[Rule 62-296.403(3), F.A.C.; Rule 62-297.401(13), F.A.C.; Construction Permit No. 0470002-050-AC]

D.15. Total Fluorides. Total Fluorides. The Permittee shall meet the 40 CFR 63 Subpart BB performance testing requirements stated in **Common Conditions HH.5 – HH.7.**

MODES 1, 2, 4 and 5:

D.16. Sulfur Dioxide. In lieu of stack testing, the Permittee shall comply with the applicable requirements in Rule 62-297.440(1), F.A.C. or maintain a record of acceptable, certified analyses of all fuel oil fired and report annually prior to March 1 of each year.

ALL MODES:

D.17. Particulate Matter. Particulate Matter Emissions stack test method shall be EPA Method 5 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(a), F.A.C.; Rule 62-297.310(7)(a)4.b., F.A.C.; Rule 62-297.401(5), F.A.C.; Construction Permit No. 0470002-050-AC]

D.18. Visible Emissions. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; Rule 62-297.401(9), F.A.C.; Construction Permit No. 0470002-050-AC]

NOTIFICATION, RECORDKEEPING, REPORTING REQUIREMENTS

D.19. The Permittee shall meet the 40 CFR 63 Subpart BB notification, recordkeeping, and reporting requirements stated in **Common Conditions HH.8. – HH.10.**

D.20. This emissions unit is subject to specific requirements of 40 CFR 63 Subpart BB, Appendix A to Subpart BB– Applicability to General Provisions to Subpart BB, and alternative MACT monitoring plan (Administrative Order No. 04-I-AP, dated October 4, 2004). The owner or operator is responsible for remaining in compliance with any updates made to Subpart A or BB. This EU is subject to Facility Wide Condition No. 10.

[40 CFR 63-Subpart A; 40 CFR 63-Subpart BB; and Administrative Order No. 04-I-AP, Alternate MACT Monitoring Plan]

D.21. This emissions unit is exempted from any otherwise applicable new source performance standard contained in 40 CFR Part 60, Subpart V. To be exempt, a source must have a current operating permit pursuant to Title V of the Act and the source must be in compliance with all requirements of 40 CFR 63, Subpart BB. For each affected source, this exemption is effective upon the date that the owner or operator demonstrates to the Administrator that the requirements of Conditions D.9., HH.1. through HH.7., have been met.

{Permitting Note: Department determined that the requirements for exemption have been met by the facility as of 8/16/06. In accordance with this regulation, if the source is not in compliance with all requirements of 40 CFR 63, Subpart BB, the exemption from any otherwise applicable new source performance standard contained in 40 CFR Part 60, Subpart V is no longer valid.}

[40 CFR 63.631]

<u>Common Conditions</u> - On-Spec Used Oil/Lead

D.22. This emissions unit is also subject to the On-Spec Used Oil/Lead conditions in Subsection EE**.**

<u>Common Conditions</u> - F.A.C. Test Requirements

D.23. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

Common Conditions – General Provisions of 40 CFR 63

D.24. This emissions unit is also subject to the applicable requirements of 40 CFR 63 Subpart A.

Subsection E. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
010	#1 Storage and Shipping Building

The #1 Storage & Shipping building. Particulate matter emissions are controlled by a Buffalo wet scrubber when shipping Monocal or Dical or Defluorinated Phosphate (DFP) or DAP (Diammonium Phosphate) or MAP (Monoammonium Phosphate). CAM does not apply for particulate matter for this emission unit.

{Permitting note(s): These emissions units are regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards; and Rule 62-296.403, F.A.C., Phosphate Processing, adopted and incorporated by reference in Rule 62-204.800, F.A.C.}

The following specific conditions apply to the emissions unit(s) listed above:

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

E.1. Permitted Capacity. The operation rate shall not exceed the Maximum 12-MRA Hourly Rate = 175 tons of product or Maximum Daily 1-Hour Average Rate = 195 tons of product for each mode and only one mode at a time.

12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Air Construction Permit 0470002-034-AC]

E.2. Methods of Operation are as follows:

- DAP (Diammonium Phosphate), MAP (Monoammonium Phosphate), Monocal, Dical, DFP (Defluorinated Phosphate) Shipment

E.3. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year (8784 in any Leap Year).

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

EMISSION LIMITATIONS AND STANDARDS

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

E.4. Particulate Matter. Particulate Matter Emissions shall not exceed 36.17 lbs/hr and 158.42 TPY. [Rule 62-296.320(4)(a), F.A.C.]

E.5. Visible Emissions. Visible Emissions shall not be equal to or greater than 20% opacity.

[Rule 62-296.320(4)(b), F.A.C.]

TEST METHODS AND PROCEDURES

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

E.6. Particulate Matter. Particulate Matter Emissions stack test method shall be EPA Method 5 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(a), F.A.C.; Rule 62-297.310(7)(a)4.b., F.A.C.; Rule 62-297.401, F.A.C.]

E.7. Visible Emissions. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; Rule 62-297.401, F.A.C.]

COMMON CONDITIONS - F.A.C. TEST REQUIREMENTS

E.8. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

Subsection F. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
015	Granular Product Shipping Facility

MAP (Monoammonium Phosphate) or DAP (Diammonium Phosphate) or Monocal or Dical or Defluorinated Phosphate (DFP) Shipping Facility. The product is transported by front-end loaders from storage piles located in the shipping and screening facility area into hoppers where product is sorted and transported to loading silos for railcar or truck loading. Particulate matter emissions from the shipping and screening facility are controlled by a single cyclone in series with a Venturi wet scrubber. CAM does not apply for particulate matter for this emission unit.

{Permitting note: This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards.}

The following specific conditions apply to the emissions unit(s) listed above:

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

F.1. Permitted Capacity. The rate shall not exceed the Maximum 12-MRA Hourly Rate = 215 tons of product or Maximum Daily 1-Hour Average Rate = 240 tons of product for each mode and only one mode at a time. The modes are defined as the operating modes for the Dical Plant (EU 004), MAP/DAP Plants (EUs 008 and 032) and the DFP Plants (EUs 003 and 038).
12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Air Construction permit No. 0470002-034-AC; air Construction Permit No. 0470002-042-AC]

F.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year (8784 in any Leap Year).

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

EMISSION LIMITATIONS AND STANDARDS

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

F.3. Particulate Matter Emissions. Particulate Matter Emissions shall not exceed 40.41 lbs/hr and 177.00 TPY.

[Rule 62-296.320(4)(a), F.A.C.]

F.4. Visible Emissions. Visible Emissions shall not be equal to or greater than 20% opacity.

[Rule 62-296.320(4)(b), F.A.C.]

TEST METHODS AND PROCEDURES

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

F.5. Test Methods. Particulate Matter Emissions stack test method shall be EPA Method 5 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed every 5 years with a frequency base day of 09/15/94.

[Rule 62-296.320(4)(a), F.A.C.; Rule 62-297.401, F.A.C.]

F.6. Test Methods. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually with a frequency base date of 09/15/94.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.401, F.A.C.]

COMMON CONDITIONS - F.A.C. TEST REQUIREMENTS

F.7. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

Subsection G. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
020	"B" Phosphoric Acid Plant

"B" Phosphoric Acid Plant with fluoride emissions continuously controlled by 2 packed wet scrubbers (Stack B and C). CAM does not apply for fluoride for this emissions unit.

{Permitting note(s): These emissions units are regulated under NSPS - 40 CFR 60, Subpart T, Standards of Performance (NSPS) for the Phosphate Fertilizer Industry: Wet-Process Phosphoric Acid Plants, adopted and incorporated by reference in Rule 62-204.800(7)(b)26., F.A.C.; Rule 62-212.300, F.A.C., General Preconstruction Review Requirements; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD); and Rule 62-296.403, F.A.C., Phosphate Processing; 40 CFR 63, Subpart A - General Provisions; 40 CFR 63, Subpart AA - National Emission Standards for Hazardous Air Pollutants (NESHAP) From Phosphoric Acid Manufacturing Plants. **The Part 40 CFR 63 Subparts A and AA take precedence, however these units are subject to all applicable State Implementation Plan (SIP) rules if these units are out of compliance with the NESHAP**}.

The following specific conditions apply to the emissions unit(s) listed above:

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

G.1. Permitted Capacity. The operation rate shall not exceed the Maximum Daily 1-Hour Average Rate = 100 tons 100% P_2O_5 input. The operation rate shall not exceed 600,000 tons during any 12 consecutive months 100% P_2O_5 input.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. 0470002-034-AC, and PSD-FL-297]

G.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year (8784 in any Leap Year).

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C. and PSD-FL-297]

EMISSION LIMITATIONS AND STANDARDS

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

G.3. Total Fluorides. Total Fluoride emissions from this emissions unit shall not exceed 0.012 lb/ton of equivalent P_2O_5 feed, 1.20 lb/hr and 3.6 TPY.

[Rule 62-204.800(7)(b)25., F.A.C.; 40 CFR 60.202; 40 CFR 63.602(a), and PSD-FL-297]
{Permitting Note: The limits are established in PSD-FL-297 and are more stringent than the MACT Standard.}

G.4. Visible Emissions. Visible Emissions shall not be equal to or greater than 20% opacity.

[Rule 62-296.320(4)(b), F.A.C.]

G.5. Stacks A, B, and C shall be subject to all process requirements of Phosphoric Acid Plant B. Phosphoric Acid Plants A and C will no longer produce phosphoric acid independently, however integral portions of both Phosphoric Acid Plants A and C will assist Phosphoric Acid Plant B to filter the phosphoric acid and control fluoride emissions. The Phosphoric Acid Plant A filter system, scrubber and stack will be used with B Phosphoric Acid Plant when additional filtering is required. Phosphoric Acid Plant A components will not operate independently or when Phosphoric Acid Plant B is not operating. Phosphoric Acid Plant C scrubber and stack will be used continuously with Phosphoric Acid Plant B to control emissions from the Phosphoric Acid Plant B production. Phosphoric Acid Plant C components will not operate independently or when Phosphoric Acid Plant B is not operating. The sum total of emissions from all three stacks (A, B, and C) shall comply with **conditions G.3., G.4., and G.5.** , of this permit. Initial and annual testing must be in compliance with this permit.

[Application No. 0470002-053-AC (PSD-FL-297B) and Rules 62-4.070(3) and 62-210.200, F.A.C. (Definitions - Potential Emissions)]

OPERATING REQUIREMENTS

G.6. Scrubber Parameter Daily Averages. The permittee shall maintain daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber within the allowable ranges established pursuant the requirements of **Condition GG.4 (1) or (2)**.

[Rule 62-204.800, F.A.C.; 40 CFR 63.604]

MONITORING REQUIREMENTS

G.7. Phosphorus-bearing Feed Material. The Permittee shall install, calibrate, maintain, and operate a monitoring system, which can be used to determine and permanently record the mass flow of phosphorus-bearing feed material to the process. The monitoring system shall have an accuracy of ±5 percent over its operating range.

[Rule 62-204.800, F.A.C.; 40 CFR 60.203(a)]

G.8. P_2O_5 Feed. The Permittee shall maintain a daily record of equivalent P_2O_5 feed.

[Rule 62-204.800, F.A.C.; 40 CFR 60.203(b)]

G.9. Scrubber Pressure Drop. The Permittee shall install, calibrate, maintain, and operate a monitoring system which continuously measures and permanently records the pressure drop across each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of ±5 percent over its operating range.

[Rule 62-204.800, F.A.C.; 40 CFR 60.203(c)]

G.10. The Permittee shall meet the 40 CFR 63 Subpart AA requirements stated in **Common Conditions GG.1 – GG.4.**

TEST METHODS AND PROCEDURES

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

G.11. <u>Total Fluorides</u>. The Permittee shall use the following procedures:

(a) In conducting the performance tests required in § 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in § 60.8(b).

(b) The owner or operator shall determine compliance with the total fluorides standard in § 60.202 as follows:

(1) The emission rate (E) of total fluorides shall be computed for each run using the following equation:

$$E = \left(\sum_{i=1}^{N} C_{si} Q_{sdi} \right) / (PK)$$

where:
E=emission rate of total fluorides, g/Mg (lb/ton) of equivalent P_2O_5 feed.
Csi=concentration of total fluorides from emission point "i," mg/dscm (gr/dscf).
Qsdi=volumetric flow rate of effluent gas from emission point "i," dscm/hr (dscf/hr).
N=number of emission points associated with the affected facility.
P=equivalent P_2O_5 feed rate, Mg/hr (ton/hr).
K=conversion factor, 1000 mg/g (7,000 gr/lb).

(2) Method 13A or 13B shall be used to determine the total fluorides concentration (Csi) and volumetric flow rate (Qsdi) of the effluent gas from each of the emission points. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf).

(3) The equivalent P_2O_5 feed rate (P) shall be computed for each run using the following equation:

P=Mp Rp

where:

Mp=total mass flow rate of phosphorus-bearing feed, Mg/hr (ton/hr).
Rp= P_2O_5 content, decimal fraction.

G.11. continued:

(i) The accountability system of § 60.203(a) shall be used to determine the mass flow rate (Mp) of the phosphorus-bearing feed.

(ii) The Association of Official Analytical Chemists (AOAC) Method 9 (incorporated by reference -- see § 60.17) shall be used to determine the P_2O_5 content (Rp) of the feed.

[Rule 62-204.800, F.A.C.; 40 CFR 60.204(a) and (b)]

G.12. **Total Fluorides**. The Permittee shall meet the 40 CFR 63 Subpart AA performance testing requirements stated in **Common Conditions GG.5 – GG.7**.

G.13. **Visible Emissions**. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually, once each federal fiscal year.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; Rule 62-297.401, F.A.C.]

G.14. **Testing Requirements**. The mass emissions from stacks A, B, and C shall comply with the limits in **specific conditions G.1. and G.3., G.4., and G.5.** Initial testing of stacks B and C are required under 0470002-053-AC (PSD-FL-297) and Compliance Plan CP-2, and annual tests are required until startup of Plant A phosphoric acid filter. Testing of stacks A, B, and C will be required annually upon startup of Plant A phosphoric acid filter and compliance has been met with 0470002-053-AC (PSD-FL-297) and Compliance Plan CP-2. The sum total of emissions from all three stacks (A, B, and C) shall comply with **conditions G.3., G.4., and G.5.,** of this permit.

[Permit No. 0470002-053-AC (PSD-FL-297) and Compliance Plan CP-2]

NOTIFICATION, RECORDKEEPING, REPORTING REQUIREMENTS

G.15. The Permittee shall meet the 40 CFR 63 Subpart AA notification, recordkeeping, and reporting requirements stated in Common Conditions GG.10. – GG.12.

G.16. This emissions unit is subject to specific requirements of 40 CFR 63 Subpart AA, Appendix A to Subpart AA– Applicability to General Provisions to Subpart AA, and alternative MACT monitoring plan (Administrative Order No. 04-I-AP, dated October 4, 2004). The owner or operator is responsible for remaining in compliance with any updates made to Subpart A or AA. This EU is subject to Facility Wide Condition No. 10.

[40 CFR 63-Subpart A, 40 CFR 63-Subpart AA, and Administrative Order No. 04-I-AP, Alternate MACT Monitoring Plan]

G.17. This emissions unit is exempted from any otherwise applicable new source performance standard contained in 40 CFR Part 60, Subpart T. To be exempt, a source must have a current operating permit pursuant to Title V of the Act and the source must be in compliance with all requirements of 40 CFR 63, Subpart AA. For each affected source, this exemption is effective upon the date that the owner or operator demonstrates to the Administrator that the requirements of **Conditions G.6., GG.1 through GG.9** have been met.

{Permitting Note: Department determined that the requirements for exemption have been met by the facility as of 8/16/06. In accordance with this regulation, if the source is not in compliance with all requirements of 40 CFR 63, Subpart AA, the exemption from any otherwise applicable new source performance standard contained in 40 CFR Part 60, Subpart T is no longer valid.}

[40 CFR 63.610]

COMMON CONDITIONS - F.A.C. TEST REQUIREMENTS

G.18. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

COMMON CONDITIONS – GENERAL PROVISIONS OF 40 CFR 63

G.19. This emissions unit is also subject to the applicable requirements of 40 CFR 63 Subpart A.

Subsection H. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
021	"C" Sulfuric Acid Plant

"C" Sulfuric Acid Plant is a double absorption process that produces sulfuric acid and controls sulfur dioxide (SO_2) emissions and has a Brinks mist eliminator to control sulfuric acid mist (SAM). CAM does not apply for sulfur dioxide for this emissions unit.

{Permitting note(s): This emissions unit is regulated under NSPS - 40 CFR 60, Subpart H, Standards of Performance for Sulfuric Acid, adopted and incorporated by reference in Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-212.300, F.A.C., General Preconstruction Review Requirements; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD); and Rule 296.402, F.A.C., Sulfuric Acid Plants.}

The following specific conditions apply to the emissions unit(s) listed above:

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

H.1. Permitted Capacity. The production rate shall not exceed 2300 TPD, expressed as 100 percent H_2S0_4 or 95.83 TPH.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC24-146402]

H.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year (8784 in any Leap Year).

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC24-146402; Construction Permit No. 0470002-034-AC]

EMISSION LIMITATIONS AND STANDARDS

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

H.3. Sulfur Dioxide. Sulfur Dioxide Emissions shall not exceed 2 kg per metric ton of acid produced (4 lb per ton), the production being expressed as 100 percent H_2SO_4, 383.33 lbs/hr and 1679.00 TPY.

[Rule 62-204.800(7)(b)10., F.A.C.; 40 CFR 60.82(a); Construction Permit No. AC24-146402]

H.4. Sulfuric Acid Mist (SAM). SAM emissions, expressed as H_2SO_4, shall not exceed 0.075 kg per metric ton of acid produced (0.15 lb per ton), the production being expressed as 100 percent H_2SO_4, 14.38 lbs/hr and 63.00 TPY.

[Rule 62-204.800(7)(b)10., F.A.C.; 40 CFR 60.83(a)(1); Construction Permit No. AC24-146402]

H.5. Visible Emissions. Visible Emissions shall not exceed 10% opacity.

[Rule 62-204.800(7)(b)10., F.A.C.; 40 CFR 60.83(a)(2); Construction Permit No. AC24-146402]

TEST METHODS AND PROCEDURES

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

H.6. Sulfur Dioxide. The following procedures and test methods shall be used to determine sulfur dioxide emissions. A compliance test shall be conducted on an annual basis, once each federal fiscal year:

(a) The test methods in 40 CFR Appendix A or other methods and procedures as specified in this condition, except as provided in 40 CFR 60.8(b).

(b) (1) The emission rate (E) of sulfur dioxide shall be computed for each run using the following equation:

$$E=(CQsd)/(PK)$$

where:

E = emission rate of SO_2 kg/metric ton (lb/ton) of 100 percent H_2SO_4 produced.
C = concentration of SO_2, g/dscm (lb/dscf).
Qsd = volumetric flow rate of the effluent gas, dscm/hr (dscf/hr).
P = production rate of 100 percent H_2SO_4, metric ton/hr (ton/hr).
K = conversion factor, 1000 g/kg (1.0 lb/lb).

H.6 continued:

(2) Method 8 shall be used to determine the Sulfur Dioxide concentration (C) and the volumetric flow rate (Qsd) of the effluent gas. The moisture content may be considered to be zero. The sampling time and sample volume for each run shall be at least 60 minutes and 1.15 dscm (40.6 dscf).

(3) Suitable methods shall be used to determine the production rate (P) of 100 percent H_2SO_4 for each run. Material balance over the production system shall be used to confirm the production rate.

(4) N/A

(c) The following may be used as alternatives to the reference methods and procedures specified in this condition:

(1) If a source processes elemental sulfur or an ore that contains elemental sulfur and uses air to supply oxygen, the following procedure may be used instead of determining the volumetric flow rate and production rate:

(i) The integrated technique of Method 3 is used to determine the O_2 concentration and, if required, CO_2 concentration.

(ii) The SO_2 emission rate is calculated as described in Condition H.12. substituting the acid mist concentration for Cs as appropriate.

[40 CFR 60.85(a),(b),(c); Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-297.401, F.A.C.; Construction Permit No. AC24-146402]

H.7. <u>Sulfuric Acid Mist</u>. The following procedures and test methods shall be used to determine sulfuric acid mist. A compliance test shall be conducted on an annual basis, once each federal fiscal year:

(a) The test methods in 40 CFR Appendix A or other methods and procedures as specified in this condition, except as provided in 40 CFR 60.8(b).

(b) (1) The emission rate (E) of sulfuric acid mist shall be computed for each run using the following equation:

$$E=(CQsd)/(PK)$$

H.7 continued:

where:

E = emission rate of acid mist kg/metric ton (lb/ton) of 100 percent H_2SO_4 produced.
C = concentration of acid mist, g/dscm (lb/dscf).
Qsd = volumetric flow rate of the effluent gas, dscm/hr (dscf/hr).
P = production rate of 100 percent H_2SO_4, metric ton/hr (ton/hr).
K = conversion factor, 1000 g/kg (1.0 lb/lb).

(2) Method 8 shall be used to determine the Sulfuric Acid Mist concentration (C) and the volumetric flow rate (Qsd) of the effluent gas. The moisture content may be considered to be zero. The sampling time and sample volume for each run shall be at least 60 minutes and 1.15 dscm (40.6 dscf).

(3) Suitable methods shall be used to determine the production rate (P) of 100 percent H_2SO_4 for each run. Material balance over the production system shall be used to confirm the production rate.

(4) N/A

(c) The following may be used as alternatives to the reference methods and procedures specified in this condition:

(1) If a source processes elemental sulfur or an ore that contains elemental sulfur and uses air to supply oxygen, the following procedure may be used instead of determining the volumetric flow rate and production rate:

(i) The integrated technique of Method 3 is used to determine the O_2 concentration and, if required, CO_2 concentration.

(ii) The acid mist emission rate is calculated as described in Condition H.12. substituting the acid mist concentration for C as appropriate.

[40 CFR 60.85(a),(b),(c); Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-297.401, F.A.C.; Construction Permit No. AC24-146402]

H.8. <u>Visible Emissions</u>. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.
[Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; 40 CFR 60.85(b)(4); Rule 62-297.401, F.A.C.; Construction Permit No. AC24-146402]

CONTINUOUS MONITORING REQUIREMENTS

H.9. Sulfur Dioxide. A continuous monitoring system for the measurement of sulfur dioxide shall be installed, calibrated, maintained, and operated. The pollutant gas used to prepare calibration gas mixtures under Performance Specification 2 and for calibration checks under 40 CFR 60.13(d), shall be sulfur dioxide (SO_2). Method 8 shall be used for conducting monitoring system performance evaluations under 40 CFR 60.13(c) except that only the sulfur dioxide portion of the Method 8 results shall be used. The span value shall be set at 1000 ppm of sulfur dioxide.

[40 CFR 60.84(a); Construction Permit No. AC24-146402]

H.10. Conversion Factor. A conversion factor for the purpose of converting monitoring data into units of the applicable standard (kg/metric ton, lb/ton) shall be established. The conversion factor shall be determined, as a minimum, three times daily by measuring the concentration of sulfur dioxide entering the converter using suitable methods (e.g., the Reich test, National Air Pollution Control Administration Publication No. 999–AP–13) and calculating the appropriate conversion factor for each eight-hour period as follows:

$$CF = k[(1.000-0.015r)/(r-s)]$$

where:

CF = conversion factor (kg/metric ton per ppm, lb/ton per ppm).
k = constant derived from material balance. For determining CF in metric units, k=0.0653. For determining CF in English units, k=0.1306.
r = percentage of sulfur dioxide by volume entering the gas converter. Appropriate corrections must be made for air injection plants subject to the Administrator's approval.
s = percentage of sulfur dioxide by volume in the emissions to the atmosphere determined by the continuous monitoring system required under Condition H.9.

[40 CFR 60.84(b)]

H.11. All conversion factors and values under **Condition H.10.**, from which they were computed (i.e., CF, r, and s) shall be recorded.
[40 CFR 60.84(c)]

H.12. <u>Sulfur Dioxide Alternative</u>. Alternatively, a source that processes elemental sulfur or an ore that contains elemental sulfur and uses air to supply oxygen may use the following continuous emission monitoring approach and calculation procedures in determining SO_2 emission rates in terms of the standard. This procedure is not required, but is an alternative that would alleviate problems encountered in the measurement of gas velocities or production rate. Continuous emission monitoring systems for measuring SO_2, O_2, and CO_2 (if required) shall be installed, calibrated, maintained, and operated by the owner or operator and subjected to the certification procedures in Performance Specifications 2 and 3. The calibration procedure and span value for the SO_2 monitor shall be as specified in **Condition H.9.** The span value for CO_2 (if required) shall be 10 percent and for O_2 shall be 20.9 percent (air). A conversion factor based on process rate data is not necessary. Calculate the SO_2 emission rate as follows:

$$Es=(CsS)/[0.265 - (0.0126\ \%O_2) - (A\ \%CO_2)]$$

where:

Es = emission rate of SO_2, kg/metric ton (lb/ton) of 100 percent of H_2SO_4 produced.
Cs = concentration of SO_2, kg/dscm (lb/dscf).
S = acid production rate factor, 368 dscm/metric ton (11,800 dscf/ton) of 100 percent H_2SO_4 produced.
$\%O_2$ = oxygen concentration, percent dry basis.
A = auxiliary fuel factor,
= 0.00 for no fuel.
= 0.0226 for methane.
= 0.0217 for natural gas.
= 0.0196 for propane.
= 0.0172 for No 2 oil.
= 0.0161 for No 6 oil.
= 0.0148 for coal.
= 0.0126 for coke.
$\%CO_2$ = carbon dioxide concentration, percent dry basis.

NOTE: It is necessary in some cases to convert measured concentration units to other units for these calculations: Use the following table for such conversions:

From—	To—	Multiply by—
g/scm	kg/scm	10^{-3}
mg/scm	kg/scm	10^{-6}
ppm (SO_2)	kg/scm	2.660×10^{-6}
ppm (SO_2)	lb/scf	1.660×10^{-7}

[40 CFR 60.84(d)]

H.13. **Sulfur Dioxide Excess Emissions**. For the purpose of reports under 40 CFR 60.7(c), periods of excess emissions shall be all three-hour periods (or the arithmetic average of three consecutive one-hour periods) during which the integrated average sulfur dioxide emissions exceed the applicable standards under **Condition H.3**.

[40 CFR 60.84(e)]

COMMON CONDITIONS - F.A.C. TEST REQUIREMENTS

H.14. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

Subsection I. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
022	"D" Sulfuric Acid Plant

"D" Sulfuric Acid Plant is a double absorption process that produces sulfuric acid and controls sulfur dioxide (SO_2) emissions. This emissions unit has a Brinks mist eliminator to control sulfuric acid mist (SAM). CAM does not apply for sulfur dioxide for this emissions unit.

{Permitting note(s): This emissions unit is regulated under NSPS - 40 CFR 60, Subpart H, Standards of Performance for Sulfuric Acid, adopted and incorporated by reference in Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-212.300, F.A.C., General Preconstruction Review Requirements; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD); and Rule 296.402, F.A.C., Sulfuric Acid Plants.}

The following specific conditions apply to the emissions unit(s) listed above:

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

I.1. Permitted Capacity. The production rate shall not exceed 2300 TPD expressed as 100 percent H_2SO_4 or 95.83 TPH.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

I.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year (8784 in any Leap Year).

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

EMISSION LIMITATIONS AND STANDARDS

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

I.3. Sulfur Dioxide. Sulfur Dioxide Emissions shall not exceed 2 kg per metric ton of acid produced (4 lb per ton), the production being expressed as 100 percent H_2SO_4, 383.33 lbs/hr and 1679.00 TPY.

[Rule 62-204.800(7)(b)10., F.A.C.; 40 CFR 60.82(a)]

I.4. Sulfuric Acid Mist (SAM). SAM emissions, expressed as H_2SO_4, shall not exceed 0.075 kg per metric ton of acid produced (0.15 lb per ton), the production being expressed as 100 percent H_2SO_4, 14.38 lbs/hr and 63.00 TPY.

[Rule 62-204.800(7)(b)10., F.A.C.; 40 CFR 60.83(a)(1)]

I.5. Visible Emissions. Visible Emissions shall not exceed 10% opacity.

[Rule 62-204.800(7)(b)10., F.A.C.; 40 CFR 60.83(a)(2)]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

I.6. Sulfur Dioxide. The following procedures and test methods shall be used to determine sulfur dioxide emissions. A compliance test shall be conducted on an annual basis, once each federal fiscal year:

(a) The test methods in 40 CFR Appendix A or other methods and procedures as specified in this condition, except as provided in 40 CFR 60.8(b).

(b) (1) The emission rate (E) of sulfur dioxide shall be computed for each run using the following equation:

$$E=(CQsd)/(PK)$$

where:

E = emission rate of SO_2 kg/metric ton (lb/ton) of 100 percent H_2SO_4 produced.
C = concentration of SO_2, g/dscm (lb/dscf).
Qsd = volumetric flow rate of the effluent gas, dscm/hr (dscf/hr).
P = production rate of 100 percent H_2SO_4, metric ton/hr (ton/hr).
K = conversion factor, 1000 g/kg (1.0 lb/lb).

(2) Method 8 shall be used to determine the Sulfur Dioxide concentration (C) and the volumetric flow rate (Qsd) of the effluent gas. The moisture content may be considered to be zero. The sampling time and sample volume for each run shall be at least 60 minutes and 1.15 dscm (40.6 dscf).

(3) Suitable methods shall be used to determine the production rate (P) of 100 percent H_2SO_4 for each run. Material balance over the production system shall be used to confirm the production rate.

(4) N/A

(c) The following may be used as alternatives to the reference methods and procedures specified in this condition:

I.6. continued:

(1) If a source processes elemental sulfur or an ore that contains elemental sulfur and uses air to supply oxygen, the following procedure may be used instead of determining the volumetric flow rate and production rate:

(i) The integrated technique of Method 3 is used to determine the O_2 concentration and, if required, CO_2 concentration.

(ii) The SO_2 emission rate is calculated as described in **Condition I.12**. substituting the acid mist concentration for Cs as appropriate.

[40 CFR 60.85(a),(b),(c); Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-297.401, F.A.C.]

I.7. <u>Sulfuric Acid Mist</u>. The following procedures and test methods shall be used to determine sulfuric acid mist. A compliance test shall be conducted on an annual basis, once each federal fiscal year:

(a) The test methods in 40 CFR Appendix A or other methods and procedures as specified in this condition, except as provided in 40 CFR 60.8(b).

(b) (1) The emission rate (E) of sulfuric acid mist shall be computed for each run using the following equation:

E=(CQsd)/(PK)
where:
E = emission rate of acid mist kg/metric ton (lb/ton) of 100 percent H_2SO_4 produced.
C = concentration of acid mist, g/dscm (lb/dscf).
Qsd = volumetric flow rate of the effluent gas, dscm/hr (dscf/hr).
P = production rate of 100 percent H_2SO_4, metric ton/hr (ton/hr).
K = conversion factor, 1000 g/kg (1.0 lb/lb).

(2) Method 8 shall be used to determine the Sulfuric Acid Mist concentration (C) and the volumetric flow rate (Qsd) of the effluent gas. The moisture content may be considered to be zero. The sampling time and sample volume for each run shall be at least 60 minutes and 1.15 dscm (40.6 dscf).
(3) Suitable methods shall be used to determine the production rate (P) of 100 percent H_2SO_4 for each run. Material balance over the production system shall be used to confirm the production rate.
(4) N/A

(c) The following may be used as alternatives to the reference methods and procedures specified in this condition:

(1) If a source processes elemental sulfur or an ore that contains elemental sulfur and uses air to supply oxygen, the following procedure may be used instead of determining the volumetric flow rate and production rate:

(i) The integrated technique of Method 3 is used to determine the O_2 concentration and, if required, CO_2 concentration.
(ii) The acid mist emission rate is calculated as described in **Condition I.12**. substituting the acid mist concentration for C as appropriate.

[40 CFR 60.85(a),(b),(c); Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-297.401, F.A.C.]

I.8. Visible Emissions. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; 40 CFR 60.85(b)(4); Rule 62-297.401, F.A.C.]

CONTINUOUS MONITORING REQUIREMENTS

I.9. Sulfur Dioxide. A continuous monitoring system for the measurement of sulfur dioxide shall be installed, calibrated, maintained, and operated. The pollutant gas used to prepare calibration gas mixtures under Performance Specification 2 and for calibration checks under 40 CFR 60.13(d), shall be sulfur dioxide (SO_2). Method 8 shall be used for conducting monitoring system performance evaluations under 40 CFR 60.13(c) except that only the sulfur dioxide portion of the Method 8 results shall be used. The span value shall be set at 1000 ppm of sulfur dioxide.

[40 CFR 60.84(a)]

I.10. Conversion Factor. A conversion factor for the purpose of converting monitoring data into units of the applicable standard (kg/metric ton, lb/ton) shall be established. The conversion factor shall be determined, as a minimum, three times daily by measuring the concentration of sulfur dioxide entering the converter using suitable methods (e.g., the Reich test, National Air Pollution Control Administration Publication No. 999–AP–13) and calculating the appropriate conversion factor for each eight-hour period as follows:

$$CF = k[(1.000 - 0.015r)/(r - s)]$$

where:

CF = conversion factor (kg/metric ton per ppm, lb/ton per ppm).
k = constant derived from material balance. For determining CF in metric units, k=0.0653. For determining CF in English units, k=0.1306.
r = percentage of sulfur dioxide by volume entering the gas converter. Appropriate corrections must be made for air injection plants subject to the Administrator's approval.
s = percentage of sulfur dioxide by volume in the emissions to the atmosphere determined by the continuous monitoring system required under **Condition I.9.**

[40 CFR 60.84(b)]

I.11. All conversion factors and values under **Condition I.10.,** from which they were computed (i.e., CF, r, and s) shall be recorded.

[40 CFR 60.84(c)]

I.12. <u>Sulfur Dioxide Alternative</u>. Alternatively, a source that processes elemental sulfur or an ore that contains elemental sulfur and uses air to supply oxygen may use the following continuous emission monitoring approach and calculation procedures in determining SO_2 emission rates in terms of the standard. This procedure is not required, but is an alternative that would alleviate problems encountered in the measurement of gas velocities or production rate. Continuous emission monitoring systems for measuring SO_2, O_2, and CO_2 (if required) shall be installed, calibrated, maintained, and operated by the owner or operator and subjected to the certification procedures in Performance Specifications 2 and 3. The calibration procedure and span value for the SO_2 monitor shall be as specified in **Condition I.9.** The span value for CO_2 (if required) shall be 10 percent and for O_2 shall be 20.9 percent (air). A conversion factor based on process rate data is not necessary. Calculate the SO_2 emission rate as follows:

$$Es=(CsS)/[0.265 - 0.0126\ \%O_2) - (A\ \%CO_2)]$$

where:

Es = emission rate of SO_2, kg/metric ton (lb/ton) of 100 percent of H_2SO_4 produced.
Cs = concentration of SO_2, kg/dscm (lb/dscf).
S = acid production rate factor, 368 dscm/metric ton (11,800 dscf/ton) of 100 percent H_2SO_4 produced.
$\%O_2$ = oxygen concentration, percent dry basis.
A = auxiliary fuel factor,
= 0.00 for no fuel.
= 0.0226 for methane.
= 0.0217 for natural gas.
= 0.0196 for propane.
= 0.0172 for No 2 oil.
= 0.0161 for No 6 oil.
= 0.0148 for coal.
= 0.0126 for coke.
$\%CO_2$ = carbon dioxide concentration, percent dry basis.

NOTE: It is necessary in some cases to convert measured concentration units to other units for these calculations: Use the following table for such conversions:

From—	To—	Multiply by—
g/scm	kg/scm	10^{-3}
mg/scm	kg/scm	10^{-6}
ppm (SO_2)	kg/scm	2.660×10^{-6}
ppm (SO_2)	lb/scf	1.660×10^{-7}

[40 CFR 60.84(d)]

I.13. <u>Sulfur Dioxide Excess Emissions</u>. For the purpose of reports under 40 CFR 60.7(c), periods of excess emissions shall be all three-hour periods (or the arithmetic average of three consecutive one-hour periods) during which the integrated average sulfur dioxide emissions exceed the applicable standards under **Condition I.3.**

[40 CFR 60.84(e)]

COMMON CONDITIONS - F.A.C. TEST REQUIREMENTS

I.14. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

Subsection J. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
032	Z-Train – No. 2 MAP/DAP Plant

Z-Train (#2 MAP/DAP Plant) with two emissions points (EP). The first EP is the main part of MAP/DAP process which is controlled by several cyclones followed by several cyclonic and venturi scrubbers (EP TG). The cooler (EP C) is controlled by a cyclone and a venturi scrubber. CAM does not apply for this emissions unit. The permittee conducted testing on the pond water scrubbers for CAM applicability for particulate matter. Fluoride emissions are covered by the 40 CFR 63 Subpart BB and testing was done by the permittee to show the pond water scrubbers are not designed for PM control.

{Permitting note(s): These emissions units are regulated under NSPS - 40 CFR 60, Subpart V, Standards of Performance for the Phosphate Fertilizer Industry: Diammonium Phosphate Plants, adopted and incorporated by reference in Rule 62-204.800(7)(b)28., F.A.C.; Rule 62-212.300, F.A.C., General Preconstruction Review Requirements; 62-212.400, F.A.C., Prevention of Significant Deterioration; Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards; and Rule 62-296.403, F.A.C., Phosphate Processing; 40 CFR 63, Subpart A - General Provisions; 40 CFR 63, Subpart BB - National Emission Standards for Hazardous Air Pollutants From Phosphate Fertilizers Production Plants. **The Part 40 CFR 63 Subparts A and BB take precedence, however these units are subject to all applicable State Implementation Plan (SIP) rules if these units are out of compliance with the NESHAP**}.

The following specific conditions apply to the emissions unit(s) listed above:

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

J.1. <u>Permitted Capacity</u>. The P_2O_5 feed shall not exceed 45.7 tons per hour daily average and 362,737 TPY P_2O_5 input, 12-month rolling total.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. 0470002-032-AC; Construction Permit No. 0470002-034-AC; and 0470002-079-AC]

J.2. <u>Methods of Operation are as follows</u>:

Mode 1 - DAP (Diammonium Phosphate) produced by Split Acid (30% & 50% P_2O_5 input) phosphoric acid.
Mode 2 - MAP (Monoammonium Phosphate) produced by Split Acid (30% & 50% P_2O_5 input) phosphoric acid.
Mode 3 - DAP (Diammonium Phosphate) produced by 40% P_2O_5 input phosphoric acid.
Mode 4 - MAP (Monoammonium Phosphate) produced by 40% P_2O_5 input phosphoric acid.
Mode 5 - MAP produced by reacting ammonia and acid in two pipe reactors. The Z-Train has been modified to allow the producing of granular MAP using a pipe reactor as an alternate to the tank reactor.

Process fuels fired are natural gas, fuel oil with a maximum sulfur content of 1.00%, or on-spec used oil with a maximum sulfur content of 1.00%.
[Rule 62-213.410, F.A.C.]

J.3. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year (8784 in any Leap Year).

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

EMISSION LIMITATIONS AND STANDARDS

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

ALL MODES:

From EP (TG):

J.4. Total Fluorides. Total Fluoride emissions shall not exceed 30 grams/metric ton of equivalent P_2O_5 feed (0.060 lb/ton); 2.18 lbs/hr and 9.50 TPY.

[Rule 62-204.800(7)27., F.A.C.; 40 CFR 60.222, 40 CFR 63.622(a)]

J.5. Particulate Matter. Particulate Matter Emissions shall not exceed 47.37 lbs/hr and 206.90 TPY.

[Rule 62-296.320(4)(a), F.A.C.]

J.6. Sulfur Dioxide. Sulfur Dioxide Emissions shall not exceed 11.80 lbs/hr and 51.50 TPY.

[Construction Permit No. AC24-56215/ PSD-FL-083]

J.7. Visible Emissions. Visible Emissions shall not be equal to or greater than 20% opacity.

[Rule 62-296.320(4)(b), F.A.C.]

From EP (C):

J.8. Visible Emissions. Visible Emissions shall not be equal to or greater than 20% opacity.

[Rule 62-296.320(4)(b), F.A.C.; Construction Permit No. 0470002-032-AC]

OPERATING REQUIREMENTS

J.9. Scrubber Parameter Daily Averages. The permittee shall maintain daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber within the allowable ranges established pursuant the requirements of **Condition HH.6.(1) or (2).**

[Rule 62-204.800, F.A.C.; 40 CFR 63.624]

MONITORING REQUIREMENTS

J.10. Phosphorus-bearing Feed Material. The Permittee shall install, calibrate, maintain, and operate a monitoring system, which can be used to determine and permanently record the mass flow of phosphorus-bearing feed material to the process. The monitoring system shall have an accuracy of ±5 percent over its operating range.

[Rule 62-204.800, F.A.C.; 40 CFR 60.223(a)]

J.11. P_2O_5 Feed. The Permittee shall maintain a daily record of equivalent P_2O_5 feed.
[Rule 62-204.800, F.A.C.; 40 CFR 60.223(b)]

J.12.a. Scrubber Pressure Drop. The Permittee shall install, calibrate, maintain, and operate a monitoring system which continuously measures and permanently records the pressure drop across each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of ±5 percent over its operating range.
[Rule 62-204.800, F.A.C.; 40 CFR 60.223(c)]

J.12.b. The tail gas scrubber pressure drop shall be measured and reported based on the entire scrubber measurements and not separated by sections.
[Construction Permit No. 0470002-079-AC]

J.13. The Permittee shall meet the 40 CFR 63 Subpart BB monitoring requirements stated in **Common Conditions HH.1 – HH.3.**

TEST METHODS AND PROCEDURES

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

ALL MODES:

From EP (TG):

J.14. Total Fluorides. (a) In conducting the performance tests required in § 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in § 60.8(b).

J.14. continued:

(b) The owner or operator shall determine compliance with the total fluorides standard in § 60.222 as follows:

(1) The emission rate (E) of total fluorides shall be computed for each run using the following equation:

$$E = \left(\sum_{i=1}^{N} C_{si} Q_{sdi} \right) / (PK)$$

where:

E=emission rate of total fluorides, g/Mg (lb/ton) of equivalent P_2O_5 feed.
Csi=concentration of total fluorides from emission point "i," mg/dscm (gr/dscf).
Qsdi=volumetric flow rate of effluent gas from emission point "i," dscm/hr (dscf/hr).
N=number of emission points associated with the affected facility.
P=equivalent P_2O_5 feed rate, Mg/hr (ton/hr).
K=conversion factor, 1000 mg/g (7,000 gr/lb).

(2) Method 13A or 13B shall be used to determine the total fluorides concentration (Csi) and volumetric flow rate (Qsdi) of the effluent gas from each of the emission points. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf).

(3) The equivalent P_2O_5 feed rate (P) shall be computed for each run using the following equation:

P=Mp Rp

where:

Mp=total mass flow rate of phosphorus-bearing feed, Mg/hr (ton/hr).
Rp= P_2O_5 content, decimal fraction.

(i) The accountability system of § 60.223(a) shall be used to determine the mass flow rate (Mp) of the phosphorus-bearing feed.

(ii) The Association of Official Analytical Chemists (AOAC) Method 9 (incorporated by reference -- see §60.17) shall be used to determine the P_2O_5 content (Rp) of the feed.

[Rule 62-204.800, F.A.C.; 40 CFR 60.224; Rule 62-296.403(3), F.A.C.]

J.15. <u>Total Fluorides</u>. The Permittee shall meet the 40 CFR 63 Subpart BB performance testing requirements stated in **Common Conditions HH.5 – HH.7.**

J.16. Particulate Matter. Particulate Matter emissions stack test method shall be EPA Method 5 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year. [Rule 62-296.320(4)(a), F.A.C.; Rule 62-297.310(7)(a)4.b., F.A.C.; Rule 62-297.401, F.A.C.]

J.17. Sulfur Dioxide. Sulfur Dioxide Emissions in lieu of stack testing shall comply with the applicable requirements in Rule 62-297.440(1), F.A.C. or maintain a record of acceptable, certified analyses of all fuel oil fired and report annually prior to March 1 of each year.

J.18. Visible Emissions. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; Rule 62-297.401, F.A.C.]

From EP (C):

J.19. Visible Emissions. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; Rule 62-297.401, F.A.C.]

NOTIFICATION, RECORDKEEPING, REPORTING REQUIREMENTS

J.20. The Permittee shall meet the 40 CFR 63 Subpart BB notification, recordkeeping, and reporting requirements stated in **Common Conditions HH.8. –HH.10.**

J.21. This emissions unit is subject to specific requirements of 40 CFR 63 Subpart BB, Appendix A to Subpart BB – Applicability to General Provisions to Subpart BB, and alternative MACT monitoring plan (Administrative Order No. 04-I-AP, dated October 4, 2004). The owner or operator is responsible for remaining in compliance with any updates made to Subpart A or BB. This EU is subject to facility Wide Condition no. 10.

[40 CFR 63-Subpart A; 40 CFR 63-Subpart BB; and Administrative Order No. 04-I-AP, Alternate MACT Monitoring Plan]

EXEMPTION FROM NEW SOURCE PERFORMANCE STANDARDS.

J.22. This emissions unit is exempted from any otherwise applicable new source performance standard contained in 40 CFR Part 60, Subpart V. To be exempt, a source must have a current operating permit pursuant to Title V of the Act and the source must be in compliance with all requirements of 40 CFR 63, Subpart BB. For each affected source, this exemption is effective upon the date that the owner or operator demonstrates to the Administrator that the requirements of **Conditions J.9., HH.1. through HH.7.,** have been met.

{Permitting Note: Department determined that the requirements for exemption have been met by the facility as of 8/16/06. In accordance with this regulation, if the source is not in compliance with all requirements of 40 CFR 63, Subpart BB, the exemption from any otherwise applicable new source performance standard contained in 40 CFR Part 60, Subpart V is no longer valid.}
[40 CFR 63.631]

<u>Common Conditions</u> - On-Spec Used Oil/Lead

J.23. This emissions unit is also subject to the On-Spec Used Oil/Lead conditions in Subsection EE**.**

COMMON CONDITIONS - F.A.C. TEST REQUIREMENTS

J.24. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

COMMON CONDITIONS – GENERAL PROVISIONS OF 40 CFR 63

J.25. This emissions unit is also subject to the applicable requirements of 40 CFR 63 Subpart A.

Subsection K. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
034	South Phosphoric Acid Filters

The South Phosphoric Acid Filters has fluoride emissions which are controlled by a counter-current packed wet scrubber (D). Also, the storage and aging tanks are controlled by this scrubber. The "B" Superphosphoric Acid (SPA) Plant (EU 036) is ducted through, but not controlled by this scrubber. The filter aid and filter media emit particulate matter, and are controlled by a common bag collector (EF). CAM does not apply for fluoride for this emissions unit.

{Permitting note: This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards.}

The following specific conditions apply to the emissions unit(s) listed above:

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

K.1. Permitted Capacity. The rate shall not exceed the Maximum 12-MRA Hourly Rate = 44.68 tons of P_2O_5 input or Maximum Daily 1-Hour Average Rate = 50 tons P_2O_5 input.
12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; permit 0470002-034-AC]

K.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year (8784 in any Leap Year).
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

EMISSION LIMITATIONS AND STANDARDS

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

K.3. From stack (D), Fluoride emissions shall not exceed 0.05 lb FL per ton P_2O_5 input; 2.23 lbs/hr and 9.80 TPY.
[Rule 62-210.200(42), F.A.C.; BACT]

K.4. From stack (EF), Visible Emissions shall not exceed 5% opacity.

[Rule 62-297.620(4), F.A.C.]

TEST METHODS AND PROCEDURES

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

K.5. Test Methods. From stack (D), Fluoride emissions stack test method shall be EPA Method 13A or 13B incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually during the federal fiscal year (October 1- September 30).

[Rule 62-297.401, F.A.C.]

K.6. Test Methods. From stack (EF), Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually during the federal fiscal year (October 1- September 30).

[Rule 62-297.401, F.A.C.]

COMMON CONDITIONS - F.A.C. TEST REQUIREMENTS

K.7. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

Subsection L. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
035	North Phosphoric Acid Filters consists of 6 rotary drum filters to filter 48% P_2O_5 Phosphoric Acid

North Phosphoric Acid Filters and storage tanks emit fluoride emissions, and are controlled by a counter-current packed wet scrubber (B). CAM does not apply for fluoride for this emissions unit.

{Permitting note: This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards.}

The following specific conditions apply to the emissions unit(s) listed above:

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

L.1. Permitted Capacity. The rate shall not exceed the Maximum 12-MRA Hourly Rate = 92.8 tons of P_2O_5 input or Maximum Daily 1-Hour Average Rate = 102.1 tons P_2O_5 input.
12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; permit 0470002-034-AC]

L.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year (8784 in any Leap Year).

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

EMISSION LIMITATIONS AND STANDARDS

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

L.3. Fluoride Emissions. Fluoride emissions shall not exceed 1.86 lbs/hr and 8.15 TPY.

[Permit #AC24-188960]

TEST METHODS AND PROCEDURES

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

L.4. Test Methods. Fluoride emissions stack test method shall be EPA Method 13A or 13B incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually during the federal fiscal year (October 1- September 30).

[Rule 62-297.401, F.A.C.]

COMMON CONDITIONS - F.A.C. TEST REQUIREMENTS

L.5. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

Subsection M this section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
036	"B" Superphosphoric Acid (SPA) Plant (Vacuum Evaporation Process)

"B" Superphosphoric Acid (SPA) Plant emits fluoride, and is ducted to the South Phosphoric Acid Filters counter-current packed wet scrubber (EU 034). Test for fluoride at EU 036 (SPA) is conducted upstream of the scrubber, in the connecting duct. CAM does not apply for fluoride for this emissions unit.

{Permitting note(s): This emissions unit is regulated under NSPS - 40 CFR 60, Subpart U, Standards of Performance for Phosphate Fertilizer Industry: Superphosphoric Acid Plants, adopted and incorporated by reference in Rule 62-204.800(7)(b)27., F.A.C.; Rule 62-212.300, F.A.C., General Preconstruction Review Requirements; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD); 40 CFR 63, Subpart A - General Provisions; 40 CFR 63, Subpart AA - National Emission Standards for Hazardous Air Pollutants (NESHAP) From Phosphoric Acid Manufacturing Plants. **The Part 40 CFR 63 Subparts A and AA take precedence, however this unit is subject to all applicable State Implementation Plan (SIP) rules if this unit is out of compliance with the NESHAP**}.

The following specific conditions apply to the emissions unit(s) listed above:

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

M.1. Permitted Capacity. The operation rate shall not exceed:

- "B" SPA - the Maximum 12-MRA Hourly Rate = 42.1 tons of 100% P_2O_5 input or Maximum Daily 1-Hour Average Rate = 46.4 tons of 100% P_2O_5 input.

12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. 0470002-034-AC]

M.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year (8784 in any Leap Year).

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

EMISSION LIMITATIONS AND STANDARDS

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

M.3. Total Fluorides. Total Fluoride emissions at the sample port from B SPA unit shall not exceed 5.0 gram/metric ton of equivalent P_2O_5 feed (0.010 lb/ton); 0.46 lbs/hr and 1.84 TPY.

[Rule 62-204.800(7)(b), F.A.C.; 40 CFR 60.212; 40 CFR 63.602(b)(1)]

MONITORING REQUIREMENTS

M.4. Phosphorus-bearing Feed Material. The Permittee shall install, calibrate, maintain, and operate a monitoring system, which can be used to determine and permanently record the mass flow of phosphorus-bearing feed material to the process. The monitoring system shall have an accuracy of ±5 percent over its operating range.

[Rule 62-204.800, F.A.C.; 40 CFR 60.213(a)]

M.5. **P_2O_5 Feed**. The Permittee shall maintain a daily record of equivalent P_2O_5 feed.

[Rule 62-204.800, F.A.C.; 40 CFR 60.213(b)]

M.6. The Permittee shall meet the 40 CFR 63 Subpart AA requirements stated in **Common Conditions GG.1 – GG.4.**

TEST METHODS AND PROCEDURES

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

M.7. Total Fluorides. (a) In conducting the performance tests required in § 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in § 60.8(b).

(b) The owner or operator shall determine compliance with the total fluorides standard in § 60.212 as follows:
(1) The emission rate (E) of total fluorides shall be computed for each run using the following equation:

$$E = \left(\sum_{i=1}^{N} C_{si} Q_{sdi} \right) / (PK)$$

where:
E=emission rate of total fluorides, g/Mg (lb/ton) of equivalent P_2O_5 feed.
Csi=concentration of total fluorides from emission point "i," mg/dscm (gr/dscf).
Qsdi=volumetric flow rate of effluent gas from emission point "i," dscm/hr (dscf/hr).
N=number of emission points associated with the affected facility.
P=equivalent P_2O_5 feed rate, Mg/hr (ton/hr).
K=conversion factor, 1000 mg/g (7,000 gr/lb).

M.7. continued:

(2) Method 13A or 13B shall be used to determine the total fluorides concentration (Csi) and volumetric flow rate (Qsdi) of the effluent gas from each of the emission points. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf).

(3) The equivalent P_2O_5 feed rate (P) shall be computed for each run using the following equation:

$$P=Mp\ Rp$$

where:

Mp=total mass flow rate of phosphorus-bearing feed, Mg/hr (ton/hr).
Rp= P_2O_5 content, decimal fraction.

(i) The accountability system of § 60.213(a) shall be used to determine the mass flow rate (Mp) of the phosphorus-bearing feed.

(ii) The Association of Official Analytical Chemists (AOAC) Method 9 (incorporated by reference -- see § 60.17) shall be used to determine the P_2O_5 content (Rp) of the feed.

[Rule 62-204.800, F.A.C.; 40 CFR 60.214]

M.8. <u>Total Fluorides</u>. The Permittee shall meet the 40 CFR 63 Subpart AA performance testing requirements stated in **Common Conditions GG.5 – GG.7** with the exception that testing shall be done every five years.
[Permit 0470002-033-AV, Rule 62-204.800(7)(b), F.A.C.; 40 CFR 60.214, Subpart U; Rule 62-297.401; F.A.C.]

NOTIFICATION, RECORDKEEPING, REPORTING REQUIREMENTS

M.9. The Permittee shall meet the 40 CFR 63 Subpart AA notification, recordkeeping, and reporting requirements stated in **Common Conditions GG.10. – GG.12**.

M.10. This emissions unit is subject to specific requirements of 40 CFR 63 Subpart AA, Appendix A to Subpart AA – Applicability to General Provisions to Subpart AA, and alternative MACT monitoring plan (Administrative Order No. 04-I-AP, dated October 4, 2004). The owner or operator is responsible for remaining in compliance with any updates made to Subpart A or AA. This EU is subject to Facility Wide Condition No. 10.

[40 CFR 63-Subpart A; 40 CFR 63-Subpart AA; and Administrative Order No. 04-I-AP, Alternate MACT Monitoring Plan]

EXEMPTION FROM NEW SOURCE PERFORMANCE STANDARDS.

M.10. This emissions unit is exempted from any otherwise applicable new source performance standard contained in 40 CFR Part 60, Subpart U. 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 40 CFR 63, Subpart AA. For each affected source, this exemption is effective upon the date that the owner or operator demonstrates to the Administrator that the requirements of **Conditions GG.1 through GG.9** have been met.

M.10. continued:

{Permitting Note: Department determined that the requirements for exemption have been met by the facility as of 8/16/06. In accordance with this regulation, if the source is not in compliance with all requirements of 40 CFR 63, Subpart AA, the exemption from any otherwise applicable new source performance standard contained in 40 CFR Part 60, Subpart U is no longer valid.}

[40 CFR 63.610]

COMMON CONDITIONS - F.A.C. TEST REQUIREMENTS

M.11. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

COMMON CONDITIONS – GENERAL PROVISIONS OF 40 CFR 63

M.12. This emissions unit is also subject to the applicable requirements of 40 CFR 63 Subpart A.

Subsection N. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
038	"B" Defluorinated Phosphate (DFP) Plant

"B" DFP Plant emits fluoride and particulate matter emissions, and is controlled by a Cross-Flow Packed Scrubber (13B). CAM applies for particulate matter, sulfur dioxide and fluoride.

{Permitting note: This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards; Compliance Assurance Monitoring (CAM), adopted and incorporated by reference in Rule 62-204.800, F.A.C.}

The following specific conditions apply to the emissions unit(s) listed above:

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

N.0. In accordance with Rule 62-210.300(2)(a)3.c., F.A.C., the operation permit for an emissions unit which has been shut down for five years or more prior to the expiration date of the current operation permit shall be renewed for a maximum period not to exceed ten years from the date of shutdown, even if the emissions unit is not maintained in operational condition, provided the conditions given in sub-subparagraph 62-210.300(2)(a)3.b., F.A.C., are met and the owner or operator demonstrates to the Department that failure to renew the permit would constitute a hardship, which may include economic hardship:

(I) The owner or operator of the emissions unit demonstrates to the Department that the emissions unit may need to be reactivated and used, or that it is the owner's or operator's intent to apply to the Department for a permit to construct a new emissions unit at the facility before the end of the extension period; and

(II) The owner or operator of the emissions unit agrees to and is legally prohibited from providing the allowable emission permitted by the renewed permit as an emissions offset to any other person under Rule 62-212.500, F.A.C.; and

(III) The emissions unit was operating in compliance with all applicable rules as of the time the source was shut down.

***EU038 was last operated in July 2005. Therefore, Permit No. 0470002-077-AV extends EU038 expiration date only until July 2015.**

[Rule 62-210.300(2)(a)3.b and (a)3.c.]

N.1. <u>Permitted Capacity</u>. The rate shall not exceed the Maximum 12-MRA Hourly Rate = 8.25 tons of product or Maximum Daily 1-Hour Average Rate = 10 tons of product.

12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Permit No. 0470002-034-AC]

N.2. Methods of Operation. The authorized fuel to be fired shall be natural gas.

[Rule 62-213.410, F.A.C.]

N.3. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year (8784 in any Leap Year).

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

EMISSION LIMITATIONS AND STANDARDS

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

N.4. Total Fluoride. Fluoride emissions shall not exceed 2.5 lbs/hr and 10.5 TPY.

[Rule 62-296.403(2), F.A.C.; Construction Permit No. AC24-255802]

N.5. Particulate Matter. Particulate Matter Emissions shall not exceed 14.05 lbs/hr and 59.00 TPY.
[Rule 62-296.320(4)(a), F.A.C.; Construction Permit No. AC24-255802]

N.6. Sulfur Dioxide. Sulfur Dioxide Emissions shall not exceed 8.00 lbs/hr and 35.04 TPY.

[Permit AC24-255802]

N.7. Visible Emissions. Visible Emissions are limited to 40% opacity.
[Rule 62-296.320(4)(b)2., F.A.C.; Construction Permit No. AC24-255802; Construction Permit No. AC24-15083 amendment dated 6/28/88]

TEST METHODS AND PROCEDURES

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

N.8. Total Fluoride. Fluoride emissions stack test method shall be EPA Method 13A or 13B incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.403(3), F.A.C.; Rule 62-297.401, F.A.C.; Construction Permit No. AC24-255802]

N.9. Particulate Matter. Particulate Matter Emissions stack test method shall be EPA Method 5 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(a), F.A.C.; Rule 62-297.401, F.A.C.; Construction Permit No. AC24-255802]

N.10. **Sulfur Dioxide**. Sulfur Dioxide Emissions testing shall comply with the applicable in requirements Rule 62-297.401(6), F.A.C. and be performed every 5 years prior to operation permit renewal. The 5-year testing frequency is justified by the low emission rate documented in previous emissions tests. The applicant has consistently presented test results that are more than 97% below the applicable standards. Furthermore, in accordance with Rule 62-297.310(7)(a)4.b., F.A.C., an annual Sulfur Dioxide compliance test is required if there is an applicable standard and if the emissions unit has a potential to emit 100 tons per year or greater. The permitted Sulfur Dioxide limit for Emissions Unit Number 038 is 8.00 pounds per hour and 35.04 tons per year. [Air Construction Permit No. 0470002-040-AC]

N.11. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.401, F.A.C.]

COMPLIANCE ASSURANCE MONITORING (CAM) REQUIREMENTS

N.12. This emissions unit is subject to the CAM requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C.

[40 CFR 64; and, Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

COMMON CONDITIONS - F.A.C. TEST REQUIREMENTS

N.13. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

Subsection O. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
039	"C" Auxiliary Boiler. This emissions unit shares a common stack with the "D" Auxiliary Boiler.

"C" Auxiliary Boiler has a design capacity of 120, 000 pounds per hour of steam. The produced steam is used to augment steam produced from the sulfuric acid plants to provide operating flexibility in the phosphoric acid production and evaporation process. The boiler is permitted to fire natural gas with No. 6 fuel oil as a stand-by fuel. The maximum heat input rate is 155 MMBTU/hr. Pollutants emitted are particulate matter, sulfur dioxide and visible emissions. CAM does not apply for sulfur dioxide and particulate matter for this emissions unit.

{Permitting note(s): This emissions unit is regulated under Rule 62-296.406, F.A.C., Fossil Fuel Steam Generators with less than 250 Million Btu per Hour Heat Input, New and Existing Emissions Units; Rule 212.400(5), F.A.C., Prevention of Significant Deterioration (PSD), Permit No. PSD-FL-083; Rule 62-212.400(6), F.A.C.; and Best Available Control Technology (BACT) Determination dated 11/7/82. This emission unit is subject to 40 CFR 63 Subpart DDDDD, I/C/I Boilers and Process Heaters and is considered to be an existing fuel boiler.}

The following specific conditions apply to the emissions unit(s) listed above:

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

O.1. Permitted Capacity. The heat input rate shall not exceed 155 MMBTU/hr.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC24-56214; Amendment dated 3/22/85]

O.2. Methods of Operation. This emissions unit shall be fired primarily with natural gas. No. 6 fuel oil or on-spec used oil may be fired as stand-by fuels. The sulfur content in the No. 6 fuel oil and the On-spec used oil shall not exceed 1.00% by weight.

Better Grade Fuel Oil. When No. 6 fuel oil is specified in this permit, a better grade may be substituted. A better grade fuel oil is defined as a fuel oil with a higher ranking in the following list:
Better Grade (Top of list)
- New, No. 2 fuel oil, or No. 2 on-specification used oil
- New, No. 3 fuel oil, or No. 3 on-specification used oil
- New, No. 4 fuel oil, or No. 4 on-specification used oil
- New, No. 5 fuel oil, or No. 5 on-specification used oil
- New, No. 6 fuel oil, or No. 6 on-specification used oil

The use of Better Grade Fuel oils does not constitute the use of these fuels beyond "as stand-by fuels" as specified under each EU's fuel usage limits below.

[Rule 62-213.410, F.A.C.; Construction Permit No. AC24-56214, PSD-FL-083; Construction Permit No. 0470002-073-AC]

O.3. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year (8784 in any Leap Year).

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC24-56214, PSD-FL-083]

EMISSION LIMITATIONS AND STANDARDS

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

O.4. Particulate Matter. Particulate Matter Emissions shall not exceed 1.2 lbs/hr and 5.3 TPY when firing natural gas, 10.7 lbs/hr and 46.7 TPY when firing fuel oil.

[Rule 62-210.200(42), F.A.C., BACT Determination dated 11/7/82; Rule 62-296.406(2), F.A.C.; Construction Permit No. AC24-56214, PSD-FL-083]

O.5. **Sulfur Dioxide**. Sulfur Dioxide Emissions shall not exceed 1.1 lb per MMBtu heat input, and 128.7 lbs/hr and 563.9 TPY when firing fuel oil, and 0.1 lbs/hr and 0.3 TPY when firing natural gas.

[Rule 62-210.200(42), F.A.C., (BACT); Rule 62-296.406(3), F.A.C.; Construction Permit No. AC24-56214, PSD-FL-083]

O.6. Visible Emissions. Visible Emissions shall not exceed 20% opacity except 27% for one 6 min. period per hour.

[Rule 62-296.406(1), F.A.C.; Construction Permit No. AC24-56214, PSD-FL-083]

O.7. Nitrogen Oxides. Nitrogen oxides emissions shall not exceed 49.2 lb per hour and 215.5 TPY when firing fuel oil, and 21.0 lbs/hr and 92.0 TPY when firing natural gas.
[Construction Permit No. AC24-56214, PSD-FL-083]

O.8. Carbon Monoxide. Carbon Monoxide emissions shall not exceed 4.1 lb per hour and 18.0 TPY when firing fuel oil, and 2.0 lbs/hr and 8.9 TPY when firing natural gas.
[Construction Permit No. AC24-56214, PSD-FL-083]

O.9. Volatile Organic Compounds. VOC emissions shall not exceed 0.8 lb per hour and 3.6 TPY when firing fuel oil, and 0.4 lbs/hr and 1.6 TPY when firing natural gas.
[Construction Permit No. AC24-56214, PSD-FL-083]

TEST METHODS AND PROCEDURES

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

O.10. Particulate Matter. This emissions unit shall be assumed to be in compliance with the Particulate Matter emission limits stated in **Condition No. O.4**., if the unit complies with the Visible Emissions limitations stated in **Condition No. O.6** and the fuel sulfur content restrictions stated in **Condition No. O.2.** The sulfur content shall be verified using the standards established in Rule 62-297.440(1), F.A.C., or maintain a record of acceptable, certified analyses of all fuel oil fired and report on an annual basis prior to March 1 of each year. The permittee shall conduct a particulate matter compliance test using EPA Method 5 upon Department request.
[Construction Permit No. AC24-56214, PSD-FL-083, Amendment dated March 22, 1985]

O.11. Sulfur Dioxide. In lieu of an annual compliance stack test for sulfur dioxide emissions, the Permittee shall comply with the fuel sulfur content restrictions stated in **Condition No. O.2.** The sulfur content shall be verified using the standards established in Rule 62-297.440(1), F.A.C., or maintain a record of acceptable, certified analyses of all fuel oil fired and report on an annual basis prior to March 1 of each year.

The permittee shall conduct sulfur dioxide compliance test using EPA Method 6 upon Department request.

[Construction Permit No. AC24-56214, PSD-FL-083, Amendment dated 2/22/84]

O.12. Visible Emissions. The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be performed annually, once each federal fiscal year.

[Rule 62-297.401, F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; Construction Permit No. AC24-56214, PSD-FL-083]

O.13 Nitrogen Oxides. The test method for nitrogen oxides shall be EPA Method 7, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be performed upon Department request.
[Construction Permit No. AC24-56210, PSD-FL-083]

O.14. Carbon Monoxide. The test method for carbon monoxide shall be EPA Method 10, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be performed upon Department request.
[Construction Permit No. AC24-56210, PSD-FL-083]

O.15. **Special Compliance Tests**. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

[Rule 62-297.310(7)(b), F.A.C.]

O.16. Excess Emissions– Startup, Shutdown, Malfunction. Excess Emissions resulting from startup, shutdown or malfunction shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed 2 hours in any 24 hour period unless authorized by the Department for longer duration.
[Rule 62-210.700(1), F.A.C.]

O.17. Excess Emissions- Malfunction. In case of excess emissions resulting from malfunctions, the owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.

[Rule 62-210.700(6), F.A.C.]

COMMON CONDITIONS - ON-SPEC USED OIL/LEAD

O.18. This emissions unit is also subject to the On-Spec Used Oil/Lead conditions in Subsection EE**.**

COMMON CONDITIONS - F.A.C. TEST REQUIREMENTS

O.19. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

Subsection P. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
040	"D" Auxiliary Boiler. This emissions unit shares a common stack with "C" Auxiliary Boiler

"D" Auxiliary Boiler has a design capacity of 100,000 pounds per hour of steam. The produced steam is used to augment steam produced from the sulfuric acid plants to provide operating flexibility in the phosphoric acid production and evaporation process. The boiler is permitted to fire natural gas with No. 6 fuel oil as a stand-by fuel. The maximum heat input rate is 155 MMBTU/hr. Pollutants emitted are particulate matter, sulfur dioxide and visible emissions. CAM does not apply for sulfur dioxide and particulate matter for this emissions unit.

{Permitting note(s): This emissions unit is regulated under Rule 62-296.406, F.A.C., Fossil Fuel Steam Generators with less than 250 Million Btu per Hour Heat Input, New and Existing Emissions Units, Rule 212.400(5), F.A.C.; Prevention of Significant Deterioration (PSD): Permit No. PSD-FL-083; Rule 62-212.400(6), F.A.C., and Best Available Control Technology (BACT) Determination dated 11/7/82. This emission unit is subject to 40 CFR 63 Subpart DDDDD, I/C/I Boilers and Process Heaters and is considered to be an existing fuel boiler.}

The following specific conditions apply to the emissions unit(s) listed above:

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

P.1. Permitted Capacity. The heat input rate shall not exceed 155 MMBTU/hr.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC24-56213, Amendment dated 3/22/85]

P.2. Methods of Operation. This emissions unit shall be fired primarily with natural gas. No. 6 fuel oil or on-spec used oil may be fired as a stand-by fuel. The sulfur content in the No. 6 fuel oil and the On-spec used oil shall not exceed 1.00% by weight.

Better Grade Fuel Oil. When No. 6 fuel oil is specified in this permit, a better grade may be substituted. A better grade fuel oil is defined as a fuel oil with a higher ranking in the following list:
Better Grade (Top of list)

New, No. 2 fuel oil, or No. 2 on-specification used oil
New, No. 3 fuel oil, or No. 3 on-specification used oil
New, No. 4 fuel oil, or No. 4 on-specification used oil
New, No. 5 fuel oil, or No. 5 on-specification used oil
New, No. 6 fuel oil, or No. 6 on-specification used oil

P.2 continued:

The use of Better Grade Fuel oils does not constitute the use of these fuels beyond "as stand-by fuels" as specified under each EU's fuel usage limits below.

[Rule 62-213.410, F.A.C.; Construction Permit No. AC24-56213, PSD-FL-083; Construction Permit No. 0470002-073-AC]

P.3. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year (8784 in any Leap Year).

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC24-56213, PSD-FL-083]

EMISSION LIMITATIONS AND STANDARDS

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

P.4. Particulate Matter. Particulate Matter Emissions shall not exceed 1.2 lbs/hr and 5.3 TPY when firing natural gas, and 10.7 lbs/hr and 47 TPY when firing fuel oil.

[Rule 62-210.200(42), F.A.C.; BACT Determination dated 11/7/82; Rule 62-296.406(2), F.A.C.; Construction Permit No. AC24-56213, PSD-FL-083]

P.5. Sulfur Dioxide. Sulfur Dioxide Emissions shall not exceed 1.1 lb per MMBtu heat input, and 128.7 lbs/hr and 564 TPY when firing fuel oil and 0.1 lbs/hr and 0.3 TPY when firing natural gas.

[Rule 62-210.200(42), F.A.C.; BACT Determination dated 11/7/82; Rule 62-296.406(3), F.A.C.; Construction Permit No. AC24-56213, PSD-FL-083]

P.6. Visible Emissions. Visible Emissions shall not exceed 20% opacity except 27% for one 6 min. period per hour.

[Rule 62-296.406(1), F.A.C.; Construction Permit No. AC24-56213, PSD-FL-083]

P.7. Nitrogen Oxides. Nitrogen oxides emissions shall not exceed 49.2 lb per hour and 215.5 TPY when firing fuel oil and 21.0 lbs/hr and 92.0 TPY when firing natural gas.

[Construction Permit No. AC24-56213, PSD-FL-083]

P.8. Carbon Monoxide. Carbon Monoxide emissions shall not exceed 4.1 lb per hour and 18.0 TPY when firing fuel oil and 2.0 lbs/hr and 9 TPY when firing natural gas.

[Construction Permit No. AC24-56213, PSD-FL-083]

P.9. Volatile Organic Compounds. VOC emissions shall not exceed 0.8 lbs/hr and 4 TPY when firing fuel oil and 0.4 lbs/hr and 2 TPY when firing natural gas.

[Construction Permit No. AC24-56213, PSD-FL-083]

TEST METHODS AND PROCEDURES

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

P.10. Particulate Matter. This emissions unit shall be assumed to be in compliance with the Particulate Matter emission limits stated in Condition No. P.4., if the unit complies with the Visible Emissions limitations stated in Condition No. P.6 and the fuel sulfur content restrictions stated in **Condition No. P.2.** The sulfur content shall be verified using the standards established in Rule 62-297.440(1), F.A.C., or maintain a record of acceptable, certified analyses of all fuel oil fired and report on an annual basis prior to March 1 of each year.

The permittee shall conduct a particulate matter compliance test using EPA Method 5 upon Department request.

[Construction Permit No. AC24-56213, PSD-FL-083, Amendment dated March 22, 1985, Applicant Request]

P.11. Sulfur Dioxide. In lieu of an annual compliance stack test for sulfur dioxide emissions, the Permittee shall comply with the fuel sulfur content restrictions stated in **Condition No. P.2.** The sulfur content shall be verified using the standards established in Rule 62-297.440(1), F.A.C., or maintain a record of acceptable, certified analyses of all fuel oil fired and report on an annual basis prior to March 1 of each year.

The permittee shall conduct sulfur dioxide compliance testing using EPA Method 6 upon Department request.
[Construction Permit No. AC24-56213, PSD-FL-083, Amendment dated 2/22/84]

P.12. Visible Emissions. The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be performed annually, once each federal fiscal year.

[Rule 62-297.401, F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; Construction Permit No. AC24-56213, PSD-FL-083]

P.13 Nitrogen Oxides. The test method for nitrogen oxides shall be EPA Method 7, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be performed upon Department request.

[Construction Permit No. AC24-56210, PSD-FL-083]

P.14. Carbon Monoxide. The test method for carbon monoxide shall be EPA Method 10, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be performed upon Department request.

[Construction Permit No. AC24-56210, PSD-FL-083]

P.15. **Special Compliance Tests**. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

[Rule 62-297.310(7)(b), F.A.C.]

P.16. Excess Emissions– Startup, Shutdown, Malfunction. Excess Emissions resulting from startup, shutdown or malfunction shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed 2 hours in any 24 hour period unless authorized by the Department for longer duration.

[Rule 62-210.700(1), F.A.C.]

P.17. Excess Emissions- Malfunction. In case of excess emissions resulting from malfunctions, the owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.

[Rule 62-210.700(6), F.A.C.]

Common Conditions - On-Spec Used Oil/Lead

P.18. This emissions unit is also subject to the On-Spec Used Oil/Lead conditions in Subsection EE

Common Conditions - F.A.C. Test Requirements

P.19. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

Subsection Q. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
042	Defluorinated Phosphate (DFP) Feed Prep

DFP Feed Prep consists of the following systems: The feed prep area where the limestone, phosphate rock, and other ingredients are mixed, the soda ash storage and handling system, and a limestone handling system. CAM does apply for particulate matter, sulfur dioxide and fluoride for this emissions unit.

The soda ash system consists of a pneumatic transfer system, which conveys soda ash from a vacuum railcar unloading hopper to a 330 ton storage silo (Emissions Point 06/ EP SA1). From this silo, soda ash is then transferred to a 20 tons soda ash bin/day tank (Emission Point 07/ EP SA2). A baghouse and bin filter control particulate Matter emissions from the silo and bin, respectively.

Limestone handling system: Limestone is unloaded via truck into a 50 ton storage silo (Emissions Point 04/EP L1) to a 3 ton limestone surge bin (Emissions Point 03/ EP L2). A baghouse and bin filter control particulate matter emissions from the silo and bin, respectively.

Remaining Emissions points are identified as Emissions Point 01 (Rock bin Baghouse), Emissions Point 02 (Baghouse), and Emissions Point 05 (Dryer wet scrubber). CAM does apply for particulate matter from the scrubber.

{Permitting note: This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards; Compliance Assurance Monitoring (CAM), adopted and incorporated by reference in Rule 62-204.800, F.A.C.}

The following specific conditions apply to the emissions unit(s) listed above:

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

Q.0. In accordance with Rule 62-210.300(2)(a)3.c., F.A.C., the operation permit for an emissions unit which has been shut down for five years or more prior to the expiration date of the current operation permit shall be renewed for a maximum period not to exceed ten years from the date of shutdown, even if the emissions unit is not maintained in operational condition, provided the conditions given in sub-subparagraph 62-210.300(2)(a)3.b., F.A.C., are met and the owner or operator demonstrates to the Department that failure to renew the permit would constitute a hardship, which may include economic hardship:

(I) The owner or operator of the emissions unit demonstrates to the Department that the emissions unit may need to be reactivated and used, or that it is the owner's or operator's intent to apply to the Department for a permit to construct a new emissions unit at the facility before the end of the extension period; and

Q.0. continued:

(II) The owner or operator of the emissions unit agrees to and is legally prohibited from providing the allowable emission permitted by the renewed permit as an emissions offset to any other person under Rule 62-212.500, F.A.C.; and

(III) The emissions unit was operating in compliance with all applicable rules as of the time the source was shut down.

***EU042 was last operated in July 2005. Therefore, Permit No. 0470002-077-AV extends EU042 expiration date only until July 2015.**

[Rule 62.210.300(2)(a)3.b and (a)3.c.]

Q.1.a. Permitted Capacity. The rate shall not exceed the Maximum 12-MRA Hourly Rate = 48.94 tons of input or Maximum Daily 1-Hour Average Rate = 54 tons of input.

12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Permit No. 0470002-034-AC]

Emission Points 03 and 04/L1 and L2 Limestone System:

Q.1.b. Permitted Capacity – Limestone System. The maximum loading rate for the Limestone Silo (EP 03/EP L1) shall not exceed 50,000 lbs/hr. The maximum loading rate for the Limestone Surge bin (EP 04/EP L2) shall not exceed 10,000 lbs/hr.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Permit No. AC24-191394]

Q.2. Methods of Operation are as follows:
Fuels fired are natural gas or fuel oil with a maximum sulfur content of 1.50%.

[Rule 62-213.410, F.A.C.]

Q.3. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year (8784 in any Leap Year). The soda ash storage equipment may operate continuously. The soda ash silo vacuum pump (EP 06/EP SA1) operating hours shall not exceed 1800 hours per year. The soda ash bin blower/exhaust fan (EP 07/EP SA2) operating hours shall not exceed 2700 hours.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC24-165588]

EMISSION LIMITATIONS AND STANDARDS

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

Emission Point 05/ Feed Prep Scrubber:

Q.4. Particulate Matter. Particulate Matter Emissions shall not exceed 31.99 lbs/hr and 134.35 TPY.

[Rule 62-296.320(4)(a), F.A.C.]

Q.5. Sulfur Dioxide. Sulfur Dioxide Emissions shall not exceed 4.90 lbs/hr and 20.58.

[Used in a SO2 model]

Q.6. Visible Emissions. Visible Emissions shall not be equal to greater than 20% opacity.

[Rule 62-296.320(4)(b), F.A.C.]

Emission Point 02/ Baghouse:

Q.7. Visible Emissions. Visible Emissions shall not exceed 5% opacity.

[Rule 62-297.620(4), F.A.C.]

Emission Point 01/ Rock Bin:

Q.8. Visible Emissions. Visible Emissions shall not exceed 5% opacity.

[Rule 62-297.620(4), F.A.C.]

Emission Point 03/ L1 Lime Silo:

Q.9.a. Particulate Matter. Particulate Matter emissions shall not exceed 0.10 lbs/hr and 0.44 TPY.

[Construction Permit No. AC24-191394]

Q.9.b. Visible Emissions. Visible Emissions shall not exceed 5% opacity.
[Rule 62-297.620(4), F.A.C.]

Emission Point 04/ L2 Lime Bin:

Q.10.a. Particulate Matter. Particulate Matter emissions shall not exceed 0.10 lbs/hr and 0.44 TPY.

[Construction Permit No. AC24-191394]

Q.10.b. Visible Emissions. Visible Emissions shall not exceed 5% opacity.

[Rule 62-297.620(4), F.A.C.]

Emission Point 06/ SA1 Soda Ash Silo:

Q.11.a. Particulate Matter. Particulate Matter emissions shall not exceed 0.25 lb/hr and 0.23 TPY.

[Construction Permit No. AC24-165588]

Q.11b. Visible Emissions. Visible Emissions shall not exceed 5% opacity.

[Rule 62-297.620(4), F.A.C.]

Emission Point 07/ SA2 Soda Ash Bin:

Q.12.a. Particulate Matter. Particulate Matter emissions shall not exceed 0.02 lb/hr and 0.027 TPY.

[Construction Permit No. AC24-165588]

Q.12.b. Visible Emissions. Visible Emissions shall not exceed 5% opacity.

[Rule 62-297.620(4), F.A.C.]

TEST METHODS AND PROCEDURES

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

Q.13. From EP 05, Particulate Matter Emissions stack test method shall be EPA Method 5 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(a), F.A.C.; Rule 62-297.401, F.A.C.]

Q.14. From EP 05, Sulfur Dioxide Emissions in lieu of testing shall comply with the applicable requirements in Rule 62-297.440(1), F.A.C. or maintain a record of acceptable, certified analyses of all fuel oil fired and report annually once each federal fiscal year.

Q.15. From EP 05, Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-297.401, F.A.C.]

Q.16. From EP 02, Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-297.401, F.A.C.]

Q.17. From EP 01, Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-297.401, F.A.C.]

Emission Point 03/ L1 Lime Silo:

Q.18.a. **Particulate Matter**. Compliance with the particulate matter limitation in **Condition Q.9.** shall be demonstrated by compliance with the Visible emissions standard in **Condition Q.9.**

Q.18.b. **Visible Emissions**. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year. The test shall be conducted while the silo is being loaded.

[Rule 62-297.401, F.A.C.; Construction Permit No. AC24-191394]

Emission Point 04/ L2 Lime Bin:

Q.19.a. **Particulate Matter**. Compliance with the particulate matter limitation in **Condition Q.10.** shall be demonstrated by compliance with the Visible emissions standard in Condition Q.10.

Q.19.b. **Visible Emissions**. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year. The test shall be conducted while the bin is being loaded.

[Rule 62-297.401, F.A.C.; Construction Permit No. AC24-191394]

Emission Point 06/ SA1 Soda Ash Silo:

Q.20. Visible Emissions. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-297.401, F.A.C.; Construction Permit No. AC24-165588]

Emission Point 07/ SA2 Soda Ash Bin:

Q.21. Visible Emissions. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-297.401, F.A.C.; Construction Permit No. AC24-165588]

COMPLIANCE ASSURANCE MONITORING (CAM) REQUIREMENTS

Q.22. Emission point EP05 is subject to the CAM requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C.

[40 CFR 64; and, Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

Common Conditions - F.A.C. Test Requirements

Q.23. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

Subsection R. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
044	"A" & "B" Defluorinated Phosphate (DFP) Coolers

"A" & "B" DFP Coolers emit particulate matter, and each are controlled by a cyclonic wet scrubber that exhaust through a common stack (EP 12). CAM does not apply for particulate matter and fluoride for this emissions unit.

{Permitting note(s): These emissions units are regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards; and Rule 62-296.403, F.A.C., Phosphate Processing}

The following specific conditions apply to the emissions unit(s) listed above:

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

R.0. In accordance with Rule 62-210.300(2)(a)3.c., F.A.C., the operation permit for an emissions unit which has been shut down for five years or more prior to the expiration date of the current operation permit shall be renewed for a maximum period not to exceed ten years from the date of shutdown, even if the emissions unit is not maintained in operational condition, provided the conditions given in sub-subparagraph 62-210.300(2)(a)3.b., F.A.C., are met and the owner or operator demonstrates to the Department that failure to renew the permit would constitute a hardship, which may include economic hardship:

(I) The owner or operator of the emissions unit demonstrates to the Department that the emissions unit may need to be reactivated and used, or that it is the owner's or operator's intent to apply to the Department for a permit to construct a new emissions unit at the facility before the end of the extension period; and

(II) The owner or operator of the emissions unit agrees to and is legally prohibited from providing the allowable emission permitted by the renewed permit as an emissions offset to any other person under Rule 62-212.500, F.A.C.; and

(III) The emissions unit was operating in compliance with all applicable rules as of the time the source was shut down.

***EU044 was last operated in July 2005. Therefore, Permit No. 0470002-077-AV extends EU044 expiration date only until July 2015.**

[Rule 62-210.300(2)(a)3.b and (a)3.c.]

R.1. Permitted Capacity. The rate for each DFP Cooler "A" & "B" shall not exceed the Maximum 12-MRA Hourly Rate = 8.25 tons of product or Maximum Daily 1-Hour Average Rate = 10 tons of product.

12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; permit 0470002-034-AC]

R.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year (8784 in any Leap Year).

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

EMISSION LIMITATIONS AND STANDARDS

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

R.3. Fluoride emissions shall not exceed 1.42 lbs/hr and 5.96 TPY.
[Rule 62-296.403(2), F.A.C.; Permit No. AO24-31725]

R.4. Particulate Matter. Particulate Matter Emissions shall not exceed 25.04 lbs/hr and 105.17 TPY.

[Rule 62-296.320(4)(a), F.A.C.; AO24-31725]

R.5. Visible Emissions. Visible Emissions shall not be equal to or greater than 20% opacity.

[Rule 62-296.320(4)(b), F.A.C.; Permit No. AO24-31725]

TEST METHODS AND PROCEDURES

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

R.6. Total Fluoride. Fluoride emissions stack test method shall be EPA Method 13A or 13B incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.
[Rule 62-296.403(3), F.A.C.; Rule 62-297.401, F.A.C.; Permit No. AO24-31725]

R.7. Particulate Matter. Particulate Matter Emissions stack test method shall be EPA Method 5 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(a), F.A.C.; Rule 62-297.401, F.A.C.; Permit No. AO24-31725]

R.8. Visible Emissions. Visible Emissions test method shall be EPA Method 5 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.401, F.A.C.]

COMMON CONDITIONS - F.A.C. TEST REQUIREMENTS

R.9. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

Subsection S. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
054	Molten Sulfur System for "C" & "D" Sulfuric Acid Plants

Molten Sulfur System for "C" & "D" Sulfuric Acid Plants consist of a rail & truck unloading system with transfer point venting, receiving pit, supply pit, and storage tank. The EU has an emission limitation for visible emissions. CAM does not apply.

{Permitting note(s): This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards}

The following specific conditions apply to the emissions unit(s) listed above:

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

S.1. Permitted Capacity. The rate shall not exceed the Maximum 12-MRA Hourly Rate = 77.08 tons of throughput or Maximum Daily 1-Hour Average Rate = 85 tons throughput.

12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages. Throughput rate corresponds to the sulfur feed rate to the sulfuric acid plants.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; permit 0470002-034-AC]

S.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year (8784 in any Leap year).

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Subsection T. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
061	Green Superphosphoric Acid (SPA) Plant

Green Superphosphoric Acid (SPA) Plant emits fluoride emissions which are controlled by a cross-flow packed wet scrubber. This process changes the color of hot SPA from black to green using an oxidant. CAM does not apply for fluoride for this emissions unit.

{Permitting note: This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards.}

The following specific conditions apply to the emissions unit(s) listed above:

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

T.1. Permitted Capacity. The rate shall not exceed the Maximum 12-MRA Hourly Rate = 40 tons of 100% P_2O_5 input or Maximum Daily 1-Hour Average Rate = 44.0 tons of 100% P_2O_5 input.
12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; permit 0470002-034-AC, (Applicant requested on July 10, 2006 and August 7, 2006) Air Construction Permit No. 0470002-054-AC]

T.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year (8784 in any Leap year).

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

EMISSION LIMITATIONS AND STANDARDS

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

T.3. At sample port, fluoride emissions shall not exceed 0.5 lb/hr and 2.2 TPY.

[Requested by applicant; Permit #AC24-205170; and Air Construction Application for Permit No. 0470002-054-AC Application]

TEST METHODS AND PROCEDURES

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

T.4. Fluoride emissions stack test method shall be EPA Method 13A or 13B incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-297.401, F.A.C.]

COMMON CONDITIONS - F.A.C. TEST REQUIREMENTS

T.5. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

Subsection U. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
062	Defluorinated Phosphate (DFP) Product Silos

DFP Product Silos emit particulate matter, which is controlled by the following emissions points (EP); EP 14, Product sizing & crushing controlled by a baghouse, and EP 16, Product storage silos "A", "B" and "C" & shipping operations controlled by a baghouse. CAM does not apply for this emissions unit.

{Permitting note(s): This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards.}

The following specific conditions apply to the emissions unit(s) listed above:

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

U.1. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year (8784 in any Leap year), and shall be recorded.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC24-250411]

U.2. **Permitted Capacity**. The maximum total discharge rate from the three silos, Nos. A, B, and C, shall not exceed 100 TPH of DFP. One or more silos may discharge at the same time.

[Construction Permit No. AC24-250411]

EMISSION LIMITATIONS AND STANDARDS

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

From EP 14:

U.3. Visible Emissions shall not exceed 5% opacity.

[Rule 62-297.620(4), F.A.C.; Operation Permit No. AC24-226519]

From EP 16:

U.4. Visible Emissions shall not exceed 5% opacity.

[Rule 62-297.620(4), F.A.C.; Operation Permit No. AC24-226519]

COMPLIANCE MONITORING AND TESTING REQUIREMENTS

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

From EP 14:

U.5. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C., and shall conduct a formal compliance test during each federal fiscal year (October 1 - September 30) unless otherwise specified by rule, order, or permit.

[Rule 62-297.401, F.A.C. and Rule 62-297.310(7)(a)4.a, F.A.C.; Operation Permit No. AC24-226519]

From EP 16:

U.6. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C., and shall conduct a formal compliance test during each federal fiscal year (October 1 - September 30) unless otherwise specified by rule, order, or permit.

[Rule 62-297.401, F.A.C. and Rule 62-297.310(7)(a)4.a, F.A.C.; Operation Permit No. AC24-226519]

COMMON CONDITIONS - F.A.C. TEST REQUIREMENTS

U.7. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

Subsection V. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
064	Swift Creek Mine Rock Dryer

SCM Rock Dryer is a phosphate rock dryer, with a fluid bed exhausting through a two-stage wet cyclonic scrubber to control particulate matter emissions. CAM does not apply for particulate matter and sulfur dioxide for this emissions unit.

{Permitting note: This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards; 40 CFR 63, Subpart A - General Provisions; 40 CFR 63, Subpart AA - National Emission Standards for Hazardous Air Pollutants (NESHAP) From Phosphoric Acid Manufacturing Plants. **The Part 40 CFR 63 Subparts A and AA take precedence, however these units are subject to all applicable State Implementation Plan (SIP) rules if these units are out of compliance with the NESHAP.}**

The following specific conditions apply to the emissions unit(s) listed above:

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

V.1. Permitted Capacity. The operation rate shall not exceed the Maximum 12-MRA Hourly Rate = 475 tons of input or Maximum Daily 1-Hour Average Rate = 525 tons of input.
12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. 0470002-034-AC]

V.2. Methods of Operation. It is fired primarily with natural gas. No. 6 fuel oil with sulfur content not to exceed 1.30 % which may contain on-spec used oil with sulfur content not to exceed 1.0 % is fired as fuel when natural gas is not available.

Better Grade Fuel Oil. When No. 6 fuel oil is specified in this permit, a better grade may be substituted. A better grade fuel oil is defined as a fuel oil with a higher ranking in the following list:
Better Grade (Top of list)

New, No. 2 fuel oil, or No. 2 on-specification used oil
New, No. 3 fuel oil, or No. 3 on-specification used oil
New, No. 4 fuel oil, or No. 4 on-specification used oil
New, No. 5 fuel oil, or No. 5 on-specification used oil
New, No. 6 fuel oil, or No. 6 on-specification used oil

The use of Better Grade Fuel oils does not constitute the use of these fuels beyond "as stand-by fuels" as specified under each EU's fuel usage limits below.

[Rule 62-213.410, F.A.C., Construction Permit No. 0470002-073-AC]

V.3. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year (8784 in any Leap year).

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

EMISSION LIMITATIONS AND STANDARDS

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

V.4. Particulate Matter. Particulate Matter Emissions shall not exceed 46.40 lbs/hr and 203.23 TPY.

[Rule 62-296.320(4)(a)., F.A.C.]

V.5. Sulfur Dioxide. Sulfur Dioxide Emissions shall not exceed 38.10 lbs/hr and 166.88 TPY.

[Used in 02/81 model]

V.6. Visible Emissions. Visible Emissions shall not be equal to or greater than 20% opacity.

[Rule 62-296.320(4)(b), F.A.C.]

OPERATING REQUIREMENTS

V.7. Scrubber Parameter Daily Averages. The permittee shall maintain daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber within the allowable ranges established pursuant the requirements of **Condition GG.4. (1) or (2).**

[Rule 62-204.800, F.A.C.; 40 CFR 63.604]

MONITORING REQUIREMENTS

V.8. The Permittee shall meet the 40 CFR 63 Subpart AA requirements stated in Common Conditions GG.1 – GG.4.

TEST METHODS AND PROCEDURES

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

V.9. Particulate Matter. The Permittee shall meet the 40 CFR 63 Subpart AA performance testing requirements stated in **Common Conditions GG.5, GG.6, and GG.8**.

V.10. Sulfur Dioxide. Sulfur Dioxide Emissions in lieu of testing shall comply with the applicable requirements in Rule 62-297.440(1), F.A.C. or maintain a record of acceptable, certified analyses of all fuel oil fired. A report shall be submitted on an annual basis prior to 03/01 of each year.

V.11. Visible Emissions. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually, once each federal fiscal year.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.401, F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.]

NOTIFICATION, RECORDKEEPING, REPORTING REQUIREMENTS

V.12. The Permittee shall meet the 40 CFR 63 Subpart AA notification, recordkeeping, and reporting requirements stated in **Common Conditions GG.10. – GG.12**.

V.13. This emissions unit is subject to specific requirements of 40 CFR 63 Subpart AA, Appendix A to Subpart AA – Applicability to General Provisions to Subpart AA, and alternative MACT monitoring plan (Administrative Order No. 04-I-AP, dated October 4, 2004). The owner or operator is responsible for remaining in compliance with any updates made to Subpart A or AA.
This EU is subject to Facility Wide condition No. 10.

[40 CFR 63-Subpart A; 40 CFR 63-Subpart AA; and Administrative Order No. 04-I-AP, Alternate MACT Monitoring Plan]

COMMON CONDITIONS - ON-SPEC USED OIL/LEAD

V.14. This emissions unit is also subject to the On-Spec Used Oil/Lead conditions in Subsection EE**.**

COMMON CONDITIONS - F.A.C. TEST REQUIREMENTS

V.15. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

COMMON CONDITIONS – GENERAL PROVISIONS OF 40 CFR 63

V.16. This emissions unit is also subject to the applicable requirements of 40 CFR 63 Subpart A.

Subsection W. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
065	Swift Creek Mine Silos

Swift Creek Mine Silos Mineral Storage and Conveyor System use a wet scrubber to control particulate matter emissions. CAM does not apply for particulate matter for this emissions unit.

{Permitting note: This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards.}

The following specific conditions apply to the emissions unit(s) listed above:

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

W.1. Permitted Capacity. The rate shall not exceed the Maximum 12-MRA Hourly Rate = 475 tons of input or Maximum Daily 1-Hour Average Rate = 525 tons of input.

12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; permit 0470002-034-AC]

W.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year (8784 in any Leap Year).

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

EMISSION LIMITATIONS AND STANDARDS

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

W.3. Particulate Matter. Particulate Matter Emissions shall not exceed 46.40 lbs/hr and 203.20 TPY.

[Rule 62-296.320(4)(a), F.A.C.]

W.4. Visible Emissions. Visible Emissions shall not be equal to or greater than 20% opacity.

[Rule 62-296.320(4)(b), F.A.C.]

TEST METHODS AND PROCEDURES

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

W.5. Particulate Matter. Particulate Matter emissions test method shall be EPA Method 5 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296. 320(4)(a)3., F.A.C.; Rule 62-297.401, F.A.C.]

W.6. Visible Emissions. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296. 320(4)(b)4., F.A.C.; Rule 62-297.401, F.A.C.]

COMMON CONDITIONS - F.A.C. TEST REQUIREMENTS

W.7. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

Subsection X. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
066	"E" Sulfuric Acid Plant

"E" Sulfuric Acid Plant is a double absorption process that produces sulfuric acid and controls sulfur dioxide (SO_2) emissions. The emissions unit uses a Brinks mist eliminator to control sulfuric acid mist (SAM). CAM does not apply for sulfur dioxide for this emissions unit.

{Permitting note(s): This emissions unit is regulated under NSPS - 40 CFR 60, Subpart H, Standards of Performance for Sulfuric Acid, adopted and incorporated by reference in Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-212.300, F.A.C., General Preconstruction Review Requirements; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD): Permit No. PSD-FL-082; and Rule 296.402, F.A.C., Sulfuric Acid Plants.}

The following specific conditions apply to the emissions unit(s) listed above:

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

X.1. Permitted Capacity. The production rate shall not exceed 2500 TPD, expressed as 100 percent H_2SO_4 or 104.20 TPH.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC24-56211, PSD-FL-082]

X.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year (8784 in any Leap Year).
[Permit No. 0470005-004-AO and Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

EMISSION LIMITATIONS AND STANDARDS

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

X.3. Sulfur Dioxide. Sulfur Dioxide Emissions shall not exceed 2 kg per metric ton of acid produced (4 lb per ton), the production being expressed as 100 percent H_2SO_4, and 416. 7 lb per hour, and 1,820.00 TPY.

[Rule 62-204.800(7)(b)10., F.A.C.; 40 CFR 60.82(a); Construction Permit No. AC24-56211, PSD-FL-082]

X.4. Sulfuric Acid Mist (SAM). SAM Emissions shall not exceed 0.075 kg per metric ton of acid produced (0.15 lb per ton), the production being expressed as 100 percent H_2SO_4, and 15.62 lbs/hr and 68.20 TPY.

[Rule 62-204.800(7)(b)10., F.A.C.; 40 CFR 60.83(a)(1); Construction Permit No. AC24-56211, PSD-FL-082]

X.5. Visible Emissions. Visible Emissions shall not exceed 10% opacity.

[Rule 62-204.800(7)(b)10., F.A.C.; 40 CFR 60.83(a)(2); Construction Permit No. AC24-56211, PSD-FL-082]

TEST METHODS AND PROCEDURES

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

X.6. Sulfur Dioxide. The following procedures and test methods shall be used to determine sulfur dioxide emissions. A compliance test shall be conducted on an annual basis, once each federal fiscal year:

(a) The test methods in 40 CFR Appendix A or other methods and procedures as specified in this condition, except as provided in 40 CFR 60.8(b).

(b) (1) The emission rate (E) of sulfur dioxide shall be computed for each run using the following equation:

E=(CQsd)/(PK)
where:
E = emission rate of SO_2 kg/metric ton (lb/ton) of 100 percent H_2SO_4 produced.
C = concentration of SO_2, g/dscm (lb/dscf).
Qsd = volumetric flow rate of the effluent gas, dscm/hr (dscf/hr).
P = production rate of 100 percent H_2SO_4, metric ton/hr (ton/hr).
K = conversion factor, 1000 g/kg (1.0 lb/lb).

(2) Method 8 shall be used to determine the Sulfur Dioxide concentration (C) and the volumetric flow rate (Qsd) of the effluent gas. The moisture content may be considered to be zero. The sampling time and sample volume for each run shall be at least 60 minutes and 1.15 dscm (40.6 dscf).

(3) Suitable methods shall be used to determine the production rate (P) of 100 percent H_2SO_4 for each run. Material balance over the production system shall be used to confirm the production rate.

(4) N/A

(c) The following may be used as alternatives to the reference methods and procedures specified in this condition:

(1) If a source processes elemental sulfur or an ore that contains elemental sulfur and uses air to supply oxygen, the following procedure may be used instead of determining the volumetric flow rate and production rate:

(i) The integrated technique of Method 3 is used to determine the O_2 concentration and, if required, CO_2 concentration.

X.6. continued:

(ii) The SO_2 emission rate is calculated as described in **Condition X.12.** substituting the acid mist concentration for Cs as appropriate.

[40 CFR 60.85(a),(b),(c); Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-297.401, F.A.C.; Construction Permit No. AC24-56211, PSD-FL-082]

X.7. <u>Sulfuric Acid Mist</u>. The following procedures and test methods shall be used to determine sulfuric acid mist. A compliance test shall be conducted on an annual basis, once each federal fiscal year:

(a) The test methods in 40 CFR Appendix A or other methods and procedures as specified in this condition, except as provided in 40 CFR 60.8(b).

(b) (1) The emission rate (E) of sulfuric acid mist shall be computed for each run using the following equation:

E=(CQsd)/(PK)

where:

E = emission rate of acid mist kg/metric ton (lb/ton) of 100 percent H_2SO_4 produced.
C = concentration of acid mist, g/dscm (lb/dscf).
Qsd = volumetric flow rate of the effluent gas, dscm/hr (dscf/hr).
P = production rate of 100 percent H_2SO_4, metric ton/hr (ton/hr).
K = conversion factor, 1000 g/kg (1.0 lb/lb).

(2) Method 8 shall be used to determine the Sulfuric Acid Mist concentration (C) and the volumetric flow rate (Qsd) of the effluent gas. The moisture content may be considered to be zero. The sampling time and sample volume for each run shall be at least 60 minutes and 1.15 dscm (40.6 dscf).

(3) Suitable methods shall be used to determine the production rate (P) of 100 percent H_2SO_4 for each run. Material balance over the production system shall be used to confirm the production rate.
(4) N/A

(c) The following may be used as alternatives to the reference methods and procedures specified in this condition:

(1) If a source processes elemental sulfur or an ore that contains elemental sulfur and uses air to supply oxygen, the following procedure may be used instead of determining the volumetric flow rate and production rate:

(i) The integrated technique of Method 3 is used to determine the O_2 concentration and, if required, CO_2 concentration.

X.7. continued:

(ii) The acid mist emission rate is calculated as described in **Condition X.12.** substituting the acid mist concentration for C as appropriate.

[40 CFR 60.85(a),(b),(c); Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-297.401, F.A.C.; Construction Permit No. AC24-56211, PSD-FL-082]

X.8. Visible Emissions. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; 40 CFR 60.85(b)(4); Rule 62-297.401, F.A.C.; Construction Permit No. AC24-56211, PSD-FL-082]

CONTINUOUS MONITORING REQUIREMENTS

X.9. Sulfur Dioxide. A continuous monitoring system for the measurement of sulfur dioxide shall be installed, calibrated, maintained, and operated. The pollutant gas used to prepare calibration gas mixtures under Performance Specification 2 and for calibration checks under 40 CFR 60.13(d), shall be sulfur dioxide (SO_2). Method 8 shall be used for conducting monitoring system performance evaluations under 40 CFR 60.13(c) except that only the sulfur dioxide portion of the Method 8 results shall be used. The span value shall be set at 1000 ppm of sulfur dioxide.
[40 CFR 60.84(a); Construction Permit No. AC24-56211, PSD-FL-082]

X.10. Conversion Factor. A conversion factor for the purpose of converting monitoring data into units of the applicable standard (kg/metric ton, lb/ton) shall be established. The conversion factor shall be determined, as a minimum, three times daily by measuring the concentration of sulfur dioxide entering the converter using suitable methods (e.g., the Reich test, National Air Pollution Control Administration Publication No. 999–AP–13) and calculating the appropriate conversion factor for each eight-hour period as follows:

$$CF = k[(1.000 - 0.015r)/(r - s)]$$

where:

CF = conversion factor (kg/metric ton per ppm, lb/ton per ppm).
k = constant derived from material balance. For determining CF in metric units, k=0.0653. For determining CF in English units, k=0.1306.
r = percentage of sulfur dioxide by volume entering the gas converter. Appropriate corrections must be made for air injection plants subject to the Administrator's approval.
s = percentage of sulfur dioxide by volume in the emissions to the atmosphere determined by the continuous monitoring system required under **Condition X.9.**

[40 CFR 60.84(b); Construction Permit No. AC24-56211, PSD-FL-082]

X.11. All conversion factors and values under **Condition X.10.** from which they were computed (i.e., CF, r, and s) shall be recorded.

[40 CFR 60.84(c)]

X.12. **Sulfur Dioxide Alternative**. Alternatively, a source that processes elemental sulfur or an ore that contains elemental sulfur and uses air to supply oxygen may use the following continuous emission monitoring approach and calculation procedures in determining SO_2 emission rates in terms of the standard. This procedure is not required, but is an alternative that would alleviate problems encountered in the measurement of gas velocities or production rate. Continuous emission monitoring systems for measuring SO_2, O_2, and CO_2 (if required) shall be installed, calibrated, maintained, and operated by the owner or operator and subjected to the certification procedures in Performance Specifications 2 and 3. The calibration procedure and span value for the SO_2 monitor shall be as specified in Condition X.9. The span value for CO_2 (if required) shall be 10 percent and for O_2 shall be 20.9 percent (air). A conversion factor based on process rate data is not necessary. Calculate the SO_2 emission rate as follows:

$$Es=(CsS)/[0.265 - (0.0126\ \%O_2) - (A\ \%CO_2)]$$

where:

Es = emission rate of SO_2, kg/metric ton (lb/ton) of 100 percent of H_2SO_4 produced.
Cs = concentration of SO_2, kg/dscm (lb/dscf).
S = acid production rate factor, 368 dscm/metric ton (11,800 dscf/ton) of 100 percent H_2SO_4 produced.
$\%O_2$ = oxygen concentration, percent dry basis.
A = auxiliary fuel factor,
= 0.00 for no fuel.
= 0.0226 for methane.
= 0.0217 for natural gas.
= 0.0196 for propane.
= 0.0172 for No 2 oil.
= 0.0161 for No 6 oil.
= 0.0148 for coal.
= 0.0126 for coke.
$\%CO_2$ = carbon dioxide concentration, percent dry basis.

NOTE: It is necessary in some cases to convert measured concentration units to other units for these calculations: Use the following table for such conversions:

From—	To—	Multiply by—
g/scm	kg/scm	10^{-3}
mg/scm	kg/scm	10^{-6}
ppm (SO_2)	kg/scm	2.660×10^{-6}
ppm (SO_2)	lb/scf	1.660×10^{-7}

[40 CFR 60.84(d)]

X.13. <u>Sulfur Dioxide Excess Emissions</u>. For the purpose of reports under 40 CFR 60.7(c), periods of excess emissions shall be all three-hour periods (or the arithmetic average of three consecutive one-hour periods) during which the integrated average sulfur dioxide emissions exceed the applicable standards under **Condition X.3**.

[40 CFR 60.84(e); Construction Permit No. AC24-56211, PSD-FL-082]

COMMON CONDITIONS - F.A.C. TEST REQUIREMENTS

X.14. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

Subsection Y. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
067	"F" Sulfuric Acid Plant

"F" Sulfuric Acid Plant is a double absorption process that produces sulfuric acid and controls sulfur dioxide (SO_2) emissions. The emissions unit uses a Brinks mist eliminator to control sulfuric acid mist (SAM). CAM does not apply for sulfur dioxide for this emissions unit.

{Permitting note(s): This emissions unit is regulated under NSPS - 40 CFR 60, Subpart H, Standards of Performance for Sulfuric Acid, adopted and incorporated by reference in Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-212.300, F.A.C., General Preconstruction Review Requirements; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD); and Rule 296.402, F.A.C., Sulfuric Acid Plants.}

The following specific conditions apply to the emissions unit(s) listed above:

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

Y.1. Permitted Capacity. The production rate shall not exceed 2500 TPD, expressed as 100 percent H_2SO_4 or 104.20 TPH.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC24-56209, PSD-FL-082]

Y.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year (8784 in any Leap Year).

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

EMISSION LIMITATIONS AND STANDARDS

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

Y.3. Sulfur Dioxide. Sulfur Dioxide Emissions shall not exceed 2 kg per metric ton of acid produced (4 lb per ton), the production being expressed as 100 percent H_2SO_4, 416.67 lbs/hr and 1,820.00 TPY.

[Rule 62-204.800(7)(b)10., F.A.C.; 40 CFR 60.82(a); Construction Permit No. AC24-56209, PSD-FL-082]

Y.4. Sulfuric Acid Mist (SAM). SAM emissions, expressed as H_2SO_4, shall not exceed 0.075 kg per metric ton of acid produced (0.15 lb per ton), the production being expressed as 100 percent H_2SO_4, 15.62 lbs/hr and 68.20 TPY.

[Rule 62-204.800(7)(b)10., F.A.C.; 40 CFR 60.83(a)(1); Construction Permit No. AC24-56209, PSD-FL-082]

Y.5. Visible Emissions. Visible Emissions shall not exceed 10% opacity.

[Rule 62-204.800(7)(b)10., F.A.C.; 40 CFR 60.83(a)(2); Construction Permit No. AC24-56209, PSD-FL-082]

TEST METHODS AND PROCEDURES

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

Y.6. Sulfur Dioxide. The following procedures and test methods shall be used to determine sulfur dioxide emissions. A compliance test shall be conducted on an annual basis, once each federal fiscal year:

(a) The test methods in 40 CFR Appendix A or other methods and procedures as specified in this condition, except as provided in 40 CFR 60.8(b).

(b) (1) The emission rate (E) of sulfur dioxide shall be computed for each run using the following equation:

E=(CQsd)/(PK)
where:
E = emission rate of SO_2 kg/metric ton (lb/ton) of 100 percent H_2SO_4 produced.
C = concentration of SO_2, g/dscm (lb/dscf).
Qsd = volumetric flow rate of the effluent gas, dscm/hr (dscf/hr).
P = production rate of 100 percent H_2SO_4, metric ton/hr (ton/hr).
K = conversion factor, 1000 g/kg (1.0 lb/lb).

(2) Method 8 shall be used to determine the Sulfur Dioxide concentration (C) and the volumetric flow rate (Qsd) of the effluent gas. The moisture content may be considered to be zero. The sampling time and sample volume for each run shall be at least 60 minutes and 1.15 dscm (40.6 dscf).

(3) Suitable methods shall be used to determine the production rate (P) of 100 percent H_2SO_4 for each run. Material balance over the production system shall be used to confirm the production rate.

(4) N/A

(c) The following may be used as alternatives to the reference methods and procedures specified in this condition:

(1) If a source processes elemental sulfur or an ore that contains elemental sulfur and uses air to supply oxygen, the following procedure may be used instead of determining the volumetric flow rate and production rate:

(i) The integrated technique of Method 3 is used to determine the O_2 concentration and, if required, CO_2 concentration.

Y.6. continued:

(ii) The SO_2 emission rate is calculated as described in **Condition Y.12.** substituting the acid mist concentration for Cs as appropriate.

[40 CFR 60.85(a),(b),(c); Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-297.401, F.A.C.; Construction Permit No. AC24-56209, PSD-FL-082]

Y.7. Sulfuric Acid Mist. The following procedures and test methods shall be used to determine sulfuric acid mist. A compliance test shall be conducted on an annual basis, once each federal fiscal year:

(a) The test methods in 40 CFR Appendix A or other methods and procedures as specified in this condition, except as provided in 40 CFR 60.8(b).

(b) (1) The emission rate (E) of sulfuric acid mist shall be computed for each run using the following equation:

E=(CQsd)/(PK)

where:

E = emission rate of acid mist kg/metric ton (lb/ton) of 100 percent H_2SO_4 produced.
C = concentration of acid mist, g/dscm (lb/dscf).
Qsd = volumetric flow rate of the effluent gas, dscm/hr (dscf/hr).
P = production rate of 100 percent H_2SO_4, metric ton/hr (ton/hr).
K = conversion factor, 1000 g/kg (1.0 lb/lb).

(2) Method 8 shall be used to determine the Sulfuric Acid Mist concentration (C) and the volumetric flow rate (Qsd) of the effluent gas. The moisture content may be considered to be zero. The sampling time and sample volume for each run shall be at least 60 minutes and 1.15 dscm (40.6 dscf).

(3) Suitable methods shall be used to determine the production rate (P) of 100 percent H_2SO_4 for each run. Material balance over the production system shall be used to confirm the production rate.

(4) N/A

(c) The following may be used as alternatives to the reference methods and procedures specified in this condition:

(1) If a source processes elemental sulfur or an ore that contains elemental sulfur and uses air to supply oxygen, the following procedure may be used instead of determining the volumetric flow rate and production rate:

(i) The integrated technique of Method 3 is used to determine the O_2 concentration and, if required, CO_2 concentration.

Y.7. continued:

(ii) The acid mist emission rate is calculated as described in **Condition Y.12.** substituting the acid mist concentration for C as appropriate.

[40 CFR 60.85(a),(b),(c); Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-297.401, F.A.C.; Construction Permit No. AC24-56209, PSD-FL-082]

Y.8. Visible Emissions. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.
[Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; 40 CFR 60.85(b)(4); Rule 62-297.401, F.A.C.]

CONTINUOUS MONITORING REQUIREMENTS

Y.9. Sulfur Dioxide. A continuous monitoring system for the measurement of sulfur dioxide shall be installed, calibrated, maintained, and operated. The pollutant gas used to prepare calibration gas mixtures under Performance Specification 2 and for calibration checks under 40 CFR 60.13(d), shall be sulfur dioxide (SO_2). Method 8 shall be used for conducting monitoring system performance evaluations under 40 CFR 60.13(c) except that only the sulfur dioxide portion of the Method 8 results shall be used. The span value shall be set at 1000 ppm of sulfur dioxide.
[40 CFR 60.84(a); Construction Permit No. AC24-56209, PSD-FL-082]

Y.10. Conversion Factor. A conversion factor for the purpose of converting monitoring data into units of the applicable standard (kg/metric ton, lb/ton) shall be established. The conversion factor shall be determined, as a minimum, three times daily by measuring the concentration of sulfur dioxide entering the converter using suitable methods (e.g., the Reich test, National Air Pollution Control Administration Publication No. 999–AP–13) and calculating the appropriate conversion factor for each eight-hour period as follows:

$$CF = k[(1.000 - 0.015r)/(r - s)]$$

where:
CF = conversion factor (kg/metric ton per ppm, lb/ton per ppm).
k = constant derived from material balance. For determining CF in metric units, k=0.0653. For determining CF in English units, k=0.1306.
r = percentage of sulfur dioxide by volume entering the gas converter. Appropriate corrections must be made for air injection plants subject to the Administrator's approval.
s = percentage of sulfur dioxide by volume in the emissions to the atmosphere determined by the continuous monitoring system required under **Condition Y.9**.

[40 CFR 60.84(b); Construction Permit No. AC24-56209, PSD-FL-082]

Y.11. All conversion factors and values under **Condition Y.10.,** from which they were computed (i.e., CF, r, and s) shall be recorded.

[40 CFR 60.84(c); Construction Permit No. AC24-56209, PSD-FL-082]

Y.12. **Sulfur Dioxide Alternative**. Alternatively, a source that processes elemental sulfur or an ore that contains elemental sulfur and uses air to supply oxygen may use the following continuous emission monitoring approach and calculation procedures in determining SO_2 emission rates in terms of the standard. This procedure is not required, but is an alternative that would alleviate problems encountered in the measurement of gas velocities or production rate. Continuous emission monitoring systems for measuring SO_2, O_2, and CO_2 (if required) shall be installed, calibrated, maintained, and operated by the owner or operator and subjected to the certification procedures in Performance Specifications 2 and 3. The calibration procedure and span value for the SO_2 monitor shall be as specified in Condition Y.9. The span value for CO_2 (if required) shall be 10 percent and for O_2 shall be 20.9 percent (air). A conversion factor based on process rate data is not necessary. Calculate the SO_2 emission rate as follows:

$$Es=(CsS)/[0.265 - (0.0126\ \%O_2) - (A\ \%CO_2)]$$

where:

Es = emission rate of SO_2, kg/metric ton (lb/ton) of 100 percent of H_2SO_4 produced.
Cs = concentration of SO_2, kg/dscm (lb/dscf).
S = acid production rate factor, 368 dscm/metric ton (11,800 dscf/ton) of 100 percent H_2SO_4 produced.
$\%O_2$ = oxygen concentration, percent dry basis.
A = auxiliary fuel factor,
= 0.00 for no fuel.
= 0.0226 for methane.
= 0.0217 for natural gas.
= 0.0196 for propane.
= 0.0172 for No 2 oil.
= 0.0161 for No 6 oil.
= 0.0148 for coal.
= 0.0126 for coke.
$\%CO_2$ = carbon dioxide concentration, percent dry basis.

NOTE: It is necessary in some cases to convert measured concentration units to other units for these calculations: Use the following table for such conversions:

From—	To—	Multiply by—
g/scm	kg/scm	10^{-3}
mg/scm	kg/scm	10^{-6}
ppm (SO_2)	kg/scm	2.660×10^{-6}
ppm (SO_2)	lb/scf	1.660×10^{-7}

[40 CFR 60.84(d)]

Y.13. **Sulfur Dioxide Excess Emissions**. For the purpose of reports under 40 CFR 60.7(c), periods of excess emissions shall be all three-hour periods (or the arithmetic average of three consecutive one-hour periods) during which the integrated average sulfur dioxide emissions exceed the applicable standards under **Condition Y.3.**

[40 CFR 60.84(e); Construction Permit No. AC24-56209, PSD-FL-082]

COMMON CONDITIONS - F.A.C. TEST REQUIREMENTS

Y.14. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

Subsection Z. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
068	"E" Auxiliary Boiler

"E" Auxiliary Boiler has a design capacity of 125,000 pounds per hour of steam. The produced steam is used to augment steam produced from the sulfuric acid plants to provide operating flexibility in the phosphoric acid production and evaporation process. The boiler is permitted to fire natural gas with No. 6 fuel oil as a stand-by fuel. The maximum heat input rate is 156 MMBTU/hr. Pollutants emitted are particulate matter, sulfur dioxide and visible emissions. CAM does not apply for particulate matter and sulfur dioxide.

{Permitting note(s): This emissions unit is regulated under Rule 62-296.406, F.A.C., Fossil Fuel Steam Generators with less than 250 Million Btu per Hour Heat Input, New and Existing Emissions Units, Rule 212.400(5), F.A.C.; Prevention of Significant Deterioration (PSD): Permit No. PSD-FL-082; Rule 62-212.400(6), F.A.C., and Best Available Control Technology (BACT) Determination dated 11/7/82. This emission unit is subject to 40 CFR 63 Subpart DDDDD, I/C/I Boilers and Process Heaters, and is considered an existing large fuel boiler. }

The following specific conditions apply to the emissions unit(s) listed above:

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

Z.1. Permitted Capacity. The heat input rate shall not exceed 156 MMBTU/hr.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Z.2. Methods of Operation. This emissions unit shall be fired with natural gas, No. 6 fuel oil, or on-spec used oil. The sulfur content in the No. 6 fuel oil and the On-spec used oil shall not exceed 1.00% by weight.
Better Grade Fuel Oil. When No. 6 fuel oil is specified in this permit, a better grade may be substituted. A better grade fuel oil is defined as a fuel oil with a higher ranking in the following list:
Better Grade (Top of list)

New, No. 2 fuel oil, or No. 2 on-specification used oil
New, No. 3 fuel oil, or No. 3 on-specification used oil
New, No. 4 fuel oil, or No. 4 on-specification used oil
New, No. 5 fuel oil, or No. 5 on-specification used oil
New, No. 6 fuel oil, or No. 6 on-specification used oil

The use of Better Grade Fuel oils does not constitute the use of these fuels beyond "as stand-by fuels" as specified under each EU's fuel usage limits below.

[Rule 62-213.410, F.A.C.; Construction Permit No. AC24-56210, PSD-FL-082; Air Permit No. 0470002-073-AC]

Z.3. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year (8784 in any Leap Year) when firing natural gas. When firing No. 6 fuel oil or on-spec used oil, the hours of operation for this emissions unit shall not exceed 8518 hours/year.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC24-56210, PSD-FL-082]

EMISSION LIMITATIONS AND STANDARDS

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

Z.4. Particulate Matter. Particulate Matter Emissions shall not exceed 13.90 lbs/hr and 59.2 TPY.

[Rule 62-210.200(42), F.A.C., BACT Determination dated 11/7/82; Rule 62-296.406(2); Construction Permit No. AC24-56210, PSD-FL-082]

Z.5. Sulfur Dioxide. Sulfur Dioxide Emissions shall not exceed 1.1 lb per MMBtu heat input, and 170.70 lb per hour and 727.00 TPY.

[Rule 62-210.200(42), F.A.C., BACT Determination dated 11/7/82; Rule 62-296.406(3); Construction Permit No. AC24-56210, PSD-FL-082]

Z.6. Visible Emissions. Visible Emissions shall not exceed 20% opacity except 27% for one 6 min. period per hour.

[Rule 62-296.406(1); Construction Permit No. AC24-56210, PSD-FL-082]

Z.7. Nitrogen Oxides. Nitrogen oxides emissions shall not exceed 64.0 lb per hour.
[Construction Permit No. AC24-56210, PSD-FL-082]

Z.8. Carbon Monoxide. Carbon Monoxide emissions shall not exceed 5.3 lb per hour.

[Construction Permit No. AC24-56210, PSD-FL-082]

Z.9. Volatile Organic Compounds. VOC emissions shall not exceed 1.1 lb per hour.

[Construction Permit No. AC24-56210, PSD-FL-082]

TEST METHODS AND PROCEDURES

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

Z.10. Particulate Matter. This emissions unit shall be assumed to be in compliance with the Particulate Matter emission limits stated in **Condition No. Z.4**, if the unit complies with the Visible Emissions limitations stated in **Condition No. Z.6** and the fuel sulfur content restrictions stated in **Condition No. Z.2.** The sulfur content shall be verified using the standards established in Rule 62-297.440(1), F.A.C., or maintain a record of acceptable, certified analyses of all fuel oil fired and report on an annual basis prior to March 1 of each year.

The permittee shall conduct a particulate matter compliance test using EPA Method 5 upon Department request.

[Construction Permit No. AC24-56210, PSD-FL-082, Amendment dated March 22, 1985]

Z.11. Sulfur Dioxide. In lieu of an annual compliance stack test for sulfur dioxide emissions, the Permittee shall comply with the fuel sulfur content restrictions stated in **Condition No. Z.2.** The sulfur content shall be verified using the standards established in Rule 62-297.440(1), F.A.C., or maintain a record of acceptable, certified analyses of all fuel oil fired and report on an annual basis prior to March 1 of each year.

The permittee shall conduct sulfur dioxide compliance test using EPA Method 6 upon Department request.

[Construction Permit No. AC24-56210, PSD-FL-082; Amendment dated February 22, 1984]

Z.12. Visible Emissions. The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be performed annually, once each federal fiscal year.

[Rule 62-297.401, F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; Construction Permit No. AC24-56210, PSD-FL-082]

Z.13 Nitrogen Oxides. The test method for nitrogen oxides shall be EPA Method 7, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be performed upon Department request.

[Construction Permit No. AC24-56210, PSD-FL-082]

Z.14. Carbon Monoxide. The test method for carbon monoxide shall be EPA Method 10, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be performed upon Department request.

[Construction Permit No. AC24-56210, PSD-FL-082]

Z.15. **Special Compliance Tests**. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

[Rule 62-297.310(7)(b), F.A.C.]

EXCESS EMISSIONS

Z.16. The Permittee shall meet Conditions II.1. and II.6.

COMMON CONDITIONS - ON-SPEC USED OIL/LEAD

Z.17. This emissions unit is also subject to the On-Spec Used Oil/Lead conditions in Subsection EE**.**

COMMON CONDITIONS - F.A.C. TEST REQUIREMENTS

Z.18. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

Subsection AA. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
069	"D" Phosphoric Acid Plant

"D" Phosphoric Acid Plant emits fluoride, and the emissions are controlled by a wet scrubber. CAM does not apply for fluorides for this emissions unit.

{Permitting note: This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards. 40 CFR 63, Subpart A - General Provisions; NSPS - 40 CFR 60, Subpart T, Standards of Performance (NSPS) for the Phosphate Fertilizer Industry: Wet-Process Phosphoric Acid Plants, adopted and incorporated by reference in Rule 62-204.800(7)(b)26., F.A.C.; 40 CFR 63, Subpart AA - National Emission Standards for Hazardous Air Pollutants (NESHAP) From Phosphoric Acid Manufacturing Plants. **The Part 40 CFR 63 Subparts A and AA take precedence, however these units are subject to all applicable State Implementation Plan (SIP) rules if these units are out of compliance with the NESHAP**}.

The following specific conditions apply to the emissions unit(s) listed above:

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

AA.1. Permitted Capacity. The operation rate shall not exceed the Maximum Daily 1-Hour Average Rate = 110 tons 100% P_2O_5 input. The operation rate shall not exceed 800,000 tons during any 12 consecutive months of 100% P_2O_5 input.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. 0470002-034-AC, and PSD-FL-297]

AA.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year (8784 in any Leap Year).

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C. and PSD-FL-297]

EMISSION LIMITATIONS AND STANDARDS

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

AA.3. **Total Fluorides.** Total Fluoride emissions from this emissions unit shall not exceed 0.012 lb/ton of equivalent P_2O_5 feed, 1.32 lb/hr and 4.8 TPY.

[Rule 62-204.800(7)(b)25., F.A.C.; 40 CFR 60.202; 40 CFR 63.602(a); and PSD-FL-297]
{Permitting Note- the limits established in PSD-FL-297 are more stringent than the MACT standard.}

AA.4. Visible Emissions. Visible Emissions shall not be equal to or greater than 20% opacity.

[Rule 62-296.320(4)(b), F.A.C.]

OPERATING REQUIREMENTS

AA.5. Scrubber Parameter Daily Averages. The permittee shall maintain daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber within the allowable ranges established pursuant the requirements of **Condition G.G.4.(1) or (2).**

[Rule 62-204.800, F.A.C.; 40 CFR 63.604]

MONITORING REQUIREMENTS

AA.6. Phosphorus-bearing feed material. The Permittee shall install, calibrate, maintain, and operate a monitoring system, which can be used to determine and permanently record the mass flow of phosphorus-bearing feed material to the process. The monitoring system shall have an accuracy of ±5 percent over its operating range.

[Rule 62-204.800, F.A.C.; 40 CFR 60.203(a)]

AA.7. **P_2O_5 Feed.** The Permittee shall maintain a daily record of equivalent P_2O_5 feed.

[Rule 62-204.800, F.A.C.; 40 CFR 60.203(b)]

AA.8. Scrubber Pressure Drop. The Permittee shall install, calibrate, maintain, and operate a monitoring system which continuously measures and permanently records the pressure drop across each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of ±5 percent over its operating range.

[Rule 62-204.800, F.A.C.; 40 CFR 60.203(c)]

AA.9. The Permittee shall meet the 40 CFR 63 Subpart AA requirements stated in Common Conditions GG.1 – GG.4.

TEST METHODS AND PROCEDURES

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

AA.10. <u>Total Fluorides</u>. The Permittee shall use the following procedures:

(a) In conducting the performance tests required in § 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in § 60.8(b).

(b) The owner or operator shall determine compliance with the total fluorides standard in § 60.202 as follows:

(1) The emission rate (E) of total fluorides shall be computed for each run using the following equation:

$$E = \left(\sum_{i=1}^{N} C_{si} Q_{sdi} \right) / (PK)$$

where:

E=emission rate of total fluorides, g/Mg (lb/ton) of equivalent P_2O_5 feed.
Csi=concentration of total fluorides from emission point "i," mg/dscm (gr/dscf).
Qsdi=volumetric flow rate of effluent gas from emission point "i," dscm/hr (dscf/hr).
N=number of emission points associated with the affected facility.
P=equivalent P_2O_5 feed rate, Mg/hr (ton/hr).
K=conversion factor, 1000 mg/g (7,000 gr/lb).

(2) Method 13A or 13B shall be used to determine the total fluorides concentration (Csi) and volumetric flow rate (Qsdi) of the effluent gas from each of the emission points. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf).

(3) The equivalent P_2O_5 feed rate (P) shall be computed for each run using the following equation:

P=Mp Rp

AA.10. continued:

where:

Mp=total mass flow rate of phosphorus-bearing feed, Mg/hr (ton/hr).
Rp= P_2O_5 content, decimal fraction.

(i) The accountability system of § 60.203(a) shall be used to determine the mass flow rate (Mp) of the phosphorus-bearing feed.

(ii) The Association of Official Analytical Chemists (AOAC) Method 9 (incorporated by reference -- see § 60.17) shall be used to determine the P_2O_5 content (Rp) of the feed.

[Rule 62-204.800, F.A.C.; 40 CFR 60.204(a) and (b)]

AA.11. Total Fluorides. The Permittee shall meet the 40 CFR 63 Subpart AA performance testing requirements stated in Common Conditions GG.5 – GG.7.

AA.12. Visible Emissions. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; Rule 62-297.401, F.A.C.]

NOTIFICATION, RECORDKEEPING, REPORTING REQUIREMENTS

AA.13. The Permittee shall meet the 40 CFR 63 Subpart AA notification, recordkeeping, and reporting requirements stated in **Common Conditions GG.10. – GG.12.**

AA.14. This emissions unit is subject to specific requirements of 40 CFR 63 Subpart AA, Appendix A to Subpart AA – Applicability to General Provisions to Subpart AA, and alternative MACT monitoring plan (Administrative Order No. 04-I-AP, dated October 4, 2004). The owner or operator is responsible for remaining in compliance with any updates made to Subpart A or AA. This EU is subject to Facility Wide Condition No. 10.

[40 CFR 63-Subpart A; 40 CFR 63-Subpart AA; and Administrative Order No. 04-I-AP, Alternate MACT Monitoring Plan]

EXEMPTION FROM NEW SOURCE PERFORMANCE STANDARDS.

AA.15. This emissions unit is exempted from any otherwise applicable new source performance standard contained in 40 CFR Part 60, Subpart T. 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 40 CFR 63, Subpart AA. For each affected source, this exemption is effective upon the date that the owner or operator demonstrates to the Administrator that the requirements of **Conditions AA.6., GG.1 through GG.9** have been met.

{Permitting Note: Department determined that the requirements for exemption have been met by the facility as of 8/16/06. In accordance with this regulation, if the source is not in compliance with all requirements of 40 CFR 63, Subpart AA, the exemption from any otherwise applicable new source performance standard contained in 40 CFR Part 60, Subpart T is no longer valid.}
[40 CFR 63.610]

COMMON CONDITIONS - F.A.C. TEST REQUIREMENTS

AA.16. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

COMMON CONDITIONS – GENERAL PROVISIONS OF 40 CFR 63

AA.17. This emissions unit is also subject to the applicable requirements of 40 CFR 63 Subpart A.

Subsection BB this section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
070	"C" & "D" Superphosphoric Acid (SPA) Plants (Vacuum Evaporation Process)

"C" & "D" Superphosphoric Acid (SPA) Plants and east & west phosphoric acid storage tanks emit fluoride, and are controlled by a scrubber. Since the Synspar Plant has no air emissions, the limerock (LR) bin associated with this emission unit is included here for recordkeeping purposes. The particulate matter emissions from this bin are controlled by a bag collector. CAM does not apply for fluoride for this emissions unit.

{Permitting note(s): These emissions units are regulated under NSPS - 40 CFR 60, Subpart U, Standards of Performance for Phosphate Fertilizer Industry: Superphosphoric Acid Plants, adopted and incorporated by reference in Rule 62-204.800(7)(b)27., F.A.C.; Rule 62-212.300, F.A.C., General Preconstruction Review Requirements; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD); 40 CFR 63, Subpart A - General Provisions; 40 CFR 63, Subpart AA - National Emission Standards for Hazardous Air Pollutants (NESHAP) From Phosphoric Acid Manufacturing Plants. **The Part 40 CFR 63 Subparts A and AA take precedence, however these units are subject to all applicable State Implementation Plan (SIP) rules if these units are out of compliance with the NESHAP**}.

The following specific conditions apply to the emissions unit(s) listed above:

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

BB.1. Permitted Capacity. The combined operation rate shall not exceed the Maximum Daily 1-Hour Average Rate = 110 tons of 100% P_2O_5 input. The operation rate shall not exceed 876,000 tons during any 12 consecutive months of 100% P_2O_5 input.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. 0470002-034-AC, and PSD-FL-297]

BB.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year (8784 in any Leap Year).

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C., and PSD-FL-297]

EMISSION LIMITATIONS AND STANDARDS

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

BB.3. Total Fluorides. Total Fluoride emissions at the sample port shall not exceed 0.0087 lb/ton of equivalent P_2O_5 feed; 0.96 lbs/hr and 3.8 TPY.

[Rule 62-204.800(7)(b), F.A.C.; 40 CFR 60.212; 40 CFR 63.602(b)(1), and PSD-FL-297]

Emission Point LR:

BB.4. Visible Emissions. Visible Emissions shall not exceed 5% opacity.

[Rule 62-297.620(4), F.A.C.]

OPERATING REQUIREMENTS

BB.5. Scrubber Parameter Daily Averages. The permittee shall maintain daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber within the allowable ranges established pursuant the requirements of **Condition II.4.(1) or (2)**.

[Rule 62-204.800, F.A.C.; 40 CFR 63.604]

MONITORING REQUIREMENTS

BB.6. Phosphorus-bearing feed material. The Permittee shall install, calibrate, maintain, and operate a monitoring system, which can be used to determine and permanently record the mass flow of phosphorus-bearing feed material to the process. The monitoring system shall have an accuracy of ±5 percent over its operating range.

[Rule 62-204.800, F.A.C.; 40 CFR 60.213(a)]

BB.7. P_2O_5 Feed. The Permittee shall maintain a daily record of equivalent P_2O_5 feed.

[Rule 62-204.800, F.A.C.; 40 CFR 60.213(b)]

BB.8. **Scrubber Pressure Drop**. The Permittee shall install, calibrate, maintain, and operate a monitoring system which continuously measures and permanently records the pressure drop across each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of ±5 percent over its operating range.

[Rule 62-204.800, F.A.C.; 40 CFR 60.213(c)]

BB.9. The Permittee shall meet the 40 CFR 63 Subpart AA requirements stated in **Common Conditions GG.1 – GG.4.**

TEST METHODS AND PROCEDURES

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

BB.10. **Total Fluorides**. The Permittee shall use the following procedures:

(a) In conducting the performance tests required in § 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in § 60.8(b).

(b) The owner or operator shall determine compliance with the total fluorides standard in § 60.212 as follows:
(1) The emission rate (E) of total fluorides shall be computed for each run using the following equation:

$$E = \left(\sum_{i=1}^{N} C_{si} Q_{sdi} \right) / (PK)$$

where:
E=emission rate of total fluorides, g/Mg (lb/ton) of equivalent P_2O_5 feed.
Csi=concentration of total fluorides from emission point "i," mg/dscm (gr/dscf).
Qsdi=volumetric flow rate of effluent gas from emission point "i," dscm/hr (dscf/hr).
N=number of emission points associated with the affected facility.
P=equivalent P_2O_5 feed rate, Mg/hr (ton/hr).
K=conversion factor, 1000 mg/g (7,000 gr/lb).

BB.10. continued:

(2) Method 13A or 13B shall be used to determine the total fluorides concentration (Csi) and volumetric flow rate (Qsdi) of the effluent gas from each of the emission points. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf).

(3) The equivalent P_2O_5 feed rate (P) shall be computed for each run using the following equation:

$$P=Mp\ Rp$$

where:

Mp=total mass flow rate of phosphorus-bearing feed, Mg/hr (ton/hr).
Rp= P_2O_5 content, decimal fraction.

(i) The accountability system of § 60.213(a) shall be used to determine the mass flow rate (Mp) of the phosphorus-bearing feed.

(ii) The Association of Official Analytical Chemists (AOAC) Method 9 (incorporated by reference -- see § 60.17) shall be used to determine the P_2O_5 content (Rp) of the feed.

[Rule 62-204.800, F.A.C.;40 CFR 60.214]

BB.11. <u>Total Fluorides</u>. The Permittee shall meet the 40 CFR 63 Subpart AA performance testing requirements stated in **Common Conditions GG.5 – GG.7** with the exception that testing shall be done every five years.
[Permit 0470002-033-AV, Rule 62-204.800(7)(b), F.A.C.; 40 CFR 60.214, Subpart U; Rule 62-297.401; F.A.C.]

From vent (LR):

BB.12. <u>Visible Emissions</u>. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.
[Rule 62-297.401, F.A.C. and Rule 62-297.310(7)(a)4.a., F.A.C.]

NOTIFICATION, RECORDKEEPING, REPORTING REQUIREMENTS

BB.13. The Permittee shall meet the 40 CFR 63 Subpart AA notification, recordkeeping, and reporting requirements stated in Common Conditions GG.10. – GG.12.

BB.14. This emissions unit is subject to specific requirements of 40 CFR 63 Subpart AA, Appendix A to Subpart AA – Applicability to General Provisions to Subpart AA, and alternative MACT monitoring plan (Administrative Order No. 04-I-AP, dated October 4, 2004). The owner or operator is responsible for remaining in compliance with any updates made to Subpart A or AA. This EU is subject to Facility Wide Condition No. 10.

[40 CFR 63-Subpart A; 40 CFR 63-Subpart AA; and Administrative Order No. 04-I-AP, Alternate MACT Monitoring Plan]

EXEMPTION FROM NEW SOURCE PERFORMANCE STANDARDS.

BB.15. This emissions unit is exempted from any otherwise applicable new source performance standard contained in 40 CFR Part 60, Subpart U. 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 40 CFR 63, Subpart AA. For each affected source, this exemption is effective upon the date that the owner or operator demonstrates to the Administrator that the requirements of Conditions BB.4., GG.1 through GG.9 have been met.

{Permitting Note: Department determined that the requirements for exemption have been met by the facility as of 8/16/06. In accordance with this regulation, if the source is not in compliance with all requirements of 40 CFR 63, Subpart AA, the exemption from any otherwise applicable new source performance standard contained in 40 CFR Part 60, Subpart U is no longer valid.}
[40 CFR 63.610]

COMMON CONDITIONS - F.A.C. TEST REQUIREMENTS

BB.16. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

COMMON CONDITIONS – GENERAL PROVISIONS OF 40 CFR 63

BB.17. This emissions unit is also subject to the applicable requirements of 40 CFR 63 Subpart A.

Subsection CC. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
071	Acid Clarification Plant

Acid Clarification Plant utilizes a series of 5 rotary drum filters and a belt filter to filter 48% P_2O_5 phosphoric acid prior to evaporation to superphosphoric acid. Fluoride emissions are controlled by a packed, counter-current, wet scrubber. CAM does not apply for fluoride for this emissions unit.

{Permitting note: This emissions unit is regulated under Best Available Control Technology (BACT) Determination, dated February 28, 1978}

The following specific conditions apply to the emissions unit(s) listed above:

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

CC.1. Permitted Capacity. The rate shall not exceed Maximum Daily 1-Hour Average Rate = 110 tons 100% P_2O_5 input. The operating rate shall not exceed 876,000 tons during any 12 consecutive months of 100% P_2O_5 input.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; permit 0470002-034-AC, and PSD-FL-297]

CC.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year (8784 in any Leap Year).

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C., and PSD-FL-297]

EMISSION LIMITATIONS AND STANDARDS

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

CC.3. Fluoride emissions shall not exceed (0.03 lb FL/ton P_2O_5 input) [1]; 3.3 lbs/hr and 13.1 TPY.

[Rule 62-210.200(42), F.A.C.; (BACT from AC24-2722 issued 02-28-78), and [1]PSD-FL-297]

TEST METHODS AND PROCEDURES

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

CC.4. Fluoride emissions stack test method shall be EPA Method 13A or 13B incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually with a frequency base date of 06/17.

[Rule 62-297.401, F.A.C.]

COMMON CONDITIONS - F.A.C. TEST REQUIREMENTS

CC.5. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

Subsection DD. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
072	Molten Sulfur System for "E" & "F" Sulfuric Acid Plants

The Molten Sulfur System for "E" & "F" Sulfuric Acid Plants consists of a rail & truck unloading system with the following emission points: 1) RP - receiving pit, 2) FP - feed pit, 3) S1 - storage tanks vents (1-7), and 4) S2 - storage tanks vents (1-7). CAM does not apply.

{Permitting note(s): This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards.}

The following specific conditions apply to the emissions unit(s) listed above:

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

DD.1. Permitted Capacity. The rate shall not exceed the Maximum 12-MRA Hourly Rate = 68.75 tons of throughput or Maximum Daily 1-Hour Average Rate = 76 tons throughput.

12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

Throughput rate corresponds to the sulfur feed rate to the sulfuric acid plants.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; permit 0470002-034-AC and 0470005-009-AO]

DD.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year (8784 in any Leap Year).

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Subsection EE. Common Conditions - On-Spec Used Oil/Lead

E.U. ID No.	Sub-section	Brief Description
039	O	'C' Auxiliary Boiler
040	R	'D' Auxiliary Boiler
068	BB	'E' Auxiliary Boiler
064	X	SCM Rock Dryer
004	D	X-Train
008	E	Y-Train
032	L	Z-Train

The following conditions apply to the emissions unit(s) listed above:

EE.1. The lead emissions cap for the facility is 9.4 TPY. The on-specification used oil fired in the 'C', 'D' & 'E' Auxiliary Boilers should not exceed 23,000,000 gallons per year which at 100 ppm yields 9.0 TPY of lead emissions. The on-specification used oil fired in the other emissions unit(s) listed above shall not exceed 0.4 TPY of lead emissions.

[Requested by the Applicant]

EE.2. The on-spec used oil prior to blending shall comply with the limits listed below and shall be recorded:

ON-SPEC USED OIL SPECIFICATIONS	
Constituent/Property	**Allowable Level**
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1,000 ppm maximum
Flash Point	100°F minimum

[40 CFR 761]

EE.3. On-specification used oil may be fired as follows:

1. At any time provided the maximum concentration of PCBs shall be less than 2 ppm and whether generated on or off-site. The analysis and recordkeeping requirements apply to each amount prior to blending even if to be blended with 90% virgin oil.

2. Only during normal operation temperature and not during startup or shutdown if the maximum concentration of PCBs is ≥ 2 but < 50 ppm.
[40 CFR 761]

EE.4. A certified on-specification used oil analysis of each delivery prior to blending shall be retained (in lieu of testing) and reported as part of the AOR.

[Rule 62-210.370(3), F.A.C.]

EE.5. A lead emissions report shall be submitted by each March 01 as part of the AOR in a table format showing all of data and results required to document that the LEAD CAP has not been exceeded for the previous calendar year.

[Rule 62-210.370(3), F.A.C.]

Subsection FF. Common Conditions - F.A.C. Test Requirements

Sub-section	E.U. ID No.	Brief Description
A.	001	#2 Phosphate Rock Grinder
B.	003	"A" Defluorinated Phosphate (DFP) Plant
C.	004	"X"-Train (Monocal/Dical process)
D.	008	"Y" Train (#1 MAP/DAP Plant)
E.	010	#1 Storage and Shipping
F.	015	Granular Product Shipping and Screening Facility
G.	020	"B" Phosphoric Acid Plant
H.	021	"C" Sulfuric Acid Plant
I.	022	"D" Sulfuric Acid Plant
J.	032	Z-Train (#2 MAP/DAP)
K.	034	South Phosphoric Acid Filters
L.	035	North Phosphoric Acid Filters
M.	036	"B" Superphosphoric Acid Plant
N.	038	"B" Defluorinated Phosphate (DFP) Plant
O.	039	"C" Auxiliary Boiler
P.	040	"D" Auxiliary Boiler
Q.	042	Defluorinated Phosphate (DFP) Feed Prep
R.	044	"A" and "B" Defluorinated Phosphate (DFP) Coolers
S.	054	Molten Sulfur System
T.	061	Green Superphosphoric Acid Plant
U.	062	Defluorinated Phosphate (DFP) Silos
V.	064	SCM Rock Dryer
W.	065	SCM Silos
X.	066	"E" Sulfuric Acid Plant
Y.	067	"F" Sulfuric Acid Plant
Z.	068	"E" Auxiliary Boiler
AA.	069	"D" Phosphoric Acid Plant
BB.	070	"C" and "D" Superphosphoric Acid Plants
CC.	071	Acid Clarification Plant
DD.	072	Molten Sulfur System

The following specific conditions may apply to the emissions unit(s) listed above:

{Permitting Note: The following conditions are placed here as a convenience and to avoid duplication. See specific conditions in Subsections A through FF for applicability.}

62-297.310 General Compliance Test Requirements.
The focal point of a compliance test is the stack or duct which vents process and/or combustion gases and air pollutants from an emissions unit into the ambient air.

(1) Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate
was measured; provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five-day period allowed for the test, the Secretary or his or her designee may accept the results of two complete runs as proof of compliance, provided that the arithmetic mean of the two complete runs is at least 20% below the allowable emission limiting standard.

(2) Operating Rate During Testing. Unless otherwise stated in the applicable emission limiting standard rule, testing of emissions shall be conducted with the emissions unit operation at permitted capacity as defined below. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

(a) Combustion Turbines. (Reserved)

(b) All Other Sources. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit.

(3) Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule.

(4) Applicable Test Procedures.

(a) Required Sampling Time.

1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.

2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.

b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a FINAL surrogate standard and an existing mass emission limiting standard.

c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

(b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.

(c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.

(d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1.

(e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.

TABLE 297.310-1
CALIBRATION SCHEDULE

ITEM	MINIMUM CALIBRATION FREQUENCY	REFERENCE INSTRUMENT	TOLERANCE
Liquid in glass thermometer	Annually	ASTM Hg in glass ref. thermometer or equivalent, or thermometric points	+/-2%
Bimetallic thermometer	Quarterly	Calib. liq. in glass thermometer	5 degrees F
Thermocouple	Annually	ASTM Hg in glass ref. thermometer, NBS calibrated reference and potentiometer	5 degrees F
Barometer	Monthly	Hg barometer or NOAA station	+/-1% scale
Pitot Tube	When required or when damaged	By construction or measurements in wind tunnel D greater than 16" and standard pitot tube	See EPA Method 2, Fig. 2-2 & 2-3
Probe Nozzles	Before each test or when nicked, dented, or corroded Max. deviation between readings	Micrometer	+/-0.001" men of at least three readings .004"
Dry Gas Meter and Orifice Meter	1. Full Scale: When received, When 5% change observed, Annually 2. One Point: Semiannually	Spirometer or calibrated wet test or dry gas test meter	2%
	3. Check after each test series	Comparison check	5%

(5) Determination of Process Variables.

(a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

(b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

(6) Required Stack Sampling Facilities. Sampling facilities include sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. All stack sampling facilities must meet any Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29 CFR Part 1910, Subparts D and E.

(a) Permanent Test Facilities. The owner or operator of an emissions unit for which a compliance test, other than a visible emissions test, is required on at least an annual basis, shall install and maintain permanent stack sampling facilities.

(b) Temporary Test Facilities. The owner or operator of an emissions unit that is not required to conduct a compliance test on at least an annual basis may use permanent or temporary stack sampling facilities. If the owner chooses to use temporary sampling facilities on an emissions unit, and the Department elects to test the unit, such temporary facilities shall be installed on the emissions unit within 5 days of a request by the Department and remain on the emissions unit until the test is completed.

(c) Sampling Ports.

1. All sampling ports shall have a minimum inside diameter of 3 inches.

2. The ports shall be capable of being sealed when not in use.

3. The sampling ports shall be located in the stack at least 2 stack diameters or equivalent diameters downstream and at least 0.5 stack diameter or equivalent diameter upstream from any fan, bend, constriction or other flow disturbance.

4. For emissions units for which a complete application to construct has been filed prior to December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 15 feet or less. For stacks with a larger diameter, four sampling ports, each 90 degrees apart, shall be installed. For emissions units for which a complete application to construct is filed on or after December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 10 feet or less. For stacks with larger diameters, four sampling ports, each 90 degrees apart, shall be installed. On horizontal circular ducts, the ports shall be located so that the probe can enter the stack vertically, horizontally or at a 45 degree angle.

5. On rectangular ducts, the cross sectional area shall be divided into the number of equal areas in accordance with EPA Method 1. Sampling ports shall be provided which allow access to each sampling point. The ports shall be located so that the probe can be inserted perpendicular to the gas flow.

(d). Work Platforms.

1. minimum size of the working platform shall be 24 square feet in area. Platforms shall be at least 3 feet wide.

2. On circular stacks with 2 sampling ports, the platform shall extend at least 110 degrees around the stack.

3. On circular stacks with more than two sampling ports, the work platform shall extend 360 degrees around the stack.

4. All platforms shall be equipped with an adequate safety rail (ropes are not acceptable), toeboard, and hinged floor-opening cover if ladder access is used to reach the platform. The safety rail directly in line with the sampling ports shall be removable so that no obstruction exists in an area 14 inches below each sample port and 6 inches on either side of the sampling port.

(e). Access to Work Platform.

1 Ladders to the work platform exceeding 15 feet in length shall have safety cages or fall arresters with a minimum of 3 compatible safety belts available for use by sampling personnel.

2. Walkways over free-fall areas shall be equipped with safety rails and toeboards.

(f). Electrical Power.

1. A minimum of two 120-volt AC, 20-amp outlets shall be provided at the sampling platform within 20 feet of each sampling port.

2. If extension cords are used to provide the electrical power, they shall be kept on the plant's property and be available immediately upon request by sampling personnel.

(g). Sampling Equipment Support.

1. A three-quarter inch eyebolt and an angle bracket shall be attached directly above each port on vertical stacks and above each row of sampling ports on the sides of horizontal ducts.

a. The bracket shall be a standard 3 inch x 3 inch x one-quarter inch equal-legs bracket which is 1 and one-half inches wide. A hole that is one-half inch in diameter shall be drilled through the exact center of the horizontal portion of the bracket. The horizontal portion of the bracket shall be located 14 inches above the centerline of the sampling port.

b. A three-eighth inch bolt which protrudes 2 inches from the stack may be substituted for the required bracket. The bolt shall be located 15 and one-half inches above the centerline of the sampling port.

c. The three-quarter inch eyebolt shall be capable of supporting a 500 pound working load. For stacks that are less than 12 feet in diameter, the eyebolt shall be located 48 inches above the horizontal portion of the angle bracket. For stacks that are greater than or equal to 12 feet in diameter, the eyebolt shall be located 60 inches above the horizontal portion of the angle bracket. If the eyebolt is more than 120 inches above the platform, a length of chain shall be attached to it to bring the free end of the chain to within safe reach from the platform.

2. A complete monorail or dualrail arrangement may be substituted for the eyebolt and bracket.

3. When the sample ports are located in the top of a horizontal duct, a frame shall be provided above the port to allow the sample probe to be secured during the test.

(7) Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.

1. The owner or operator of a new or modified emissions unit that is subject to an emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining an operation permit for such emissions unit.

2. For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit operation, except that such test shall not be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid and/or solid fuel for more than 400 hours other than during startup.

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:

a Did not operate; or

b. In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours.

4. During each federal fiscal year (October 1 -- September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:

a. Visible emissions, if there is an applicable standard;

b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and

c. Each NESHAP pollutant, if there is an applicable emission standard.

5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.

6. For fossil fuel steam generators on a semi-annual particulate matter emission compliance testing schedule, a compliance test shall not be required for any six-month period in which liquid and/or solid fuel is not burned for more than 200 hours other than during startup.

7. For emissions units electing to conduct particulate matter emission compliance testing quarterly pursuant to Rule 62-296.405(2)(a), F.A.C., a compliance test shall not be required for any quarter in which liquid and/or solid fuel is not burned for more than 100 hours other than during startup.

8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit.

9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

10. An annual compliance test conducted for visible emissions shall not be required for units exempted from permitting at Rule 62-210.300(3)(a), F.A.C., or units permitted under the General Permit provisions at Rule 62- 210.300(4)(a)1. through 7., F.A.C.

(b) Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

(c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

(8) Test Reports.

(a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.

(b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.

(c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:

1. The type, location, and designation of the emissions unit tested.
2. The facility at which the emissions unit is located.
3. The owner or operator of the emissions unit.
4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
8. The date, starting time and duration of each sampling run.
9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
10. The number of points sampled and configuration and location of the sampling plane.
11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.

l2. The type, manufacturer and configuration of the sampling equipment used.

13. Data related to the required calibration of the test equipment.
14. Data on the identification, processing and weights of all filters used.
15. Data on the types and amounts of any chemical solutions used.
16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
17. The names of individuals, who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
18. All measured and calculated data required to be determined by each applicable test procedure for each run.
19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

62-297.320 Standards for Persons Engaged in Visible Emissions Observations.

(1) Training and Certification Required. All persons engaged in determining the opacity of visible emissions in Florida shall attend training and be certified by a training provider in accordance with the procedures and requirements set forth below.

(a) Certification shall consist of satisfactory attendance and completion of a classroom lecture and a field qualification. For certification purposes, the classroom lecture and field qualification are separate and independent requirements.
(b) Attendance at the classroom lecture is required no less frequently than every three years. Successful completion of the field qualification is required no less frequently than every six months.
(c) Proof of certification shall be made by including copies of the signed and dated certificates or cards issued by the training providers with documentation of visible emissions observations submitted to the department, or otherwise upon request of the department.

(2) Requirements for Training Providers. All persons providing training leading to the certification of persons engaged in determining the opacity of visible emissions in Florida shall meet the requirements of subsections 62-297.320(2)-(8), F.A.C.
(a) For certification purposes, the classroom lecture and field certification are separate and independent requirements. For each course scheduled, each training provider shall offer a classroom lecture and one or more days of field qualification.
(b) Copies of quality assurance documentation, attendance records and field data sheets shall be maintained for a period of no less than three years after the conclusion of each course and shall be made available to the department upon request.
(c) Each training provider shall arrange for suitable locations for the classroom lecture and field qualification sessions that facilitate learning and reduce the impact of the smoke on passersby.
(d) To assure that cigar, pipe or cigarette smoke does not interfere with the observations of the trainees, each training provider shall enforce a policy of no smoking within the field qualification area.

(3) Classroom Lecture.
(a) The classroom lecture shall include the following topics and exercises:
1. Sources and causes of visible emissions.
2. Common types of emission control equipment and their effects on visible emissions observations.
3. History of opacity measurement.
4. Principles and theory of opacity.
5. Plume types and characteristics.
6. Legal aspects of visible emissions observations and legal defensibility of Method 9.
7. Basic meteorological conditions that influence plume behavior.
8. Proper procedures for conducting field observations under a variety of conditions.
9. A demonstration of commonly used measurement devices including a compass, a wind speed measurement device, and an inclinometer.
10. A written exercise demonstrating the proper procedure for documentation of observations.
(b) Training providers shall issue a signed and dated certificate or card to all persons attending the classroom lecture.

(4) Field Qualification.
(a) The field qualification shall be conducted in accordance with the requirements set forth in 40 CFR Part 60, Subpart A, EPA Method 9, adopted and incorporated by reference at Rule 62-204.800, F.A.C.; EPA Quality Assurance Handbook for Air Pollution Measurement Systems: Volume III, Section 3.12, hereby adopted and incorporated by reference; and EPA Guidelines for Evaluation of Visible Emissions (EPA 340/1-75-007, April 1975), hereby adopted and incorporated by reference.
(b) Each training provider shall meet requirements for quality assurance at least as stringent as those outlined in EPA Method 9.

(c) Each training provider shall monitor the attendees so that conferring or copying results during field qualification does not occur.
(d) Each training provider shall not provide hints of any kind or demonstrate the smoke standards during the field qualification sessions, except during familiarization runs prior to each test.
(e) Training providers shall issue a signed and dated certificate or card to all persons who successfully complete the field qualification.

(5) Notification to Department of Training Course Offerings. Each training provider shall notify the Department of all visible emissions training courses such provider offers in Florida at least 30 days prior to the start of each course.

(6) Notification to Department of Persons Receiving Certification. Each training provider shall provide a list of the names of attendees receiving certification at its courses to the department no later than 30 days after the conclusion of each course.

(7) Audit by the Department. For auditing purposes, each training provider shall allow one or more persons from the Department or a local air pollution control agency to observe each visible emissions training course offered in Florida without advance notice to the training provider. The training provider shall not issue a certificate or card to the observers, and shall not charge a fee for their attendance.

(8) Invalidation of Certificates. After investigation by the department, should any training provider's course be found by the department to not meet the requirements of this section, the certificates or cards offered by such provider for such course shall not be considered valid for visible emissions observations in Florida.

Subsection GG. Common Conditions – Subparts AA Monitoring and Testing Requirements

Sub-section	E.U. ID No.	Brief Description
G.	020	"B" Phosphoric Acid Plant
M.	036	"B" Superphosphoric Acid Plant
V.	064	SCM Rock Dryer
AA.	069	"D" Phosphoric Acid Plant
BB.	070	"C" and "D" Superphosphoric Acid Plants

MONITORING REQUIREMENTS

GG.1. Phosphorus-bearing Feed Material. The Permittee shall install, calibrate, maintain, and operate a monitoring system, which can be used to determine and permanently record the mass flow of phosphorus-bearing feed material to the process. The monitoring system shall have an accuracy of ±5 percent over its operating range.

[Rule 62-204.800, F.A.C.; 40 CFR 63.605(a)]

GG.2. P_2O_5 Feed and Phosphate Rock Feed. (1) Each owner or operator of a new or existing wet-process phosphoric acid process line or superphosphoric acid process line subject to the provisions of this subpart shall maintain a daily record of equivalent P_2O_5 feed.

(2) Each owner or operator of a new or existing phosphate rock calciner or phosphate rock dryer subject to the provisions of this subpart shall maintain a daily record of phosphate rock feed by determining the total mass rate in metric ton/hour or short tons per hour of phosphorus bearing feed using a monitoring system for measuring mass flowrate which meets the requirements of Condition II.1.

[Rule 62-204.800, F.A.C.; 40 CFR 63.605(b)(1)and (2)]

GG.3. Scrubber Pressure Drop and Liquid Flow Rate. Each owner or operator of a new or existing wet-process phosphoric acid process line, superphosphoric acid process line, phosphate rock dryer or phosphate rock calciner using a wet scrubbing emission control system shall install, calibrate, maintain, and operate the following monitoring systems:

(1) A monitoring system which continuously measures and permanently records the pressure drop across each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of ±5 percent over its operating range.

GG.3. continued:

(2) A monitoring system which continuously measures and permanently records the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of ±5 percent over its operating range.

[Rule 62-204.800, F.A.C.; 40 CFR 63.605(c)(1) and (2)]

GG.4. Operating Parameter Allowable Range Methodology. Following the date on which the performance test required in § 63.606 is completed, the owner or operator of a new or existing affected source using a wet scrubbing emission control system and subject to emissions limitations for total fluorides or particulate matter contained in this subpart must establish allowable ranges for operating parameters using the methodology of either paragraph (1) or (2) of this Condition:

(1) The allowable range for the daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system is ±20 percent of the baseline average value determined as a requirement of §63.606(c)(4), (d)(4), or (e)(2). 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, but, in no instance shall the adjustment be reduced to less than ±10 percent. The owner or operator must notify the Administrator of the baseline average value and must notify the Administrator each time that the baseline value is changed as a result of the most recent performance test. When a source using the methodology of this paragraph is retested, the owner or operator shall determine whether new allowable ranges of baseline average values will be based upon the new performance test or (if the new performance test results are within the previously established range) whether there will be no change in the operating parameters derived from previous tests. When a source using the methodology of this paragraph is retested and the performance test results are submitted to the Administrator pursuant to §§63.607(c)(1), 63.7(g)(1), and/or 63.10(d)(2), the owner or operator will indicate whether the operating range will be based on the new performance test or the previously established range. If the Administrator has not denied approval of the new operating ranges within 30 days of submission of the performance test results, the new ranges shall be deemed approved and the new baseline value shall then be effective on the 31st day following submission.

GG.4. continued**:**

(2) The owner or operator of any new or existing affected source shall establish, and provide to the Administrator for approval, allowable ranges for the daily averages of the pressure drop across and of the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system for the purpose of assuring compliance with this subpart. Allowable ranges may be based upon baseline average values recorded during previous performance tests using the test methods required in §63.606(c)(4), (d)(4), or (e)(2). As an alternative, the owner or operator can establish the allowable ranges using the results of performance tests conducted specifically for the purposes of this paragraph using the test methods required in this subpart and established in the manner required in §63.606(c)(4), (d)(4), or (e)(2). The source shall certify that the control devices and processes have not been modified subsequent to the testing upon which the data used to establish the allowable ranges were obtained. The allowable ranges developed pursuant to the provisions of this paragraph must be submitted to the Administrator for approval. The owner or operator must request and obtain approval of the Administrator for changes to the allowable ranges. When a source using the methodology of this paragraph is retested, the owner or operator shall determine new allowable ranges of baseline average values unless the retest indicates no change in the operating parameters outside the previously established ranges. If the Administrator has not denied approval of the new operating ranges within 30 days of submission of the performance test results, the new ranges shall be deemed approved and the new baseline value shall then be effective on the 31st day following submission.

[Rule 62-204.800, F.A.C.; 40 CFR 63.605(d)]

PERFORMANCE TESTS AND COMPLIANCE PROVISIONS.

GG.5. <u>Performance Tests</u>.

(1) On or before the applicable compliance date in § 63.609 and once per annum thereafter, each owner or operator of a phosphoric acid manufacturing plant shall conduct a performance test to demonstrate compliance with the applicable emission standard for each existing wet-process phosphoric acid process line, superphosphoric acid process line, phosphate rock dryer, and phosphate rock calciner. The owner or operator shall conduct the performance test according to the procedures in 40 CFR 63 Subpart A and in section 63.606.

(2) As required by § 63.7(a)(2) and once per annum thereafter, each owner or operator of a phosphoric acid manufacturing plant shall conduct a performance test to demonstrate compliance with the applicable emission standard for each new wet-process phosphoric acid process line, superphosphoric acid process line, phosphate rock dryer, and phosphate rock calciner. The owner or operator shall conduct the performance test according to the procedures in 40 CFR 63 Subpart A and in section 63.606.
[40 CFR 63.606(a)]

GG.6. In conducting performance tests, each owner or operator of an affected source shall 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).

[40 CFR 63.606(b)]

GG.7. **Total Fluorides**. Each owner or operator of a new or existing wet-process phosphoric acid process line or superphosphoric acid process line shall determine compliance with the applicable total fluorides standards in § 63.602 or § 63.603 as follows:

(1) The emission rate (E) of total fluorides shall be computed for each run using the following equation:

$$E = \left(\sum_{i=1}^{N} \mathbf{C_{si}}\, \mathbf{Q_{sdi}}\right)/(\mathbf{PK})$$

where:

E = emission rate of total fluorides, g/metric ton (lb/ton) of equivalent P_2O_5 feed.
$\mathbf{C_{si}}$ = concentration of total fluorides from emission point ``i," mg/dscm (mg/dscf).
$\mathbf{Q_{sdi}}$ = volumetric flow rate of effluent gas from emission point ``i," dscm/hr (dscf/hr).
N = number of emission points associated with the affected facility.
P = equivalent P_2O_5 feed rate, metric ton/hr (ton/hr).
K = conversion factor, 1000 mg/g (453,600 mg/lb).

(2) Method 13A or 13B (40 CFR part 60, appendix A) shall be used to determine the total fluorides concentration (C_{si}) and volumetric flow rate (Q_{sdi}) of the effluent gas from each of the emission points. 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. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf).

(3) The equivalent P_2O_5 feed rate (P) shall be computed using the following equation:

$$P = M_p R_p$$

where:

M_p = total mass flow rate of phosphorus-bearing feed, metric ton/hr (ton/hr).
R_p = P_2O_5 content, decimal fraction.

(i) The accountability system described in § 63.605(a) and (b) shall be used to determine the mass flow rate (M_p) of the phosphorus-bearing feed.

(ii) The P_2O_5 content (R_p) of the feed shall be determined using as appropriate the following methods (incorporated by reference- see 40 CFR 63.14) specified in the Book of Methods Used and Adopted By The Association Of Florida Phosphate Chemists, Seventh Edition 1991, 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.

(4) To comply with § 63.605(d)(1) or (2), the owner or operator shall use the monitoring systems in § 63.605(c) to determine the average pressure loss of the gas stream across each scrubber in the process scrubbing system and to determine the average flow rate of the scrubber liquid to each scrubber in the process scrubbing system during each of the total fluoride runs. The arithmetic averages of the three runs shall be used as the baseline average values for the purposes of § 63.605(d)(1) or (2).

[40 CFR 63.606(c)]

GG.8. <u>Particulate Matter</u>. Each owner or operator of a new or existing phosphate rock dryer shall demonstrate compliance with the particulate matter standards in § 63.602 or § 63.603 as follows:

(1) The emission rate (E) of particulate matter shall be computed for each run using the following equation:

$$E = (C_s Q_{sd})/(PK)$$

where:
E = emission rate of particulate matter, kg/Mg (lb/ton) of phosphate rock feed.
C_s = concentration of particulate matter, g/dscm (g/dscf).
Q_{sd} = volumetric flow rate of effluent gas, dscm/hr (dscf/hr).
P = phosphate rock feed rate, Mg/hr (ton/hr).
K = conversion factor, 1000 g/kg (453.6 g/lb).

(2) Method 5 (40 CFR part 60, appendix A) shall be used to determine the particulate matter concentration (c_s) and volumetric flow rate (Q_{sd}) of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf).

(3) The system described in § 63.605(a) shall be used to determine the phosphate rock feed rate (P) for each run.

(4) To comply with § 63.605(d)(1) or (2), the owner or operator shall use the monitoring systems in § 63.605(c) to determine the average pressure loss of the gas stream across each scrubber in the process scrubbing system and to determine the average flow rate of the scrubber liquid to each scrubber in the process scrubbing system during each of the particulate matter runs. The arithmetic average of the one-hour averages determined during the three test runs shall be used as the baseline average values for the purposes of § 63.605(d)(1) or (2).
[40 CFR 63.606(d)]

GG.9. Each owner or operator of a new or existing phosphate rock calciner shall demonstrate compliance with the particulate matter standards in §§ 63.602 and 63.603 as follows:

(1) Method 5 (40 CFR part 60, appendix A) shall be used to determine the particulate matter concentration. The sampling time and volume for each test run shall be at least 60 minutes and 1.70 dscm.

(2) To comply with § 63.605(d)(1) or (2), the owner or operator shall use the monitoring systems in § 63.605(c) to determine the average pressure loss of the gas stream across each scrubber in the process scrubbing system and to determine the average flow rate of the scrubber liquid to each scrubber in the process scrubbing system during each of the particulate matter runs. The arithmetic average of the one-hour averages determined during the three test runs shall be used as the baseline average values for the purposes of § 63.605(d)(1) or (2).

[40 CFR 63.606(e)]

NOTIFICATION, RECORDKEEPING, AND REPORTING REQUIREMENTS.

GG.10. Each owner or operator subject to the requirements of this subpart shall comply with the notification requirements in § 63.9.

[40 CFR 63.607(a)]

GG.11. Each owner or operator subject to the requirements of this subpart shall comply with the recordkeeping requirements in § 63.10.

[40 CFR 63.607(b)]

GG.12. The owner or operator of an affected source shall comply with the reporting requirements specified in § 63.10 as follows:

(1) Performance test report. As required by § 63.10, the owner or operator shall report the results of the initial and annual performance tests as part of the notification of compliance status required in § 63.9.

(2) Excess emissions report. As required by § 63.10, the owner or operator of an affected source shall submit an excess emissions report for any exceedance of an operating parameter limit. The report shall contain the information specified in § 63.10. When no exceedances of an operating parameter have occurred, such information shall be included in the report. The report shall be submitted semiannually and shall be delivered or postmarked by the 30th day following the end of the calendar half. If exceedances are reported, the owner or operator shall report quarterly until a request to reduce reporting frequency is approved as described in § 63.10.

GG.12. continued:

(3) Summary report. If the total duration of control system exceedances for the reporting period is less than 1 percent of the total operating time for the reporting period, the owner or operator shall submit a summary report containing the information specified in § 63.10 rather than the full excess emissions report, unless required by the Administrator. The summary report shall be submitted semiannually and shall be delivered or postmarked by the 30th day following the end of the calendar half.

(4) If the total duration of control system operating parameter exceedances for the reporting period is 1 percent or greater of the total operating time for the reporting period, the owner or operator shall submit a summary report and the excess emissions report.

[40 CFR 63.607(c)]

Subsection HH. Common Conditions – Subparts BB Monitoring and Testing Requirements

Sub-section	E.U. ID No.	Brief Description
D.	008	"Y" Train #1 MAP/DAP Plant
J.	032	"Z"-Train #2 MAP/DAP Plant

Monitoring Requirements

HH.1. Phosphorus-Bearing Feed Material. The Permittee shall install, calibrate, maintain, and operate a monitoring system, which can be used to determine and permanently record the mass flow of phosphorus-bearing feed material to the process. The monitoring system shall have an accuracy of ±5 percent over its operating range.

[Rule 62-204.800, F.A.C.; 40 CFR 63.625(a)]

HH.2. P_2O_5 Feed. Each owner or operator of a new or existing diammonium and/or monoammonium phosphate process line or granular triple superphosphate process line subject to the provisions of this subpart shall maintain a daily record of equivalent P_2O_5 feed.

[Rule 62-204.800, F.A.C.; 40 CFR 63.625(b)]

HH.3. Scrubber Pressure Drop and Liquid Flow Rate. Each owner or operator of a new or existing diammonium and/or monoammonium phosphate process line, granular triple superphosphate process line, or granular triple superphosphate storage building using a wet scrubbing emission control system shall install, calibrate, maintain, and operate the following monitoring systems:

(1) A monitoring system which continuously measures and permanently records the pressure drop across each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of ±5 percent over its operating range.

(2) A monitoring system which continuously measures and permanently records the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of ±5 percent over its operating range.

[Rule 62-204.800, F.A.C.; 40 CFR 63.625(b)]

HH.4. <u>Operating Parameter Allowable Range Methodology</u>. Following the date on which the performance test required in § 63.626 is completed, the owner or operator of a new or existing affected source using a wet scrubbing emission control system and subject to emissions limitations for total fluorides or particulate matter contained in this subpart must establish allowable ranges for operating parameters using the methodology of either paragraph (1) or (2) of this Condition:

(1) The allowable range for the daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system is ±20 percent of the baseline average value determined as a requirement of §63.626(c)(4) or (d)(4). 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, but in no instance shall the adjustment be reduced to less than ±10 percent. The owner or operator must notify the Administrator of the baseline average value and must notify the Administrator each time that the baseline value is changed as a result of the most recent performance test. When a source using the methodology of this paragraph is retested, the owner or operator shall determine whether new allowable ranges of baseline average values will be based upon the new performance test or (if the new performance test results are within the previously established range) whether there will be no change in the operating parameters derived from previous tests. When a source using the methodology of this paragraph is retested and the performance test results are submitted to the Administrator pursuant to §§63.627(c)(1), 63.7(g)(1), and/or 63.10(d)(2), the owner or operator will indicate whether the operating range will be based on the new performance test or the previously established range. If the Administrator has not denied approval of the new operating ranges within 30 days of submission of the performance test results, the new ranges shall be deemed approved and the new baseline value shall then be effective on the 31st day following submission.

(2) The owner or operator of any new or existing affected source shall establish, and provide to the Administrator for approval, allowable ranges for the daily averages of the pressure drop across and of the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system for the purpose of assuring compliance with this subpart. Allowable ranges may be based upon baseline average values recorded during previous performance tests using the test methods required in §63.626(c)(4) or (d)(4). As an alternative, the owner or operator can establish the allowable ranges using the results of performance tests conducted specifically for the purposes of this paragraph using the test methods required in this subpart and established in the manner required in §63.626(c)(4) or (d)(4). The source shall certify that the control devices and processes have not been modified subsequent to the testing upon which the data used to establish the allowable ranges were obtained. The allowable ranges developed pursuant to the provisions of this paragraph must be submitted to the Administrator for approval. The owner or operator must request and obtain approval of the Administrator for changes to the allowable ranges. When a source using the methodology of this paragraph is retested, the owner or operator shall determine new allowable ranges of baseline average values unless the retest indicates no change in the operating parameters outside the previously established ranges. If the Administrator has not denied approval of the new operating ranges within 30 days of submission of the performance test results, the new ranges shall be deemed approved and the new baseline value shall then be effective on the 31st day following submission.
[Rule 62-204.800, F.A.C.; 40 CFR 63.625(f)]

PERFORMANCE TESTS AND COMPLIANCE PROVISIONS.

HH.5. Performance Tests.

(1) On or before the applicable compliance date in § 63.630 and once per annum thereafter, each owner or operator of a phosphate fertilizers production plant subject to the provisions of this subpart shall conduct a performance test to demonstrate compliance with the applicable emission standard for each existing diammonium and/or monoammonium phosphate process line, granular triple superphosphate process line, or granular triple superphosphate storage building. The owner or operator shall conduct the performance test according to the procedures in subpart A of this part and in this section.

(2) As required by § 63.7(a)(2) and once per annum thereafter, each owner or operator of a phosphate fertilizers production plant subject to the provisions of this subpart shall conduct a performance test to demonstrate compliance with the applicable emission standard for each new diammonium and/or monoammonium phosphate process line, granular triple superphosphate process line, or granular triple superphosphate storage building. The owner or operator shall conduct the performance test according to the procedures in subpart A of this part and in this section.

[40 CFR 63.626(a)]

HH.6. In conducting performance tests, each owner or operator of an affected source shall 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).

[40 CFR 63.626(b)]

HH.7. Total Fluorides. Each owner or operator of a new or existing diammonium and/or monoammonium phosphate process line or granular triple superphosphate process line shall determine compliance with the applicable total fluorides standards in § 63.622 or § 63.623 as follows:

(1) The emission rate (E) of total fluorides shall be computed for each run using the following equation:

$$E = \left(\sum_{i=1}^{N} \mathbf{C_{si}\ Q_{sdi}}\right)/(PK)$$

where:

E = emission rate of total fluorides, g/metric ton (lb/ton) of equivalent P_2O_5 feed.
C_{si} = concentration of total fluorides from emission point "i," mg/dscm (mg/dscf).
Q_{sdi} = volumetric flow rate of effluent gas from emission point ``i," dscm/hr (dscf/hr).
N = number of emission points associated with the affected facility.
P = equivalent P_2O_5 feed rate, metric ton/hr (ton/hr).

HH.7. continued:

K = conversion factor, 1000 mg/g (453,600 mg/lb).

(2) Method 13A or 13B (40 CFR part 60, appendix A) shall be used to determine the total fluorides concentration (C_{si}) and volumetric flow rate (Q_{sdi}) of the effluent gas from each of the emission points. If Method 13 B 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 sections 7.3.3 and 7.3.4 in Method 13 A, may be omitted. The sampling time and sample volume for each run shall be at least one hour and 0.85 dscm (30 dscf).

(3) The equivalent P_2O_5 feed rate (P) shall be computed using the following equation:

$$P = M_p R_p$$

where:

M_p = total mass flow rate of phosphorus-bearing feed, metric ton/hr (ton/hr).
R_p = P_2O_5 content, decimal fraction.

(i) The accountability system described in § 63.625(a) and (b) shall be used to determine the mass flow rate (M_p) of the phosphorus-bearing feed.

(ii) The P_2O_5 content (R_p) of the feed shall be determined using as appropriate the following methods (incorporated by reference- see 40 CFR 63.14) specified in the Book of Methods Used and Adopted By The Association Of Florida Phosphate Chemists, Seventh Edition 1991, 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.

HH.7. continued:

(4) To comply with § 63.625(f)(1) or (2), the owner or operator shall use the monitoring systems in § 63.625(c) to determine the average pressure loss of the gas stream across each scrubber in the process scrubbing system and to determine the average flow rate of the scrubber liquid to each scrubber in the process scrubbing system during each of the total fluoride runs. The arithmetic averages of the three runs shall be used as the baseline average values for the purposes of § 63.625(f)(1) or (2).

[40 CFR 63.626(c)]

NOTIFICATION, RECORDKEEPING, AND REPORTING REQUIREMENTS.

HH.8. Each owner or operator subject to the requirements of this subpart shall comply with the notification requirements in § 63.9.

[40 CFR 63.627(a)]

HH.9. Each owner or operator subject to the requirements of this subpart shall comply with the recordkeeping requirements in § 63.10.

[40 CFR 63.627(b)]

HH.10. The owner or operator of an affected source shall comply with the reporting requirements specified in § 63.10 as follows:

(1) Performance test report. As required by § 63.10, the owner or operator shall report the results of the initial and annual performance tests as part of the notification of compliance status required in § 63.9.

(2) Excess emissions report. As required by § 63.10, the owner or operator of an affected source shall submit an excess emissions report for any exceedance of an operating parameter limit. The report shall contain the information specified in § 63.10. When no exceedances of an operating parameter have occurred, such information shall be included in the report. The report shall be submitted semiannually and shall be delivered or postmarked by the 30th day following the end of the calendar half. If exceedances are reported, the owner or operator shall report quarterly until a request to reduce reporting frequency is approved as described in § 63.10.

(3) Summary report. If the total duration of control system exceedances for the reporting period is less than 1 percent of the total operating time for the reporting period, the owner or operator shall submit a summary report containing the information specified in § 63.10 rather than the full excess emissions report, unless required by the Administrator. The summary report shall be submitted semiannually and shall be delivered or postmarked by the 30th day following the end of the calendar half.

HH.10. continued:

(4) If the total duration of control system operating parameter exceedances for the reporting period is 1 percent or greater of the total operating time for the reporting period, the owner or operator shall submit a summary report and the excess emissions report.

[40 CFR 63.627(c)]

Subsection II. Common Conditions – F.A.C. Excess Emissions Rules

II.1. Excess Emissions– Startup, Shutdown, Malfunction. Excess emissions resulting from startup, shutdown or malfunction shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed 2 hours in any 24 hour period unless authorized by the Department for longer duration.
[Rule 62-210.700(1), F.A.C.]

II.2. Excess Emissions – Existing Fossil Fuel Steam Generators. Excess emissions from existing fossil fuel steam generators resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized.
[Rule 62-210.700(2), F.A.C.]

II.3. **Excess Emissions – Existing Fossil Fuel Steam Generators – Soot Blowing and Load Change**. Excess emissions from existing fossil fuel steam generators resulting from boiler cleaning (soot blowing) and load change shall be permitted provided the duration of such excess emissions shall not exceed 3 hours in any 24-hour period and visible emissions shall not exceed Number 3 of the Ringelmann Chart (60 percent opacity), and providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized.

A load change occurs when the operational capacity of a unit is in the 10 percent to 100 percent capacity range, other than startup or shutdown, which exceeds 10 percent of the unit's rated capacity and which occurs at a rate of 0.5 percent per minute or more.

Visible emissions above 60 percent opacity shall be allowed for not more than 4, six (6)-minute periods, during the 3-hour period of excess emissions allowed by this subparagraph, for boiler cleaning and load changes, at units which have installed and are operating, or have committed to install or operate, continuous opacity monitors. Particulate matter emissions shall not exceed an average of 0.3 lbs. per million BTU heat input during the 3-hour period of excess emissions allowed by this subparagraph.

[Rule 62-210.700(3), F.A.C.]

II.4. Excess Emissions. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment of process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited.

[Rule 62-210.700(4), F.A.C.]

II.5. Excess Emissions. Considering operational variations in types of industrial equipment operations affected by this rule, the Department may adjust maximum and minimum factors to provide reasonable and practical regulatory controls consistent with the public interest.

[Rule 62-210.700(5), F.A.C.]

II.6. Excess Emissions– Malfunction. In case of excess emissions resulting from malfunctions, the owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.
[Rule 62-210.700(6), F.A.C.]

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
075	Concrete Batch Plant

The entire concrete batch plant and auxiliary equipment will be trailer mounted for ease of movement. Aggregate and cement will be received in bags and/or by truck. Raw materials will be stored in bins, transferred via screw conveyor to a dry blender, and then fed with water to the mixing truck(s). The trucks will deliver the concrete to a staging area where it will be pumped to the desired location. The storage bin and dry blender will be equipped with a cartridge filter for particulate matter control. Auxiliary equipment includes a diesel engine generator, diesel engine power screen, and a diesel engine air compressor. The diesel engines will fire ultra low sulfur No. 2 fuel oil with a maximum sulfur content of 15 ppm.

[Application No. 0470002-074-AC]

PERFORMANCE RESTRICTIONS

JJ.1. Capacities. The plant has a capacity of producing 120 cubic yards of concrete per hour. The plant will be restricted to a maximum production of concrete, while at this facility, to 120,000 cubic yards per year. The cement and cement additive silo(s) shall be equipped with high efficiency dust collections devices (baghouses). The baghouses shall be operated at all times that the silo(s) are in operation.
[Rule 62-4.070(3), F.A.C. and Application No. 0470002-074-AC]

JJ.2. Hours of Operation. The hours of operation shall not be limited (i.e., 8760 hours per year (8784 in any Leap Year).
[Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

EMISSION LIMITING STANDARDS

JJ.3. Visible Emissions. Emissions from silos, weigh hoppers (batchers), and other enclosed storage and conveying equipment shall be controlled to the extent necessary to limit visible emissions to 5 percent opacity.
[Rule 62-296.414(1), F.A.C.]

JJ.4. The owner or operator shall take reasonable precautions to control unconfined emissions from hoppers, storage and conveying equipment, conveyor drop points, truck loading and unloading, and unpaved roads. The following shall constitute reasonable precautions:

a. Management of unpaved roads which shall include the following:

(i) Wetting of unpaved roads used in this project will be required twice daily unless rainfall or previous wetting has eliminated visible fugitive road dust emissions.

JJ.4. continued:

(ii) Reduce truck speeds as necessary to minimize visible dust from truck traffic.

b. Use of spray bar, chute, or partial enclosure to mitigate emissions at the material drop point into the truck.

[Rule 62-296.320(4)(c), Rule 62-296.414(2), F.A.C.]

SPECIFIC TESTING REQUIREMENTS

JJ.5. **Visible Emissions**. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. Testing shall be conducted at the dust control emission point (EP), including but limited to the storage silo(s) and the blender. Testing at each EP shall be performed while loading a tanker truck into the silo and loading material into the blender respectively.

[Rules 62-4.070, 62-213.420(1)(a)3., 62-297.310 and 62-297.401, F.A.C.]

JJ.6. Visible emissions tests of silo dust collector exhaust points shall be conducted while loading the silo at a rate that is representative of the normal silo loading rate. The minimum loading rate shall be 25 tons per hour unless such rate is unachievable in practice. If emissions from the weigh hopper (batcher) operation are also controlled by the silo dust collector, the batching operation shall be in operation during the visible emissions test. The batching rate during the emissions test shall be representative of the normal batching rate and duration. Each test report shall state the actual silo loading rate during emissions testing and, if applicable, whether or not batching occurred during emissions testing.

[Rule 62-296.414(3)(c), F.A.C.]

JJ.7. If emissions from the weigh hopper (batcher) operation are controlled by a dust collector which is separate from the silo dust collector, visible emissions tests of the weigh hopper (batcher) dust collector exhaust point shall be conducted while batching at a rate that is representative of the normal batching rate and duration. Each test report shall state the actual batching rate during emissions testing.
[Rule 62-296.414(3)(d), F.A.C.]

RECORDKEEPING AND REPORTING REQUIREMENTS

JJ.8. The permittee shall maintain daily records of the amount of wetting of the haul road including number of applications, approximate quantity of water applied, and reason if less than two applications of water were applied daily. These records shall be made available to the Department upon request.

[Rule 62-212.300, Rule 62-4.070, F.A.C.]

Subsection KK. Emergency Engines

Because this facility operates stationary reciprocating internal combustion engines, it is subject to regulation under 40 CFR 63, Subpart ZZZZ, - National Emissions Standards For Hazardous Air Pollutants For Stationary Reciprocating Internal Combustion Engines.

The specific conditions in this section apply to the following emissions units:

ID No.	Emission Unit Description
076	15 Emergency Engines

Engine No.(s) 1-8 & 10-14 are subject to regulation under 40 CFR 63, Subpart ZZZZ, - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

Engine No.(s) 15 & 16 are subject to regulation under Subpart JJJJ—Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

Engine No. 1: Mobile diesel generator Aux set (#3 D/L), manufactured by Allis Chamers, Model # 2900 MK1, Serial # D2-117976.

Engine No. 2: Mobile diesel generator Aux set (#2 D/L), manufactured by John Deere, Model #6329DF-01, Serial #337375T.

Engine No. 3: Mobile diesel generator Aux set (#4 D/L), manufactured by Allis Chamers, Model #2900MK1, Serial # D275931.

Engine No. 4: Diesel ELEC (#54 D/L), manufactured by Allis Chamers, Model #8900MK1, Serial # 1-7451-2D759110.

Engine No. 5: Diesel 215 KW DSL, manufactured by Detroit Diesel, Model #1063-7305, Serial # 06A0467476.

Engine No. 6: Diesel Engine STA 150 KW, manufactured by CAT, Model #3208, Serial # 30A03399.

Engine No. 7: Diesel Murphy/lima 75-13846, manufactured by Perkins, Model #LJ-33478, Serial # U428363U.

Engine No. 8: Diesel Katolight D500FRV4, manufactured by VOLVO, Model #TAD1631G, Serial # 2160034028.

Engine No. 9: Removed from Site.

Engine No. 10: Diesel ENGINE 600KW, manufactured by CAT, Model #3456, Serial # 7WG00960.

Engine No. 11: Diesel Engine 3126, manufactured by CAT, Model #3126, Serial # CKK00259.

Engine No. 12: Diesel Engine 3126, manufactured by CAT, Model #3126, Serial # CKK00260.

Engine No. 13: Diesel MOBILE PUMP, FIRE H20, manufactured by CAT, Model #3126, Serial # CKK00308.

Engine No. 14: 330 HP emergency use diesel MOBILE ENGINE, FIRE PUMP, built in 2004, manufactured by CAT, Model #3126, Serial # CKK00307.

The following table provides important details for Engine No. s 1- 8 & 10-14:

Engine	Equip #	Group Code 2	Plant	Displacement (L/cyl)	HP	Year Built/Manufactured	Use
1	000005	M04 Light Plant G	SCM	301 CID	100	1974	Limited
2	000009	M04 Light Plant G	SCM	380 CID	100	1974	Limited
3	000012	M04 Light Plant G	SCM	301 CID	100	1975	Limited
4	000014	M04 Light Plant G	SCM	301 CID	100	1975	Limited
5	000016	M04 Light Plant G	SCC	426 CID	230	1992	Limited
6	000533	M04 Light Plant G	SRC	636 CID	250	1988	Limited
7	001026	M04 Light Plant G	SCC	3.9 L	100	1998	Emergency
8	001106	M04 Light Plant G	SRC	16.1 L	200	1999	Limited
9	---	REMOVED from site	---	---	---	---	---
10	001593	M04 Light Plant G	SRC	15.8 L	535	2001	Emergency
11	001626	P02 PUMP- 2" DIS	SRC	7.2 L	330	2004	Emergency
12	001645	P02 PUMP- 2" DIS	Stored @ mobile	7.2 L	330	2004	Emergency
13	001703	P02 PUMP- 2" DIS	SCC	7.2 L	330	2004	Emergency
14	001715	997 OTHER, MOBILE	SCM	7.2 L	330	2004	Emergency

KK.1. Existing Stationary RICE (Engines 1-8 & 10-16). 40 CFR 63.6590(a)(1)(ii) Existing stationary RICE at major source, constructed before June 12, 2006.

An existing stationary CI RICE located at a major source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than **May 3, 2013**.

GENERAL REQUIREMENTS FOR ENGINE NO.(s) 1-8 & 10-16

KK.2. (a) You must be in compliance with the emission limitations and operating limitations in this subpart that apply to you at all times.

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

[40 CFR 63.6605]

KK.3. Table 2c to Subpart ZZZZ of Part 63—Requirements for Existing Compression Ignition Stationary RICE Located at a Major Source of HAP Emissions[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 annually, whichever comes first;
c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.[3]

During periods of startup you must 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.[3]

[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) 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.

[75 FR 51593, Aug. 20, 2010]

KK.4. No testing is required as per Tables 3-5. In accordance with 40 CFR 63.6625(e)(2), the facility 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. 40 CFR 63.6625(f), the facility must install a non-resettable hour meter if one is not already installed. 40 CFR 63.6625(h), the facility 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. 40 CFR 63.6625(i), the facility has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c.

KK.5. In accordance with 40 CFR 63.6635, the facility must:

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

No notification is required as per 40 CFR 63.6645(a)(5); §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h).

Engine No.(s) 15 & 16 are subject to regulation under Subpart JJJJ—Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

ENGINE NO.(s) 15 & 16

Engine No. 15: LPG Auxiliary power for radio equipment, manufactured by GM3.0L, Model #9CEXS03.0 2PA, Serial # H090023423.

Engine No. 16: LPG Auxiliary power for radio equipment SCM, manufactured by GM3.0L, Model #9CEXS03.0 2PA, Serial # H090023424.

The following table provides important details for the emergency use Engines No(s) 15 & 16.

Engine	Equip #	Group Code 2	Plant	Displacement (L/cyl)	HP	Year Built/Manufactured	Use
15	002245	M04 Light Plant G	SCR	3.0L	64	2009	Emergency
16	002246	M04 Light Plant G	SCM	3.0L	64	2009	Emergency

GENERAL REQUIREMENTS FOR ENGINE NO. (s) 15 & 16

Owners and operators of stationary SI ICE that commence construction on or after January 1, 2009, for emergency engines with a maximum engine power greater than 19 KW (25 HP).

EMISSION STANDARDS FOR OWNERS AND OPERATORS

KK.6. Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) manufactured on or after the applicable date in January 1, 2009 that are rich burn engines that use LPG must comply with the emission standards in §60.4231(c) for their stationary SI ICE (Phase 1 emission standards in 40 CFR 90.103, applicable to class II engines, and other requirements for new nonroad SI engines in 40 CFR part 90).

40 CFR 90.103 (Table 3—Phase 2 Class II) Engine Exhaust Emission Standards by Model Year

[Grams per kilowatt-hour]

Model Year						
Engine Class	**Emission requirement**	**2001**	**2002**	**2003**	**2004**	**2005 and later**
II	HC +NO_X	18.0	16.6	15.0	13.6	12.1
	NMHC+NO_X	16.7	15.3	14.0	12.7	11.3
	CO	610	610	610	610	610

[40 CFR 60.4231(c); 40 CFR 60.4233(c) and 40 CFR 90.103]

Any of the engines may be replaced by a like-kind units, as needed. The permittee shall comply with the applicable requirements under 40 CFR 63, Subpart JJJJ and ZZZZ and include the information on the units in the subsequent revision or renewal application (whichever comes first).

Subsection LL. Specific Conditions –Boilers subject to 40 CFR 63, Subpart DDDDD

This section of the permit addresses the following emissions unit/units.

ID No.	Emission Unit Description
039	"C" Auxiliary Boiler
040	"D" Auxiliary Boiler
068	"E" Auxiliary Boiler
---	100 HP York-Shipley , natural gas fired, 4.25 MMBtu/hr heat input
---	100 HP FB-S 100 Fulton, natural gas fired, 4.25 MMBtu/hr heat input

On September 13, 2004, EPA promulgated national emission standards for hazardous air pollutants (NESHAP) for industrial, commercial, and institutional boilers and process heaters.

On June 19, 2007, the United States Court of Appeals for the District of Columbia Circuit vacated and remanded the standards.

On March 21, 2011, EPA promulgated 40 CFR 63, Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. This final rule became effective on May 20, 2011.

On May 18, 2011, EPA published a notice delaying the effective dates of the March 21, 2011 final rule until such time as judicial review is no longer pending or until EPA completes its reconsideration of the rules, whichever is earlier.

On December 23, 2011, EPA published the reconsideration proposal (40 CFR 63, subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters). The EPA intends to finalize the reconsideration in the spring of 2012.

On January 9, 2012, the United States Court of Appeals for the District of Columbia Circuit issued a decision vacating and remanding the EPA May 18, 2011delay notice. As such, the March 21, 2011 promulgated 40 CFR 63, Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters is now effective.

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

LL.1. <u>NESHAP, 40 CFR 63 Subpart DDDDD Applicability</u>. Emissions Unit Nos. 039, 040, and 068 are classified as existing industrial boilers. The 100 HP York-Shipley and the 100 HP FB-S 100 Fulton boilers are also classified as existing industrial boilers**.** All boilers shall comply with applicable provisions of 40 CFR 63 Subpart DDDDD.

[40 CFR 63.7490(a)(1), 40 CFR 63.7490(d), 40 CFR 63.7575(def)]

LL.2. <u>40 CFR 63, Subpart A-General Provision</u>. Table 10 of 40 CFR 63 Subpart DDDDD, shows which parts of the General Provisions in §§63.1 through 63.15 are applicable.

[40 CFR 63.7565]

LL.3. Compliance Date: Emissions Unit Nos. 039, 040, 068. The owner or operator shall comply with the applicable emission limitations and operating limitations of 40 CFR 63 Subpart DDDDD no later than March 21, 2014.

[40 CFR 63.7495(b)]

NOTIFICATION REQUIREMENTS

LL.4. The applicable notification requirements in §63.7545 according to the schedule in 63.7545 and in Subpart A of Part 63 shall be met.

[40 CFR 63.7495(d)]

§ 63.7500 Emission limitations, work practice standards, operating limits

(a) You must meet the requirements in paragraphs (a)(1) through (3) of this section, except as provided in paragraphs (b) and (c) of this section. You must meet these requirements at all times.

(1) You must meet each emission limit and work practice standard in Tables 1 through 3, and 12 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. If your affected source is a new or reconstructed affected source that commenced construction or reconstruction after June 4, 2010, and before May 20, 2011, you may comply with the emission limits in Table 1 or 12 to this subpart until March 21, 2014. On and after March 21, 2014, you must comply with the emission limits in Table 1 to this subpart.

(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 and alternative monitoring parameters, you must apply to the EPA Administrator for approval of alternative monitoring under §63.8(f).

(3) 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. 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.

LL.4. continued:

(c) Limited-use boilers and process heaters must complete a biennial tune-up as specified in §63.7540. They are not subject to the emission limits in Tables 1 and 2 to this subpart, the annual tune-up requirement in Table 3 to this subpart, or the operating limits in Table 4 to this subpart. Major sources that have limited-use boilers and process heaters must complete an energy assessment as specified in Table 3 to this subpart if the source has other existing boilers subject to this subpart that are not limited-use boilers.

[40 CFR 63.7500]

§ 63.7501 How can I assert an affirmative defense if I exceed an emission limitations during a malfunction?

In response to an action to enforce the emission limitations and operating limits set forth in §63.7500 you may assert an affirmative defense to a claim for civil penalties for exceeding such standards that are caused by malfunction, as defined at §63.2. Appropriate penalties may be assessed, however, if you fail to meet your burden of proving all of the requirements in the affirmative defense. The affirmative defense shall not be available for claims for injunctive relief.

(a) To establish the affirmative defense in any action to enforce such a limit, you must timely meet the notification requirements in paragraph (b) of this section, and must prove by a preponderance of evidence that:

(1) The excess emissions:

(i) Were caused by a sudden, infrequent, and unavoidable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner, and

(ii) Could not have been prevented through careful planning, proper design or better operation and maintenance practices; and

(iii) Did not stem from any activity or event that could have been foreseen and avoided, or planned for; and

(iv) Were not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and

(2) Repairs were made as expeditiously as possible when the applicable emission limitations were being exceeded. Off-shift and overtime labor were used, to the extent practicable to make these repairs; and

(3) The frequency, amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent practicable during periods of such emissions; and

LL.4. continued:

(4) If the excess emissions resulted from a bypass of control equipment or a process, then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and

(5) All possible steps were taken to minimize the impact of the excess emissions on ambient air quality, the environment and human health; and

(6) All emissions monitoring and control systems were kept in operation if at all possible, consistent with safety and good air pollution control practices; and

(7) All of the actions in response to the excess emissions were documented by properly signed, contemporaneous operating logs; and

(8) At all times, the facility was operated in a manner consistent with good practices for minimizing emissions; and

(9) A written root cause analysis has been prepared, the purpose of which is to determine, correct, and eliminate the primary causes of the malfunction and the excess emissions resulting from the malfunction event at issue. The analysis shall also specify, using best monitoring methods and engineering judgment, the amount of excess emissions that were the result of the malfunction.

(b) *Notification.* The owner or operator of the facility experiencing an exceedance of its emission limit(s) during a malfunction shall notify the Administrator by telephone or facsimile (fax) transmission as soon as possible, but no later than 2 business days after the initial occurrence of the malfunction, if it wishes to avail itself of an affirmative defense to civil penalties for that malfunction. The owner or operator seeking to assert an affirmative defense shall also submit a written report to the Administrator within 45 days of the initial occurrence of the exceedance of the standard in §63.7500 to demonstrate, with all necessary supporting documentation, that it has met the requirements set forth in paragraph (a) of this section. The owner or operator may seek an extension of this deadline for up to 30 additional days by submitting a written request to the Administrator before the expiration of the 45 day period. Until a request for an extension has been approved by the Administrator, the owner or operator is subject to the requirement to submit such report within 45 days of the initial occurrence of the exceedance

[40 CFR 63.7501]

<u>General Compliance Requirements -§ 63.7505</u>

a) You must be in compliance with the emission limits and operating limits in this subpart. These limits apply to you at all times.

(b) [Reserved]

(c) You must demonstrate compliance with all applicable emission limits using performance testing, fuel analysis, or continuous monitoring systems (CMS), including a continuous emission monitoring system (CEMS) or continuous opacity monitoring system (COMS), where applicable. You may demonstrate compliance with the applicable emission limit for hydrogen chloride or mercury using fuel analysis if the emission rate calculated according to §63.7530(c) is less than the applicable emission limit. Otherwise, you must demonstrate compliance for hydrogen chloride or mercury using performance testing, if subject to an applicable emission limit listed in Table 1, 2, or 12 to this subpart.

(d) If you demonstrate compliance with any applicable emission limit through performance testing and subsequent compliance with operating limits (including the use of continuous parameter monitoring system), or with a CEMS, or COMS, you must develop a site-specific monitoring plan according to the requirements in paragraphs (d)(1) through (4) of this section for the use of any CEMS, COMS, or continuous parameter monitoring system. This requirement also applies to you if you petition the EPA Administrator for alternative monitoring parameters under §63.8(f).

(1) For each CMS required in this section (including CEMS, COMS, or continuous parameter monitoring system), you must develop, and submit to the delegated authority for approval upon request, a site-specific monitoring plan that addresses paragraphs (d)(1)(i) through (iii) of this section. You must submit this site-specific monitoring plan, if requested, at least 60 days before your initial performance evaluation of your CMS. This requirement to develop and submit a site specific monitoring plan does not apply to affected sources with existing monitoring plans that apply to CEMS and COMS prepared under appendix B to part 60 of this chapter and that meet the requirements of §63.7525.

(i) Installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);

(ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and

(iii) Performance evaluation procedures and acceptance criteria (*e.g.*, calibrations).

(2) In your site-specific monitoring plan, you must also address paragraphs (d)(2)(i) through (iii) of this section.

(i) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1)(ii), (c)(3), and (c)(4)(ii);

(ii) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and

(iii) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c) (as applicable in Table 10 to this subpart), (e)(1), and (e)(2)(i).

(3) You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan.

(4) You must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.

[40 CFR 63.7505]

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 affected sources that elect to demonstrate compliance with any of the applicable emission limits in Tables 1 or 2 of this subpart through performance testing, your initial compliance requirements include conducting performance tests according to §63.7520 and Table 5 to this subpart, conducting a fuel analysis for each type of fuel burned in your boiler or process heater according to §63.7521 and Table 6 to this subpart, establishing operating limits according to §63.7530 and Table 7 to this subpart, and conducting CMS performance evaluations according to §63.7525. For affected sources that burn a single type of fuel, you are exempted from the compliance requirements of conducting a fuel analysis for each type of fuel burned in your boiler or process heater according to §63.7521 and Table 6 to this subpart. For purposes of this subpart, units that use a supplemental fuel only for startup, unit shutdown, and transient flame stability purposes still qualify as affected sources that burn a single type of fuel, and the supplemental fuel is not subject to the fuel analysis requirements under §63.7521 and Table 6 to this subpart.

(b) For affected sources that elect to demonstrate compliance with the applicable emission limits in Tables 1 or 2 of this subpart for hydrogen chloride or mercury through fuel analysis, your initial compliance requirement is to conduct a fuel analysis for each type of fuel burned in your boiler or process heater according to §63.7521 and Table 6 to this subpart and establish operating limits according to §63.7530 and Table 8 to this subpart.

(c) If your boiler or process heater is subject to a carbon monoxide limit, your initial compliance demonstration for carbon monoxide is to conduct a performance test for carbon monoxide according to Table 5 to this subpart. Your initial compliance demonstration for carbon monoxide also includes conducting a performance evaluation of your continuous oxygen monitor according to §63.7525(a).

(d) If your boiler or process heater subject to a PM limit has a heat input capacity greater than 250 MMBtu per hour and combusts coal, biomass, or residual oil, your initial compliance demonstration for PM is to conduct a performance evaluation of your continuous emission monitoring system for PM according to §63.7525(b). Boilers and process heaters that use a continuous emission monitoring system for PM are exempt from the performance testing and operating limit requirements specified in paragraph (a) of this section.

(e) For existing affected sources, you must demonstrate initial compliance, 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.

(f) If your new or reconstructed affected source commenced construction or reconstruction after June 4, 2010, you must demonstrate initial compliance with the emission limits no later than November 16, 2011 or within 180 days after startup of the source, whichever is later. If you are demonstrating compliance with an emission limit in Table 12 to this subpart that is less stringent than (that is, higher than) the applicable emission limit in Table 1 to this subpart, you must demonstrate compliance with the applicable emission limit in Table 1 no later than September 17, 2014.

(g) For affected sources that ceased burning solid waste consistent with §63.7495(e) and for which your initial compliance date has passed, you must demonstrate compliance within 60 days of the effective date of the waste-to-fuel switch. If you have not conducted your compliance demonstration for this subpart within the previous 12 months, you must complete all compliance demonstrations for this subpart before you commence or recommence combustion of solid waste.

§ 63.7515 When must I conduct subsequent performance tests, fuel analyses, or tune-ups?

(a) You must conduct all applicable performance tests according to §63.7520 on an annual basis, except those for dioxin/furan emissions, unless you follow the requirements listed in paragraphs (b) through (e) of this section. Annual performance tests must be completed no more than 13 months after the previous performance test, unless you follow the requirements listed in paragraphs (b) through (e) of this section. Annual performance testing for dioxin/furan emissions is not required after the initial compliance demonstration.

(b) You can conduct performance tests less often for a given pollutant if your performance tests for the pollutant for at least 2 consecutive years show that your emissions are at or below 75 percent of the emission limit, and if there are no changes in the operation of the affected source or air pollution control equipment that could increase emissions. In this case, you do not have to conduct a performance test for that pollutant for the next 2 years. You must conduct a performance test during the third year and no more than 37 months after the previous performance test. If you elect to demonstrate compliance using emission averaging under §63.7522, you must continue to conduct performance tests annually.

(c) If your boiler or process heater continues to meet the emission limit for the pollutant, you may choose to conduct performance tests for the pollutant every third year if your emissions are at or below 75 percent of the emission limit, and if there are no changes in the operation of the affected source or air pollution control equipment that could increase emissions, but each such performance test must be conducted no more than 37 months after the previous performance test. If you elect to demonstrate compliance using emission averaging under §63.7522, you must continue to conduct performance tests annually. The requirement to test at maximum chloride input level is waived unless the stack test is conducted for HCl. The requirement to test at maximum Hg input level is waived unless the stack test is conducted for Hg.

(d) If a performance test shows emissions exceeded 75 percent of the emission limit for a pollutant, you must conduct annual performance tests for that pollutant until all performance tests over a consecutive 2-year period show compliance.

(e) If you are required to meet an applicable tune-up work practice standard, you must conduct an annual or biennial performance tune-up according to §63.7540(a)(10) and (a)(11), 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.

(f) If you demonstrate compliance with the mercury or hydrogen chloride 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 in Table 1, 2, or 12 of this subpart. If you burn a new type of fuel, you must conduct a fuel analysis before burning the new type of fuel in your boiler or process heater. You must still meet all applicable continuous compliance requirements in §63.7540. If 12 consecutive monthly fuel analyses demonstrate compliance, you may request decreased fuel analysis frequency by applying to the EPA Administrator for approval of alternative monitoring under §63.8(f).

(g) You must report the results of performance tests and the associated initial fuel analyses within 90 days after the completion of the performance tests. This report must also verify that the operating limits for your affected source have not changed or provide documentation of revised operating parameters established according to §63.7530 and Table 7 to this subpart, as applicable. The reports for all subsequent performance tests must include all applicable information required in §63.7550.

§ 63.7520 What stack tests and procedures must I use?

(a) You must conduct all performance tests according to §63.7(c), (d), (f), and (h). You must also develop a site-specific stack test plan according to the requirements in §63.7(c). You shall conduct all performance tests under such conditions as the Administrator specifies to you based on representative performance of the affected source for the period being tested. Upon request, you shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests.

(b) You must conduct each performance test according to the requirements in Table 5 to this subpart.

(c) You must conduct each performance test under the specific conditions listed in Tables 5 and 7 to this subpart. You must conduct performance tests at representative operating load conditions while burning the type of fuel or mixture of fuels that has the highest content of chlorine and mercury, and you must demonstrate initial compliance and establish your operating limits based on these performance tests. These requirements could result in the need to conduct more than one performance test. Following each performance test and until the next performance test, you must comply with the operating limit for operating load conditions specified in Table 4 to this subpart.

(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 comply with the minimum applicable sampling times or volumes specified in Tables 1, 2, and 12 to this subpart.

(e) To determine compliance with the emission limits, you must use the F-Factor methodology and equations in sections 12.2 and 12.3 of EPA Method 19 at 40 CFR part 60, appendix A–7 of this chapter to convert the measured particulate matter concentrations, the measured hydrogen chloride concentrations, and the measured mercury concentrations that result from the initial performance test to pounds per million Btu heat input emission rates using F-factors.

§ 63.7521 What fuel analyses, fuel specification, and procedures must I use?

(a) For solid, liquid, and gas 2 (other) fuels, you must conduct fuel analyses for chloride and mercury according to the procedures in paragraphs (b) through (e) of this section and Table 6 to this subpart, as applicable. You are not required to conduct fuel analyses for fuels used for only startup, unit shutdown, and transient flame stability purposes. You are required to conduct fuel analyses only for fuels and units that are subject to emission limits for mercury and hydrogen chloride in Tables 1, 2, or 12 to this subpart. Gaseous and liquid fuels are exempt from requirements in paragraphs (c) and (d) of this section and Table 6 of this subpart.

(b) You must develop and submit a site-specific fuel monitoring plan to the EPA Administrator for review and approval according to the following procedures and requirements in paragraphs (b)(1) and (2) of this section.

(1) You must submit the fuel analysis plan no later than 60 days before the date that you intend to conduct an initial compliance demonstration.

(2) You must include the information contained in paragraphs (b)(2)(i) through (vi) of this section in your fuel analysis plan.

(i) The identification of all fuel types anticipated to be burned in each boiler or process heater.

(ii) For each fuel type, the notification of whether you or a fuel supplier will be conducting the fuel analysis.

(iii) For each fuel type, a detailed description of the sample location and specific procedures to be used for collecting and preparing the composite samples if your procedures are different from paragraph (c) or (d) of this section. Samples should be collected at a location that most accurately represents the fuel type, where possible, at a point prior to mixing with other dissimilar fuel types.

(iv) For each fuel type, the analytical methods from Table 6, with the expected minimum detection levels, to be used for the measurement of chlorine or mercury.

(v) If you request to use an alternative analytical method other than those required by Table 6 to this subpart, you must also include a detailed description of the methods and procedures that you are proposing to use. Methods in Table 6 shall be used until the requested alternative is approved.

(vi) If you will be using fuel analysis from a fuel supplier in lieu of site-specific sampling and analysis, the fuel supplier must use the analytical methods required by Table 6 to this subpart.

(c) At a minimum, you must obtain three composite fuel samples for each fuel type according to the procedures in paragraph (c)(1) or (2) of this section.

(1) If sampling from a belt (or screw) feeder, collect fuel samples according to paragraphs (c)(1)(i) and (ii) of this section.

(i) Stop the belt and withdraw a 6-inch wide sample from the full cross-section of the stopped belt to obtain a minimum two pounds of sample. You must collect all the material (fines and coarse) in the full cross-section. You must transfer the sample to a clean plastic bag.

(ii) Each composite sample will consist of a minimum of three samples collected at approximately equal 1-hour intervals during the testing period.

(2) If sampling from a fuel pile or truck, you must collect fuel samples according to paragraphs (c)(2)(i) through (iii) of this section.

(i) For each composite sample, you must select a minimum of five sampling locations uniformly spaced over the surface of the pile.

(ii) At each sampling site, you must dig into the pile to a depth of 18 inches. You must insert a clean flat square shovel into the hole and withdraw a sample, making sure that large pieces do not fall off during sampling.

(iii) You must transfer all samples to a clean plastic bag for further processing.

(d) You must prepare each composite sample according to the procedures in paragraphs (d)(1) through (7) of this section.

(1) You must thoroughly mix and pour the entire composite sample over a clean plastic sheet.

(2) You must break sample pieces larger than 3 inches into smaller sizes.

(3) You must make a pie shape with the entire composite sample and subdivide it into four equal parts.

(4) You must separate one of the quarter samples as the first subset.

(5) If this subset is too large for grinding, you must repeat the procedure in paragraph (d)(3) of this section with the quarter sample and obtain a one-quarter subset from this sample.

(6) You must grind the sample in a mill.

(7) You must use the procedure in paragraph (d)(3) of this section to obtain a one-quarter subsample for analysis. If the quarter sample is too large, subdivide it further using the same procedure.

(e) You must determine the concentration of pollutants in the fuel (mercury and/or chlorine) in units of pounds per million Btu of each composite sample for each fuel type according to the procedures in Table 6 to this subpart.

(f) To demonstrate that a gaseous fuel other than natural gas or refinery gas qualifies as an other gas 1 fuel, as defined in §63.7575, you must conduct a fuel specification analyses for hydrogen sulfide and mercury according to the procedures in paragraphs (g) through (i) of this section and Table 6 to this subpart, as applicable. You are not required to conduct the fuel specification analyses in paragraphs (g) through (i) of this section for gaseous fuels other than natural gas or refinery gas that are complying with the limits for units designed to burn gas 2 (other) fuels.

(g) You must develop and submit a site-specific fuel analysis plan for other gas 1 fuels to the EPA Administrator for review and approval according to the following procedures and requirements in paragraphs (g)(1) and (2) of this section.

(1) You must submit the fuel analysis plan no later than 60 days before the date that you intend to conduct an initial compliance demonstration.

(2) You must include the information contained in paragraphs (g)(2)(i) through (vi) of this section in your fuel analysis plan.

(i) The identification of all gaseous fuel types other than natural gas or refinery gas anticipated to be burned in each boiler or process heater.

(ii) For each fuel type, the notification of whether you or a fuel supplier will be conducting the fuel specification analysis.

(iii) For each fuel type, a detailed description of the sample location and specific procedures to be used for collecting and preparing the samples if your procedures are different from the sampling methods contained in Table 6. Samples should be collected at a location that most accurately represents the fuel type, where possible, at a point prior to mixing with other dissimilar fuel types. If multiple boilers or process heaters are fueled by a common fuel stream it is permissible to conduct a single gas specification at the common point of gas distribution.

(iv) For each fuel type, the analytical methods from Table 6, with the expected minimum detection levels, to be used for the measurement of hydrogen sulfide and mercury.

(v) If you request to use an alternative analytical method other than those required by Table 6 to this subpart, you must also include a detailed description of the methods and procedures that you are proposing to use. Methods in Table 6 shall be used until the requested alternative is approved.

(vi) If you will be using fuel analysis from a fuel supplier in lieu of site-specific sampling and analysis, the fuel supplier must use the analytical methods required by Table 6 to this subpart.

(h) You must obtain a single fuel sample for each other gas 1 fuel type according to the sampling procedures listed in Table 6 for fuel specification of gaseous fuels.

(i) You must determine the concentration in the fuel of mercury, in units of microgram per cubic meter, and of hydrogen sulfide, in units of parts per million, by volume, dry basis, of each sample for each gas 1 fuel type according to the procedures in Table 6 to this subpart.

§ 63.7522 Can I use emissions averaging to comply with this subpart?

(a) As an alternative to meeting the requirements of §63.7500 for particulate matter, hydrogen chloride, or mercury on a boiler or process heater-specific basis, if you have more than one existing boiler or process heater in any subcategory located at your facility, you may demonstrate compliance by emissions averaging, if your averaged emissions are not more than 90 percent of the applicable emission limit, according to the procedures in this section. You may not include new boilers or process heaters in an emissions average.

(b) For a group of two or more existing boilers or process heaters in the same subcategory that each vent to a separate stack, you may average particulate matter, hydrogen chloride, or mercury emissions among existing units to demonstrate compliance with the limits in Table 2 to this subpart if you satisfy the requirements in paragraphs (c), (d), (e), (f), and (g) of this section.

(c) For each existing boiler or process heater in the averaging group, the emission rate achieved during the initial compliance test for the HAP being averaged must not exceed the emission level that was being achieved on May 20, 2011 or the control technology employed during the initial compliance test must not be less effective for the HAP being averaged than the control technology employed on May 20, 2011.

(d) The averaged emissions rate from the existing boilers and process heaters participating in the emissions averaging option must be in compliance with the limits in Table 2 to this subpart at all times following the compliance date specified in §63.7495.

(e) You must demonstrate initial compliance according to paragraph (e)(1) or (2) of this section using the maximum rated heat input capacity or maximum steam generation capacity of each unit and the results of the initial performance tests or fuel analysis.

(1) You must use Equation 1 of this section to demonstrate that the particulate matter, hydrogen chloride, or mercury emissions from all existing units participating in the emissions averaging option for that pollutant do not exceed the emission limits in Table 2 to this subpart.

$$AveWeightedEmissions = 1.1 \times \sum_{i=1}^{n} (Er \times Hm) \div \sum_{i=1}^{n} Hm \qquad \text{(Eq. 1)}$$

Where:

Ave Weighted Emissions = Average weighted emissions for particulate matter, hydrogen chloride, or mercury, in units of pounds per million Btu of heat input.

Er = Emission rate (as determined during the initial compliance demonstration) of particulate matter, hydrogen chloride, or mercury from unit, i, in units of pounds per million Btu of heat input. Determine the emission rate for particulate matter, hydrogen chloride, or mercury by performance testing according to Table 5 to this subpart, or by fuel analysis for hydrogen chloride or mercury using the applicable equation in §63.7530(c).

Hm = Maximum rated heat input capacity of unit, i, in units of million Btu per hour.

n = Number of units participating in the emissions averaging option.

1.1 = Required discount factor.

(2) If you are not capable of determining the maximum rated heat input capacity of one or more boilers that generate steam, you may use Equation 2 of this section as an alternative to using Equation 1 of this section to demonstrate that the particulate matter, hydrogen chloride, or mercury emissions from all existing units participating in the emissions averaging option do not exceed the emission limits for that pollutant in Table 2 to this subpart.

$$AveWeightedEmissions = 1.1 \times \sum_{i=1}^{n} (Er \times Sm \times Cfi) \div \sum_{i=1}^{n} (Sm \times Cfi) \qquad \text{(Eq. 2)}$$

Where:

Ave Weighted Emissions = Average weighted emission level for PM, hydrogen chloride, or mercury, in units of pounds per million Btu of heat input.

Er = Emission rate (as determined during the most recent compliance demonstration) of particulate matter, hydrogen chloride, or mercury from unit, i, in units of pounds per million Btu of heat input. Determine the emission rate for particulate matter, hydrogen chloride, or mercury by performance testing according to Table 5 to this subpart, or by fuel analysis for hydrogen chloride or mercury using the applicable equation in §63.7530(c).

Sm = Maximum steam generation capacity by unit, i, in units of pounds.

Cfi = Conversion factor, calculated from the most recent compliance test, in units of million Btu of heat input per pounds of steam generated for unit, i.

1.1 = Required discount factor.

(f) After the initial compliance demonstration described in paragraph (e) of this section, you must demonstrate compliance on a monthly basis determined at the end of every month (12 times per year) according to paragraphs (f)(1) through (3) of this section. The first monthly period begins on the compliance date specified in §63.7495.

(1) For each calendar month, you must use Equation 3 of this section to calculate the average weighted emission rate for that month using the actual heat input for each existing unit participating in the emissions averaging option.

$$AveWeightedEmissions = 1.1 \times \sum_{i=1}^{n} (Er \times Hb) \div \sum_{i=1}^{n} Hb \qquad \text{(Eq. 3)}$$

Where:

Ave Weighted Emissions = Average weighted emission level for particulate matter, hydrogen chloride, or mercury, in units of pounds per million Btu of heat input, for that calendar month.

Er = Emission rate (as determined during the most recent compliance demonstration) of particulate matter, hydrogen chloride, or mercury from unit, i, in units of pounds per million Btu of heat input. Determine the emission rate for particulate matter, hydrogen chloride, or mercury by performance testing according to Table 5 to this subpart, or by fuel analysis for hydrogen chloride or mercury using the applicable equation in §63.7530(c).

Hb = The heat input for that calendar month to unit, i, in units of million Btu.

n = Number of units participating in the emissions averaging option.

1.1 = Required discount factor.

(2) If you are not capable of monitoring heat input, you may use Equation 4 of this section as an alternative to using Equation 3 of this section to calculate the average weighted emission rate using the actual steam generation from the boilers participating in the emissions averaging option.

$$AveWeightedEmissions = 1.1 \times \sum_{i=1}^{n} (Er \times Sa \times Cfi) \div \sum_{i=1}^{n} (Sa \times Cfi) \qquad \text{(Eq. 4)}$$

Where:

Ave Weighted Emissions = average weighted emission level for PM, hydrogen chloride, or mercury, in units of pounds per million Btu of heat input for that calendar month.

Er = Emission rate (as determined during the most recent compliance demonstration of particulate matter, hydrogen chloride, or mercury from unit, i, in units of pounds per million Btu of heat input. Determine the emission rate for particulate matter, hydrogen chloride, or mercury by performance testing according to Table 5 to this subpart, or by fuel analysis for hydrogen chloride or mercury using the applicable equation in §63.7530(c).

Sa = Actual steam generation for that calendar month by boiler, i, in units of pounds.

Cfi = Conversion factor, as calculated during the most recent compliance test, in units of million Btu of heat input per pounds of steam generated for boiler, i.

1.1 = Required discount factor.

(3) Until 12 monthly weighted average emission rates have been accumulated, calculate and report only the average weighted emission rate determined under paragraph (f)(1) or (2) of this section for each calendar month. After 12 monthly weighted average emission rates have been accumulated, for each subsequent calendar month, use Equation 5 of this section to calculate the 12-month rolling average of the monthly weighted average emission rates for the current calendar month and the previous 11 calendar months.

$$Eavg = \sum_{i=1}^{n} ERi \div 12 \quad \text{(Eq. 5)}$$

Where:

Eavg = 12-month rolling average emission rate, (pounds per million Btu heat input)

ERi = Monthly weighted average, for calendar month “i” (pounds per million Btu heat input), as calculated by paragraph (f)(1) or (2) of this section.

(g) You must develop, and submit to the applicable delegated authority for review and approval, an implementation plan for emission averaging according to the following procedures and requirements in paragraphs (g)(1) through (4) of this section.

(1) You must submit the implementation plan no later than 180 days before the date that the facility intends to demonstrate compliance using the emission averaging option.

(2) You must include the information contained in paragraphs (g)(2)(i) through (vii) of this section in your implementation plan for all emission sources included in an emissions average:

(i) The identification of all existing boilers and process heaters in the averaging group, including for each either the applicable HAP emission level or the control technology installed as of May 20, 2011 and the date on which you are requesting emission averaging to commence;

(ii) The process parameter (heat input or steam generated) that will be monitored for each averaging group;

(iii) The specific control technology or pollution prevention measure to be used for each emission boiler or process heater in the averaging group and the date of its installation or application. If the pollution prevention measure reduces or eliminates emissions from multiple boilers or process heaters, the owner or operator must identify each boiler or process heater;

(iv) The test plan for the measurement of particulate matter, hydrogen chloride, or mercury emissions in accordance with the requirements in §63.7520;

(v) The operating parameters to be monitored for each control system or device consistent with §63.7500 and Table 4, and a description of how the operating limits will be determined;

(vi) If you request to monitor an alternative operating parameter pursuant to §63.7525, you must also include:

(A) A description of the parameter(s) to be monitored and an explanation of the criteria used to select the parameter(s); and

(B) A description of the methods and procedures that will be used to demonstrate that the parameter indicates proper operation of the control device; the frequency and content of monitoring, reporting, and recordkeeping requirements; and a demonstration, to the satisfaction of the applicable delegated authority, that the proposed monitoring frequency is sufficient to represent control device operating conditions; and

(vii) A demonstration that compliance with each of the applicable emission limit(s) will be achieved under representative operating load conditions. Following each compliance demonstration and until the next compliance demonstration, you must comply with the operating limit for operating load conditions specified in Table 4 to this subpart.

(3) The delegated authority shall review and approve or disapprove the plan according to the following criteria:

(i) Whether the content of the plan includes all of the information specified in paragraph (g)(2) of this section; and

(ii) Whether the plan presents sufficient information to determine that compliance will be achieved and maintained.

(4) The applicable delegated authority shall not approve an emission averaging implementation plan containing any of the following provisions:

(i) Any averaging between emissions of differing pollutants or between differing sources; or

(ii) The inclusion of any emission source other than an existing unit in the same subcategory.

(h) For a group of two or more existing affected units, each of which vents through a single common stack, you may average particulate matter, hydrogen chloride, or mercury emissions to demonstrate compliance with the limits for that pollutant in Table 2 to this subpart if you satisfy the requirements in paragraph (i) or (j) of this section.

(i) For a group of two or more existing units in the same subcategory, each of which vents through a common emissions control system to a common stack, that does not receive emissions from units in other subcategories or categories, you may treat such averaging group as a single existing unit for purposes of this subpart and comply with the requirements of this subpart as if the group were a single unit.

(j) For all other groups of units subject to the common stack requirements of paragraph (h) of this section, including situations where the exhaust of affected units are each individually controlled and then sent to a common stack, the owner or operator may elect to:

(1) Conduct performance tests according to procedures specified in §63.7520 in the common stack if affected units from other subcategories vent to the common stack. The emission limits that the group must comply with are determined by the use of Equation 6 of this section.

$$En = \sum_{i=1}^{n} (ELi \times Hi) \div \sum_{i=1}^{n} Hi \quad \text{(Eq. 6)}$$

Where:

En = HAP emission limit, pounds per million British thermal units (lb/MMBtu), parts per million (ppm), or nanograms per dry standard cubic meter (ng/dscm).

ELi = Appropriate emission limit from Table 2 to this subpart for unit i, in units of lb/MMBtu, ppm or ng/dscm.

Hi = Heat input from unit i, MMBtu.

(2) Conduct performance tests according to procedures specified in §63.7520 in the common stack. If affected units and non-affected units vent to the common stack, the non-affected units must be shut down or vented to a different stack during the performance test unless the facility determines to demonstrate compliance with the non-affected units venting to the stack; and

(3) Meet the applicable operating limit specified in §63.7540 and Table 8 to this subpart for each emissions control system (except that, if each unit venting to the common stack has an applicable opacity operating limit, then a single continuous opacity monitoring system may be located in the common stack instead of in each duct to the common stack).

(k) The common stack of a group of two or more existing boilers or process heaters in the same subcategory subject to paragraph (h) of this section may be treated as a separate stack for purposes of paragraph (b) of this section and included in an emissions averaging group subject to paragraph (b) of this section.

§ 63.7525 What are my monitoring, installation, operation, and maintenance requirements?

(a) If your boiler or process heater is subject to a carbon monoxide emission limit in Table 1, 2, or 12 to this subpart, you must install, operate, and maintain a continuous oxygen monitor according to the procedures in paragraphs (a)(1) through (6) of this section by the compliance date specified in §63.7495. The oxygen level shall be monitored at the outlet of the boiler or process heater.

(1) Each CEMS for oxygen (O_2CEMS) must be installed, operated, and maintained according to the applicable procedures under Performance Specification 3 at 40 CFR part 60, appendix B, and according to the site-specific monitoring plan developed according to §63.7505(d).

(2) You must conduct a performance evaluation of each O_2CEMS according to the requirements in §63.8(e) and according to Performance Specification 3 at 40 CFR part 60, appendix B.

(3) Each O_2CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

(4) The O_2CEMS data must be reduced as specified in §63.8(g)(2).

(5) You must calculate and record 12-hour block average concentrations for each operating day.

(6) For purposes of calculating data averages, you must use all the data collected during all periods in assessing compliance, excluding data collected during periods when the monitoring system malfunctions or is out of control, during associated repairs, and during required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments). Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Any period for which the monitoring system malfunctions or is out of control and data are not available for a required calculation constitutes a deviation from the monitoring requirements. Periods when data are unavailable because of required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments) do not constitute monitoring deviations.

(b) If your boiler or process heater has a heat input capacity of greater than 250 MMBtu per hour and combusts coal, biomass, or residual oil, you must install, certify, maintain, and operate a CEMS measuring PM emissions discharged to the atmosphere and record the output of the system as specified in paragraphs (b)(1) through (5) of this section.

(1) Each CEMS shall be installed, certified, operated, and maintained according to the requirements in §63.7540(a)(9).

(2) For a new unit, the initial performance evaluation shall be completed no later than November 16, 2011 or 180 days after the date of initial startup, whichever is later. For an existing unit, the initial performance evaluation shall be completed no later than September 17, 2014.

(3) Compliance with the applicable emissions limit shall be determined based on the 30-day rolling average of the hourly arithmetic average emissions concentrations using the continuous monitoring system outlet data. The 30-day rolling arithmetic average emission concentration shall be calculated using EPA Reference Method 19 at 40 CFR part 60, appendix A–7.

(4) Collect CEMS hourly averages for all operating hours on a 30-day rolling average basis. Collect at least four CMS data values representing the four 15-minute periods in an hour, or at least two 15-minute data values during an hour when CMS calibration, quality assurance, or maintenance activities are being performed.

(5) The 1-hour arithmetic averages required shall be expressed in lb/MMBtu and shall be used to calculate the boiler operating day daily arithmetic average emissions.

(c) If you have an applicable opacity operating limit in this rule, and are not otherwise required to install and operate a PM CEMS or a bag leak detection system, you must install, operate, certify and maintain each COMS according to the procedures in paragraphs (c)(1) through (7) of this section by the compliance date specified in §63.7495.

(1) Each COMS must be installed, operated, and maintained according to Performance Specification 1 at appendix B to part 60 of this chapter.

(2) You must conduct a performance evaluation of each COMS according to the requirements in §63.8(e) and according to Performance Specification 1 at appendix B to part 60 of this chapter.

(3) As specified in §63.8(c)(4)(i), each COMS must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(4) The COMS data must be reduced as specified in §63.8(g)(2).

(5) You must include in your site-specific monitoring plan procedures and acceptance criteria for operating and maintaining each COMS according to the requirements in §63.8(d). At a minimum, the monitoring plan must include a daily calibration drift assessment, a quarterly performance audit, and an annual zero alignment audit of each COMS.

(6) You must operate and maintain each COMS according to the requirements in the monitoring plan and the requirements of §63.8(e). You must identify periods the COMS is out of control including any periods that the COMS fails to pass a daily calibration drift assessment, a quarterly performance audit, or an annual zero alignment audit. Any 6-minute period for which the monitoring system is out of control and data are not available for a required calculation constitutes a deviation from the monitoring requirements.

(7) You must determine and record all the 6-minute averages (and daily block averages as applicable) collected for periods during which the COMS is not out of control.

(d) If you have an operating limit that requires the use of a CMS, you must install, operate, and maintain each continuous parameter monitoring system according to the procedures in paragraphs (d)(1) through (5) of this section by the compliance date specified in §63.7495.

(1) The continuous parameter monitoring system must complete a minimum of one cycle of operation for each successive 15-minute period. You must have a minimum of four successive cycles of operation to have a valid hour of data.

(2) Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must conduct all monitoring in continuous operation at all times that the unit 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.

(3) For purposes of calculating data averages, you must not use data recorded during monitoring malfunctions, associated repairs, out of control periods, or required quality assurance or control activities. You must use all the data collected during all other periods in assessing compliance. Any 15-minute period for which the monitoring system is out-of-control and data are not available for a required calculation constitutes a deviation from the monitoring requirements.

(4) You must determine the 4-hour block average of all recorded readings, except as provided in paragraph (d)(3) of this section.

(5) You must record the results of each inspection, calibration, and validation check.

(e) If you have an operating limit that requires the use of a flow monitoring system, you must meet the requirements in paragraphs (d) and (e)(1) through (4) of this section.

(1) You must install the flow sensor and other necessary equipment in a position that provides a representative flow.

(2) You must use a flow sensor with a measurement sensitivity of no greater than 2 percent of the expected flow rate.

(3) You must minimize the effects of swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.

(4) You must conduct a flow monitoring system performance evaluation in accordance with your monitoring plan at the time of each performance test but no less frequently than annually. (f) If you have an operating limit that requires the use of a pressure monitoring system, you must meet the requirements in paragraphs (d) and (f)(1) through (6) of this section.

(1) Install the pressure sensor(s) in a position that provides a representative measurement of the pressure (*e.g.* , PM scrubber pressure drop).

(2) Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion.

(3) Use a pressure sensor with a minimum tolerance of 1.27 centimeters of water or a minimum tolerance of 1 percent of the pressure monitoring system operating range, whichever is less.

(4) Perform checks at least once each process operating day to ensure pressure measurements are not obstructed (*e.g.* , check for pressure tap pluggage daily).

(5) Conduct a performance evaluation of the pressure monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than annually.

(6) If at any time the measured pressure exceeds the manufacturer's specified maximum operating pressure range, conduct a performance evaluation of the pressure monitoring system in accordance with your monitoring plan and confirm that the pressure monitoring system continues to meet the performance requirements in you monitoring plan. Alternatively, install and verify the operation of a new pressure sensor.

(g) If you have an operating limit that requires a pH monitoring system, you must meet the requirements in paragraphs (d) and (g)(1) through (4) of this section.

(1) Install the pH sensor in a position that provides a representative measurement of scrubber effluent pH.

(2) Ensure the sample is properly mixed and representative of the fluid to be measured.

(3) Conduct a performance evaluation of the pH monitoring system in accordance with your monitoring plan at least once each process operating day.

(4) Conduct a performance evaluation (including a two-point calibration with one of the two buffer solutions having a pH within 1 of the pH of the operating limit) of the pH monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than quarterly.

(h) If you have an operating limit that requires a secondary electric power monitoring system for an electrostatic precipitator (ESP) operated with a wet scrubber, you must meet the requirements in paragraphs (h)(1) and (2) of this section.

(1) Install sensors to measure (secondary) voltage and current to the precipitator collection plates.

(2) Conduct a performance evaluation of the electric power monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than annually.

(i) If you have an operating limit that requires the use of a monitoring system to measure sorbent injection rate (e.g., weigh belt, weigh hopper, or hopper flow measurement device), you must meet the requirements in paragraphs (d) and (i)(1) through (2) of this section.

(1) Install the system in a position(s) that provides a representative measurement of the total sorbent injection rate.

(2) Conduct a performance evaluation of the sorbent injection rate monitoring system in accordance with your monitoring plan at the time of each performance test but no less frequently than annually.

(j) If you are not required to use a PM CEMS and elect to use a fabric filter bag leak detection system to comply with the requirements of this subpart, you must install, calibrate, maintain, and continuously operate the bag leak detection system as specified in paragraphs (j)(1) through (7) of this section.

(1) You must 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) Conduct a performance evaluation of the bag leak detection system in accordance with your monitoring plan and consistent with the guidance provided in EPA–454/R–98–015 (incorporated by reference, *see* §63.14).

(3) Use a bag leak detection system certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 10 milligrams per actual cubic meter or less.

(4) Use a bag leak detection system equipped with a device to record continuously the output signal from the sensor.

(5) Use a bag leak detection system equipped with a system that will alert when an increase in relative particulate matter emissions over a preset level is detected. The alarm must be located where it can be easily heard or seen by plant operating personnel.

(7) Where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.

(k) For each unit that meets the definition of limited-use boiler or process heater, you must monitor and record the operating hours per year for that unit.

§ 63.7530 How do I demonstrate initial compliance with the emission limitations, fuel specifications and work practice standards?

(a) You must demonstrate initial compliance with each emission limit that applies to you by conducting initial performance tests and fuel analyses and establishing operating limits, as applicable, according to §63.7520, paragraphs (b) and (c) of this section, and Tables 5 and 7 to this subpart. If applicable, you must also install, and operate, maintain all applicable CMS (including CEMS, COMS, and continuous parameter monitoring systems) according to §63.7525.

(b) If you demonstrate compliance through performance testing, you must establish each site-specific operating limit in Table 4 to this subpart that applies to you according to the requirements in §63.7520, Table 7 to this subpart, and paragraph (b)(3) of this section, as

applicable. You must also conduct fuel analyses according to §63.7521 and establish maximum fuel pollutant input levels according to paragraphs (b)(1) and (2) of this section, as applicable. As specified in §63.7510(a), if your affected source burns a single type of fuel (excluding supplemental fuels used for unit startup, shutdown, or transient flame stabilization), you are not required to perform the initial fuel analysis for each type of fuel burned in your boiler or process heater. However, if you switch fuel(s) and cannot show that the new fuel(s) do (does) not increase the chlorine or mercury input into the unit through the results of fuel analysis, then you must repeat the performance test to demonstrate compliance while burning the new fuel(s).

(1) You must establish the maximum chlorine fuel input (Clinput) during the initial fuel analysis according to the procedures in paragraphs (b)(1)(i) through (iii) of this section.

(i) You must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of chlorine.

(ii) During the fuel analysis for hydrogen chloride, you must determine the fraction of the total heat input for each fuel type burned (Qi) based on the fuel mixture that has the highest content of chlorine, and the average chlorine concentration of each fuel type burned (Ci).

(iii) You must establish a maximum chlorine input level using Equation 7 of this section.

$$Clinput = \sum_{i=1}^{n} (Ci \times Qi) \quad \text{(Eq. 7)}$$

Where:

Cl input = Maximum amount of chlorine entering the boiler or process heater through fuels burned in units of pounds per million Btu.

Ci = Arithmetic average concentration of chlorine in fuel type, i, analyzed according to §63.7521, in units of pounds per million Btu.

Qi = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest content of chlorine. If you do not burn multiple fuel types during the performance testing, it is not necessary to determine the value of this term. Insert a value of “1” for Qi.

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of chlorine.

(2) You must establish the maximum mercury fuel input level (Mercuryinput) during the initial fuel analysis using the procedures in paragraphs (b)(2)(i) through (iii) of this section.

(i) You must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of mercury.

(ii) During the compliance demonstration for mercury, you must determine the fraction of total heat input for each fuel burned (Qi) based on the fuel mixture that has the highest content of mercury, and the average mercury concentration of each fuel type burned (HGi).

(iii) You must establish a maximum mercury input level using Equation 8 of this section.

$$Mercuryinput = \sum_{i=1}^{n} (HGi \times Qi) \qquad \text{(Eq. 8)}$$

Where:

Mercury input = Maximum amount of mercury entering the boiler or process heater through fuels burned in units of pounds per million Btu.

HGi = Arithmetic average concentration of mercury in fuel type, i, analyzed according to §63.7521, in units of pounds per million Btu.

Qi = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest mercury content. If you do not burn multiple fuel types during the performance test, it is not necessary to determine the value of this term. Insert a value of “1” for Qi.

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of mercury.

(3) You must establish parameter operating limits according to paragraphs (b)(3)(i) through (iv) of this section.

(i) For a wet scrubber, you must establish the minimum scrubber effluent pH, liquid flowrate, and pressure drop as defined in §63.7575, as your operating limits during the three-run performance test. If you use a wet scrubber and you conduct separate performance tests for particulate matter, hydrogen chloride, and mercury emissions, you must establish one set of minimum scrubber effluent pH, liquid flowrate, and pressure drop operating limits. The minimum scrubber effluent pH operating limit must be established during the hydrogen chloride performance test. If you conduct multiple performance tests, you must set the minimum liquid flowrate and pressure drop operating limits at the highest minimum values established during the performance tests.

(ii) For an electrostatic precipitator operated with a wet scrubber, you must establish the minimum voltage and secondary amperage (or total power input), as defined in §63.7575, as your operating limits during the three-run performance test. (These operating limits do not apply to electrostatic precipitators that are operated as dry controls without a wet scrubber.)

iii) For a dry scrubber, you must establish the minimum sorbent injection rate for each sorbent, as defined in §63.7575, as your operating limit during the three-run performance test.

(iv) For activated carbon injection, you must establish the minimum activated carbon injection rate, as defined in §63.7575, as your operating limit during the three-run performance test.

(v) The operating limit for boilers or process heaters with fabric filters that demonstrate continuous compliance through bag leak detection systems is that a bag leak detection system be installed according to the requirements in §63.7525, and that each fabric filter must be operated such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month period.

(c) If you elect to demonstrate compliance with an applicable emission limit through fuel analysis, you must conduct fuel analyses according to §63.7521 and follow the procedures in paragraphs (c)(1) through (4) of this section.

(1) If you burn more than one fuel type, you must determine the fuel mixture you could burn in your boiler or process heater that would result in the maximum emission rates of the pollutants that you elect to demonstrate compliance through fuel analysis.

(2) You must determine the 90th percentile confidence level fuel pollutant concentration of the composite samples analyzed for each fuel type using the one-sided z-statistic test described in Equation 9 of this section.

$$P90 = mean + (SD \times t) \quad \text{(Eq. 9)}$$

Where:

P90 = 90th percentile confidence level pollutant concentration, in pounds per million Btu.

Mean = Arithmetic average of the fuel pollutant concentration in the fuel samples analyzed according to §63.7521, in units of pounds per million Btu.

SD = Standard deviation of the pollutant concentration in the fuel samples analyzed according to §63.7521, in units of pounds per million Btu.

T = t distribution critical value for 90th percentile (0.1) probability for the appropriate degrees of freedom (number of samples minus one) as obtained from a Distribution Critical Value Table.

(3) To demonstrate compliance with the applicable emission limit for hydrogen chloride, the hydrogen chloride emission rate that you calculate for your boiler or process heater using Equation 10 of this section must not exceed the applicable emission limit for hydrogen

chloride.

$$HCl = \sum_{i=1}^{n} \left(Ci90 \times Qi \times 1.028 \right) \quad \text{(Eq. 10)}$$

Where:

HCl = Hydrogen chloride emission rate from the boiler or process heater in units of pounds per million Btu.

Ci90 = 90th percentile confidence level concentration of chlorine in fuel type, i, in units of pounds per million Btu as calculated according to Equation 9 of this section.

Qi = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest content of chlorine. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of “1” for Qi.

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of chlorine.

1.028 = Molecular weight ratio of hydrogen chloride to chlorine.

(4) To demonstrate compliance with the applicable emission limit for mercury, the mercury emission rate that you calculate for your boiler or process heater using Equation 11 of this section must not exceed the applicable emission limit for mercury.

$$Mercury = \sum_{i=1}^{n} \left(Hgi90 \times Qi \right) \quad \text{(Eq. 11)}$$

Where:

Mercury = Mercury emission rate from the boiler or process heater in units of pounds per million Btu.

Hgi90 = 90th percentile confidence level concentration of mercury in fuel, i, in units of pounds per million Btu as calculated according to Equation 9 of this section.

Qi = Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest mercury content. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of “1” for Qi.

n = Number of different fuel types burned in your boiler or process heater for the mixture that has the highest mercury content.

(d) If you own or operate an existing unit with a heat input capacity of less than 10 million Btu per hour, you must submit a signed statement in the Notification of Compliance Status report that indicates that you conducted a tune-up of the unit.

(e) You must include with the Notification of Compliance Status a signed certification that the energy assessment was completed according to Table 3 to this subpart and is an accurate depiction of your facility.

(f) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.7545(e).

(g) If you elect to demonstrate that a gaseous fuel meets the specifications of an other gas 1 fuel as defined in §63.7575, you must conduct an initial fuel specification analyses according to §63.7521(f) through (i). If the mercury and hydrogen sulfide constituents in the gaseous fuels will never exceed the specifications included in the definition, you will include a signed certification with the Notification of Compliance Status that the initial fuel specification test meets the gas specifications outlined in the definition of other gas 1 fuels. If your gas constituents could vary above the specifications, you will conduct monthly testing according to the procedures in §63.7521(f) through (i) and §63.7540(c) and maintain records of the results of the testing as outlined in §63.7555(g).

(h) If you own or operate a unit subject emission limits in Tables 1, 2, or 12 of this subpart, you must minimize the unit's startup and shutdown periods following the manufacturer's recommended procedures, if available. If manufacturer's recommended procedures are not available, you must follow recommended procedures for a unit of similar design for which manufacturer's recommended procedures are available. You must submit a signed statement in the Notification of Compliance Status report that indicates that you conducted startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a unit of similar design if manufacturer's recommended procedures are not available.

§ 63.7533 Can I use emission credits earned from implementation of energy conservation measures to comply with this subpart?

(a) If you elect to comply with the alternative equivalent steam output-based emission limits, instead of the heat input-based limits, listed in Tables 1 and 2 of this subpart and you want to take credit for implementing energy conservation measures identified in an energy assessment, you may demonstrate compliance using emission reduction credits according to the procedures in this section. Owners or operators using this compliance approach must establish an emissions benchmark, calculate and document the emission credits, develop an Implementation Plan, comply with the general reporting requirements, and apply the emission credit according to the procedures in paragraphs (b) through (f) of this section.

(b) For each existing affected boiler for which you intend to apply emissions credits, establish a benchmark from which emission reduction credits may be generated by determining the actual annual fuel heat input to the affected boiler before initiation of an energy conservation activity to reduce energy demand (*i.e.,* fuel usage) according to paragraphs (b)(1) through (4)

of this section. The benchmark shall be expressed in trillion Btu per year heat input.

(1) The benchmark from which emission credits may be generated shall be determined by using the most representative, accurate, and reliable process available for the source. The benchmark shall be established for a one-year period before the date that an energy demand reduction occurs, unless it can be demonstrated that a different time period is more representative of historical operations.

(2) Determine the starting point from which to measure progress. Inventory all fuel purchased and generated on-site (off-gases, residues) in physical units (MMBtu, million cubic feet, etc.).

(3) Document all uses of energy from the affected boiler. Use the most recent data available.

(4) Collect non-energy related facility and operational data to normalize, if necessary, the benchmark to current operations, such as building size, operating hours, etc. Use actual, not estimated, use data, if possible and data that are current and timely.

(c) Emissions credits can be generated if the energy conservation measures were implemented after January 14, 2011 and if sufficient information is available to determine the appropriate value of credits.

(1) The following emission points cannot be used to generate emissions averaging credits:

(i) Energy conservation measures implemented on or before January 14, 2011, unless the level of energy demand reduction is increased after January 14, 2011, in which case credit will be allowed only for change in demand reduction achieved after January 14, 2011.

(ii) Emission credits on shut-down boilers. Boilers that are shut down cannot be used to generate credits.

(2) For all points included in calculating emissions credits, the owner or operator shall:

(i) Calculate annual credits for all energy demand points. Use Equation 12 to calculate credits. Energy conservation measures that meet the criteria of paragraph (c)(1) of this section shall not be included, except as specified in paragraph (c)(1)(i) of this section.

(3) Credits are generated by the difference between the benchmark that is established for each affected boiler, and the actual energy demand reductions from energy conservation measures implemented after January 14, 2011. Credits shall be calculated using Equation 12 of this section as follows:

(i) The overall equation for calculating credits is:

$$Credits = \sum_{i=1}^{n} EIS_{iactual} + EI_{baseline} \quad \text{(Eq. 12)}$$

Where:

Credits = Energy Input Savings for all energy conservation measures implemented for an affected boiler, million Btu per year.

$EIS_{iactual}$= Energy Input Savings for each energy conservation measure implemented for an affected boiler, million Btu per year.

$EI_{baseline}$= Energy Input for the affected boiler, million Btu.

n = Number of energy conservation measures included in the emissions credit for the affected boiler.

(d) The owner or operator shall develop and submit for approval an Implementation Plan containing all of the information required in this paragraph for all boilers to be included in an emissions credit approach. The Implementation Plan shall identify all existing affected boilers to be included in applying the emissions credits. The Implementation Plan shall include a description of the energy conservation measures implemented and the energy savings generated from each measure and an explanation of the criteria used for determining that savings. You must submit the implementation plan for emission credits to the applicable delegated authority for review and approval no later than 180 days before the date on which the facility intends to demonstrate compliance using the emission credit approach.

(e) The emissions rate from each existing boiler participating in the emissions credit option must be in compliance with the limits in Table 2 to this subpart at all times following the compliance date specified in §63.7495.

(f) You must demonstrate initial compliance according to paragraph (f)(1) or (2) of this section.

(1) You must use Equation 13 of this section to demonstrate that the emissions from the affected boiler participating in the emissions credit compliance approach do not exceed the emission limits in Table 2 to this subpart.

$$E_{adj} = E_m \times (1 - EC) \quad \text{(Eq. 13)}$$

Where:

E_{adj}= Emission level adjusted applying the emission credits earned, lb per million Btu steam output for the affected boiler.

E_m= Emissions measured during the performance test, lb per million Btu steam output for the affected boiler.

EC = Emission credits from equation 12 for the affected boiler.

Continuous Compliance Requirements

§ 63.7535 How do I monitor and collect data to demonstrate continuous compliance?

(a) You must monitor and collect data according to this section and the site-specific monitoring plan required by §63.7505(d).

(b) You must operate the monitoring system and collect data at all required intervals at all times that the affected source is operating, except for periods of monitoring system malfunctions or out of control periods (*see* §63.8(c)(7) of this part), and required monitoring system quality assurance or control activities, including, as applicable, calibration checks and required zero and span adjustments. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. You are required to effect monitoring system repairs in response to monitoring system malfunctions or out-of-control periods and to return the monitoring system to operation as expeditiously as practicable.

(c) You may not use data recorded during monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods, or required monitoring system quality assurance or control activities in data averages and calculations used to report emissions or operating levels. You must use all the data collected during all other periods in assessing the operation of the control device and associated control system.

(d) Except for periods of monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods, and required monitoring system quality assurance or quality control activities including, as applicable, calibration checks and required zero and span adjustments, failure to collect required data is a deviation of the monitoring requirements.

§ 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, operating limit, and work practice standard in Tables 1 through 3 to this subpart that applies to you according to the methods specified in Table 8 to this subpart and paragraphs (a)(1) through (11) of this section.

(1) Following the date on which the initial compliance demonstration is completed or is required to be completed under §§63.7 and 63.7510, whichever date comes first, operation above the established maximum or below the established minimum operating limits shall constitute a deviation of established operating limits listed in Table 4 of this subpart except

during performance tests conducted to determine compliance with the emission limits or to establish new operating limits. Operating limits must be confirmed or reestablished during performance tests.

(2) As specified in §63.7550(c), you must keep records of the type and amount of all fuels burned in each boiler or process heater during the reporting period to demonstrate that all fuel types and mixtures of fuels burned would either result in lower emissions of hydrogen chloride and mercury than the applicable emission limit for each pollutant (if you demonstrate compliance through fuel analysis), or result in lower fuel input of chlorine and mercury than the maximum values calculated during the last performance test (if you demonstrate compliance through performance testing).

(3) If you demonstrate compliance with an applicable hydrogen chloride emission limit through fuel analysis and you plan to burn a new type of fuel, you must recalculate the hydrogen chloride emission rate using Equation 9 of §63.7530 according to paragraphs (a)(3)(i) through (iii) of this section.

(i) You must determine the chlorine concentration for any new fuel type in units of pounds per million Btu, based on supplier data or your own fuel analysis, according to the provisions in your site-specific fuel analysis plan developed according to §63.7521(b).

(ii) You must determine the new mixture of fuels that will have the highest content of chlorine.

(iii) Recalculate the hydrogen chloride emission rate from your boiler or process heater under these new conditions using Equation 10 of §63.7530. The recalculated hydrogen chloride emission rate must be less than the applicable emission limit.

(4) If you demonstrate compliance with an applicable hydrogen chloride emission limit through performance testing and you plan to burn a new type of fuel or a new mixture of fuels, you must recalculate the maximum chlorine input using Equation 7 of §63.7530. If the results of recalculating the maximum chlorine input using Equation 7 of §63.7530 are greater than the maximum chlorine input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in §63.7520 to demonstrate that the hydrogen chloride emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the procedures in §63.7530(b).

(5) If you demonstrate compliance with an applicable mercury emission limit through fuel analysis, and you plan to burn a new type of fuel, you must recalculate the mercury emission rate using Equation 11 of §63.7530 according to the procedures specified in paragraphs (a)(5)(i) through (iii) of this section.

(i) You must determine the mercury concentration for any new fuel type in units of pounds per million Btu, based on supplier data or your own fuel analysis, according to the provisions

in your site-specific fuel analysis plan developed according to §63.7521(b).

(ii) You must determine the new mixture of fuels that will have the highest content of mercury.

(iii) Recalculate the mercury emission rate from your boiler or process heater under these new conditions using Equation 11 of §63.7530. The recalculated mercury emission rate must be less than the applicable emission limit.

(6) If you demonstrate compliance with an applicable mercury emission limit through performance testing, and you plan to burn a new type of fuel or a new mixture of fuels, you must recalculate the maximum mercury input using Equation 8 of §63.7530. If the results of recalculating the maximum mercury input using Equation 8 of §63.7530 are higher than the maximum mercury input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in §63.7520 to demonstrate that the mercury emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the procedures in §63.7530(b).

(7) If your unit is controlled with a fabric filter, and you demonstrate continuous compliance using a bag leak detection system, you must initiate corrective action within 1 hour of a bag leak detection system alarm and complete corrective actions as soon as practical, and operate and maintain the fabric filter system such that the alarm does not sound more than 5 percent of the operating time during a 6-month period. You must also keep records of the date, time, and duration of each alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action taken. You must also record the percent of the operating time during each 6-month period that the alarm sounds. In calculating this operating time percentage, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If you take longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken to initiate corrective action.

(8) [Reserved]

(9) The owner or operator of an affected source using a CEMS measuring PM emissions to meet requirements of this subpart shall install, certify, operate, and maintain the PM CEMS as specified in paragraphs (a)(9)(i) through (a)(9)(iv) of this section.

(i) The owner or operator shall conduct a performance evaluation of the PM CEMS according to the applicable requirements of §60.13, and Performance Specification 11 at 40 CFR part 60, appendix B of this chapter.

(ii) During each PM correlation testing run of the CEMS required by Performance Specification 11 at 40 CFR part 60, appendix B of this chapter, PM and oxygen (or carbon dioxide) data shall be collected concurrently (or within a 30-to 60-minute period) by both the

CEMS and conducting performance tests using Method 5 or 5B at 40 CFR part 60, appendix A–3 or Method 17 at 40 CFR part 60, appendix A–6 of this chapter.

(iii) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 2 at 40 CFR part 60, appendix F of this chapter. Relative Response Audits must be performed annually and Response Correlation Audits must be performed every 3 years.

(iv) After December 31, 2011, within 60 days after the date of completing each CEMS relative accuracy test audit or performance test conducted to demonstrate compliance with this subpart, you must submit the relative accuracy test audit data and performance test data to EPA by successfully submitting the data electronically into EPA's Central Data Exchange by using the Electronic Reporting Tool (see *http://www.epa.gov/ttn/chief/ert/ert tool.html/*).

(10) If your boiler or process heater is in either the natural gas, refinery gas, other gas 1, or Metal Process Furnace subcategories and has a heat input capacity of 10 million Btu per hour or greater, you must conduct a tune-up of the boiler or process heater annually to demonstrate continuous compliance as specified in paragraphs (a)(10)(i) through (a)(10)(vi) of this section. This requirement does not apply to limited-use boilers and process heaters, as defined in §63.7575.

(i) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may delay the burner inspection until the next scheduled unit shutdown, but you must inspect each burner at least once every 36 months);

(ii) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;

(iii) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly;

(iv) Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available;

(v) Measure the concentrations in the effluent stream of carbon monoxide 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); and

(vi) Maintain on-site and submit, if requested by the Administrator, an annual report containing the information in paragraphs (a)(10)(vi)(A) through (C) of this section,

(A) The concentrations of carbon monoxide in the effluent stream in parts per million by volume, and oxygen in volume percent, measured before and after the adjustments of the

boiler;

(B) A description of any corrective actions taken as a part of the combustion adjustment; and

(C) The type and amount of fuel used over the 12 months prior to the annual adjustment, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.

(11) If your boiler or process heater has a heat input capacity of less than 10 million Btu per hour, or meets the definition of limited-use boiler or process heater in §63.7575, you must conduct a biennial tune-up of the boiler or process heater as specified in paragraphs (a)(10)(i) through (a)(10)(vi) of this section to demonstrate continuous compliance.

(12) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within one week of startup.

(b) You must report each instance in which you did not meet each emission limit and operating limit in Tables 1 through 4 to this subpart that apply to you. These instances are deviations from the emission limits in this subpart. These deviations must be reported according to the requirements in §63.7550.

(c) If you elected to demonstrate that the unit meets the specifications for hydrogen sulfide and mercury for the other gas 1 subcategory and you cannot submit a signed certification under §63.7545(g) because the constituents could exceed the specifications, you must conduct monthly fuel specification testing of the gaseous fuels, according to the procedures in §63.7521(f) through (i).

§ 63.7541 How do I demonstrate continuous compliance under the emissions averaging provision?

(a) Following the compliance date, the owner or operator must demonstrate compliance with this subpart on a continuous basis by meeting the requirements of paragraphs (a)(1) through (5) of this section.

(1) For each calendar month, demonstrate compliance with the average weighted emissions limit for the existing units participating in the emissions averaging option as determined in §63.7522(f) and (g).

(2) You must maintain the applicable opacity limit according to paragraphs (a)(2)(i) and (ii) of this section.

(i) For each existing unit participating in the emissions averaging option that is equipped with a dry control system and not vented to a common stack, maintain opacity at or below the applicable limit.

(ii) For each group of units participating in the emissions averaging option where each unit in

the group is equipped with a dry control system and vented to a common stack that does not receive emissions from non-affected units, maintain opacity at or below the applicable limit at the common stack.

(3) For each existing unit participating in the emissions averaging option that is equipped with a wet scrubber, maintain the 3-hour average parameter values at or below the operating limits established during the most recent performance test.

(4) For each existing unit participating in the emissions averaging option that has an approved alternative operating plan, maintain the 3-hour average parameter values at or below the operating limits established in the most recent performance test.

(5) For each existing unit participating in the emissions averaging option venting to a common stack configuration containing affected units from other subcategories, maintain the appropriate operating limit for each unit as specified in Table 4 to this subpart that applies.

(b) Any instance where the owner or operator fails to comply with the continuous monitoring requirements in paragraphs (a)(1) through (5) of this section is a deviation.

Notification, Reports, and Records

§ 63.7545 What notifications must I submit and when?

(a) You must submit to the delegated authority 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 May 20, 2011, you must submit an Initial Notification not later than 120 days after May 20, 2011.

(c) As specified in §63.9(b)(4) and (b)(5), if you startup your new or reconstructed affected source on or after May 20, 2011, you must submit an Initial Notification not later than 15 days after the actual date of startup of the affected source.

(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.

(e) If you are required to conduct an initial compliance demonstration as specified in §63.7530(a), you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii). For the initial compliance demonstration for each affected source, 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 the affected source according to §63.10(d)(2). The Notification of Compliance Status report must contain all the

information specified in paragraphs (e)(1) through (8), as applicable.

(1) A description of the affected unit(s) including identification of which subcategory the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit, description of the fuel(s) burned, including whether the fuel(s) were determined by you or EPA through a petition process to be a non-waste under §241.3, whether the fuel(s) were processed from discarded non-hazardous secondary materials within the meaning of §241.3, 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.

(3) A summary of the maximum carbon monoxide emission levels recorded during the performance test to show that you have met any applicable emission standard in Table 1, 2, or 12 to this subpart.

(4) Identification of whether you plan to demonstrate compliance with each applicable emission limit through performance testing 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 emission 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 May 20, 2011.

(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 complies with the requirements in §63.7540(a)(10) to conduct an annual or biennial tune-up, as applicable, of each unit.”

(ii) “This facility has had an energy assessment performed according to §63.7530(e).”

(iii) Except for 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, 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.

(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:

(1) The name of the owner or operator of the affected source, 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 subcategory 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 intend to switch fuels, and this fuel switch may result in the applicability of a different subcategory, you must provide 30 days prior notice of the date upon which you will switch fuels. The notification must identify:

(1) The name of the owner or operator of the affected source, the location of the source, the boiler(s) that will switch fuels, and the date of the notice.

(2) The currently applicable subcategory under this subpart.

(3) The date on which you became subject to the currently applicable standards.

(4) The date upon which you will commence the fuel switch.

§ 63.7550 What reports must I submit and when?

(a) You must submit each report in Table 9 to this subpart that applies to you.

(b) Unless the EPA Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date in Table 9 to this subpart and according to the requirements in paragraphs (b)(1) through (5) of this section. For units that are subject only to a requirement to conduct an annual or biennial tune-up according to §63.7540(a)(10) or (a)(11), respectively, and not subject to emission limits or operating limits, you may submit only an annual or biennial compliance report, as applicable, as specified in paragraphs (b)(1) through (5) of this section, instead of a semi-annual compliance report.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.7495 and ending on June 30 or December 31, whichever date is the first date that occurs at least 180 days (or 1 or 2 year, as applicable, if submitting an annual or biennial compliance report) after the compliance date that is specified for your source in §63.7495.

(2) The first 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 first calendar half after the compliance date that is specified for your source in §63.7495. The first annual or biennial compliance report must be postmarked no later than January 31.

(3) 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. Annual and biennial compliance reports must cover the applicable one or two year periods from January 1 to December 31.

(4) 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. Annual and biennial compliance reports must be postmarked no later than January 31.

(5) For each affected source that is subject to permitting regulations pursuant to part 70 or part 71 of this chapter, and if the delegated authority has established dates for submitting semiannual reports pursuant to §70.6(a)(3)(iii)(A) or §71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the delegated authority has established instead of according to the dates in paragraphs (b)(1) through (4) of this section.

(c) The compliance report must contain the information required in paragraphs (c)(1) through (13) of this section.

(1) Company name and address.

(2) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) The total fuel use by each affected source subject to an emission limit, for each calendar month within the semiannual (or annual or biennial) reporting period, including, but not limited to, a description of the fuel, whether the fuel has received a non-waste determination by EPA or your basis for concluding that the fuel is not a waste, and the total fuel usage amount with units of measure.

(5) A summary of the results of the annual performance tests for affected sources subject to an emission limit, a summary of any fuel analyses associated with performance tests, and documentation of any operating limits that were reestablished during this test, if applicable. If you are conducting performance tests once every 3 years consistent with §63.7515(b) or (c), the date of the last 2 performance tests, a comparison of the emission level you achieved in the last 2 performance tests to the 75 percent emission limit threshold required in §63.7515(b) or (c), and a statement as to whether there have been any operational changes since the last performance test that could increase emissions.

(6) A signed statement indicating that you burned no new types of fuel in an affected source subject to an emission limit. Or, if you did burn a new type of fuel and are subject to a hydrogen chloride emission limit, you must submit the calculation of chlorine input, using Equation 5 of §63.7530, that demonstrates that your source is still within its maximum chlorine input level established during the previous performance testing (for sources that demonstrate compliance through performance testing) or you must submit the calculation of hydrogen chloride emission rate using Equation 10 of §63.7530 that demonstrates that your source is still meeting the emission limit for hydrogen chloride emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel and are subject to a mercury emission limit, you must submit the calculation of mercury input, using Equation 8 of §63.7530, that demonstrates that your source is still within its maximum mercury input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of mercury emission rate using Equation 11 of §63.7530 that demonstrates that your source is still meeting the emission limit for mercury emissions (for boilers or process heaters that demonstrate compliance through fuel analysis).

(7) If you wish to burn a new type of fuel in an affected source subject to an emission limit and you cannot demonstrate compliance with the maximum chlorine input operating limit using Equation 7 of §63.7530 or the maximum mercury input operating limit using Equation 8 of §63.7530, you must include in the compliance report a statement indicating the intent to conduct a new performance test within 60 days of starting to burn the new fuel.

(8) A summary of any monthly fuel analyses conducted to demonstrate compliance according to §§63.7521 and 63.7530 for affected sources subject to emission limits, and any fuel specification analyses conducted according to §63.7521(f) and §63.7530(g).

(9) If there are no deviations from any emission limits or operating limits in this subpart that apply to you, a statement that there were no deviations from the emission limits or operating limits during the reporting period.

(10) If there were no deviations from the monitoring requirements including no periods during which the CMSs, including CEMS, COMS, and continuous parameter monitoring systems, were out of control as specified in §63.8(c)(7), a statement that there were no deviations and no periods during which the CMS were out of control during the reporting period.

(11) If a malfunction occurred during the reporting period, the 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 you during a malfunction of a boiler, process heater, or associated air pollution control device or CMS to minimize emissions in accordance with §63.7500(a)(3), including actions taken to correct the malfunction.

(12) Include the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual or biennial tune-up according to §63.7540(a)(10) or (a)(11), respectively. Include the date of the most recent burner inspection if it was not done annually or biennially and was delayed until the next scheduled unit shutdown.

(13) If you plan to demonstrate compliance by emission averaging, certify the emission level achieved or the control technology employed is no less stringent that the level or control technology contained in the notification of compliance status in §63.7545(e)(5)(i).

(d) For each deviation from an emission limit or operating limit in this subpart that occurs at an affected source where you are not using a CMS to comply with that emission limit or operating limit, the compliance report must additionally contain the information required in paragraphs (d)(1) through (4) of this section.

(1) The total operating time of each affected source during the reporting period.

(2) A description of the deviation and which emission limit or operating limit from which you deviated.

(3) Information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken.

(4) A copy of the test report if the annual performance test showed a deviation from the emission limits.

(e) For each deviation from an emission limit, operating limit, and monitoring requirement in this subpart occurring at an affected source where you are using a CMS to comply with that emission limit or operating limit, you must include the information required in paragraphs (e)(1) through (12) of this section. This includes any deviations from your site-specific monitoring plan as required in §63.7505(d).

(1) The date and time that each deviation started and stopped and description of the nature of the deviation (*i.e.*, what you deviated from).

(2) The date and time 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.

(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) An analysis 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's downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period.

(8) An identification of each parameter that was monitored at the affected source for which there was a deviation.

(9) A brief description of the source for which there was a deviation.

(10) A brief description of each CMS for which there was a deviation.

(11) The date of the latest CMS certification or audit for the system for which there was a deviation.

(12) A description of any changes in CMSs, processes, or controls since the last reporting period for the source for which there was a deviation.

(f) Each affected source that has obtained a Title V operating permit pursuant to part 70 or part 71 of this chapter must report all deviations as defined in this subpart in the semiannual monitoring report required by §70.6(a)(3)(iii)(A) or §71.6(a)(3)(iii)(A). If an affected source submits a compliance report pursuant to Table 9 to this subpart along with, or as part of, the semiannual monitoring report required by §70.6(a)(3)(iii)(A) or §71.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any emission limit, operating limit, or work practice requirement in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report does not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the delegated authority.

(g) [Reserved]

(h) As of January 1, 2012 and within 60 days after the date of completing each performance test, as defined in §63.2, 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.

§ 63.7555 What records must I keep?

(a) You must keep records according to paragraphs (a)(1) and (2) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that you submitted, according to the requirements in §63.10(b)(2)(xiv).

(2) Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in §63.10(b)(2)(viii).

(b) For each CEMS, COMS, and continuous monitoring system you must keep records according to paragraphs (b)(1) through (5) of this section.

(1) Records described in §63.10(b)(2)(vii) through (xi).

(2) Monitoring data for continuous opacity monitoring system during a performance evaluation as required in §63.6(h)(7)(i) and (ii).

(3) Previous (*i.e.*, superseded) versions of the performance evaluation plan as required in §63.8(d)(3).

(4) Request for alternatives to relative accuracy test for CEMS as required in §63.8(f)(6)(i).

(5) Records of the date and time that each deviation started and stopped.

(c) You must keep the records required in Table 8 to this subpart including records of all monitoring data and calculated averages for applicable operating limits, such as opacity, pressure drop, pH, and operating load, to show continuous compliance with each emission limit and operating limit that applies to you.

(d) For each boiler or process heater subject to an emission limit in Table 1, 2 or 12 to this subpart, you must also keep the applicable records in paragraphs (d)(1) through (8) of this section.

(1) You must keep records of monthly fuel use by each boiler or process heater, including the type(s) of fuel and amount(s) used.

(2) If you combust non-hazardous secondary materials that have been determined not to be solid waste pursuant to §41.3(b)(1), you must keep a record which documents how the secondary material meets each of the legitimacy criteria. If you combust a fuel that has been processed from a discarded non-hazardous secondary material pursuant to §241.3(b)(4), you must keep records as to how the operations that produced the fuel satisfies the definition of processing in §241.2. If the fuel received a non-waste determination pursuant to the petition process submitted under §241.3(c), you must keep a record that documents how the fuel satisfies the requirements of the petition process.

(3) You must keep records of monthly hours of operation by each boiler or process heater that meets the definition of limited-use boiler or process heater.

(4) A copy of all calculations and supporting documentation of maximum chlorine fuel input, using Equation 7 of §63.7530, that were done to demonstrate continuous compliance with the hydrogen chloride emission limit, for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of hydrogen chloride emission rates, using Equation 10 of §63.7530, that were done to demonstrate compliance with the hydrogen chloride emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum chlorine fuel input or hydrogen chloride emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate chlorine fuel input, or hydrogen chloride emission rate, for each boiler and process heater.

(5) A copy of all calculations and supporting documentation of maximum mercury fuel input, using Equation 8 of §63.7530, that were done to demonstrate continuous compliance with the mercury emission limit for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of mercury emission rates, using Equation 11 of §63.7530, that were done to demonstrate compliance with the mercury emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum mercury fuel input or mercury emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate mercury fuel input, or mercury emission rates, for each boiler and process heater.

(6) If, consistent with §63.7515(b) and (c), you choose to stack test less frequently than annually, you must keep annual records that document that your emissions in the previous stack test(s) were less than 75 percent of the applicable emission limit, and document that there was no change in source operations including fuel composition and operation of air pollution control equipment that would cause emissions of the relevant pollutant to increase within the past year.

(7) Records of the occurrence and duration of each malfunction of the boiler or process heater, or of the associated air pollution control and monitoring equipment.

(8) Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in §63.7500(a)(3), including corrective actions to restore the malfunctioning boiler or process heater, air pollution control, or monitoring equipment to its normal or usual manner of operation.

(e) If you elect to average emissions consistent with §63.7522, you must additionally keep a copy of the emission averaging implementation plan required in §63.7522(g), all calculations required under §63.7522, including monthly records of heat input or steam generation, as applicable, and monitoring records consistent with §63.7541.

(f) If you elect to use emission credits from energy conservation measures to demonstrate compliance according to §63.7533, you must keep a copy of the Implementation Plan required in §63.7533(d) and copies of all data and calculations used to establish credits according to §63.7533(b), (c), and (f).

(g) If you elected to demonstrate that the unit meets the specifications for hydrogen sulfide and mercury for the other gas 1 subcategory and you cannot submit a signed certification under §63.7545(g) because the constituents could exceed the specifications, you must maintain monthly records of the calculations and results of the fuel specifications for mercury and hydrogen sulfide in Table 6.

(h) If you operate a unit designed to burn natural gas, refinery gas, or other gas 1 fuel that is subject to this subpart, and you use an alternative fuel other than natural gas, refinery gas, or other gas 1 fuel, you must keep records of the total hours per calendar year that alternative fuel is burned.

§ 63.7560 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 on site, or they must be accessible from on site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). You can keep the records off site for the remaining 3 years.

<u>Other Requirements and Information</u>

§ 63.7570 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by EPA, or a delegated authority such as your State, local, or tribal agency. If the EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency (as well as EPA) has the authority to implement and enforce this subpart. You should contact your EPA Regional Office to find out if 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 listed in paragraphs (b)(1) through (5) of this section are retained by the EPA Administrator and are not transferred to the State, local, or tribal agency, however, EPA retains oversight of this subpart and can take enforcement actions, as appropriate.

(1) Approval of alternatives to the non-opacity emission limits and work practice standards in §63.7500(a) and (b) under §63.6(g).

(2) Approval of alternative opacity emission limits in §63.7500(a) under §63.6(h)(9).

(3) Approval of major change to test methods in Table 5 to this subpart under §63.7(e)(2)(ii) and (f) and as defined in §63.90, and alternative analytical methods requested under §63.7521(b)(2).

(4) Approval of major change to monitoring under §63.8(f) and as defined in §63.90, and approval of alternative operating parameters under §63.7500(a)(2) and §63.7522(g)(2).

(5) Approval of major change to recordkeeping and reporting under §63.10(e) and as defined in §63.90.

§ 63.7575 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act, in §63.2 (the General Provisions), and in this section as follows:

Affirmative defense means, in the context of an enforcement proceeding, a response or defense put forward by a defendant, regarding which the defendant has the burden of proof, and the merits of which are independently and objectively evaluated in a judicial or administrative proceeding.

Annual heat input means the heat input for the 12 months preceding the compliance demonstration.

Bag leak detection system means a group of instruments that are capable of monitoring particulate matter loadings in the exhaust of a fabric filter (*i.e.*, baghouse) in order to detect bag failures. A bag leak detection system includes, but is not limited to, an instrument that operates on electrodynamic, triboelectric, light scattering, light transmittance, or other principle to monitor relative particulate matter loadings.

Benchmarking means a process of comparison against standard or average.

Biomass or bio-based solid fuel means any biomass-based solid fuel that is not a solid waste. This includes, but is not limited to, wood residue; wood products (*e.g.*, trees, tree stumps, tree limbs, bark, lumber, sawdust, sander dust, chips, scraps, slabs, millings, and shavings); animal manure, including litter and other bedding materials; vegetative agricultural and silvicultural materials, such as logging residues (slash), nut and grain hulls and chaff (*e.g.*, almond, walnut, peanut, rice, and wheat), bagasse, orchard prunings, corn stalks, coffee bean hulls and grounds. This definition of biomass is not intended to suggest that these materials are or are not solid waste.

Blast furnace gas fuel-fired boiler or process heater means an industrial/commercial/institutional boiler or process heater that receives 90 percent or more of its total annual gas volume from blast furnace gas.

Boiler means an enclosed device using controlled flame combustion and having the primary purpose of recovering thermal energy in the form of steam or hot water. Controlled flame combustion refers to a steady-state, or near steady-state, process wherein fuel and/or oxidizer feed rates are controlled. A device combusting solid waste, as defined in §241.3, is not a boiler unless the device is exempt from the definition of a solid waste incineration unit as provided in section 129(g)(1) of the Clean Air Act. Waste heat boilers are excluded from this definition.

Boiler system means the boiler and associated components, such as, the feed water system, the combustion air system, the fuel system (including burners), blowdown system, combustion control system, and energy consuming systems.

Calendar year means the period between January 1 and December 31, inclusive, for a given year.

Coal means all solid fuels classifiable as anthracite, bituminous, sub-bituminous, or lignite by ASTM D388 (incorporated by reference, see §63.14), coal refuse, and petroleum coke. For the purposes of this subpart, this definition of “coal” includes synthetic fuels derived from coal for creating useful heat, including but not limited to, solvent-refined coal, coal-oil mixtures, and coal-water mixtures. Coal derived gases are excluded from this definition.

Coal refuse means any by-product 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 kilojoules per kilogram (6,000 Btu per pound) on a dry basis.

Commercial/institutional boiler means a boiler used in commercial establishments or institutional establishments such as medical centers, research centers, institutions of higher education, hotels, and laundries to provide steam and/or hot water.

Common stack means the exhaust of emissions from two or more affected units through a single flue. Affected units with a common stack may each have separate air pollution control systems located before the common stack, or may have a single air pollution control system located after the exhausts come together in a single flue.

Cost-effective energy conservation measure means a measure that is implemented to improve the energy efficiency of the boiler or facility that has a payback (return of investment) period of 2 years or less.

Deviation.

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

(i) Fails to meet any requirement or obligation established by this subpart including, but not limited to, any emission limit, operating limit, or work practice standard; or

(ii) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit.

(2) A deviation is not always a violation. The determination of whether a deviation constitutes a violation of the standard is up to the discretion of the entity responsible for enforcement of the standards.

Dioxins/furans means tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans.

Distillate oil means fuel oils, including recycled oils, that comply with the specifications for fuel oil numbers 1 and 2, as defined by ASTM D396 (incorporated by reference, see §63.14).

Dry scrubber means an add-on air pollution control system that injects dry alkaline sorbent (dry injection) or sprays an alkaline sorbent (spray dryer) to react with and neutralize acid gas in the exhaust stream forming a dry powder material. Sorbent injection systems in fluidized bed boilers and process heaters are included in this definition. A dry scrubber is a dry control system.

Dutch oven means a unit having a refractory-walled cell connected to a conventional boiler setting. Fuel materials are introduced through an opening in the roof of the Dutch oven and burn in a pile on its floor.

Electric utility steam generating unit means a fossil fuel-fired combustion unit of more than 25 megawatts that serves a generator that produces electricity for sale. A fossil fuel-fired unit that cogenerates steam and electricity and supplies more than one-third of its potential electric output capacity and more than 25 megawatts electrical output to any utility power distribution system for sale is considered an electric utility steam generating unit.

Electrostatic precipitator (ESP) means an add-on air pollution control device used to capture particulate matter by charging the particles using an electrostatic field, collecting the particles using a grounded collecting surface, and transporting the particles into a hopper. An electrostatic precipitator is usually a dry control system.

Emission credit means emission reductions above those required by this subpart. Emission credits generated may be used to comply with the emissions limits. Credits may come from pollution prevention projects that result in reduced fuel use by affected units. Shutdowns cannot be used to generate credits.

Energy assessment means the following only as this term is used in Table 3 to this subpart.

(1) Energy assessment for facilities with affected boilers and process heaters using less than 0.3 trillion Btu per year heat input will be one day in length maximum. The boiler system and energy use system accounting for at least 50 percent of the energy output will be evaluated to identify energy savings opportunities, within the limit of performing a one-day energy assessment.

(2) The Energy assessment for facilities with affected boilers and process heaters using 0.3 to 1.0 trillion Btu per year will be 3 days in length maximum. The boiler system and any energy use system accounting for at least 33 percent of the energy output will be evaluated to identify energy savings opportunities, within the limit of performing a 3-day energy assessment.

(3) In the Energy assessment for facilities with affected boilers and process heaters using greater than 1.0 trillion Btu per year, the boiler system and any energy use system accounting for at least 20 percent of the energy output will be evaluated to identify energy savings opportunities.

Energy management practices means the set of practices and procedures designed to manage energy use that are demonstrated by the facility's energy policies, a facility energy manager and other staffing responsibilities, energy performance measurement and tracking methods, an energy saving goal, action plans, operating procedures, internal reporting requirements, and periodic review intervals used at the facility.

Energy use system includes, but is not limited to, process heating; compressed air systems; machine drive (motors, pumps, fans); process cooling; facility heating, ventilation, and air-conditioning systems; hot heater systems; building envelop; and lighting.

Equivalent means the following only as this term is used in Table 6 to this subpart:

(1) An equivalent sample collection procedure means a published voluntary consensus standard or practice (VCS) or EPA method that includes collection of a minimum of three composite fuel samples, with each composite consisting of a minimum of three increments collected at approximately equal intervals over the test period.

(2) An equivalent sample compositing procedure means a published VCS or EPA method to systematically mix and obtain a representative subsample (part) of the composite sample.

(3) An equivalent sample preparation procedure means a published VCS or EPA method that: Clearly states that the standard, practice or method is appropriate for the pollutant and the fuel matrix; or is cited as an appropriate sample preparation standard, practice or method for the pollutant in the chosen VCS or EPA determinative or analytical method.

(4) An equivalent procedure for determining heat content means a published VCS or EPA method to obtain gross calorific (or higher heating) value.

(5) An equivalent procedure for determining fuel moisture content means a published VCS or EPA method to obtain moisture content. If the sample analysis plan calls for determining metals (especially the mercury, selenium, or arsenic) using an aliquot of the dried sample, then the drying temperature must be modified to prevent vaporizing these metals. On the other hand, if metals analysis is done on an “as received” basis, a separate aliquot can be dried to determine moisture content and the metals concentration mathematically adjusted to a dry basis.

(6) An equivalent pollutant (mercury, hydrogen chloride, hydrogen sulfide) determinative or analytical procedure means a published VCS or EPA method that clearly states that the standard, practice, or method is appropriate for the pollutant and the fuel matrix and has a published detection limit equal or lower than the methods listed in Table 6 to this subpart for the same purpose.

Fabric filter means an add-on air pollution control device used to capture particulate matter by filtering gas streams through filter media, also known as a baghouse. A fabric filter is a dry control system.

Federally enforceable means all limitations and conditions that are enforceable by the EPA 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 40 CFR 51.24.

Fluidized bed boiler means a boiler utilizing a fluidized bed combustion process.

Fluidized bed combustion means a process where a fuel is burned in a bed of granulated particles, which are maintained in a mobile suspension by the forward flow of air and combustion products.

Fuel cell means a boiler type in which the fuel is dropped onto suspended fixed grates and is fired in a pile. The refractory-lined fuel cell uses combustion air preheating and positioning of secondary and tertiary air injection ports to improve boiler efficiency.

Fuel type means each category of fuels that share a common name or classification. Examples include, but are not limited to, bituminous coal, sub-bituminous coal, lignite, anthracite, biomass, residual oil. Individual fuel types received from different suppliers are not considered new fuel types.

Gaseous fuel includes, but is not limited to, natural gas, process gas, landfill gas, coal derived gas, refinery gas, and biogas. Blast furnace gas is exempted from this definition.

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

Hourly average means the arithmetic average of at least four CMS data values representing the four 15-minute periods in an hour, or at least two 15-minute data values during an hour when CMS calibration, quality assurance, or maintenance activities are being performed.

Hot water heater means a closed vessel with a capacity of no more than 120 U.S. gallons in which water is heated by combustion of gaseous or liquid fuel and is withdrawn for use external to the vessel at pressures not exceeding 160 psig, including the apparatus by which the heat is generated and all controls and devices necessary to prevent water temperatures from exceeding 210 degrees Fahrenheit (99 degrees Celsius). *Hot water heater* also means a tankless unit that provides on demand hot water.

Hybrid suspension grate boiler means a boiler designed with air distributors to spread the fuel material over the entire width and depth of the boiler combustion zone. The drying and much of the combustion of the fuel takes place in suspension, and the combustion is completed on the grate or floor of the boiler.

Industrial boiler means a boiler used in manufacturing, processing, mining, and refining or any other industry to provide steam and/or hot water.

Limited-use boiler or process heater means any boiler or process heater that burns any amount of solid, liquid, or gaseous fuels, has a rated capacity of greater than 10 MMBtu per hour heat input, and has a federally enforceable limit of no more than 876 hours per year of operation.

Liquid fuel subcategory includes any boiler or process heater of any design that burns more than 10 percent liquid fuel and less than 10 percent solid fuel, based on the total annual heat input to the unit.

Liquid fuel includes, but is not limited to, distillate oil, residual oil, on-spec used oil, and biodiesel.

Load fraction means the actual heat input of the boiler or process heater divided by the average operating load determined according to Table 7 to this subpart.

Metal process furnaces include natural gas-fired annealing furnaces, preheat furnaces, reheat furnaces, aging furnaces, heat treat furnaces, and homogenizing furnaces.

Million Btu (MMBtu) means one million British thermal units.

Minimum activated carbon injection rate means load fraction (percent) multiplied by the lowest hourly average activated carbon injection rate measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limits.

Minimum pressure drop means the lowest hourly average pressure drop measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limit.

Minimum scrubber effluent pH means the lowest hourly average sorbent liquid pH measured at the inlet to the wet scrubber according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable hydrogen chloride emission limit.

Minimum scrubber liquid flow rate means the lowest hourly average liquid flow rate (*e.g.,* to the PM scrubber or to the acid gas scrubber) measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limit.

Minimum scrubber pressure drop means the lowest hourly average scrubber pressure drop measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limit.

Minimum sorbent injection rate means load fraction (percent) multiplied by the lowest hourly average sorbent injection rate for each sorbent measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limits.

Minimum total secondary electric power means the lowest hourly average total secondary electric power determined from the values of secondary voltage and secondary current to the electrostatic precipitator measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limits.

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) Liquid petroleum gas, as defined in ASTM D1835 (incorporated by reference, *see* §63.14); 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 mega joules (MJ) per dry standard cubic meter (910 and 1,150 Btu per dry standard cubic foot); or

(4) Propane or propane derived synthetic natural gas. Propane means a colorless gas derived from petroleum and natural gas, with the molecular structure C_3H_8.

Opacity means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

Operating day means a 24-hour period between 12 midnight and the following midnight during which any fuel is combusted at any time in the boiler or process heater unit. It is not necessary for fuel to be combusted for the entire 24-hour period.

Other gas 1 fuel means a gaseous fuel that is not natural gas or refinery gas and does not exceed the maximum concentration of 40 micrograms/cubic meters of mercury and 4 parts per million, by volume, of hydrogen sulfide.

Particulate matter (PM) means any finely divided solid or liquid material, other than uncombined water, as measured by the test methods specified under this subpart, or an approved alternative method.

Period of natural gas curtailment or supply interruption means a period of time during which the supply of natural gas to an affected facility is halted for reasons beyond the control of the facility. The act of entering into a contractual agreement with a supplier of natural gas established for curtailment purposes does not constitute a reason that is under the control of a facility for the purposes of this definition. An increase in the cost or unit price of natural gas does not constitute a period of natural gas curtailment or supply interruption.

Process heater means an enclosed device using controlled flame, and the unit's primary purpose is to transfer heat indirectly to a process material (liquid, gas, or solid) or to a heat transfer material for use in a process unit, instead of generating steam. Process heaters are devices in which the combustion gases do not come into direct contact with process materials. A device combusting solid waste, as defined in §241.3, is not a process heater unless the device is exempt from the definition of a solid waste incineration unit as provided in section 129(g)(1) of the Clean Air Act. Process heaters do not include units used for comfort heat or space heat, food preparation for on-site consumption, or autoclaves.

Pulverized coal boiler means a boiler in which pulverized coal or other solid fossil fuel is introduced into an air stream that carries the coal to the combustion chamber of the boiler where it is fired in suspension.

Qualified energy assessor means:

(1) someone who has demonstrated capabilities to evaluate a set of the typical energy savings opportunities available in opportunity areas for steam generation and major energy using systems, including, but not limited to:

(i) Boiler combustion management.

(ii) Boiler thermal energy recovery, including

(A) Conventional feed water economizer,

(B) Conventional combustion air preheater, and

(C) Condensing economizer.

(iii) Boiler blowdown thermal energy recovery.

(iv) Primary energy resource selection, including

(A) Fuel (primary energy source) switching, and

(B) Applied steam energy versus direct-fired energy versus electricity.

(v) Insulation issues.

(vi) Steam trap and steam leak management.

(vi) Condensate recovery.

(viii) Steam end-use management.

(2) Capabilities and knowledge includes, but is not limited to:

(i) Background, experience, and recognized abilities to perform the assessment activities, data analysis, and report preparation.

(ii) Familiarity with operating and maintenance practices for steam or process heating systems.

(iii) Additional potential steam system improvement opportunities including improving steam turbine operations and reducing steam demand.

(iv) Additional process heating system opportunities including effective utilization of waste heat and use of proper process heating methods.

(v) Boiler-steam turbine cogeneration systems.

(vi) Industry specific steam end-use systems.

Refinery gas means any gas that is generated at a petroleum refinery and is combusted. Refinery gas includes natural gas when the natural gas is combined and combusted in any proportion with a gas generated at a refinery. Refinery gas includes gases generated from other facilities when that gas is combined and combusted in any proportion with gas generated at a refinery.

Residual oil means crude oil, and all fuel oil numbers 4, 5 and 6, as defined in ASTM D396–10 (incorporated by reference, see §63.14(b)).

Responsible official means responsible official as defined in §70.2.

Solid fossil fuel includes, and is not limited to, coal, coke, petroleum coke, and tire derived fuel.

Solid fuel means any solid fossil fuel or biomass or bio-based solid fuel.

Steam output means (1) for a boiler that produces steam for process or heating only (no power generation), the energy content in terms of MMBtu of the boiler steam output, and (2) for a boiler that cogenerates process steam and electricity (also known as combined heat and power (CHP)), the total energy output, which is the sum of the energy content of the steam exiting the turbine and sent to process in MMBtu and the energy of the electricity generated converted to MMBtu at a rate of 10,000 Btu per kilowatt-hour generated (10 MMBtu per megawatt-hour).

Stoker means a unit consisting of a mechanically operated fuel feeding mechanism, a stationary or moving grate to support the burning of fuel and admit under-grate air to the fuel, an overfire air system to complete combustion, and an ash discharge system. This definition of stoker includes air swept stokers. There are two general types of stokers: Underfeed and overfeed. Overfeed stokers include mass feed and spreader stokers.

Suspension boiler means a unit designed to feed the fuel by means of fuel distributors. The distributors inject air at the point where the fuel is introduced into the boiler in order to spread the fuel material over the boiler width. The drying (and much of the combustion) occurs while the material is suspended in air. The combustion of the fuel material is completed on a grate or floor below. Suspension boilers almost universally are designed to have high heat release rates to dry quickly the wet fuel as it is blown into the boilers.

Temporary boiler means any gaseous or liquid fuel boiler 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 boiler is not a temporary boiler if any one of the following conditions exists:

(1) The equipment is attached to a foundation.

(2) The boiler or a replacement remains at a location for more than 12 consecutive months. 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.

Tune-up means adjustments made to a boiler in accordance with procedures supplied by the manufacturer (or an approved specialist) to optimize the combustion efficiency.

Unit designed to burn biomass/bio-based solid subcategory includes any boiler or process heater that burns at least 10 percent biomass or bio-based solids on an annual heat input basis in combination with solid fossil fuels, liquid fuels, or gaseous fuels.

Unit designed to burn coal/solid fossil fuel subcategory includes any boiler or process heater that burns any coal or other solid fossil fuel alone or at least 10 percent coal or other solid fossil fuel on an annual heat input basis in combination with liquid fuels, gaseous fuels, or less than 10 percent biomass and bio-based solids on an annual heat input basis.

Unit designed to burn gas 1 subcategory includes any boiler or process heater that burns only natural gas, refinery gas, and/or other gas 1 fuels; with the exception of liquid fuels burned for periodic testing not to exceed a combined total of 48 hours during any calendar year, or during periods of gas curtailment and gas supply emergencies.

Unit designed to burn gas 2 (other) subcategory includes any boiler or process heater that is not in the unit designed to burn gas 1 subcategory and burns any gaseous fuels either alone or in combination with less than 10 percent coal/solid fossil fuel, less than 10 percent biomass/bio-based solid fuel, and less than 10 percent liquid fuels on an annual heat input basis.

Unit designed to burn liquid subcategory includes any boiler or process heater that burns any liquid fuel, but less than 10 percent coal/solid fossil fuel and less than 10 percent biomass/bio-based solid fuel on an annual heat input basis, either alone or in combination with gaseous fuels. Gaseous fuel boilers and process heaters that burn liquid fuel for periodic testing of liquid fuel, maintenance, or operator training, not to exceed a combined total of 48 hours during any calendar year or during periods of maintenance, operator training, or testing of liquid fuel, not to exceed a combined total of 48 hours during any calendar year are not included in this definition. Gaseous fuel boilers and process heaters that burn liquid fuel during periods of gas curtailment or gas supply emergencies of any duration are also not included in this definition.

Unit designed to burn liquid fuel that is a non-continental unit means an industrial, commercial, or institutional boiler or process heater designed to burn liquid fuel located in the State of Hawaii, the Virgin Islands, Guam, American Samoa, the Commonwealth of Puerto Rico, or the Northern Mariana Islands.

Unit designed to burn solid fuel subcategory means any boiler or process heater that burns any solid fuel alone or at least 10 percent solid fuel on an annual heat input basis in combination with liquid fuels or gaseous fuels.

Voluntary Consensus Standards or VCS mean technical standards (*e.g.*, materials specifications, test methods, sampling procedures, business practices) developed or adopted by one or more voluntary consensus bodies. EPA/Office of Air Quality Planning and Standards, by precedent, has only used VCS that are written in English. Examples of VCS bodies are: American Society of Testing and Materials (ASTM 100 Barr Harbor Drive, P.O. Box CB700, West Conshohocken, Pennsylvania 19428–B2959, (800) 262–1373, *http://www.astm.org*), American Society of Mechanical Engineers (ASME ASME, Three

Park Avenue, New York, NY 10016–5990, (800) 843–2763, *http://www.asme.org*), International Standards Organization (ISO 1, ch. de la Voie-Creuse, Case postale 56, CH–1211 Geneva 20, Switzerland, +41 22 749 01 11, *http://www.iso.org/iso/home.htm*), Standards Australia (AS Level 10, The Exchange Centre, 20 Bridge Street, Sydney, GPO Box 476, Sydney NSW 2001, + 61 2 9237 6171 *http://www.stadards.org.au*), British Standards Institution (BSI, 389 Chiswick High Road, London, W4 4AL, United Kingdom, +44 (0)20 8996 9001, *http://www.bsigroup.com*), Canadian Standards Association (CSA 5060 Spectrum Way, Suite 100, Mississauga, Ontario L4W 5N6, Canada, 800–463–6727, *http://www.csa.ca*), European Committee for Standardization (CEN CENELEC Management Centre Avenue Marnix 17 B–1000 Brussels, Belgium +32 2 550 08 11, *http://www.cen.eu/cen*), and German Engineering Standards (VDI VDI Guidelines Department, P.O. Box 10 11 39 40002, Duesseldorf, Germany, +49 211 6214–230, *http://www.vdi.eu*). The types of standards that are not considered VCS are standards developed by: The United States, *e.g.*, California (CARB) and Texas (TCEQ); industry groups, such as American Petroleum Institute (API), Gas Processors Association (GPA), and Gas Research Institute (GRI); and other branches of the U.S. government, *e.g.*, Department of Defense (DOD) and Department of Transportation (DOT). This does not preclude EPA from using standards developed by groups that are not VCS bodies within their rule. When this occurs, EPA has done searches and reviews for VCS equivalent to these non-EPA methods.

Waste heat boiler means a device that recovers normally unused energy and converts it to usable heat. Waste heat boilers are also referred to as heat recovery steam generators.

Waste heat process heater means an enclosed device that recovers normally unused energy and converts it to usable heat. Waste heat process heaters are also referred to as recuperative process heaters.

Wet scrubber means any add-on air pollution control device that mixes an aqueous stream or slurry with the exhaust gases from a boiler or process heater to control emissions of particulate matter or to absorb and neutralize acid gases, such as hydrogen chloride. A wet scrubber creates an aqueous stream or slurry as a byproduct of the emissions control process.

Work practice standard means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the Clean Air Act.

As stated in §63.7500, you must comply with the following applicable emission limits:

Table 1 to Subpart DDDDD of Part 63_Emission Limits for New or Reconstructed Boilers and Process Heaters [a]
[Units with heat input capacity of 10 million Btu per hour or greater]

If your boiler or process heater is in this subcategory . . .	For the following pollutants . . .	The emissions must not exceed the following emission limits, except during periods of startup and shutdown . . .	Or the emissions must not exceed the following output-based limits (lb per MMBtu of steam output) . . .	Using this specified sampling volume or test run duration . . .
1. Units in all subcategories designed to burn solid fuel.	a. Particulate Matter.	0.0011 lb per MMBtu of heat input (30-day rolling average for units 250 MMBtu/hr or greater, 3-run average for units less than 250 MMBtu/hr).	0.0011; (30-day rolling average for units 250 MMBtu/hr or greater, 3-run average for units less than 250 MMBtu/hr).	Collect a minimum of 3 dscm per run.
	b. Hydrogen Chloride.	0.0022 lb per MMBtu of heat input.	0.0021.....	For M26A, collect a minimum of 1 dscm per run; for M26 collect a minimum of 60 liters per run.
	c. Mercury.....	3.5E-06 lb per MMBtu of heat input.	3.4E-06.....	For M29, collect a minimum of 1 dscm per run; for M30A or M30B, collect a minimum sample

	as specified in the method; for ASTM D6784 \b\ collect a minimum of 2 dscm.

Table 1 to Subpart DDDDD of Part 63_Emission Limits for New or Reconstructed Boilers and Process Heaters [a] - Continued
[Units with heat input capacity of 10 million Btu per hour or greater]

2. Units designed to burn pulverized coal/solid fossil fuel.	a. Carbon monoxide (CO).	12 ppm by volume on a dry basis corrected to 3 percent oxygen.	0.01.....	1 hr minimum sampling time, use a span value of 30 ppmv.
	b. Dioxins/Furans.	0.003 ng/dscm (TEQ) corrected to 7 percent oxygen.	2.8E-12 (TEQ).....	Collect a minimum of 4 dscm per run.
3. Stokers designed to burn coal/ solid fossil fuel.	a. CO.....	6 ppm by volume on a dry basis corrected to 3 percent oxygen.	0.005.....	1 hr minimum sampling time, use a span value of 20 ppmv.
	b. Dioxins/Furans.	0.003 ng/dscm (TEQ) corrected to 7 percent oxygen.	2.8E-12 (TEQ).....	Collect a minimum of 4 dscm per run.
4. Fluidized bed units designed to burn coal/solid fossil fuel.	a. CO.....	18 ppm by volume on a dry basis corrected to 3 percent oxygen.	0.02.....	1 hr minimum sampling time, use a span value of 40 ppmv.
	b. Dioxins/Furans.	0.002 ng/dscm (TEQ) corrected to 7 percent oxygen.	1.8E-12 (TEQ).....	Collect a minimum of 4 dscm per run.
5. Stokers designed to burn biomass/bio-based solids.	a. CO.....	160 ppm by volume on a dry basis corrected to 3 percent oxygen.	0.13.....	1 hr minimum sampling time, use a span value of 400 ppmv.

	b. Dioxins/Furans.	0.005 ng/dscm (TEQ) corrected to 7 percent oxygen.	4.4E-12 (TEQ)..... Collect a minimum of 4 dscm per run.
6. Fluidized bed units designed to burn biomass/bio-based solids.	a. CO.....	260 ppm by volume on a dry basis corrected to 3 percent oxygen.	0.18..... 1 hr minimum sampling time, use a span value of 500 ppmv.

Table 1 to Subpart DDDDD of Part 63_Emission Limits for New or Reconstructed Boilers and Process Heaters [a] - Continued
[Units with heat input capacity of 10 million Btu per hour or greater]

	b. Dioxins/Furans. 0.02 ng/dscm (TEQ) corrected to 7 percent oxygen.	1.8E-11 (TEQ).....	Collect a minimum of 4 dscm per run.
7. Suspension burners/Dutch Ovens designed to burn biomass/ bio-based solids.	a. CO..... 470 ppm by volume on a dry basis corrected to 3 percent oxygen.	0.45.....	1 hr minimum sampling time, use a span value of 1000 ppmv.
	b. Dioxins/Furans. 0.2 ng/dscm (TEQ) corrected to 7 percent oxygen.	1.8E-10 (TEQ).....	Collect a minimum of 4 dscm per run.
8. Fuel cells designed to burn biomass/bio-based solids.	a. CO..... 470 ppm by volume on a dry basis corrected to 3 percent oxygen.	0.23.....	1 hr minimum sampling time, use a span value of 1000 ppmv.
	b. Dioxins/Furans. 0.003 ng/dscm (TEQ) corrected to 7 percent oxygen.	2.86E-12 (TEQ)....	Collect a minimum of 4 dscm per run.
9. Hybrid suspension/grate units designed to burn biomass/bio-based solids.	a. CO..... 1,500 ppm by volume on a dry basis corrected to 3 percent oxygen.	0.84.....	1 hr minimum sampling time, use a span value of 3000 ppmv.
	b. Dioxins/Furans. 0.2 ng/dscm (TEQ) corrected to 7 percent oxygen.	1.8E-10 (TEQ).....	Collect a minimum of 4 dscm per run.

10. Units designed to burn liquid fuel.	a. Particulate Matter.	0.0013 lb per MMBtu of heat input (30-day rolling average for residual oil-fired units 250 MMBtu/hr or greater, 3-run average for other units).	0.001; (30-day rolling average for residual oil-fired units 250 MMBtu/hr or greater, 3-run average for other units).	Collect a minimum of 3 dscm per run.

Table 1 to Subpart DDDDD of Part 63_Emission Limits for New or Reconstructed Boilers and Process Heaters [a] - Continued
[Units with heat input capacity of 10 million Btu per hour or greater]

	b. Hydrogen Chloride.	0.00033 lb per MMBtu of heat input.	0.0003.....	For M26A: Collect a minimum of 1 dscm per run; for M26, collect a minimum of 60 liters per run.
	c. Mercury.....	2.1E-07 lb per MMBtu of heat input.	0.2E-06.....	Collect enough volume to meet an in-stack detection limit data quality objective of 0.10 ug/dscm.
	d. CO.....	3 ppm by volume on a dry basis corrected to 3 percent oxygen.	0.0026.....	1 hr minimum sampling time, use a span value of 3 ppmv.
	e. Dioxins/Furans.	0.002 ng/dscm (TEQ) corrected to 7 percent oxygen.	4.6E-12 (TEQ).....	Collect a minimum of 4 dscm per run.
11. Units designed to burn liquid fuel located in non-continental States and territories.	a. Particulate Matter.	0.0013 lb per MMBtu of heat input (30-day rolling average for residual oil-fired units 250 MMBtu/hr or greater, 3-run average for other	0.001; (30-day rolling average for residual oil-fired units 250 MMBtu/hr or greater, 3-run average for other units).	Collect a minimum of 3 dscm per run.

	units).	
b. Hydrogen Chloride.	0.00033 lb per MMBtu of heat input.	0.0003..... For M26A: Collect a minimum of 1 dscm per run; for M26, collect a minimum of 60 liters per run.

Table 1 to Subpart DDDDD of Part 63_Emission Limits for New or Reconstructed Boilers and Process Heaters [a] - Continued
[Units with heat input capacity of 10 million Btu per hour or greater]

	c. Mercury.....	7.8E-07 lb per MMBtu of heat input.	8.0E-07.....	For M29, collect a minimum of 3 dscm per run; for M30B, collect a minimum sample as specified in the method; for ASTM D6784 \b\ collect a minimum of 3 dscm.
	d. CO.....	51 ppm by volume on a dry basis corrected to 3 percent oxygen.	0.043.....	1 hr minimum sampling time, use a span value of 100 ppmv.
	e. Dioxins/Furans.	0.002 ng/dscm (TEQ) corrected to 7 percent oxygen.	4.6E-12(TEQ).....	Collect a minimum of 3 dscm per run.
12. Units designed to burn gas 2 (other) gases.	a. Particulate Matter.	0.0067 lb per MMBtu of heat input (30-day rolling average for units 250 MMBtu/hr or greater, 3-run average for units less than 250 MMBtu/hr).	.004; (30-day rolling average for units 250 MMBtu/hr or greater, 3-run average for units less than 250 MMBtu/hr).	Collect a minimum of 1 dscm per run.
	b. Hydrogen Chloride.	0.0017 lb per MMBtu of heat	.003.....	For M26A, Collect a minimum of 1

	input.	dscm per run; for M26, collect a minimum of 60 liters per run.
c. Mercury.....	7.9E-06 lb per MMBtu of heat input.	2.0E-07..... For M29, collect a minimum of 1 dscm per run; for M30A or M30B, collect

Table 1 to Subpart DDDDD of Part 63_Emission Limits for New or Reconstructed Boilers and Process Heaters [a] - Continued
[Units with heat input capacity of 10 million Btu per hour or greater]

			a minimum sample as specified in the method; for ASTM D6784 \b\ collect a minimum of 2 dscm.
d. CO.....	3 ppm by volume on a dry basis corrected to 3 percent oxygen.	0.002.....	1 hr minimum sampling time, use a span value of 10 ppmv.
e. Dioxins/Furans.	0.08 ng/dscm (TEQ) corrected to 7 percent oxygen.	4.1E-12 (TEQ).....	Collect a minimum of 4 dscm per run

\a\ If your affected source is a new or reconstructed affected source that commenced construction or reconstruction after June 4, 2010, and before May 20, 2011, you may comply with the emission limits in Table 12 to this subpart until March 21, 2014. On and after March 21, 2014, you must comply with the emission limits in Table 1 to this subpart.
\b\ Incorporated by reference, see § 63.14.

As stated in §63.7500, you must comply with the following applicable emission limits:

Table 2 to Subpart DDDDD of Part 63_Emission Limits for Existing Boilers and Process Heaters
[Units with heat input capacity of 10 million Btu per hour or greater]

If your boiler or process heater is in this subcategory . . .	For the following pollutants . . .	The emissions must not exceed the following emission limits, except during periods of startup and shutdown . . .	The emissions must not exceed the following output-based limits (lb per MMBtu of steam output) . . .	Using this specified sampling volume or test run duration . . .
1. Units in all subcategories of heat input (30-day rolling average for units 250 MMBtu/hr or greater, 3-run average for units less than 250 MMBtu/hr).	a. Particulate Matter.	0.039 lb per MMBtu of heat input (30-day rolling average for units 250 MMBtu/hr or greater, 3-run average for units less than 250 MMBtu/hr).	0.038; (30-day rolling average of 1 dscm per run.	Collect a minimum of 1 dscm per run; for M26, collect a minimum of 60 liters per run.
	b. Hydrogen Chloride.	0.035 lb per MMBtu of heat input.	0.04.....	For M26A, collect a minimum of 1 dscm per run; for M26, collect a minimum of 60 liters per run.
	c. Mercury.....	4.6E-06 lb per MMBtu of heat input.	4.5E-06.....	For M29, collect a minimum of 1 dscm per run; for M30A or M30B, collect

	a minimum sample as specified in the method; for ASTM D6784 \a\ collect a minimum of 2 dscm.

Table 2 to Subpart DDDDD of Part 63_Emission Limits for Existing Boilers and Process Heaters - Continued
[Units with heat input capacity of 10 million Btu per hour or greater]

2. Pulverized coal units designed to burn pulverized coal/solid fossil fuel.	a. CO.....	160 ppm by volume on a dry basis corrected to 3 percent oxygen.	0.14.....	1 hr minimum sampling time, use a span value of 300 ppmv.
	b. Dioxins/Furans.	0.004 ng/dscm (TEQ) corrected to 7 percent oxygen.	3.7E-12 (TEQ).....	Collect a minimum of 4 dscm per run.
3. Stokers designed to burn coal/ solid fossil fuel.	a. CO.....	270 ppm by volume on a dry basis corrected to 3 percent oxygen.	0.25.....	1 hr minimum sampling time, use a span value of 500 ppmv.
	b. Dioxins/Furans.	0.003 ng/dscm (TEQ) corrected to 7 percent oxygen.	2.8E-12 (TEQ).....	Collect a minimum of 4 dscm per run.
4. Fluidized bed units designed to burn coal/solid fossil fuel.	a. CO.....	82 ppm by volume on a dry basis corrected to 3 percent oxygen.	0.08.....	1 hr minimum sampling time, use a span value of 200 ppmv
	b. Dioxins/Furans.	0.002 ng/dscm (TEQ) corrected to 7 percent oxygen.	1.8E-12 (TEQ).....	Collect a minimum of 4 dscm per run.
5. Stokers designed to burn biomass/bio-based solid.	a. CO.....	490 ppm by volume on a dry basis corrected to 3 percent oxygen.	0.35.....	1 hr minimum sampling time, use a span value of 1000 ppmv.

	b. Dioxins/Furans.	0.005 ng/dscm (TEQ) corrected to 7 percent oxygen.	4.4E-12 (TEQ)..... Collect a minimum of 4 dscm per run.
6. Fluidized bed units designed to burn biomass/bio-based solid.	a. CO.....	430 ppm by volume on a dry basis corrected to 3 percent oxygen.	0.28..... 1 hr minimum sampling time, use a span value of 850 ppmv.

Table 2 to Subpart DDDDD of Part 63_Emission Limits for Existing Boilers and Process Heaters - Continued
[Units with heat input capacity of 10 million Btu per hour or greater]

	b. Dioxins/Furans. 0.02 ng/dscm (TEQ) corrected to 7 percent oxygen.	1.8E-11(TEQ)..... of 4 dscm per run.	Collect a minimum
7. Suspension burners/Dutch Ovens designed to burn biomass/ bio-based solid.	a. CO..... 470 ppm by volume on a dry basis corrected to 3 percent oxygen.	0.45..... of 1000 ppmv.	1 hr minimum sampling time, use a span value
	b. Dioxins/Furans. 0.2 ng/dscm (TEQ) corrected to 7 percent oxygen.	1.8E-10 (TEQ)..... of 4 dscm per run.	Collect a minimum
8. Fuel cells designed to burn biomass/bio-based solid.	a. CO..... 690 ppm by volume on a dry basis corrected to 3 percent oxygen.	0.34..... use a span value of 1300 ppmv.	1 hr minimum sampling time,
	b. Dioxins/Furans. 4 ng/dscm (TEQ) corrected to 7 percent oxygen.	3.5E-09 (TEQ)..... of 4 dscm per run.	Collect a minimum
9. Hybrid suspension/grate units designed to burn biomass/bio-based solid.	a. CO..... 3,500 ppm by volume on a dry basis corrected to 3 percent oxygen.	2.0..... of 7000 ppmv.	1 hr minimum sampling time, use a span value
	b. Dioxins/Furans. 0.2 ng/dscm (TEQ) corrected to 7 percent oxygen.	1.8E-10 (TEQ)..... of 4 dscm per run.	Collect a minimum

10. Units designed to burn liquid fuel.	a. Particulate Matter.	0.0075 lb per MMBtu of heat input (30-day rolling average for residual oil-fired units 250 MMBtu/hr or greater, 3-run average for other units).	0.0073; (30-day rolling average for residual oil-fired units 250 MMBtu/hr or greater, 3-run average for other units).	Collect a minimum of 1 dscm per run.

Table 2 to Subpart DDDDD of Part 63_Emission Limits for Existing Boilers and Process Heaters - Continued
[Units with heat input capacity of 10 million Btu per hour or greater]

b. Hydrogen Chloride.	0.00033 lb per MMBtu of heat input.	0.0003.....	For M26A, collect a minimum of 1 dscm per run; for M26, collect a minimum of 200 liters per run.
c. Mercury.....	3.5E-06 lb per MMBtu of heat input.	3.3E-06.....	For M29, collect a minimum of 1 dscm per run; for M30A or M30B collect a minimum sample as specified in the method, for ASTM D6784 \a\ collect a minimum of 2 dscm.
d. CO.....	10 ppm by volume on a dry basis corrected to 3 percent oxygen.	0.0083.....	1 hr minimum sampling time, use a span value of 20 ppmv.
e. Dioxins/Furans.	4 ng/dscm (TEQ) corrected to 7 percent oxygen.	9.2E-09 (TEQ).....	Collect a minimum of 1 dscm per run.

11. Units designed to burn liquid fuel located in non-continental States and territories.	a. Particulate Matter.	0.0075 lb per MMBtu of heat input (30-day rolling average for residual oil-fired units 250 MMBtu/hr or greater, 3-run average for other units).	0.0073; (30-day rolling average for residual oil-fired units 250 MMBtu/hr or greater, 3-run average for other units).	Collect a minimum of 1 dscm per run.
	b. Hydrogen Chloride.	0.00033 lb per MMBtu of heat input.	0.0003.....	For M26A, collect a minimum of 1 dscm per run; for M26, collect a minimum of 200

Table 2 to Subpart DDDDD of Part 63_Emission Limits for Existing Boilers and Process Heaters - Continued
[Units with heat input capacity of 10 million Btu per hour or greater]

				liters per run.
	c. Mercury.....	7.8E-07 lb per MMBtu of heat input.	8.0E-07.....	For M29, collect a minimum of 1 dscm per run; for M30A or M30B, collect a minimum sample as specified in the method; for ASTM D6784 \a\ collect a minimum of 2 dscm.
	d. CO.....	160 ppm by volume on a dry basis corrected to 3 percent oxygen.	0.13.....	1 hr minimum sampling time, use a span value of 300 ppmv.
	e. Dioxins/Furans.	4 ng/dscm (TEQ) corrected to 7 percent oxygen.	9.2E-09 (TEQ).....	Collect a minimum of 1 dscm per run.
12. Units designed to burn gas 2 (other) gases.	a. Particulate Matter.	0.043 lb per MMBtu of heat input (30-day rolling average for units 250 MMBtu/hr or greater, 3-run average for units less than 250 MMBtu/hr).	0.026; (30-day rolling average for units 250 MMBtu/hr or greater, 3-run average for units less than 250 MMBtu/hr).	Collect a minimum of 1 dscm per run.

b. Hydrogen Chloride.	0.0017 lb per MMBtu of heat input.	0.001..... For M26A, collect a minimum of 1 dscm per run; for M26, collect a minimum of 60 liters per run.
c. Mercury.....	1.3E-05 lb per MMBtu of heat input.	7.8E-06..... For M29, collect a minimum of 1 dscm per run; for M30A or M30B, collect

Table 2 to Subpart DDDDD of Part 63_Emission Limits for Existing Boilers and Process Heaters - Continued
[Units with heat input capacity of 10 million Btu per hour or greater]

			a minimum sample as specified in the method; for ASTM D6784 \a\ collect a minimum of 2 dscm.
d. CO.....	9 ppm by volume on a dry basis corrected to 3 percent oxygen.	0.005.....	1 hr minimum sampling time, use a span value of 20 ppmv.
e. Dioxins/Furans.	0.08 ng/dscm (TEQ) corrected to 7 percent oxygen.	3.9E-11 (TEQ).....	Collect a minimum of 4 dscm per run.

\a\ Incorporated by reference, see § 63.14.

As stated in §63.7500, you must comply with the following applicable work practice standards:

Table 3 to Subpart DDDDD of Part 63_Work Practice Standards

If your unit is . . .	You must meet the following . . .
1. A new or existing boiler or process heater with heat input capacity of less than 10 million Btu per hour or a limited use boiler or process heater.	Conduct a tune-up of the boiler or process heater biennially as specified in § 63.7540.
2. A new or existing boiler or process heater in either the Gas 1 or Metal Process Furnace subcategory 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.
3. An existing boiler or process heater located at a major source facility.	Must have a one-time energy assessment performed on the major source facility by 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. The energy assessment must include:

Table 3 to Subpart DDDDD of Part 63_Work Practice Standards - Continued

If your unit is . . .	You must meet the following . . .
	a. A visual inspection of the boiler or process heater system. b. An evaluation of operating characteristics of the facility, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints, c. An inventory of major energy consuming systems, 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 practices and provide recommendations for improvements consistent with the definition of energy management practices, f. A list of major energy conservation measures, g. A list of the energy savings potential of the energy conservation measures identified, and

Table 3 to Subpart DDDDD of Part 63_Work Practice Standards - Continued

If your unit is . . .	You must meet the following . . .
	h. A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.
4. An existing or new unit subject to emission limits in Tables 1, 2, or 12 of this subpart..	Minimize the unit's startup and shutdown periods following the manufacturer's recommended procedures. If manufacturer's recommended procedures are not available, you must follow recommended procedures for a unit of similar design for which manufacturer's recommended procedures are available.

As stated in §63.7500, you must comply with the applicable operating limits:

Table 4 to Subpart DDDDD of Part 63_Operating Limits for Boilers and Process Heaters

If you demonstrate compliance using . . .	You must meet these operating limits . . .
1. Wet PM scrubber control.....	Maintain the 12-hour block average pressure drop and the 12-hour block average liquid flow rate at or above the lowest 1-hour average pressure drop and the lowest 1-hour average liquid flow rate, respectively, measured during the most recent performance test demonstrating compliance with the PM emission limitation according to § 63.7530(b) and Table 7 to this subpart.
2. Wet acid gas (HCl) scrubber control.	Maintain the 12-hour block average effluent pH at or above the lowest 1-hour average pH and the 12-hour block average liquid flow rate at or above the lowest 1-hour average liquid flow rate measured during the most recent performance test

Table 4 to Subpart DDDDD of Part 63_Operating Limits for Boilers and Process Heaters - Continued

If you demonstrate compliance using . . .	You must meet these operating limits . . .
	demonstrating compliance with the HCl emission limitation according to § 63.7530(b) and Table 7 to this subpart.
3. Fabric filter control on units not required to install and operate a PM CEMS.	a. Maintain opacity to less than or equal to 10 percent opacity (daily block average); or b. Install and operate a bag leak detection system according to § 63.7525 and operate the fabric filter such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during each 6-month period.
4. Electrostatic precipitator control on units not required to install and operate a PM CEMS.	a. This option is for boilers and process heaters that operate dry control systems (i.e., an ESP without a wet scrubber). Existing and new boilers and process heaters must maintain opacity to less than or equal to 10 percent opacity (daily block average);

Table 4 to Subpart DDDDD of Part 63_Operating Limits for Boilers and Process Heaters - Continued

If you demonstrate compliance using . . .	You must meet these operating limits . . .
	or
	b. This option is only for boilers and process heaters not subject to PM CEMS or continuous compliance with an opacity limit (i.e., COMS). Maintain the minimum total secondary electric power input of the electrostatic precipitator at or above the operating limits established during the performance test according to § 63.7530(b) and Table 7 to this subpart.
5. Dry scrubber or carbon injection control.	Maintain the minimum sorbent or carbon injection rate as defined in § 63.7575 of this subpart.
6. Any other add-on air pollution control type on units not required to install and operate a PM CEMS.	This option is for boilers and process heaters that operate dry control systems. Existing and new boilers and process heaters must maintain opacity to less than or equal to 10 percent opacity (daily block average).

Table 4 to Subpart DDDDD of Part 63_Operating Limits for Boilers and Process Heaters - Continued

If you demonstrate compliance using . . .	You must meet these operating limits . . .
7. Fuel analysis	Maintain the fuel type or fuel mixture such that the applicable emission rates calculated according to § 63.7530(c)(1), (2) and/or (3) is less than the applicable emission limits.
8. Performance testing	For boilers and process heaters that demonstrate compliance with a performance test, maintain the operating load of each unit such that is does not exceed 110 percent of the average operating load recorded during the most recent performance test.
9. Continuous Oxygen Monitoring System.	For boilers and process heaters subject to a carbon monoxide emission limit that demonstrate compliance with an O2 CEMS as specified in § 63.7525(a), maintain the oxygen level of the stack gas such that it is not below the

Table 4 to Subpart DDDDD of Part 63_Operating Limits for Boilers and Process Heaters - Continued

If you demonstrate compliance using . . .	You must meet these operating limits . . .
	lowest hourly average oxygen concentration measured during the most recent CO performance test.

As stated in §63.7520, you must comply with the following requirements for performance testing for existing, new or reconstructed affected sources:

Table 5 to Subpart DDDDD of Part 63_Performance Testing Requirements

To conduct a performance test for the following pollutant...	You must...	Using...
1. Particulate Matter.....	a. Select sampling ports location and the number of traverse points.	Method 1 at 40 CFR part 60, appendix A-1 of this chapter.
	b. Determine velocity and volumetric flow-rate of the stack gas..	Method 2, 2F, or 2G at 40 CFR part 60, appendix A-1 or A-2 to part 60 of this chapter.
	c. Determine oxygen or carbon dioxide concentration of the stack gas.	Method 3A or 3B at 40 CFR part 60, appendix A-2 to part 60 of this chapter, or ANSI/ASME PTC 19.10-1981.\a\
	d. Measure the moisture content of the stack gas.	Method 4 at 40 CFR part 60, appendix A-3 of this chapter.

Table 5 to Subpart DDDDD of Part 63_Performance Testing Requirements – Continued

To conduct a performance test for the following pollutant...	You must...	Using...
	e. Measure the particulate matter emission concentration.	Method 5 or 17 (positive pressure fabric filters must use Method 5D) at 40 CFR part 60, appendix A-3 or A-6 of this chapter.
	f. Convert emissions concentration to lb per MMBtu emission rates.	Method 19 F-factor methodology at 40 CFR part 60, appendix A-7 of this chapter.
2. Hydrogen chloride.....	a. Select sampling ports location and the number of traverse points.	Method 1 at 40 CFR part 60, appendix A-1 of this chapter.
	b. Determine velocity and volumetric flow-rate of the stack gas.	Method 2, 2F, or 2G at 40 CFR part 60, appendix A-2 of this chapter.
	c. Determine oxygen or carbon dioxide	Method 3A or 3B at 40 CFR part 60, appendix A-

Table 5 to Subpart DDDDD of Part 63_Performance Testing Requirements- Continued

To conduct a performance test for the following pollutant...	You must...	Using...
	concentration of the stack gas.	2 of this chapter, or ANSI/ASME PTC 19.10-1981.\a\
	d. Measure the moisture content of the stack gas.	Method 4 at 40 CFR part 60, appendix A-3 of this chapter.
	e. Measure the hydrogen chloride emission concentration.	Method 26 or 26A (M26 or M26A) at 40 CFR part 60, appendix A-8 of this chapter.
	f. Convert emissions concentration to lb per MMBtu emission rates.	Method 19 F-factor methodology at 40 CFR part 60, appendix A-7 of this chapter.
3. Mercury.....	a. Select sampling ports location and the number of traverse points.	Method 1 at 40 CFR part 60, appendix A-1 of this chapter.

Table 5 to Subpart DDDDD of Part 63_Performance Testing Requirements- Continued

To conduct a performance test for the following pollutant...	You must...	Using...
	b. Determine velocity and volumetric flow-rate of the stack gas.	Method 2, 2F, or 2G at 40 CFR part 60, appendix A-1 or A-2 of this chapter.
	c. Determine oxygen or carbon dioxide concentration of the stack gas.	Method 3A or 3B at 40 CFR part 60, appendix A-1 of this chapter, or ANSI/ASME PTC 19.10-1981.\a\
	d. Measure the moisture content of the stack gas.	Method 4 at 40 CFR part 60, appendix A-3 of this chapter.
	e. Measure the mercury emission concentration.	Method 29, 30A, or 30B (M29, M30A, or M30B) at 40 CFR part 60, appendix A-8 of this chapter or Method 101A at 40 CFR part 60, appendix B of this chapter,

Table 5 to Subpart DDDDD of Part 63_Performance Testing Requirements- Continued

To conduct a performance test for the following pollutant...	You must...	Using...
		or ASTM Method D6784.\a\
	f. Convert emissions concentration to lb per MMBtu emission rates.	Method 19 F-factor methodology at 40 CFR part 60, appendix A-7 of this chapter.
4. CO.....	a. Select the sampling ports location and the number of traverse points.	Method 1 at 40 CFR part 60, appendix A-1 of this chapter.
	b. Determine oxygen concentration of the stack gas.	Method 3A or 3B at 40 CFR part 60, appendix A-3 of this chapter, or ASTM D6522-00 (Reapproved 2005), or ANSI/ ASME PTC 19.10-1981.\a\
	c. Measure the moisture content of the stack gas.	Method 4 at 40 CFR part 60, appendix A-3 of this chapter.

Table 5 to Subpart DDDDD of Part 63_Performance Testing Requirements- Continued

To conduct a performance test for the following pollutant...	You must...	Using...
	d. Measure the CO emission concentration.	Method 10 at 40 CFR part 60, appendix A-4 of this chapter. Use a span value of 2 times the concentration of the applicable emission limit.
5. Dioxins/Furans.....	a. Select the sampling ports location and the number of traverse points.	Method 1 at 40 CFR part 60, appendix A-1 of this chapter.
	b. Determine oxygen concentration of the stack gas.	Method 3A or 3B at 40 CFR part 60, appendix A-3 of this chapter, or ASTM D6522-00 (Reapproved 2005),\a\ or ANSI/ASME PTC 19.10-1981.\a\

Table 5 to Subpart DDDDD of Part 63_Performance Testing Requirements- Continued

To conduct a performance test for the following pollutant...	You must...	Using...
	c. Measure the moisture content of the stack gas.	Method 4 at 40 CFR part 60, appendix A-3 of this chapter.
	d. Measure the dioxins/furans emission concentration.	Method 23 at 40 CFR part 60, appendix A-7 of this chapter.
	e. Multiply the measured dioxins/furans emission concentration by the appropriate toxic equivalency factor.	Table 11 of this subpart.

\a\ Incorporated by reference, see § 63.14.

As stated in §63.7521, you must comply with the following requirements for fuel analysis testing for existing, new or reconstructed affected sources. However, equivalent methods (as defined in §63.7575) may be used in lieu of the prescribed methods at the discretion of the source owner or operator:

Table 6 to Subpart DDDDD of Part 63_Fuel Analysis Requirements

To conduct a fuel analysis for the following pollutant . . .	You must . . .	Using . . .
1. Mercury.....	a. Collect fuel samples.	Procedure in § 63.7521(c) or ASTM D2234/D2234M \a\ (for coal) or ASTM D6323 \a\ (for biomass), or equivalent.
	b. Composite fuel samples.	Procedure in § 63.7521(d) or equivalent.
	c. Prepare composited fuel samples.	EPA SW-846-3050B \a\ (for solid samples), EPA SW-846-3020A \a\ (for liquid samples), ASTM D2013/D2013M \a\ (for coal), ASTM D5198 \a\ (for biomass), or equivalent.
	d. Determine heat content of the fuel type.	ASTM D5865 \a\ (for coal) or ASTM E711 \a\ (for biomass),

Table 6 to Subpart DDDDD of Part 63_Fuel Analysis Requirements - Continued

To conduct a fuel analysis for the following pollutant . . .	You must . . .	Using . . .
		or equivalent.
	e. Determine moisture content of the fuel type.	ASTM D3173 \a\ or ASTM E871,\a\ or equivalent.
	f. Measure mercury concentration in fuel sample.	ASTM D6722 \a\ (for coal), EPA SW-846-7471B \a\ (for solid samples), or EPA SW-846-7470A \a\ (for liquid samples), or equivalent.
	g. Convert concentration into units of pounds of pollutant per MMBtu of heat content.	
2. Hydrogen Chloride.....	a. Collect fuel samples.	Procedure in § 63.7521(c) or ASTM D2234/D2234M \a\ (for coal) or ASTM D6323 \a\ (for biomass), or equivalent.

Table 6 to Subpart DDDDD of Part 63_Fuel Analysis Requirements - Continued

To conduct a fuel analysis for the following pollutant . . .	You must . . .	Using . . .
	b. Composite fuel samples.	Procedure in § 63.7521(d) or equivalent.
	c. Prepare composited fuel samples.	EPA SW-846-3050B \a\ (for solid samples), EPA SW-846-3020A \a\ (for liquid samples), ASTM D2013/D2013M \a\ (for coal), or ASTM D5198 \a\ (for biomass), or equivalent.
	d. Determine heat content of the fuel type.	ASTM D5865 \a\ (for coal) or ASTM E711 \a\ (for biomass), or equivalent.
	e. Determine moisture content of the fuel type.	ASTM D3173 \a\ or ASTM E871,\a\ or equivalent.
	f. Measure chlorine concentration in fuel sample.	EPA SW-846-9250,\a\ ASTM D6721 \a\ (for coal), or ASTM E776 \a\ (for biomass), or equivalent.

Table 6 to Subpart DDDDD of Part 63_Fuel Analysis Requirements - Continued

To conduct a fuel analysis for the following pollutant . . .	You must . . .	Using . . .
	g. Convert concentrations into units of pounds of pollutant per MMBtu of heat content.	
3. Mercury Fuel Specification for other gas 1 fuels.	a. Measure mercury concentration in the fuel sample.	ASTM D5954,\a\ ASTM D6350,\a\ ISO 6978-1:2003(E),\a\ or ISO 6978-2:2003(E) \a\, or equivalent.
	b. Convert concentration to unit of micrograms/ cubic meter.	
4. Hydrogen Sulfide Fuel Specification for other gas 1 fuels.	a. Measure total hydrogen sulfide.	ASTM D4084a or equivalent.
	b. Convert to ppm...	

\a\ Incorporated by reference, see § 63.14.

As stated in Sec. 63.7520, you must comply with the following requirements for establishing operating limits:

Table 7 to Subpart DDDDD of Part 63--Establishing Operating Limits

If you have an applicable emission limit for . . .	And your operating limits are based on . . .	You must . . .	Using . . .	According to the following requirements
1. Particulate matter or mercury	a. Wet scrubber operating parameters.	i. Establish a site-specific minimum pressure drop and minimum flow rate operating limit according to Sec. 63.7530(b).	(1) Data from the pressure drop and liquid flow rate monitors and the particulate matter or mercury performance test.	(a) You must collect pressure drop and liquid flow rate data every 15 minutes during the entire period of the performance tests; (b) Determine the lowest hourly average pressure drop and liquid flow rate by computing the hourly averages using all of the 15-minute readings taken during each performance test.
	b. Electrostatic precipitator operating parameters	i. Establish a site-specific minimum total secondary	(1) Data from the voltage and secondary amperage monitors	(a) You must collect secondary voltage and secondary

(option only for units that operate wet scrubbers).	electric power input according to Sec. 63.7530(b).	during the particulate matter or mercury performance test.	amperage for each ESP cell and calculate total secondary electric power input data every 15 minutes during	

Table 7 to Subpart DDDDD of Part 63--Establishing Operating Limits – Continued

If you have an applicable emission limit for . . .	And your operating limits are based on . . .	You must . . .	Using . . .	According to the following requirements
				the entire period of the performance tests; (b) Determine the average total secondary electric power input by computing the hourly averages using all of the 15-minute readings taken during each performance test.
2. Hydrogen Chloride.....	a. Wet scrubber operating parameters.	i. Establish site-specific minimum pressure drop, pH, and liquid flow rate operating limits according to Sec. 63.7530(b).	(1) Data from the pressure drop, effluent pH, and flow-rate monitors and the hydrogen chloride performance test.	(a) You must collect pH and liquid flow-rate data every 15 minutes during the entire period of the performance tests; (b) Determine the

	hourly average pH and liquid flow rate by computing the hourly averages using all of the 15-minute readings taken during each

Table 7 to Subpart DDDDD of Part 63--Establishing Operating Limits – Continued

If you have an applicable emission limit for . . .	And your operating limits are based on . . .	You must . . .	Using . . .	According to the following requirements
				performance test.
	b. Dry scrubber operating parameters.	i. Establish a site-specific minimum sorbent injection rate operating limit according to Sec. 63.7530(b). If different acid used during the hydrogen chloride performance test, the average value for each sorbent becomes the site-specific operating limit for that sorbent.	(1) Data from the sorbent injection rate monitors and hydrogen chloride or mercury performance test.	(a) You must collect sorbent injection rate data every 15 minutes during the entire period of the performance (b) Determine the hourly average sorbent injection rate by computing the hourly averages using all of the 15-minute readings taken during each performance test. (c) Determine the lowest hourly average of the three test run averages established during the performance test as your operating

limit. When your unit operates at lower loads, multiply your sorbent injection rate by the load fraction (e.g., for 50 percent

Table 7 to Subpart DDDDD of Part 63--Establishing Operating Limits – Continued

If you have an applicable emission limit for . . .	And your operating limits are based on . . .	You must . . .	Using . . .	According to the following requirements
				load, multiply the injection rate operating limit by 0.5) to determine the required injection rate.
3. Mercury and dioxins/furans...	a. Activated carbon injection.	i. Establish a site-specific minimum activated carbon injection rate operating limit according to Sec. 63.7530(b).	(1) Data from the activated carbon rate monitors and mercury and dioxins/furans performance tests.	(a) You must collect activated carbon injection rate data every 15 minutes during the entire period of the performance tests; (b) Determine the hourly average activated carbon injection rate by computing the hourly averages using all of the 15-minute readings taken during each performance test.

(c) Determine the lowest hourly average established during the performance test as your operating limit. When your

Table 7 to Subpart DDDDD of Part 63--Establishing Operating Limits – Continued

If you have an applicable emission limit for . . .	And your operating limits are based on . . .	You must . . .	Using . . .	According to the following requirements
				unit operates at lower loads, multiply your activated carbon injection rate by the load fraction (e.g., actual heat input divided by heat input during performance test, for 50 percent load, multiply the injection rate operating limit by 0.5) to determine the required injection rate.

4. Carbon monoxide.....	a. Oxygen.....	i. Establish a unit-specific limit for minimum oxygen level according to Sec. 63.7520.	(1) Data from the oxygen monitor specified in Sec. 63.7525(a).	(a) You must collect oxygen data every 15 minutes during the entire period of the performance tests; (b) Determine the hourly average oxygen concentration by computing the hourly averages using all of the

Table 7 to Subpart DDDDD of Part 63--Establishing Operating Limits – Continued

If you have an applicable emission limit for . . .	And your operating limits are based on . . .	You must . . .	Using . . .	According to the following requirements
				15-minute readings taken during each performance test. (c) Determine the lowest hourly average established during the performance test as your minimum operating limit.
5. Any pollutant for which compliance is demonstrated by a performance test.	a. Boiler or process heater operating load.	i. Establish a unit specific operating load limit for maximum steam generation monitors.	(1) Data from the operating load monitors or from steam generation monitors.	(a) You must collect operating load or steam generation data every 15 minutes during the entire period of the performance test. (b) Determine the average operating load by computing the hourly averages using all of the 15-
		according to Sec. 63.7520(c).		

Table 7 to Subpart DDDDD of Part 63--Establishing Operating Limits – Continued

If you have an applicable emission limit for . . .	And your operating limits are based on . . .	You must . . .	Using . . .	According to the following requirements
				minute readings taken during each performance test. (c) Determine the average of the three test run averages during the performance test, and multiply this by 1.1 (110 percent) as your operating limit.

Table 8 to Subpart DDDDD of Part 63_Demonstrating Continuous Compliance

If you must meet the following operating limits or work practice standards . . .	You must demonstrate continuous compliance by . . .
1. Opacity.....	a. Collecting the opacity monitoring system data according to §63.7525(c) and § 63.7535; and b. Reducing the opacity monitoring data to 6-minute averages; and c. Maintaining opacity to less than or equal to 10 percent (daily block average).
2. Fabric Filter Bag Leak Detection Operation.	Installing and operating a bag leak detection system according to §63.7525 and operating the fabric filter such that the requirements in §63.7540(a)(9) are met.
3. Wet Scrubber Pressure Drop and Liquid Flow-rate.	a. Collecting the pressure drop and liquid flow rate monitoring system data according to §§ 63.7525 and 63.7535; and b. Reducing the data to 12-hour block averages; and c. Maintaining the 12-hour average pressure drop and liquid flow-rate at or above the operating limits established during the performance test according to §63.7530(b).
4. Wet Scrubber pH.....	a. Collecting the pH monitoring system data according to §§ 63.7525 and 63.7535; and b. Reducing the data to 12-hour block averages; and c. Maintaining the 12-hour average pH at or above the operating limit established during the performance test according to § 63.7530(b).
5. Dry Scrubber Sorbent or Carbon Injection Rate.	a. Collecting the sorbent or carbon injection rate monitoring system data for the dry scrubber according to §§ 63.7525 and 63.7535; and b. Reducing the data to 12-hour block averages; and

Table 8 to Subpart DDDDD of Part 63_Demonstrating Continuous Compliance -Continued

If you must meet the following operating limits or work practice standards . . .	You must demonstrate continuous compliance by . . .
	c. Maintaining the 12-hour average sorbent or carbon injection rate at or above the minimum sorbent or carbon injection rate as defined in §63.7575.
6. Electrostatic Precipitator Total Secondary Electric Power Input.	a. Collecting the total secondary electric power input monitoring system data for the electrostatic precipitator according to §§ 63.7525 and 63.7535; and b. Reducing the data to 12-hour block averages; and c. Maintaining the 12-hour average total secondary electric power input at or above the operating limits established during the performance test according to§ 63.7530(b).
7. Fuel Pollutant Content....	a. Only burning the fuel types and fuel mixtures used to demonstrate compliance with the applicable emission limit according to § 63.7530(b) or (c) as applicable; and b. Keeping monthly records of fuel use according to § 63.7540(a).
8. Oxygen content.....	a. Continuously monitor the oxygen content in the combustion exhaust according to § 63.7525(a). b. Reducing the data to 12-hour block averages; and c. Maintain the 12-hour block average oxygen content in the exhaust at or above the lowest hourly average oxygen level measured during the most recent carbon monoxide performance test.

Table 8 to Subpart DDDDD of Part 63_Demonstrating Continuous Compliance -Continued

If you must meet the following operating limits or work practice standards . . .	You must demonstrate continuous compliance by . . .
9. Boiler or process heater operating load.	a. Collecting operating load data or steam generation data every 15 minutes. b. Reducing the data to 12-hour block averages; and c. Maintaining the 12-hour average operating load at or below the operating limit established during the performance test according to § 63.7520(c).

As stated in Sec. 63.7550, you must comply with the following requirements for reports:

Table 9 to Subpart DDDDD of Part 63--Reporting Requirements

You must submit a(n)	The report must contain . . .	You must submit the report . . .
1. Compliance report.....	a. Information required in Sec. 63.7550(c)(1) through (12); and.	Semiannually, annually, or biennially according to the requirements in Sec. 63.7550(b).
	b. If there are no deviations from any emission limitation (emission limit and operating limit) that applies to you and there are no deviations from the requirements for work practice standards in Table 3 to this subpart that to you, a statement that there were no deviations from the emission limitations and work practice standards during the reporting period. If there were no periods during which the CMSs, including continuous emissions monitoring system, continuous opacity monitoring system, and operating parameter monitoring systems, were out-of-control as specified in Sec. 63.8(c)(7), a statement that there were no periods during which the CMSs were out-of-control during the reporting period; and	
	c. If you have a deviation from any emission limitation (emission limit and operating limit) where you are not Using a CMS to comply with that emission limit or operating limit, or a deviation from a work practice during the reporting period, the report must contain the information in Sec. 63.7550(d); and	
	d. If there were periods during which the CMSs, including continuous emissions monitoring system, continuous opacity	

monitoring system, and operating parameter monitoring systems, were out-of-control as specified in Sec.63.8(c)(7), or otherwise not operating, the report must contain the information in Sec.63.7550(e).

As stated in Sec. 63.7565, you must comply with the applicable General Provisions according to the following:

Table 10 to Subpart DDDDD of Part 63--Applicability of General Provisions to Subpart DDDDD

Citation	Subject	Applies to subpart DDDDD
Sec. 63.1	Applicability	Yes.
Sec. 63.2	Definitions	Yes. Additional terms defined in Sec. 63.7575
Sec. 63.3	Units and Abbreviations.	Yes.
Sec. 63.4	Prohibited Activities and Circumvention.	Yes.
Sec. 63.5	Preconstruction Review and Notification Requirements.	Yes.
Sec. 63.6(a), (b)(1)-(b)(5), (b)(7), (c).	Compliance with Standards and Maintenance Requirements.	Yes.
Sec. 63.6(e)(1)(i)	General duty to minimize emissions.	No. See Sec. 63.7500(a)(3) for the general duty requirement.
Sec. 63.6(e)(1)(ii)	Requirement to correct malfunctions as soon as practicable.	No.

Table 10 to Subpart DDDDD of Part 63--Applicability of General Provisions to Subpart DDDDD - Continued

Citation	Subject	Applies to subpart DDDDD
Sec. 63.6(e)(3)	Startup, shutdown, and malfunction plan requirements..	No.
Sec. 63.6(f)(1)	Startup, shutdown, and malfunction exemptions for compliance with non-opacity emission standards..	No.
Sec. 63.6(f)(2) and (3)	Compliance with non-opacity emission standards..	Yes.
Sec. 63.6(g)	Use of alternative standards.	Yes.
Sec. 63.6(h)(1)	Startup, shutdown, and malfunction exemptions to opacity standards..	No. See Sec. 63.7500(a).
Sec. 63.6(h)(2) to (h)(9)	Determining compliance with opacity emission standards.	Yes.
Sec. 63.6(i)	Extension of compliance..	Yes.
Sec. 63.6(j)	Presidential exemption..	Yes.

Table 10 to Subpart DDDDD of Part 63--Applicability of General Provisions to Subpart DDDDD - Continued

Citation	Subject	Applies to subpart DDDDD
Sec. 63.7(a), (b), (c), and (d).	Performance Testing Requirements.	Yes.
Sec. 63.7(e)(1).....	Conditions for conducting performance tests..	No. Subpart DDDDD specifies conditions for conducting performance tests at Sec. 63.7520(a).
Sec. 63.7(e)(2)-(e)(9), (f), (g), and (h).	Performance Testing Requirements.	Yes.
Sec. 63.8(a) and (b).....	Applicability and Conduct of Monitoring.	Yes.
Sec. 63.8(c)(1).....	Operation and maintenance of CMS.	Yes.
Sec. 63.8(c)(1)(i).....	General duty to minimize emissions and CMS operation.	No. See Sec. 63.7500(a)(3).
Sec. 63.8(c)(1)(ii).....	Operation and maintenance of CMS.	Yes.
Sec. 63.8(c)(1)(iii).....	Startup, shutdown, and malfunction plans for CMS.	No.
Sec. 63.8(c)(2) to (c)(9)...	Operation and maintenance of CMS.	Yes.
Sec. 63.8(d)(1) and (2).....	Monitoring Requirements, Quality	Yes.

Table 10 to Subpart DDDDD of Part 63--Applicability of General Provisions to Subpart DDDDD - Continued

Citation	Subject	Applies to subpart DDDDD
	Control Program.	
Sec. 63.8(d)(3).....	Written procedures for CMS.	Yes, except for the last sentence, which refers to a startup, shutdown, and malfunction plan. Startup, shutdown, and malfunction plans are not required.
Sec. 63.8(e).....	Performance evaluation of a CMS.	Yes.
Sec. 63.8(f).....	Use of an alternative monitoring method..	Yes.
63.8(g).....	Reduction of monitoring data..	Yes.
Sec. 63.9.....	Notification Requirements.	Yes.
Sec. 63.10(a), (b)(1).....	Recordkeeping and	Yes.

Table 10 to Subpart DDDDD of Part 63--Applicability of General Provisions to Subpart DDDDD - Continued

Citation	Subject	Applies to subpart DDDDD
	Reporting Requirements.	
Sec. 63.10(b)(2)(i).....	Recordkeeping of occurrence and duration of startups or shutdowns.	Yes.
Sec. 63.10(b)(2)(ii).....	Recordkeeping of malfunctions.	No. See Sec. 63.7555(d)(7) for recordkeeping of occurrence and duration and Sec. 63.7555(d)(8) for actions taken during malfunctions.
Sec. 63.10(b)(2)(iii).....	Maintenance records...	Yes.
Sec. 63.10(b)(2)(iv) and (v)	Actions taken to minimize emissions during startup, shutdown, or malfunction.	No.
Sec. 63.10(b)(2)(vi).....	Recordkeeping for CMS malfunctions.	Yes.
Sec. 63.10(b)(2)(vii) to (xiv).	Other CMS requirements	Yes.

Table 10 to Subpart DDDDD of Part 63--Applicability of General Provisions to Subpart DDDDD - Continued

Citation	Subject	Applies to subpart DDDDD
Sec. 63.10(b)(3).....	Recordkeeping requirements for applicability determinations.	No.
Sec. 63.10(c)(1) to (9).....	Recordkeeping for sources with CMS.	Yes.
Sec. 63.10(c)(10) and (11)..	Recording nature and cause of malfunctions, and corrective actions.	No. See Sec. 63.7555(d)(7) for recordkeeping of occurrence and duration and Sec. 63.7555(d)(8) for actions taken during malfunctions.
Sec. 63.10(c)(12) and (13)..	Recordkeeping for sources with CMS.	Yes.
Sec. 63.10(c)(15).....	Use of startup, shutdown, and malfunction plan.	No.
Sec. 63.10(d)(1) and (2)....	General reporting requirements.	Yes.
Sec. 63.10(d)(3).....	Reporting opacity or visible emission observation results.	No.

Table 10 to Subpart DDDDD of Part 63--Applicability of General Provisions to Subpart DDDDD - Continued

Citation	Subject	Applies to subpart DDDDD
Sec. 63.10(d)(4)	Progress reports under an extension of compliance.	Yes.
Sec. 63.10(d)(5)	Startup, shutdown, and malfunction reports.	No. See Sec. 63.7550(c)(11) for malfunction reporting requirements.
Sec. 63.10(e) and (f)		Yes.
Sec. 63.11	Control Device Requirements.	No.
Sec. 63.12	State Authority and Delegation.	Yes.
Sec. 63.13-63.16	Addresses, Incorporation by Reference, Availability of Information, Performance Track Provisions.	Yes.
Sec. 63.1(a)(5),(a)(7)-(a)(9), (b)(2), (c)(3)-(4), (d), 63.6(b)(6), (c)(3), (c)(4), (d), (e)(2), (e)(3)(ii), (h)(3), (h)(5)(iv), 63.8(a)(3), 63.9(b)(3), (h)(4),	Reserved	No.

Table 10 to Subpart DDDDD of Part 63--Applicability of General Provisions to Subpart DDDDD - Continued

Citation	Subject	Applies to subpart DDDDD
63.10(c)(2)-(4), (c)(9)..		

Table 11 to Subpart DDDDD of Part 63_Toxic Equivalency Factors for Dioxins/Furans

Dioxin/furan congener	Toxic equivalency factor
2,3,7,8-tetrachlorinated dibenzo-p-dioxin.....	1
1,2,3,7,8-pentachlorinated dibenzo-p-dioxin.....	1
1,2,3,4,7,8-hexachlorinated dibenzo-p-dioxin.....	0.1
1,2,3,7,8,9-hexachlorinated dibenzo-p-dioxin.....	0.1
1,2,3,6,7,8-hexachlorinated dibenzo-p-dioxin.....	0.1
1,2,3,4,6,7,8-heptachlorinated dibenzo-p-dioxin..	0.01
octachlorinated dibenzo-p-dioxin.....	0.0003
2,3,7,8-tetrachlorinated dibenzofuran.....	0.1
2,3,4,7,8-pentachlorinated dibenzofuran.....	0.3
1,2,3,7,8-pentachlorinated dibenzofuran.....	0.03
1,2,3,4,7,8-hexachlorinated dibenzofuran.....	0.1
1,2,3,6,7,8-hexachlorinated dibenzofuran.....	0.1
1,2,3,7,8,9-hexachlorinated dibenzofuran.....	0.1
2,3,4,6,7,8-hexachlorinated dibenzofuran.....	0.1
1,2,3,4,6,7,8-heptachlorinated dibenzofuran.....	0.01
1,2,3,4,7,8,9-heptachlorinated dibenzofuran.....	0.01
octachlorinated dibenzofuran.....	0.0003

Table 12 to Subpart DDDDD of Part 63_Alternative Emission Limits for New or Reconstructed Boilers and Process Heaters That Commenced Construction or Reconstruction After June 4, 2010, and Before May 20, 2011

If your boiler or process heater is in this subcategory	For the following pollutants	The emissions must not exceed the following emission limits, except during periods of startup and shutdown	Using this specified sampling volume or test run duration
1. Units in all subcategories designed to burn solid fuel.	a. Mercury.....	3.5E-06 lb per MMBtu of heat input.	For M29, collect a minimum of 2 dscm per run; for M30A or M30B, collect a minimum sample as specified in the method; for ASTM D6784 \a\ collect a minimum of 2 dscm.
2. Units in all subcategories designed to burn solid fuel that combust at least 10 percent biomass/ bio-based solids on an annual heat input basis and less than 10 percent coal/solid fossil fuels on an annual heat input basis.	a. Particulate Matter..	0.008 lb per MMBtu of heat input (30-day rolling average for units 250 MMBtu/hr or greater, 3-run average for units less than 250 MMBtu/hr).	Collect a minimum of 1 dscm per run.
	b. Hydrogen Chloride...	0.004 lb per MMBtu of heat input.	For M26A, collect a minimum of 1 dscm per run; for M26, collect a minimum of 60 liters per run.

3. Units in all subcategories designed to burn solid fuel that combust at least 10 percent coal/ solid fossil fuels on an annual heat input basis and less than 10 percent biomass/bio-based solids on an annual heat input basis.	a. Particulate Matter..	0.0011 lb per MMBtu of heat input (30-day rolling average for units 250 MMBtu/hr or greater, 3-run average for units less than 250 MMBtu/hr).	Collect a minimum of 3 dscm per run.
	b. Hydrogen Chloride...	0.0022 lb per MMBtu of heat input.	For M26A, collect a minimum of 1 dscm per run; for M26, collect a minimum of 60 liters

Table 12 to Subpart DDDDD of Part 63_Alternative Emission Limits for New or Reconstructed Boilers and Process Heaters That Commenced Construction or Reconstruction After June 4, 2010, and Before May 20, 2011 – Continued

			per run.
4. Units designed to burn pulverized coal/solid fossil fuel.	a. CO.....	90 ppm by volume on a dry basis corrected to 3 percent oxygen.	1 hr minimum sampling time.
	b. Dioxins/Furans.....	0.003 ng/dscm (TEQ) corrected to 7 percent oxygen.	Collect a minimum of 4 dscm per run.
5. Stokers designed to burn coal/ solid fossil fuel.	a. CO.....	7 ppm by volume on a dry basis corrected to 3 percent oxygen.	1 hr minimum sampling time.
	b. Dioxins/Furans.....	0.003 ng/dscm (TEQ) corrected to 7 percent oxygen.	Collect a minimum of 4 dscm per run.
6. Fluidized bed units designed to burn coal/solid fossil fuel.	a. CO.....	30 ppm by volume on a dry basis corrected to 3 percent oxygen.	1 hr minimum sampling time.
	b. Dioxins/Furans.....	0.002 ng/dscm (TEQ) corrected to 7 percent oxygen.	Collect a minimum of 4 dscm per run.

7. Stokers designed to burn biomass/ bio-based solids.	a. CO..... 560 ppm by volume on a dry basis corrected to 3 percent oxygen.	1 hr minimum sampling time.
	b. Dioxins/Furans..... 0.005 ng/dscm (TEQ) corrected to 7 percent oxygen.	Collect a minimum of 4 dscm per run.
8. Fluidized bed units designed to burn biomass/bio-based solids.	a. CO..... 260 ppm by volume on a dry basis corrected to 3 percent oxygen.	1 hr minimum sampling time.
	b. Dioxins/Furans..... 0.02 ng/dscm (TEQ) corrected to 7 percent oxygen.	Collect a minimum of 4 dscm per run.

Table 12 to Subpart DDDDD of Part 63_Alternative Emission Limits for New or Reconstructed Boilers and Process Heaters That Commenced Construction or Reconstruction After June 4, 2010, and Before May 20, 2011 – Continued

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9. Suspension burners/Dutch Ovens designed to burn biomass/bio-based solids.	a. CO.....	1,010 ppm by volume on a dry basis corrected to 3 percent oxygen.	1 hr minimum sampling time.
	b. Dioxins/Furans.....	0.2 ng/dscm (TEQ) corrected to 7 percent oxygen.	Collect a minimum of 4 dscm per run.
10. Fuel cells designed to burn biomass/bio-based solids.	a. CO.....	470 ppm by volume on a dry basis corrected to 3 percent oxygen.	1 hr minimum sampling time.
	b. Dioxins/Furans.....	0.003 ng/dscm (TEQ) corrected to 7 percent oxygen.	Collect a minimum of 4 dscm per run.
11. Hybrid suspension/grate units designed to burn biomass/bio-based solids.	a. CO.....	1,500 ppm by volume on a dry basis corrected to 3 percent oxygen.	1 hr minimum sampling time.
	b. Dioxins/Furans.....	0.2 ng/dscm (TEQ) corrected to 7 percent oxygen.	Collect a minimum of 4 dscm per run.

12. Units designed to burn liquid fuel.	a. Particulate Matter..	0.002 lb per MMBtu of heat input (30-day rolling average for units 250 MMBtu/hr or greater, 3-run average for units less than 250 MMBtu/hr).	Collect a minimum of 2 dscm per run.
	b. Hydrogen Chloride...	0.0032 lb per MMBtu of heat input.	For M26A, collect a minimum of 1 dscm per run; for M26, collect a minimum of 60 liters per run.
	c. Mercury.....	3.0E-07 lb per MMBtu of heat input.	For M29, collect a minimum of 2 dscm per run; for M30A or M30B, collect a minimum

Table 12 to Subpart DDDDD of Part 63_Alternative Emission Limits for New or Reconstructed Boilers and Process Heaters That Commenced Construction or Reconstruction After June 4, 2010, and Before May 20, 2011 – Continued

			sample as specified in the method; for ASTM D6784 \a\ collect a minimum of 2 dscm.
	d. CO.....	3 ppm by volume on a dry basis corrected to 3 percent oxygen.	1 hr minimum sampling time.
	e. Dioxins/Furans.....	0.002 ng/dscm (TEQ) corrected to 7 percent oxygen.	Collect a minimum of 4 dscm per run.
13. Units designed to burn liquid fuel located in non-continental States and territories.	a. Particulate Matter..	0.002 lb per MMBtu of heat input (30-day rolling average for units 250 MMBtu/hr or greater, 3-run average for units less than 250 MMBtu/hr).	Collect a minimum of 2 dscm per run.
	b. Hydrogen Chloride...	0.0032 lb per MMBtu of heat input.	For M26A, collect a minimum of 1 dscm per run; for M26, collect a minimum of 60 liters per run.

c. Mercury.....	7.8E-07 lb per MMBtu of heat input.	For M29, collect a minimum of 1 dscm per run; for M30A or M30B, collect a minimum sample as specified in the method; for ASTM D6784 \a\ collect a minimum of 2 dscm.
d. CO.....	51 ppm by volume on a dry basis corrected to 3 percent oxygen.	1 hr minimum sampling time.
e. Dioxins/Furans.....	0.002 ng/dscm (TEQ) corrected to 7 percent oxygen.	Collect a minimum of 4 dscm per run.

Table 12 to Subpart DDDDD of Part 63_Alternative Emission Limits for New or Reconstructed Boilers and Process Heaters That Commenced Construction or Reconstruction After June 4, 2010, and Before May 20, 2011 – Continued

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14. Units designed to burn gas 2 (other) gases.	a. Particulate Matter..	0.0067 lb per MMBtu of heat input (30-day rolling average for units 250 MMBtu/hr or greater, 3-run average for units less than 250 MMBtu/hr).	Collect a minimum of 1 dscm per run.
	b. Hydrogen Chloride...	0.0017 lb per MMBtu of heat input.	For M26A, collect a minimum of 1 dscm per run; for M26, collect a minimum of 60 liters per run.
	c. Mercury.....	7.9E-06 lb per MMBtu of heat input.	For M29, collect a minimum of 1 dscm per run; for M30A or M30B, collect a minimum sample as specified in the method; for ASTM D6784 \a\ collect a minimum of 2 dscm.
	d. CO.....	3 ppm by volume on a dry basis corrected to 3 percent oxygen.	1 hr minimum sampling time.

e. Dioxins/Furans.....	0.08 ng/dscm (TEQ) corrected to 7 percent oxygen.	Collect a minimum of 4 dscm per run.

\a\ Incorporated by reference, see § 63.14.

SECTION IV. APPENDICES.

The Following Appendices Are Enforceable Parts of This Permit:

Appendix A, Glossary.
Appendix CAM, Compliance Assurance Monitoring Plan.
Appendix CP3, Compliance Plan.
Appendix I, List of Insignificant Emissions Units and/or Activities.
Appendix ICE, Requirements for Internal Combustion Engines.
Appendix NESHAP, Subpart A – General Provisions.
Appendix NESHAP, AA, BB, ZZZZ.
Appendix NSPS, Subpart A – General Provisions.
Appendix NSPS, Subpart T, U, V, JJJJ.
Appendix RR, Facility-wide Reporting Requirements.
Appendix TR, Facility-wide Testing Requirements.
Appendix TV, Title V General Conditions.
Appendix U, List of Unregulated Emissions Units and/or Activities.

REFERENCED ATTACHMENTS.

The Following Attachments Are Included for Applicant Convenience:

Figure 1, Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance (40 CFR 60, July, 1996).
Table H, Permit History.
Table 1, Summary of Air Pollutant Standards and Terms.
Table 2, Compliance Requirements.