# NOTICE OF FINAL TITLE V AIR OPERATION PERMIT REVISION

In the Matter of an Application for Permit Revision/Renewal by:

Ms. Karen A. Sheffield General Manager Tampa Electric Company 6944 US HWY 41 Apollo Beach, FL 33572-9200 FINAL Permit Project No.: 0570039-017-AV Big Bend Station Hillsborough County

Enclosed is the FINAL Permit, No. 0570039-017-AV, for the Title V Air Operation Revision/Renewal for the Big Bend Station located at Big Bend Road, North Ruskin, Hillsborough County. The purpose of this permit is to incorporate the changes approved in air construction permit 0570039-016-AC, which is simultaneously processed with this revision; to make some administrative corrections; and to revise and renew the existing Title V permit.

This permit revision is issued pursuant to Chapter 403, Florida Statutes (F.S.). There were no comments received from Region 4, U.S. EPA, regarding the PROPOSED Permit.

Any party to this order (permit revision) has the right to seek judicial review of the permit revision pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Legal Office; and, by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 (thirty) days from the date this Notice is filed with the Clerk of the Department of Environmental Protection.

Executed in Tallahassee, Florida.

Trina L. Vielhauer, Chief Bureau of Air Regulation

TLV/CLP

FINAL Permit Project No.: 0570039-017-AV Big Bend Station Hillsborough County

# **CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk OPERATION PERMIT REVISION (including the FINAl before the close of business on to the permits to the permits of	L Determination and the FINAL Per	
Ms. Karen A. Sheffield, R.O.		
The undersigned duly designated deputy agency clerk AIR OPERATION PERMIT REVISION was sent by U.S persons listed or as otherwise noted:		
Mr. Gregory M. Nelson, D.R. (Tampa Electric Company) Mr. Thomas W. Davis, P.E. (E-mail) (ECT) Ms. Laura Crouch, TEC (E-mail) Mr. Jerry Campbell, EPCHC (E-mail) Mr. Jerry Kissel, FDEP-SWD (E-mail) USEPA, Region 4 (INTERNET E-mail Memorandum)		
	Clerk Stamp	
	FILING AND ACKNOWLEDGMENT FILED, on this dat pursuant to §120.52(7), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.	
	(Clerk)	(Date)

# **FINAL Determination**

Title V Air Operation Permit Revision/Renewal FINAL Permit Project No.: 0570039-017-AV Tampa Electric Company Big Bend Station Page 1 of 1

# I. Comments.

No comments were received from the USEPA during their 45 day review period of the PROPOSED Permit. Day 45 is December 30, 2004.

#### II. Conclusion.

In conclusion, the permitting authority hereby issues the FINAL Permit.

#### STATEMENT OF BASIS

Tampa Electric Company Big Bend Station Facility ID No.: 0570039 Hillsborough County

Title V Air Operation Permit Revision/Renewal FINAL Permit Project No.: 0570039-017-AV

The initial Title V Air Operation Permit No. 0570039-002-AV became final on December 28, 2000, and effective on January 1, 2001. Subsequently, Title V Air Operation Permits Nos. 0570039-010-AV and 0570039-013-AV revised the initial permit. This Title V Air Operation Permit Revision/Renewal 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, and 62-214. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

The purpose of this permit is: to incorporate the changes approved in air construction permit 0570039-016-AC, which is simultaneously processed with this revision; to make some administrative corrections; and to revise the existing Title V permit.

TEC Big Bend is a nominal 2,028 MW electric generation facility. This facility consists of four steam boilers (Units Nos. 1 through 4); four steam turbines; three simple-cycle combustion turbines (CT Nos. 1, 2, and 3); solid fuels, fly ash, limestone, gypsum, slag, and bottom ash storage and handling facilities, and fuel oil storage tanks. Units No. 1, 2, 3, and 4 have nominal maximum heat inputs of 4037, 3996, 4115 and 4330 million BTU per hour, respectively. Units No. 1 through 4 are fired with coal and with petcoke in a mixture with coal up to 20.0% petcoke/80.0% coal (by weight), or a coal blended with coal residual generated from the Polk Power Station, or a coal/petroleum coke blend further blended with coal residual generated from the Polk Power Station. The combustion turbines are fired with No. 2 distillate fuel oil. In addition, there is a ship surface coating operation.

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

Based on the initial Title V permit application received June 14, 1996, and the renewal application received June 28, 2004, this facility is a major source of hazardous air pollutants (HAPs).

The following descriptions and conditions established in the initial Title V Air Operation Permit, No. 0570039-002-AV, and the previous Title V Air Operation Permit Revisions, Nos. 0570039-010-AV and 0570039-013-AV, are changed as follows. Additions are highlighted, and deletions are shown by strikethroughs. Rationale for change is shown in [brackets].

Table of Contents. [Pages renumbered.]

# Placard Page.

1. [Additional applicable requirements.] The following attachments were added to the "Referenced attachments made a part of this permit" on the placard page:

APPENDIX CAM

EPA letter of approval of two plans for control of particulate matter; dated June 19, 2003

2. [Submission of updated information] The following attachments were updated as follows: DOCUMENT III.I.36-PROCEDURES FOR STARTUP AND SHUTDOWN UNITS 1-4
DOCUMENT III.I.47 - OPERATION AND MAINTENANCE PLAN (version dated June 2004) 7/18/97)

**I. Subsection A. Facility Description.** [Corrections to clarify the overview of the facility's operation have been made]:

#### Overview of the facility's operation:

Solid fuel is unloaded from ship/barge into the solid fuel yard, the blending bins or directly to the tripper room via belt conveyors. Solid fuel from the piles is loaded onto belt conveyors using a rail mounted or mobile reclaimer. The solid fuel is then belt conveyed to the blending bins tower, which consists of six storage bins, where the solid fuel may be is blended for use at the plant, or transloaded into trucks for shipment off site. From the solid fuel yard conveyors, the solid fuel is screw conveyed into the bins. Particulate matter (PM) emissions from the conveyors in the solid fuel yard blending bins are controlled by 3 4 rotoclones, one at the conveyor drop and one for every 2 bins. PM emissions from the screw conveyor are controlled by the fourth rotoclone. Blending bins can either Each has 2 hoppers, which feed the transloader, or solid fuel can be are-conveyed, via 2 parallel belts (T1, T2) to 2 crushers (each belt has a crusher), or diverted directly to the tripper room. PM emissions from the 2 crushers and transfer tower are controlled by 2 rotoclones.

From the tripper room solid fuel yard, the solid fuel is conveyed to the tripper room where 2 trippers bunker the solid fuels into 4 solid fuel bunkers. Each unit has its own respective bunker. Solid fuel samples are taken every 15 minutes during bunking, and composited for analysis. From the bunkers, the solid fuel is gravity fed into 14 erushers mills, and then gravity fed into the boilers. There are 3 ball mills tall crushers, each for Unit Nos. 1-3, and 5 bowl mills erushers for Unit No. 4. From the mills erushers, the solid fuel is pneumatically fed into classifiers, two for each mill on Unit Nos. 1-3 and one for each mill on Unit No. 4 erusher for a total of 238 classifiers, and then into the respective boiler.

PM emissions from Boiler Nos. 1-43 are controlled by individual Electrostatic Precipitators (ESPs). Unit Nos. I-4 PM emissions are controlled by an ESP, and the SO<sub>2</sub> emissions are controlled by an FGD scrubber systems. When Unit Nos. 1-3 burns petroleum coke, the exhaust gases, following particulate matter removal by the units's ESPs, will be routed to the inlet of the Unit No. 4 flue gas desulfurization (FGD) system scrubber. In the this integrated mode, Unit No. 3 will meet the same sulfur dioxide emissions limitations as Unit No. 4. The FGD scrubber will continue to treat the exhaust gas from Unit No. 4. The FGD scrubber outlet stream, consisting of the combined Unit No. 3 and Unit No. 4 treated exhaust, will then be split and discharged through stacks CS002 and CS003.

Fly ash from Units No. 1 and No. 2 is vented into Fly Ash Silo #1 which is controlled by a baghouse. Fly ash from Unit No. 3 is vented into Silo #2, which can also receive fly ash from Units No. 1 and 2. while fFly ash from Unit No. 4 is vented into Silo #3. The fly ash from each silo is then loaded into trucks and transported off site, while the bottom ash from Unit No. 4 is conveyed across Big Bend Road south of the Big Bend facility to a settling pond. Each fly ash silo is controlled by a baghouse.

The byproduct gypsum is conveyed to the east side of the plant for dewatering diverting and transporting off site. Limestone is unloaded to an underground hopper conveyor belt system to the limestone storage building on the east side of the by-product gypsum area. Particulate matter emissions from the limestone trucks unloading is controlled by a baghouse. From the storage building, limestone is belt conveyed into 2 storage silos and then gravity fed into the mill room. Two Three rotary mills grind the limestone and mix it with water to form a slurry that is stored in 2 3 storage tanks for use in the FGD. The slurry is then pumped to the 4 reaction tanks of Units 1-4 scrubbers that are located directly south of and adjacent to the absorption towers of the FGD scrubber. Gypsum is sold and transported offsite and can be stored south of Big Bend Road prior to offsite removal. Most of the by-product gypsum is wallboard grade, however, gypsum that is produced during start up, shutdown or upset conditions is de-watered and belt-conveyed across the street to the southeast of the plant for drying and transportation off site.

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There are 3-combustion turbines (CT) manufactured by Westinghouse. They are all fired on No. 2 fuel oil. Unit CT No. 1 is near the plant and Unit CT Nos. 2 and 3 are on the north side of the property. There is a large No. 2 fuel oil storage tank near Unit CT Nos. 2 and 3 and a small day tank near Unit CT No. 1.

#### I. Subsection B. Summary of Emissions Unit ID Nos. and Brief Descriptions.

- [Descriptions of Emissions Units 26 and 28 clarified as follows:]
  -026 Fly Ash Handling and Storage Fugitive Emissions from Unit Nos. 1-3 (all except silos)
  -028 Fly Ash Handling System Fugitive Emissions from Unit No. 4.
- [Unit No. 4 Coal Bunker, formerly included in Emission Unit 31, has been given its own identification of Emission Unit 39, for consistency with the coal bunkers for Units Nos. 1-3.] -039 Unit No. 4 Coal Bunker
- [Emissions Units 24 and 31 have been deleted. These emissions units are duplicates of emissions units already addressed in Emissions Units 20, 15, 16, 17, and newly created 39.]
  - -024 Limestone Handling Conveyor LE to South Storage Silo with Baghouse
  - -031 Cyclone collectors for bunkers (FH-059 through FH-062)
- **I. Subsection C. Relevant Documents.** The following Documents were added to the list of relevant documents on file with the permitting authority:

Big Bend Generating Station Best Operating Practices for Particulate Matter; dated September 2001 Big Bend Generating Station Best Available Control Technology for Particulate Matter; revised October 2002

#### **II.4.** [Change of address]:

Prevention of Accidental Releases (Section 112(r) of CAA).

a. The permittee shall submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center when, and if, such requirement becomes applicable. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:

RMP Reporting Center

Post Office Box 3346 Merrifield, VA 22116-3346 Telephone: 703/816-4434 P.O. Box 1515

Lanham-Seabrook, Maryland 20703-1515 Telephone: 301/429-5018

and,

**b.** The permittee shall 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]

#### III.A.2. [format change]:

- b. Other operation:
- i. In addition to the fuels allowed to be burned during normal operation, each unit may also burn new No. 2 fuel during startup, shutdown, flame stabilization, and during the start of a mill on an already operating unit.
- ii. Evaporation of up to 150,000 gallons per year, total at the facility, is allowed of non-hazardous, but potentially HAP-emitting, mineral acid solution boiler chemical cleaning waste which was generated on site.
- III. A.7. [Revision of particulate limit based on Consent Final Judgment and Consent Decree.] Except as provided in Specific Condition No. A.11., the particulate matter emission rate for each unit shall not exceed

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0.1 0.03 pounds per million BTU heat input. {Permitting note: The averaging time for the emissions standard in this condition shall be equal to the cumulative run time required by the specified test method.} [Rule 62-296.405(1)(b), F.A.C.; Consent Final Judgment (DEP vs. TEC) dated December 6, 1999; Consent Decree (U.S. Vs. TEC) dated February 29, 2000; and EPA letter of approval of two plans (BOP and BACT) for control of particulate matter dated June 19, 2003]

III. A.8. [Revision of particulate limits based on Consent Final Judgment and Consent Decree.]
i. <u>Unit Particulate Matter Emission Limits</u>: Based on the maximum permitted heat input rates listed in Specific Condition A.1., the maximum permitted particulate matter annual emission rate for each unit is as follows:

Unit No.	tons/yr	
1	530 1768	
2	525 1750	
3	541 1802	

In the event that a maximum permitted heat input rate for a unit is reduced, the maximum annual permitted particulate matter emission rate for that unit shall also be reduced accordingly.

[Rule 62-296.700(4)(b)1., F.A.C. .; Consent Final Judgment (DEP vs. TEC) dated December 6, 1999; Consent Decree (U.S. Vs. TEC) dated February 29, 2000; and EPA letter of approval of two plans (BOP and BACT) for control of particulate matter dated June 19, 2003]

III.A.16. [Deletion of obsolete petcoke fuel sulfur content monitoring condition after 2005. SO<sub>2</sub> emissions are measured directly using continuous monitoring systems (CEMS), however, the permittee must submit on an annual basis through 2005, data demonstrating that removal of the sulfur content limit in the petroleum coke fired did not result in a significant increase in the representative actual annual emission of any regulated pollutant. (See Specific Condition III.A.2.)

<u>Petcoke Sulfur Content</u>: <u>Until January 1, 2006</u>, The owner or operator shall measure the sulfur content of representative samples of all petcoke received using appropriate ASTM methods to demonstrate compliance with the sulfur content limit of this permit. [Permit Nos. 0570039-003-AC & 0570039-004-AC]

III.A.26. [Deletion of obsolete petcoke fuel sulfur content recordkeeping condition after 2005. SO<sub>2</sub> emissions are measured directly using continuous monitoring systems (CEMS), however, the permittee must submit on an annual basis through 2005, data demonstrating that removal of the sulfur content limit in the petroleum coke fired did not result in a significant increase in the representative actual annual emission of any regulated pollutant. (See Specific Condition III.A.2.]

Records of Petcoke Sulfur Content: Until January 1, 2006, The owner or operator shall maintain records of petcoke sampling and analysis results performed as required by Specific Condition A.16. of this section. [Rule 62-4.070(3), F.A.C., and permit nos. 0570039-003-AC & 0570039-004-AC]

#### III.A.29. [Correction of typographical error]:

For Unit Nos. 1-3, gravimetric instrument data verifying that the 20.0% maximum petroleum coke content by weight has not been exceeded shall be maintained for two years and submitted to the Department and the EPCHC with each annual operating report. Also to be maintained and available for inspection shall be a record of operation showing the date, fuel used, mode of operation (integrated/non-integrated), and the duration of all startups, shutdowns and malfunctions.

[Rule 62-4.070(3), F.A.C.]

#### III.A.30. [Deletion of obsolete data reporting condition after 2005.]

Until January 1, 2006, fFor Unit No. 3, TEC shall maintain and submit to the Department and the EPCHC, on an annual basis for a period of 5 years from the date the unit begins firing petroleum coke, data demonstrating that the operational change of firing petcoke did not result in an emissions increase. [Rule 62-4.070(3), F.A.C.]

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#### III.A.32. [Clarification.] Continuous Emission Monitoring Network and Alarms:

To demonstrate compliance with emission limits that are protective of AAQS, data inputs will consist of hourly CEM data from the SO<sub>2</sub>, flow, and CO<sub>2</sub> monitors for Units 1-3 at Big Bend Station. TEC will use CEM data from common stack CS0W1 and/or CS001 to represent combined unit compliance with the emission limitations for each Unit 1 and Unit 2. When Unit 3 is operated in the integrated mode, TEC will use apportioned CEM data from both common stacks CS002 and CS003 to represent individual unit compliance with the emission limitations for Unit 3. In the event any monitor fails, TEC will comply with 40 CFR 75, Subpart D – Missing Data Substitution Procedures.

[Applicant request.]

[New applicable requirements.] III.A.34. These emissions units are subject to requirements contained in Consent Final Judgment (DEP vs. TEC) dated December 6, 1999 and the Consent Decree (U.S. vs. TEC) dated February 29, 2000, including the October 4, 2000 amendment.

[Permit No. 0570039-014-AC]

[New applicable requirements.] III.A.35. The first in a series of equipment installed pursuant to the Consent Final Judgment and Consent Decree for the purposes of NO<sub>X</sub> requirements contained therein include:

- a. Steam Generator Units No. 1-3 are equipped with Low NO<sub>X</sub> burners (LNB).
- b. Steam Generators Units 1 and 2 are equipped with coal and air flow monitoring equipment.
- c. Steam Generator Unit 2 is equipped with a neural network system that monitors the following parameters: excess O<sub>2</sub> bias, force draft fan balance bias, mill outlet temperature bias, rating damper bias, and mill bypass damper bias.

[Permit No. 0570039-014-AC]

[New applicable requirements.] III.A.36. Units 1, 2, and 3 shall be operated using the Low  $NO_X$  burners and in accordance with the operational procedures that have been developed to minimize  $NO_X$  emissions. [Permit No. 0570039-014-AC]

[New applicable requirements.] III.A.37. These emissions units are subject to the Compliance Assurance Monitoring requirements contained in the attached APPENDIX CAM.

#### III. Subsection B. Description. [Clarification added.]

As an option, Unit No. 3 exhaust gas, following particulate matter removal by the unit's ESP, will be routed to the inlet of the Unit No. 4 flue gas desulfurization (FGD) system scrubber. In this integrated mode, Unit No. 3 will meet the same sulfur dioxide emissions limitations as Unit No. 4. The FGD scrubber will continue to treat the exhaust gas from Unit No. 4. The FGD scrubber outlet stream, consisting of the combined Unit No. 3 and Unit No. 4 treated exhaust, will then be split and discharged through stacks CS002 and CS003. Stack CS002 does *not* include a recirculation duct to return exhaust gas to the inlet of the FGD scrubber. Continuous opacity monitoring systems (COMS) will be located at the outlet of Unit No. 3 and Unit No. 4 ESPs. Continuous SO<sub>2</sub> and CO<sub>2</sub> emissions monitoring systems (CEMS) will be located in stacks CS002 and CS003. Continuous NOx emissions monitoring systems (CEMS) will be located in the inlet ducts of each unit. These monitoring systems will be used to determine compliance with all current applicable requirements.

- III.B.2. Methods of Operation Fuels. [Format change and clarification added to condition B.2.b. Condition B.2.d. deleted per permit 0570039-016-AC; Coal washing requirement made redundant by inclusion of 90% SO<sub>2</sub> reduction requirement found in condition B.7.]
- a. Normal operation: The fuel fired in Unit No. 4 shall consist of coal, or a coal/petroleum coke blend containing a maximum of 20% petroleum coke by weight, or coal blended with coal residual generated from the Polk Power Station, or a coal/petroleum coke blend further blended with coal residual generated from the Polk Power Station. In any case, the petroleum coke content of any fuel blend shall not

exceed 20% by weight. The vanadium content of the petroleum coke fired shall not exceed 2660 ppm vanadium. The ash content of the petroleum coke fired shall not exceed 0.76% by weight on a dry basis. The permittee shall maintain and submit to the Department, and to the Environmental Protection Commission of Hillsborough County, on an annual basis for the years 2001, 2002, 2003, 2004, and 2005 data demonstrating that removal of the sulfur content limit and the revision of the vanadium content limit in the petroleum coke fired did not result in a significant increase in the representative actual annual emissions of any regulated pollutant.

#### b. Other operation:

- i. In addition to the fuels allowed to be burned during normal operation, Unit No. 4 may also burn new No. 2 fuel during startup, shutdown, flame stabilization and during the start of an additional solid fuel mill pulverizer on an already operating unit.
- ii. Evaporation of up to 150,000 gallons per year, total at the facility, is allowed of non-hazardous, but potentially HAP-emitting, mineral acid solution boiler chemical cleaning waste which was generated on site.
- c. Coal shall not be burned in Unit No. 4 unless both the electrostatic precipitator and limestone scrubber are operating properly.
- d. [Reserved] Coal burned in Unit No. 4 shall be washed before it is transported to the plant site. TEC shall maintain records of all coal washing and preparation activities for any coal which is to be fired in Big Bend Unit No. 4. These reports shall be submitted to the Department on a quarterly basis.
- e. TEC shall maintain a daily log of the amounts and types of fuels used and copies of fuel analyses containing information on sulfur content, ash content and heating values.
- f. Beneficiated, or refined, coal residual: The total amount of beneficiated, or refined, coal residual fired at Big Bend Station (all Unit Nos. 1-4 combined) shall be limited to 500 tons per day. The beneficiated, or refined, coal residual results from using the beneficiated process, described in permit application 0570039-012-AC, to wash and screen the raw coal residual to remove fines and oversized materials. This beneficiation process shall be performed at Polk Power Station, not Big Bend Station.
- g. Raw coal residual: The total amount of raw coal residual fired at Big Bend Station (all Unit Nos. 1-4 combined) shall be limited to 200 tons per day. The raw coal residual is a by-product of the gasification of coal at the Polk Power Station. At the time of the issuance of permit 0570039-012-AC on October 4, 2001, there were approximately 100,000 tons of raw coal residual stored at Polk Power Station. Once this raw coal residual pile has been fired, TEC shall only fire raw coal residual in the event of a significant beneficiation process malfunction. TEC shall document all beneficiation process malfunctions and record the amount of raw coal residual, if any, fired at Big Bend Station. These records should be kept on site at Big Bend and made readily available to the Department and the Environmental Protection Commission of Hillsborough County upon request.
- h. No coal residual shall be fired in any Unit when the corresponding scrubber is not in operation. [Rules 62-4.070(3), 62-4.160(2), 62-210.200, and 62-213.440(1), F.A.C.; PSD-FL-040; Power Plant Siting Certification PA 79-12; Permit No. 0570039-012-AC; Permit No. 0570039-016-AC]

# **III. B.5.i.** [Revision of particulate limits based on Consent Final Judgment and Consent Decree.] Unit Particulate Matter Emission Limits:

- a. Particulate matter emissions from Unit No. 4 shall not exceed 0.03 0.01 lb/million Btu heat input. This standard applies at all times except during periods of startup, shutdown, or malfunction. [Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.42a(a); 40 CFR 60.46a(a); 40 CFR 60.46a(c); Consent Final Judgment (DEP vs. TEC) dated December 6, 1999; Consent Decree (U.S. Vs. TEC) dated February 29, 2000; and EPA letter of approval of two plans (BOP and BACT) for control of particulate matter dated June 19, 2003]
- b. Based on the maximum permitted heat input rate listed in Specific Condition B.1., particulate matter emissions from Unit No. 4 shall not exceed 129.9 43.3 lbs/hour, 3118 1039 lbs/day, and 569.0 189.7 tons/year.

[PSD-FL-040 and Rule 62-296.700(4)(b)1., F.A.C.; Consent Final Judgment (DEP vs. TEC) dated December 6, 1999; Consent Decree (U.S. Vs. TEC) dated February 29, 2000; and EPA letter of approval of two plans (BOP and BACT) for control of particulate matter dated June 19, 2003]

#### III. B. 12. [Correction to cross-reference.]

During emergency conditions in the principal company, an affected facility with a malfunctioning flue gas desulfurization system may be operated if sulfur dioxide emissions are minimized by:

- (1) Operating all operable flue gas desulfurization system modules, and bringing back into operation any malfunctioned module as soon as repairs are completed,
- (2) Bypassing flue gases around only those flue gas desulfurization system modules that have been taken out of operation because they were incapable of any sulfur dioxide emission reduction or which would have suffered significant physical damage if they had remained in operation, and
- (3) Operating a *spare* flue gas desulfurization system module. The Department or EPCHC may at their discretion require TEC within 60 days of notification to demonstrate spare module capability. To demonstrate this capability, the owner or operator must demonstrate compliance with the appropriate requirements of specific conditions B.5. and B.7. for any period of operation lasting from 24 hours to 30 days when:
  - (i) Any one flue gas desulfurization module is not operated,
  - (ii) The affected facility is operating at the maximum heat input rate,
- (iii) The fuel fired during the 24-hour to 30-day period is representative of the type and average sulfur content of fuel used over a typical 30-day period, and
- (iv) TEC has given the Department or EPCHC at least 30 days notice of the date and period of time over which the demonstration will be performed. [Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.46a(d)]

#### III.B.19. [Clarifications to monitoring configuration.]

TEC shall calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for measuring the oxygen and/or carbon dioxide content of the flue gases at each location where sulfur dioxide or nitrogen oxides emissions are monitored. The sulfur dioxide, nitrogen dioxide, oxygen and/or carbon dioxide, and opacity monitoring devices shall meet the applicable requirements of Section 62-214, F.A.C., 40 CFR 60.47a., and 40 CFR 75. ). The opacity monitor shall be placed in the duct work between the electrostatic precipitator and the FGD scrubber. When Units 3 and 4 are operating in the integrated mode (Unit 3 flue gases routed through the Unit 4 FGD system), tThe continuous monitoring system will measure sulfur dioxide emissions at the inlet of each unit and outlet of the Unit-4 FGD system and from the Unit 3 stack (CS002) and Unit 4 stack (CS003), while emissions of nitrogen oxides, oxygen and/or carbon dioxide, and opacity shall be measured in the Units 3 and 4 ducts prior to the FGD system. When Unit 4 is operating and Unit 3 is not operating in the integrated mode, the continuous monitoring system will measure only Unit 4's inlet duct and stack for SO<sub>2</sub> emissions. The emissions of nitrogen oxides and opacity shall be measured in the Unit 4 duct prior to the FGD system. The emissions of carbon dioxide and sulfur dioxide are both measured in the inlet and outlet ducts.

[Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.47a(d); Power Plant Siting Certification PA 79-12D]

III.B.28. [Applicant request to eliminate references to optional fuel pretreatment. Deleted per permit 0570039-016-AC]

TEC shall determine compliance with the SO<sub>2</sub> standards in specific condition B.7. as follows:

(1) The percent of potential SO<sub>2</sub> emissions (%Ps) to the atmosphere shall be computed using the following equation:

$$P_s = \frac{(100 - R_t)}{(100 - R_g)} / 100$$

where:

 $%P_s$  = percent of potential  $SO_2$  emissions, percent.

%R<sub>f</sub> – percent reduction from fuel pretreatment, percent.

 $%R_g$  = percent reduction by  $SO_2$  control system, percent.

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- (2) [Reserved.] The procedures in Method 19 may be used to determine percent reduction (%R<sub>f</sub>) of sulfur by such processes as fuel pretreatment (physical coal cleaning, hydrodesulfurization of fuel oil, etc.), coal pulverizers, and bottom and flyash interactions. This determination is optional.
- (3) The procedures in Method 19 shall be used to determine the percent  $SO_2$  reduction (% $R_g$  of any  $SO_2$  control system. Alternatively, a combination of an "as fired" fuel monitor and emission rates measured after the control system, following the procedures in Method 19, may be used if the percent reduction is calculated using the average emission rate from the  $SO_2$  control device and the average  $SO_2$  input rate from the "as fired" fuel analysis for 30 successive boiler operating days.
  - (4) The appropriate procedures in Method 19 shall be used to determine the emission rate.
- (5) The continuous monitoring systems specified in conditions B.17. and B.19. shall be used to determine the concentrations of  $SO_2$  and  $CO_2$  or  $O_2$ .

[Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.48a (c); 40 CFR 60 43a; 40 CFR 60.47a(b) and (d); 40 CFR 60 Appendix A, Method 19; Applicant request; 0570039-016-AC]

III.B.35. [Coal washing requirement made redundant by inclusion of 90% SO<sub>2</sub> reduction requirement found in condition B.7. Applicant request to eliminate references to fuel pretreatment. Deleted per permit 0570039-016-AC]

[Reserved.] If fuel pretreatment credit is claimed toward the sulfur dioxide emission standards in specific condition B.7. TEC shall submit a signed statement:

- —(1) Indicating what percentage cleaning credit was taken for the calendar quarter, and whether the credit was determined in accordance with the provisions of specific condition B.28. and Method 19 (Appendix A of 40 CFR 60); and
- -(2) Listing the quantity, heat content, and date each pretreated fuel shipment was received during the previous quarter; the name and location of the fuel pretreatment facility; and the total quantity and total heat content of all fuels received at the affected facility during the previous quarter.

  [Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.49a(e), 40 CFR 60.48a(c)]

[New applicable requirements.] III.B.66. These emissions units are subject to requirements contained in Consent Final Judgment (DEP vs. TEC) dated December 6, 1999 and the Consent Decree (U.S. vs. TEC) dated February 29, 2000, including the October 4, 2000 amendment.

[Permit No. 0570039-014-AC]

[New applicable requirements.] III.B.67. The first in a series of equipment installed pursuant to the Consent Final Judgment and Consent Decree for the purposes of NO<sub>X</sub> requirements contained therein include:

- a. Steam Generator Unit No. 4 is equipped with Low NO<sub>X</sub> burners (LNB).
- b. Steam Generator No. 4 is equipped with separate overfire air (SOFA).

[Permit No. 0570039-014-AC]

[New applicable requirements.] III.B.68. Unit 4 shall be operated using the Low  $NO_X$  burners and in accordance with the operational procedures that have been developed to minimize  $NO_X$  emissions. [Permit No. 0570039-014-AC]

[New applicable requirements.] III.B.69. Unit 4 shall be operated using the Separate Overfire Air System (SOFA) and in accordance with the operational procedures that have been developed to minimize NO<sub>X</sub> emissions.

[Permit No. 0570039-014-AC]

[New applicable requirements.] III.B.70. These emissions units are subject to the Compliance Assurance Monitoring requirements contained in the attached APPENDIX CAM.

#### III. Subsection D. Descriptions. [Clarifications to descriptions.]

Fly Ash Silo No. 2 handles fly ash from Steam Generator Units Nos. 1, 2, and/or 3. Fly ash is pneumatically conveyed in a series of pipes from the individual unit precipitators (Units 1, 2, and/or 3, only two units at any time) to the silo for temporary storage. Fly ash from Silo No. 2 is discharged in either a

wet or dry state. From the silo, the dry fly ash is gravity fed by tubing into closed tanker trucks and transported to an off-site consumer. The wet fly ash is processed through a pugmill and then unloaded into a dump truck to be transported to an off-site consumer. Particulate emissions generated during silo loading operation and from the tanker truck loadout chutes are controlled by a 20,081 DSCFM Flex Kleen, Model No. 84 UDTR-640 baghouse in addition to reasonable precautions.

**III.D.1.** [Reformatting of permitted loading rate language for Fly Ash Silo No. 2 to be consistent with the format with loading rate language for Fly Ash Silo No. 1. Also, permitting note deleted because operation during testing information already contained in condition D.1. and loading rate limits in federally enforceable construction permit.]

Capacity. The maximum permitted loading rate for all Fly Ash Silo No. 1 processes combined is 44.5 tons per hour. The maximum permitted loading rate for all Fly Ash Silo No. 2 processes combined is 44.5 tons per hour. For Fly Ash Silo No. 2, the maximum permitted loading rate is the simultaneous maximum transfer of flyash from boiler Units 1, 2, and 3. Separate testing of emissions from each unit shall be conducted with each emissions unit operation at 90 to 100 percent of the maximum permitted capacity heat input rate. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate 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.

[AC29-194516; AO29-161082; Rule 62-4.160(2), and Rule 62-297.310(2), F.A.C.]

{Permitting note: The material loading limitations have been placed in each permit to identify the capacity of each emissions unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the emissions unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability. Regular recordkeeping is not required for material loading. Instead the owner or operator is expected to determine material loading whenever the emission testing is required, to demonstrate at what percentage of the rated capacity that the emissions unit was tested. Rule 62–297.310(5), F.A.C., included in the permit, requires measurement of process variables for emission tests. Material loading demonstrations may be based on best engineering evaluation of the operating requirements necessary to achieve 90 to 100 percent of the rated loading, unless such operating conditions are otherwise specified by permit condition.}

III.D.10. [Applicant request to remove the word "completely" from condition III.D.10.d since the truck loading valve is not normally operated completely open.]

Compliance testing for the silo and tanker truck loading operations shall be conducted under the

following conditions:

- a. All conveyance hoppers will be operational during the test.
- b. All fly ash will be directed to the silo, no reinjection of fly ash to the boiler systems will occur during the test.
- c. The boilers shall operate at the maximum capability of this unit under normal operating conditions during the test.
- d. Two tanker trucks shall be loaded during the test. The loading valve shall be eompletely open to allow 90%-100% of the maximum loading rate during testing filling. Position of the valve during testing shall be recorded.
- e. The visible emission test shall be at least 30 minutes in duration and the period of time during which truck loading occurred indicated on the test report.

[Rules 62-4.070(3) and 62-297.310, F.A.C.].

# III. Subsection E. Description. [Clarification of description.]

Fly Ash Silo No. 3 handles fly ash from Steam Generator Unit No. 4. Also, fly ash may be pneumatically conveyed from tanker trucks to Silo No. 3. Particulate matter emissions are controlled by a 1,200 DSCFM

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Flex Kleen Model 84-WRTC-80-II-G baghouse. The wet flyash may be is processed through a pugmill and then unloaded into a dump truck.

# III. Subsection F. Limestone Handling and Storage [Revised per permit 0570039-016-AC.] This section addresses the following Regulated Emissions Units:

E.U. ID No.	Brief Description
-011	Truck/Railcar Limestone Unloading Receiving Hopper with baghouse
-012	Limestone Silo A with 2 baghouses
-013	Limestone Silo B with 2 baghouses
-023	Limestone Handling Conveyor LB to Conveyor LC with baghouse,
	Limestone Handling Conveyor LD to Conveyor LE with baghouse
-024	Limestone Handling Conveyor LE to South Storage Silo with baghouse,
	Limestone Handling Conveyor LE to North Storage Silo with baghouse
-025	Limestone Storage and Handling Fugitive Emissions

#### Descriptions

Particulate matter emissions from the truck and railear unloading of limestone are controlled by a Mikro-Pulsaire Model 400S12TR baghouse. Particulate matter emissions generated by the transfer of limestone from Handling Conveyor LB to Conveyor LC are controlled by a Sternvent Model DKED18003 baghouse. Particulate matter emissions generated by the transfer of limestone from Handling Conveyor LD to Conveyor LE are controlled by a Sternvent Model DKED 18003 baghouse. Particulate matter emissions generated by the transfer of limestone from Handling Conveyor LE to the South Storage Silo are controlled by a Flex Kleen Model 58 BVBC 36 IIG baghouse. Particulate matter emissions generated by the transfer of limestone from Handling Conveyor LE to the North Storage Silo are controlled by a Flex Kleen Model 58 BVBC 36 IIG baghouse.

# III. F.1. [Clarification of process.]

Total combined particulate matter emissions from the limestone handling hoppers/conveyors shall not exceed 0.65 lb/hr. Visible emissions are limited to 5% opacity. Compliance testing for particulate matter emissions is not required provided the opacity limit is maintained.

[PSD-FL-040; Power Plant Siting Certification PA 79-12]

#### **III.F.4.** [Revised per permit 0570039-016-AC.]

The limestone handling receiving hopper, conveyor transfer points and silos shall be maintained at negative pressures with the exhaust vented to a control system(s).

[PSD-FL-040]

III.F.5. [Clarification that annual VE test is not required for fugitive emissions.] Tampa Electric will perform an annual VE test on E.U. ID Nos. 011, 012, 013, and 023 to satisfy the periodic monitoring requirements of these conditions. In addition, the system pressure will be monitored quarterly to assess that the system is operating under negative pressure.

[USEPA objection resolution.]

III.Subsection G. Coal Bunkers with Roto-Clones [Removal of Unit No. 4 Coal Bunker from E.U. 031 to make new E.U. 039 for Unit No. 4 Coal Bunker for consistency with format for Unit 1-3 Coal Bunkers.]

#### This section addresses the following Regulated Emissions Units:

E.U. ID No.	Brief Description
-015	Unit No. 1 Coal Bunker with Roto-Clone
-016	Unit No. 2 Coal Bunker with Roto-Clone
-017	Unit No. 3 Coal Bunker with Roto-Clone
-039	Unit No. 4 Coal Bunker with Roto-Clone

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# Descriptions

These emission units are Steam Generator Units Nos. 1-43 Coal Bunkers with an exhaust fan/cyclone collector (Roto-Clone) controlling dust emission from each unit's respective bunker. Two moving transfer stations via their respective conveyor belts route coal through enclosed chutes to the various bunkers. Coal Bunkers 1-43 are each equipped with a 9400 ACFM American Air Filter (AAF) Company Type D Roto-Clone to abate dust emissions during ventilation. A number of vent pipes convey fresh air from each bunker to a Roto-Clone during particulate matter removal. Particulate matter removed by the Roto-Clones is returned to the coal bunkers via a hopper and return line. Unit No. 1 Coal Bunker is situated west of Unit No. 2 Coal Bunker. Unit No. 3 Coal Bunker is situated east of Unit No. 2 Coal Bunker. Unit No. 4 Coal Bunker is located east of Unit No. 3.

#### **III.G.4.** [Equipment clarification.]

Since a source of less than 1 TPY is exempt from particulate matter RACT provisions, the maximum allowable particulate emissions shall not exceed 0.99 tons per year from each rotoclone eyelone exhaust. Also maximum allowable particulate matter emissions shall not exceed 0.48 lbs/hr from each cyclone exhaust.

[AO29-163788 to escape RACT]

III. Subsection H. Solid Fuel Yard [Deletion of redundant EU 031, and clarification of descriptions.]

#### This section addresses the following Regulated Emissions Units:

E.U. ID No.	Brief Description
-010	Solid Fuel Yard, Fugitive Emissions
-029	Cyclone collectors for fuel blending bins (FH-032 through FH-035)
-030	Cyclone collectors for fuel crushers (FH-048 and FH-049)
-031	Cyclone collectors for bunkers (FH-059 through FH-062)
050	· · · · · · · · · · · · · · · · · · ·

#### Descriptions

Solid fuel is unloaded from ship/barge into the Solid fuel yard, the blending bins or directly to the tripper room via belt conveyors. Solid fuel from the piles is loaded onto belt conveyors using a rail mounted or mobile reclaimer. The solid fuel is then belt conveyed to the blending bins tower, which consists of six storage bins, where the solid fuel may be is blended for use at the plant, or transloaded into trucks for shipment off site. From the solid fuel yard conveyors, the solid fuel is screw conveyed into the bins. Particulate matter (PM) emissions from the conveyors in the blending bins solid fuel yard are controlled by 3 4 rotoclones, one at the conveyor drop, and one for every 2 bins. PM emissions from the screw conveyor are controlled by the fourth rotoclone. Blending bins can either Each has 2 hoppers, which feed the transloader, or solid fuel can be are conveyed, via 2 parallel belts (T1, T2) to 2 crushers (each belt has a crusher), or diverted directly to the tripper room. PM emissions from the 2 crushers and transfer tower are controlled by 2 rotoclones.

From the tripper room solid fuel yard, the solid fuel is conveyed to the tripper room where 2 trippers bunker the solid fuels into 4 solid fuel bunkers. Each unit has its own respective bunker. Solid fuel samples are taken every 15 minutes during bunking, and composited for analysis. From the bunkers, the solid fuel is gravity fed into 14 mills erushers, and then gravity fed into the boilers. There are 3 ball mills tall crushers, each for Unit Nos. 1-3, and 5 bowl mills erushers for Unit No. 4. From the mills erushers, the solid fuel is pneumatically fed into classifiers, two for each erusher mill on Unit Nos. 1-3 and one for each mill on Unit No. 4 for a total of 238 classifiers, and then into the respective boilers.

# III. Subsection L. Limestone Handling System for FGD System for Units 1 & 2 [Clarification of description.]

Description

New cComponents of the limestone handling system to provide limestone for the new FGD system. The components are Silo C and its related rotary unloader, belt feeder and wet ball mill, and reversible belt conveyors LF and LG. Conveyors LF and LG replace an existing bifurcated chute which feeds from conveyor LE to silos A and B. Particulate emissions from drops from limestone handling conveyors LE, LF and LG and the silo C belt feeder are controlled by a baghouse: American Air Filter Fabripulse - Model B, size 12-72-1155. Particulate emissions from displaced air in silo C will be controlled by a baghouse: American Air Filter Fabripak, size 6-16-132. The new wet ball mill is a wet process with no expected particulate emissions.

#### III.L.6. [Update of specific condition numbering.]

<u>Visible Emissions Tests in Lieu of Stack Tests, Emissions Unit 020</u>: After passing the initial test required by specific condition L.9. 21 of this section, the owner or operator is permitted to comply with the visible emission limit of specific condition L.4. 16 and the testing requirement of specific condition L.5. 17 of this section in lieu of regularly demonstrating compliance with the limitations of 40 CFR 60.672(a)(1) and (2) and the particulate matter limitation of specific condition L.4. 16 of this section. If the Department has reason to believe that the particulate weight emission limit of 40 CFR 60.672(a)(1) or the particulate matter limitation of specific condition L.4. 16 of this section is not being met, it shall require compliance be demonstrated by the test method specified by 40 CFR 60.675. [Rules 62-4.070(3) and 62-297.620(4), F.A.C.]

III.L.7. [Update of specific condition numbering.] Records of Maintenance: The owner or operator shall make and maintain records of maintenance on the enclosures and baghouses sufficient to demonstrate compliance with the operating procedures requirements of specific condition L.3. 15 of this section. [Rule 62-4.070(3), F.A.C.]

#### III.L.8. [Update of specific condition numbering.]

#### Pursuant to 40 CFR 60.672 Standard for Particulate Matter:

[Note: The requirements of 40 CFR 60.672(a)(1) and (2) apply to emissions unit 020, and the requirements of 40 CFR 60.672(f) apply to emissions unit 021.]

- (a) No owner or operator shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any stack emissions which:
  - (1) Contain particulate matter in excess of 0.05 g/dscm; and
  - (2) Exhibit greater than 7 percent opacity.

[Note: The emission limit of specific condition L.4. 16 of this section is more stringent than the limitation of 40 CFR 60.672(a)(2).]

(f) No owner or operator shall cause to be discharged into the atmosphere from any baghouse that controls emissions from only an individual, enclosed storage bin, stack emissions which exhibit greater than 7 percent opacity.

[Note: The emission limit of specific condition L.4. 16 of this section is more stringent than the limitation of 40 CFR 60.672(f). See the note for that condition.]

# III.L.9. [Update of specific condition numbering.]

#### Pursuant to 40 CFR 60.675 Test Methods and Procedures:

(a) In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR 60 or other methods and procedures as specified in this section, except as provided in 40 CFR 60.8(b).

- (b) The owner or operator shall determine compliance with the particulate matter standards in 40 CFR 60.672(a) as follows:
- (1) Method 5 or Method 17 shall be used to determine the particulate matter concentration. The sample volume shall be at least 1.70 dscm (60 dscf). For Method 5, if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without heaters. If the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121 °C (250 °F), to prevent water condensation on the filter.
- (2) Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity. [Note: The owner or operator is required to demonstrate compliance with the particulate matter emission limitation of 40 CFR 60.672(a)(1) by performing and passing an initial particulate matter test in accordance with the requirements of this section, unless such requirement is waived by the US Environmental Protection Agency. No subsequent regular annual particulate matter testing is required. The owner or operator is permitted to comply with the visible emission limit of specific condition L.4. 16 of this section in lieu of regularly demonstrating compliance with the limitations of 40 CFR 60.672(a)(1) and (2). See also specific condition L.6. 18 of this section.]
- (c) (2) In determining compliance with the opacity of stack emissions from any baghouse that controls emissions only from an individual enclosed storage bin under 40 CFR 60.672(f) of this subpart, using Method 9, the duration of the Method 9 observations shall be 1 hour (ten 6-minute averages). [Note: The initial Method 9 test duration for emissions unit 021 is one hour pursuant to 40 CFR 60.675(c)(2), while the initial Method 9 test duration for emissions unit 020 is 3 hours pursuant to 40 CFR 60.11(b). Subsequent annual Method 9 tests shall be conducted for 30 minutes for emissions units 020 and 021.]
- (g) If, after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting any rescheduled performance test required in this section, the owner or operator of an affected facility shall submit a notice to the Administrator at least 7 days prior to any rescheduled performance test.
- III.M.5. [Update of specific condition numbering.] <u>Visible Emissions Tests in Lieu of Stack Tests</u>: The owner or operator is permitted to comply with the visible emission limit of specific condition M.3. 25 and the testing requirement of specific condition M.4. 26 of this section in lieu of regularly demonstrating compliance with the particulate matter limitation of specific condition M.3. 25 of this section. If the Department has reason to believe that the particulate matter limitation of specific condition M.3. 25 of this section is not being met, it shall require compliance be demonstrated by conducting a particulate matter test in accordance with EPA Method 5 specified at 40 CFR 60 Appendix A. [Rules 62-4.070(3) and 62-297.620(4), F.A.C.]
- III.M.6. <u>Records of Maintenance</u>: [Edited for consistency.] The owner or operator shall make and maintain records of maintenance on the baghouse sufficient to demonstrate compliance with the operating procedures requirements of specific condition M.2. of this section. [Rule 62-4.070(3), F.A.C.]
- IV. Updates were made to the Phase II Acid Rain Part as needed.

Appendix CAM. CAM Plans were added for Boiler Units 1-4.

Tampa Electric Company Big Bend Station Facility ID No.: 0570039 Hillsborough County

# Title V Air Operation Permit Revision/Renewal

FINAL Permit No.: 0570039-017-AV

Permitting Authority:
State of Florida
Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
Title V Section

Mail Station #5505 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Telephone: 850/488-0114 Fax: 850/921-9533

Compliance Authority:
Environmental Protection Commission
of Hillsborough County
1410 North 21 Street
Tampa, Florida 33605
Telephone: 813/272-5530

Fax: 813/272-5605

# Title V Air Operation Permit Revision/Renewal FINAL Permit No.: 0570039-017-AV

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Permittee:

Tampa Electric Company 6944 US HWY 41 Apollo Beach, FL 33572-9200 FINAL Permit No.: 0570039-017-AV

Facility ID No.: 0570039

SIC Nos.: 49, 4911

Project: Title V Air Operation Permit Revision/Renewal

This permit revision is for the purpose of incorporating the terms and conditions of the air construction permit, No. 0570039-012-AC, to make some administrative corrections, and to renew the current Title V permit. This permit is for the operation of the Tampa Electric Company (TEC) Big Bend Station. This facility is located at Big Bend Road, North Ruskin, Hillsborough County; UTM Coordinates: Zone 17, 361.9 km East and 3075.0 km North; Latitude: 27° 47' 36" North and Longitude: 82° 24' 11" West.

This Title V Air Operation Permit Revision/Renewal 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 and 62-214. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit. Referenced attachments made a part of this permit:

Appendix U-1, List of Unregulated Emissions Units and/or Activities

Appendix I-1, List of Insignificant Emissions Units and/or Activities

APPENDIX TV-4, TITLE V CONDITIONS (version dated 2/02/02)

APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96)

TABLE 297.310-1, CALIBRATION SCHEDULE (version dated 10/07/96)

FIGURE I - SUMMARY REPORT-GASEOUS AND OPACITY EXCESS EMISSIONS AND

MONITORING SYSTEM PERFORMANCE REPORT (version dated 7/96)

DOCUMENT III.I.3 - PROCEDURES FOR STARTUP AND SHUTDOWN UNITS I - 4

DOCUMENT III.I.4 - OPERATION AND MAINTENANCE PLAN (version dated June 2004)

40 CFR 60 Subpart A - General Provisions

40 CFR 63 Subpart A - General Provisions modified for Subpart II

40 CFR 63 Subpart II - § 63.782 Definitions

40 CFR 63 Subpart II - Figure I. Flow diagram of compliance procedures

40 CFR 63 Subpart II - TABLE 2 VOLATILE ORGANIC HAP (VOHAP) LIMITS FOR MARINE COATINGS

40 CFR 63 Subpart II - TABLE 3 SUMMARY OF RECORDKEEPING & REPORTING REQUIREMENTS

40 CFR 63 Subpart II - APPENDIX A VOC DATA SHEET

40 CFR 63 Subpart II - APPENDIX B

DEP Form No. 62-210.900(1)(a)

Consent Final Judgement (DEP vs. TEC) dated December 6, 1999

Phase II NOx Compliance Plan

Phase Il NOx Averaging Plan

Consent Decree (U.S. vs. TEC) dated February 29, 2000; amended October 4, 2000.

TEC Big Bend Station Unit 3 Corrective Action Plan - EPC Case No. 00-1223CCG0039

APPENDIX CAM

EPA letter of approval of two plans for control of particulate matter; dated June 19, 2003

Effective Date: January 1, 2005

Renewal Application Due Date: December 31, 2008

Expiration Date: December 31, 2009

Michael G. Cooke, Director, Division of Air Resource Management FINAL Permit Revision/Renewal No.: 0570039-017-AV

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# Section I. Facility Information.

# Subsection A. Facility Description.

TEC Big Bend is a nominal 2,028 MW electric generation facility. This facility consists of four steam boilers (Units Nos. 1 through 4); four steam turbines; three simple-cycle combustion turbines (CT Nos. 1, 2, and 3); solid fuels, fly ash, limestone, gypsum, slag, and bottom ash storage and handling facilities, and fuel oil storage tanks. Units No. 1, 2, 3, and 4 have nominal maximum heat inputs of 4037, 3996, 4115 and 4330 million BTU per hour, respectively. Units No. 1 through 4 are fired with coal and with petcoke in a mixture with coal up to 20.0% petcoke/80.0% coal (by weight), or a coal blended with coal residual generated from the Polk Power Station, or a coal/petroleum coke blend further blended with coal residual generated from the Polk Power Station. The combustion turbines are fired with No. 2 distillate fuel oil. In addition, there is a ship surface coating operation.

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

Based on the initial Title V permit application received June 14, 1996, this facility is a major source of hazardous air pollutants (HAPs).

# Overview of the facility's operation:

Solid fuel is unloaded from ship/barge into the solid fuel yard, the blending bins or directly to the tripper room via belt conveyors. Solid fuel from the piles is loaded onto belt conveyors using a rail mounted or mobile reclaimer. The solid fuel is then belt conveyed to the blending bins, which consists of six storage bins, where the solid fuel may be blended for use at the plant, or transloaded into trucks for shipment off site. Particulate matter (PM) emissions from the conveyors in the blending bins are controlled by 4 rotoclones, one at the conveyor drop and one for every 2 bins. Blending bins can either feed the transloader, or solid fuel can be conveyed, via 2 parallel belts (T1, T2) to 2 crushers (each belt has a crusher), or diverted directly to the tripper room. PM emissions from the 2 crushers and transfer tower are controlled by 2 rotoclones.

From the tripper room 2 trippers bunker the solid fuels into 4 solid fuel bunkers. Each unit has its own respective bunker. From the bunkers, the solid fuel is gravity fed into 14 mills, and then fed into the boilers. There are 3 ball mills, each for Unit Nos. 1-3, and 5 bowl mills for Unit No. 4. From the mills, the solid fuel is pneumatically fed into classifiers, two for each mill on Unit Nos. 1-3 and one for each mill on Unit No. 4 for a total of 23 classifiers, and then into the respective boiler.

PM emissions from Boiler Nos. 1- 4 are controlled by individual Electrostatic Precipitators (ESPs). Unit Nos. 1-4 SO<sub>2</sub> emissions are controlled by FGD scrubber systems. When Unit Nos. 1-3 burn petroleum coke, the exhaust gases, following particulate matter removal by the units' ESPs, will be routed to the inlet of the flue gas desulfurization (FGD) system scrubber. In the integrated mode, Unit No. 3 will meet the same sulfur dioxide emissions limitations as Unit No. 4. The FGD scrubber will continue to treat the exhaust gas from Unit No. 4. The FGD scrubber outlet stream, consisting of the combined Unit No. 3 and Unit No. 4 treated exhaust, will then be split and discharged through stacks CS002 and CS003.

Fly ash from Units No. 1 and No. 2 is vented into Fly Ash Silo #1 which is controlled by a baghouse. Fly ash from Unit No. 3 is vented into Silo #2, which can also receive fly ash from Units No. 1 and 2. Fly ash from Unit No. 4 is vented into Silo #3. The fly ash from each silo is then loaded into trucks and transported off site, while the bottom ash from Unit No. 4 is conveyed across Big Bend Road south of the Big Bend facility to a settling pond. Each fly ash silo is controlled by a baghouse.

The byproduct gypsum is conveyed to the east side of the plant for dewatering and transporting off site. Limestone is unloaded to an underground hopper conveyor belt system to the limestone storage building on the east side of the by-product gypsum area. From the storage building, limestone is belt conveyed into 3 storage silos and then gravity fed into the mill room. Three rotary mills grind the limestone and mix it with water to form a slurry that is stored in 3 storage tanks for use in the FGD. The slurry is then pumped to the 4 reaction tanks of Units 1- 4 scrubbers that are located directly south of and adjacent to the absorption towers of the FGD scrubber. Gypsum is sold and transported offsite and can be stored south of Big Bend Road prior to offsite removal.

There are 3-combustion turbines (CT) manufactured by Westinghouse. They are all fired on No. 2 fuel oil. CT No. 1 is near the plant and CT Nos. 2 and 3 are on the north side of the property. There is a large No. 2 fuel oil storage tank near CT Nos. 2 and 3 and a small day tank near CT No. 1.

# Subsection B. Summary of Emissions Unit ID Nos. and Brief Descriptions.

<b>E.U.</b>	
ID No.	Brief Description
-001	Unit No. 1 Steam Generator
-002	Unit No. 2 Steam Generator
-003	Unit No. 3 Steam Generator
-004	Unit No. 4 Steam Generator
-005	Combustion Turbine No. 2
-006	Combustion Turbine No. 3
-007	Combustion Turbine No. 1
-008	Fly Ash Silo No. 1 Baghouse
-009	Fly Ash Silo No. 2 Baghouse
-010	Solid Fuel Yard, Fugitive Emissions
-011	Truck Unloading of Limestone
-012	Limestone Silo A with one baghouse and one backup baghouse
-013	Limestone Silo B with one baghouse and one backup baghouse
0.1.4	
-014	Fly Ash Silo No. 3 Baghouse
-015	Unit No. 1 Coal Bunker
-016	Unit No. 2 Coal Bunker
-017	Unit No. 3 Coal Bunker
-018	Flyash Silo No. 1 Truck Loadout
-019	Flyash Silo No. 2 Truck Loadout
-020	Drops from limestone handling conveyors LE, LF, and LG and silo C belt feeder with
	baghouse
-021	Silo C with one baghouse

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<u>E.U.</u>	Subsection B. Summary of Emissions Unit ID Nos. and Brief Descriptions.		
ID No.	(continued)		
	Brief Description		
-022	Lime silo with one baghouse for the waste water treatment plant for the chloride		
	bleed stream		
-023	Limestone Handling Conveyor LB to Conveyor LC with baghouse		
	Limestone Handling Conveyor LD to Conveyor LE with baghouse		
-025	Limestone Storage and Handling Fugitive Emissions		
-026	Fly Ash Handling and Storage Fugitive Emissions from Unit Nos. 1-3 (all except		
	silos)		
-027	Fly Ash Silo No. 3 Truck Loadout		
-028	Fly Ash Handling System Fugitive Emissions from Unit No. 4		
-029	Cyclone collectors for fuel blending bins (FH-032 and FH-035)		
-030	Cyclone collectors for fuel crushers (FH-048 and FH-049)		
-032	Surface coating of miscellaneous metal parts		
-033	Abrasive Blast Booth with baghouse		
-034	Abrasive Blast Media Storage with baghouse		
-035	Surface coating of ships		
-037	Coal Residual Storage Building		
-038	Coal Residual Transfer System		
-039	Unit No. 4 Coal Bunker		
-036	Unregulated Emissions Units and/or Activities		

Please reference the Permit No., Facility ID No., and appropriate Emissions Unit(s) ID No(s). on all correspondence, test report submittals, applications, etc.

# Subsection C. Relevant Documents.

The documents listed below are not a part of this permit; however, they are specifically related to this permitting action.

# These documents are provided to the permittee for information purposes only:

Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers

Appendix H-1, Permit History

# These documents are on file with the permitting authority:

Initial Title V Permit issued December 28, 2000.

Title V Permit Revision issued August 15, 2001.

Form dated November 5, 2002, changing the Responsible Official.

Letter dated November 12, 2003, adding an Alternate Designated Representative.

Application for Air Construction Permit dated December 31, 2003.

Application for a Title V Air Operation Permit Revision received January 16, 2004.

Application for Air Construction Permit dated May 18, 2004.

Application for a Title V Air Operation Permit Revision received January 16, 2004

Additional information dated September 24, 2004.

Big Bend Generating Station Best Operating Practices for Particulate Matter; dated September 2001

Big Bend Generating Station Best Available Control Technology for Particulate Matter; revised October 2002

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#### Section II. Facility-wide Conditions.

#### The following conditions apply facility-wide:

- 1. APPENDIX TV-4, TITLE V CONDITIONS, is a part of this permit. {Permitting note: APPENDIX TV-4, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided a copy when requested or otherwise appropriate.}
- 2. Not federally enforceable. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. No person shall cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor. [Rule 62-296.320(2), F.A.C.]
- 3. General Particulate Emission Limiting Standards. General Visible Emissions Standard. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. [Rules 62-296.320(4)(b)1. & 4., F.A.C.]

<u>{Permitting Note:</u> Although the Permittee is <u>not</u> required to perform a visible emissions compliance test to demonstrate compliance with the facility-wide limitations annually or before renewal, if the Department believes that the general visible emissions standard is being violated, the Department may require that the owner or operator perform a visible emissions compliance test per Chapter 62-297.310(7)(b), Special Compliance Tests. In addition, Department personnel who are certified to perform visible emissions tests may determine compliance with the general visible emissions standard.}

- 4. Prevention of Accidental Releases (Section 112(r) of CAA).
- a. The permittee shall submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center when, and if, such requirement becomes applicable. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:

RMP Reporting Center
P.O. Box 1515
Lanham-Seabrook, Maryland 20703-1515
Telephone: 301/429-5018

and,

**b.** The permittee shall 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]

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5. <u>Unregulated Emissions Units and/or Activities.</u> Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit. [Rule 62-213.440(1), F.A.C.]

- 6. <u>Insignificant Emissions Units and/or Activities.</u> Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit. [Rules 62-213.440(1), 62-213.430(6) and 62-4.040(1)(b), F.A.C.]
- 7. General Pollutant Emission Limiting Standards. 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. Nothing was deemed necessary and ordered at this time.

  [Rule 62-296.320(1)(a), F.A.C.]
- 8. Emissions of Unconfined Particulate Matter. Unconfined particulate matter emissions that may result from operations include: vehicular traffic on paved and unpaved roads; wind-blown dust from yard areas; and periodic abrasive blasting. Pursuant to Rules 62-296.320(4)(c)1., 3. & 4., F.A.C., reasonable precautions to prevent emissions of unconfined particulate matter at this facility include the following requirements (see Condition 57. of APPENDIX TV-4, TITLE V CONDITIONS):

The following requirements are "<u>not federally enforceable</u>": The following techniques will be used to prevent unconfined particulate matter emissions on an as needed basis:

- a. Chemical or water application to: unpaved roads and unpaved yard areas;
- b. Paving and maintenance of roads, parking areas and yards;
- c. Landscaping or planting of vegetation;
- d. Confining abrasive blasting where possible; and
- e. Other techniques, as necessary.

[Rule 62-296.320(4)(c)2., F.A.C.; and, proposed by the applicant in the initial Title V permit application received June 14, 1996.]

- 9. When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one. [Rule 62-213.440, F.A.C.]
- 10. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3)(a)2., F.A.C., shall be submitted to the Department and EPA within 60 (sixty) days after the end of the calendar year using DEP Form No. 62-213.900(7), F.A.C. [Rules 62-213.440(3) and 62-213.900, F.A.C.]

{Permitting Note: This condition implements the requirements of Rules 62-213.440(3)(a)2. & 3., F.A.C. (see Condition 51. of APPENDIX TV-4, TITLE V CONDITIONS)}

11. The Consent Final Judgement (DEP vs. TEC) dated December 6, 1999; and the Consent Decree (U.S. vs. TEC) dated February 29, 2000, including the October 4, 2000 amendment; are attached hereto and made a part of this permit. The permittee shall comply with the Consent Final Judgement and the Consent Decree. Wherever the Consent Decree conflicts with this permit the terms and conditions of the Consent Decree control. Upon expiration of the Consent Decree the Title V permit shall be modified to

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incorporate any terms and conditions that are deemed necessary by the permitting authority for the continued operation of the facility.

[Rules 62-4.070(3)&(5) and 62-213.440, F.A.C.]

12. Unless otherwise stated in a specific condition, averaging times for specified emission standards are based on the run time of the test method(s) used for determining compliance. [Rule 62-4.070(3), F.A.C.]

13. a. The permittee shall submit all compliance related notifications and reports required of this permit to the Environmental Protection Commission of Hillsborough County:

> **Environmental Protection Commission** of Hillsborough County 1410 North 21 Street Tampa, Florida 33605 Telephone: 813/272-5530

Fax: 813/272-5605

- b. The permittee shall provide timely notification to the Environmental Protection Commission of Hillsborough County prior to implementing any changes that may result in a modification to this permit. The changes may include, but are not limited to, the following, and may also require prior authorization before implementation:
  - 1. Alteration or replacement of any equipment\* or parameter listed in the Facility or Subsection descriptions.
  - 2. Installation or addition of any equipment\* which is a source of air pollution.
  - 3. Any changes in the method of operation, raw materials, products of fuels.

\*Not applicable to normal maintenance and repairs, and vehicles used for transporting material. [Rules 62-4.070(3) and 62-210.300, F.A.C.]

14. Any reports, data, notifications, certifications, and requests required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to:

> United States Environmental Protection Agency Region 4 Air, Pesticides & Toxics Management Division Air and EPCRA Enforcement Branch, Air Enforcement Section 61 Forsyth Street Atlanta, Georgia 30303 Telephone: 404/562-9155, Fax: 404/562-9163

15. Certification by Responsible Official (RO). In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct information.

[Rule 62-213.420(4), F.A.C.]

#### Section III. Regulated Emissions Units Conditions.

Subsection A. Steam Generators Units Nos. 1, 2, & 3 This section addresses the following Regulated Emissions Units:

E.U. ID No.	<b>Brief Description</b>	
-001	Unit No. 1 Steam Generator	
-002	Unit No. 2 Steam Generator	
-003	Unit No. 3 Steam Generator	

<u>Descriptions</u>. The fuel fired in Units No. 1, No. 2, and No. 3 consists of coal, or a coal/petroleum coke blend containing a maximum of 20% petroleum coke by weight, or coal blended with coal residual generated from the Polk Power Station, or a coal/petroleum coke blend further blended with coal residual generated from the Polk Power Station.

Unit No. 1 is a fossil fuel fired steam boiler generating unit rated at 4037 MMBtu/hour with an electrical generating capacity of 445 MW. It is a "wet" bottom utility boiler manufactured by Riley Stoker Corporation. Unit No. 1 began commercial operation in 1970.

Unit No. 2 is a fossil fuel fired steam boiler generating unit rated at 3996 MMBtu/hour with an electrical generating capacity of 445 MW. It is a "wet" bottom utility boiler manufactured by Riley Stoker Corporation. Unit No. 2 began commercial operation in 1973.

Unit No. 1 and Unit No. 2 share two common stacks (Stacks CS001 and CS0W1). Particulate emissions generated during the operation of the units are controlled by dry electrostatic precipitators (ESPs) manufactured by Western Precipitator Division, Joy Manufacturing Corporation. ESP control efficiency is 99.7%. Whenever either unit is fired with petcoke in any amount up to the allowable ratio (20% petcoke/80% coal, by wt.), its flue gases must be directed from its ESP to the FGD system and then to stack CS0W1. Otherwise, if petcoke is not fired, the flue gases may bypass the FGD system and stack CS0W1, and the flue gases are routed from the ESP directly to stack CS001.

Unit No. 3 is a fossil fuel fired steam boiler generating unit rated at 4115 MMBtu/hour with an electrical generating capacity of 445 MW. It is a "wet" bottom utility boiler manufactured by Riley Stoker Corporation. Operation of this unit may include diverting all of the flue gas into the existing Big Bend Unit No. 4 flue gas desulfurization (FGD) system for sulfur dioxide emission reduction. Sulfur dioxide emissions that are generated and not diverted through the Unit No. 4 FGD system are uncontrolled. Particulate matter emissions generated during the operation of the unit are controlled by a dry electrostatic precipitator (ESP) manufactured by Research-Cottrell, Inc. The ESP control efficiency is 99.7%. Unit No. 3 began commercial operation in 1976.

{Permitting note: Units No. 1, No. 2, and No. 3 are regulated under the federal Acid Rain Program for Phase II SO<sub>2</sub> and NO<sub>x</sub>, adopted and incorporated by reference in Rule 62-204.800, F.A.C.; and regulated under 62-296.405, F.A.C. These units were also formerly regulated under the federal Acid Rain Program as Phase I SO<sub>2</sub> substitution units.}

The following specific conditions apply to the emissions units listed above:

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#### ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

A.1. <u>Capacity</u>. The maximum permitted heat input rate for each unit is as follows:

Unit No.	MMBTU/hr		
1	4037		
2	3996		
3	4115		

[Rules 62-4.160(2), 62-210.200(PTE) and 62-296.405, F.A.C.]

{Permitting note: The heat input limitations have been placed in this permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability. Regular recordkeeping, other than annual, is not required for heat input. Instead the owner or operator is expected to determine heat input whenever emission testing is required, to demonstrate at what percentage of the rated capacity that the unit was tested. Rule 62-297.310(5), F.A.C., requires measurement of the process variables for emission tests. Such heat input determination may be based on measurements of fuel consumption by various methods to calculate average hourly heat input during the test. Annual heat input must be calculated in order to determine annual emissions of pollutants whose limits are based upon heat input.}

# A.2. Methods of Operation - Fuels.

a. Normal operation: The fuel fired in Units No. 1, No. 2, and No. 3 shall consist of coal, or a coal/petroleum coke blend containing a maximum of 20% petroleum coke by weight, or coal blended with coal residual generated from the Polk Power Station, or a coal/petroleum coke blend further blended with coal residual generated from the Polk Power Station. In any case, the petroleum coke content of any fuel blend shall not exceed 20% by weight. The vanadium content of the petroleum coke fired shall not exceed 2660 ppm vanadium. The ash content of the petroleum coke fired shall not exceed 0.76% by weight on a dry basis. The permittee shall maintain and submit to the Department, and to the Environmental Protection Commission of Hillsborough County, on an annual basis for the years 2001, 2002, 2003, 2004, and 2005 data demonstrating that removal of the sulfur content limit and the revision of the vanadium content limit in the petroleum coke fired did not result in a significant increase in the representative actual annual emissions of any regulated pollutant.

# b. Other operation:

- i. In addition to the fuels allowed to be burned during normal operation, each unit may also burn new No. 2 fuel during startup, shutdown, flame stabilization, and during the start of a mill on an already operating unit.
- ii. Evaporation of up to 150,000 gallons per year, total at the facility, is allowed of non-hazardous, but potentially HAP-emitting, mineral acid solution boiler chemical cleaning waste which was generated on site.
- c. Beneficiated, or refined, coal residual: The total amount of beneficiated, or refined, coal residual fired at Big Bend Station (all Unit Nos. 1-4 combined) shall be limited to 500 tons per day. The beneficiated, or refined, coal residual results from using the beneficiated process, described in permit application 0570039-012-AC, to wash and screen the raw coal residual to remove fines and oversized materials. This beneficiation process shall be performed at Polk Power Station, not Big Bend Station.
- d. Raw coal residual: The total amount of raw coal residual fired at Big Bend Station (all Unit Nos. 1-4 combined) shall be limited to 200 tons per day. The raw coal residual is a by-product of the

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gasification of coal at the Polk Power Station. At the time of the issuance of permit 0570039-012-AC on October 4, 2001, there were approximately 100,000 tons of raw coal residual stored at Polk Power Station. Once this raw coal residual pile has been fired, TEC shall only fire raw coal residual in the event of a significant beneficiation process malfunction. TEC shall document all beneficiation process malfunctions and record the amount of raw coal residual, if any, fired at Big Bend Station. These records should be kept on site at Big Bend and made readily available to the Department and the Environmental Protection Commission of Hillsborough County upon request.

[Rules 62-4.070(3), 62-4.160(2), 62-210.200, and 62-213.440(1), F.A.C.; 0570039-012-AC]

{Permitting note: "Flame stabilization" is defined as the use of new No. 2 fuel oil to stabilize a flame during times of unexpected poor coal quality or equipment failure such as coal piping pluggage. Flame stabilization due to poor coal quality occurs when coal is wet or does not provide the necessary heat to maintain a stable flame. In this situation, new No. 2 fuel oil is combusted to provide the additional required heat input to maintain a stable flame. Flame stabilization due to equipment failure occurs when coal piping is plugged, or equipment is otherwise damaged, that results in an inconsistent amount of coal reaching the burners. Under certain conditions, this may result in the burners intermittently seeing large amounts of fuel at one time, causing a potentially explosive flame "puff". In this situation, new No. 2 fuel oil must be used for stabilization to prevent flame "puffing" and ensure safe operation. Combustion of No. 2 fuel oil is also necessary during periods of load change to initialize and stabilize the flame until coal flow to the burners reaches steady state. As defined in 62-210.700(3), F.A.C., Load change occurs when the operational capacity of a unit is in the 10 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.}

#### A.3. FGD Operation Required for Petcoke and Coal Residual:

a. Whenever emissions Unit No. 1 or No. 2 is fired with petcoke in any amount up to the allowable percentage, or any amount of coal residual, its flue gases shall be directed to FGD system for Units No. 1 and No. 2.

[Permit Nos. 0570039-003-AC, 0570039-004-AC, and 0570039-012-AC]

{Note: The owner or operator may operate each emissions unit without directing its emissions to the FGD system whenever neither petcoke nor coal residual is being fired in the emissions unit.}

{Note: The excess emissions provisions of specific condition A.11. of this permit are also applicable to the FGD system operation.}

b. The permittee is allowed to divert and integrate all of Unit No. 3 flue gas for purposes of treating that flue gas in the existing Unit No. 4 flue gas desulfurization (FGD) system. At all times while firing any permitted amount of petroleum coke or coal residual, Unit No. 3 shall operate only in the integrated mode except during startups, shutdowns, and/or malfunctions during all of which best operational practices shall be employed including the cessation of petroleum coke and/or coal residual bunkering.

[Rule 62-4.070(3), F.A.C., 40 CFR 60.40a; and Permit Nos. PSD-FL-040 and 0570039-012-AC]

A.4. <u>Limit on Petcoke Bunkering</u>: The owner or operator at any given time shall not bunker more than the amount of petcoke that may be fired in each emissions Unit No. 1 or No. 2 in one day. [0570039-003-AC and 0570039-004-AC]

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[Note: This condition is intended to limit possible excess emissions in the event of an unexpected breakdown of the FGD system that requires its shutdown while either emissions unit is firing petcoke.]

A.5. <u>Hours of Operation</u>. Unit No. 1, Unit No. 2, and Unit No. 3 are each allowed to operate continuously, i.e., 8760 hours/year. [Rule 62-210.200, F.A.C., Definitions (PTE)]

#### **EMISSION LIMITATIONS AND STANDARDS**

A.6. Except as provided in Specific Condition No. A.11., visible emissions from each unit shall not exceed 20% opacity except for one six-minute period per hour during which opacity shall not exceed 27%.

[Rule 62-296.405(1)(a), F.A.C.]

A.7. Except as provided in Specific Condition No. A.11., the particulate matter emission rate for each unit shall not exceed 0.03 pounds per million BTU heat input. {Permitting note: The averaging time for the emissions standard in this condition shall be equal to the cumulative run time required by the specified test method.}

[Rule 62-296.405(1)(b), F.A.C.; Consent Final Judgment (DEP vs. TEC) dated December 6, 1999; Consent Decree (U.S. Vs. TEC) dated February 29, 2000; and EPA letter of approval of two plans (BOP and BACT) for control of particulate matter dated June 19, 2003]

#### A.8.

i. <u>Unit Particulate Matter Emission Limits</u>: Based on the maximum permitted heat input rates listed in Specific Condition A.1., the maximum permitted particulate matter annual emission rate for each unit is as follows:

Unit No.	tons/yr	
1	530	
2	525	
3	541	

In the event that a maximum permitted heat input rate for a unit is reduced, the maximum annual permitted particulate matter emission rate for that unit shall also be reduced accordingly. [Rule 62-296.700(4)(b)1., F.A.C.; Consent Final Judgment (DEP vs. TEC) dated December 6, 1999; Consent Decree (U.S. Vs. TEC) dated February 29, 2000; and EPA letter of approval of two plans (BOP and BACT) for control of particulate matter dated June 19, 2003]

ii. <u>Facility-wide Particulate Matter Emission Limit</u>: In order to provide reasonable assurance that a significant net emission rate increase will not occur as a result of combusting raw and beneficiated coal residual at Big Bend, the combined emissions from Steam Generator Units 1-4 shall not exceed an annual emissions cap of 2,767 tons per year of PM/PM<sub>10</sub>. This cap corresponds to the average emissions of the years 1999 and 2000. Any relaxation in this limit that increases the facility's potential to emit by at least 1 ton of pollutant per year will result in a reevaluation of PSD applicability for the facility as though construction had not yet commenced at the facility.

[Rule 62-212.400(2)(g) and Permit No. 0570039-012-AC]

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#### A.9.

- i. <u>Unit Sulfur Dioxide Emission Limits</u>. {Permitting Note: The Consent Final Judgement (DEP vs. TEC) dated December 6, 1999; and the Consent Decree (U.S. vs. TEC) dated February 29, 2000, including the October 4, 2000 amendment; which are part of this permit, supercede this specific condition. Wherever the Consent Decree conflicts with this permit condition, the Consent Decree takes precedence.}
- a. Units No. 1, No. 2, and No. 3, each shall not emit more than 6.5 pounds of sulfur dioxide per million BTU heat input on a two-hour average; nor shall Units No. 1, No. 2, and No. 3, in total, emit more than 31.5 tons per hour of sulfur dioxide on a three-hour average and 25 tons per hour of sulfur dioxide on a 24-hour block average (midnight to midnight).
- [Rules 62-296.405(1)(c)2.b. and 3., F.A.C.; and Rule 62-204.240(1), F.A.C.]
- b. Integrated Operation While in the integrated mode Units No. 3 and 4 shall meet the pounds per million Btu and percent reduction sulfur dioxide limitations that are applicable to Unit No. 4. (Specific Conditions B.7. and B.8.). Unit 3 will be operated in this integrated mode except during unit or FGD startups, shutdowns, maintenance and/or malfunctions, during all of which best operational practices shall be employed, including the cessation of bunkering fuels that would emit higher than 6.5 lb SO<sub>2</sub> per MMBtu.
- c. Units No. 1 and No. 2, in total, shall not emit more than 16.5 tons per hour of sulfur dioxide on a 24-hour block average.
  - d. Unit No. 3 shall not emit more than 8.5 tons per hour of sulfur dioxide on a twenty-four hour block average.
  - e. While scrubbing sulfur dioxide emissions, the following table lists the sulfur dioxide emissions limits (lbs/hr) for six different operating scenarios:

	Operating Mode, Emission Limits (lbs/hour)			Averaging
Operating Scenario	Unit 1	Unit 2	Unit 3	Period (Calendar day basis)
1	Scrubbed, 3310	Scrubbed*, 3277	Unscrubbed*, 14814	24 hours
2	Scrubbed, 3310	Unscrubbed, 9590	Unscrubbed, 9876	24 hours
3	Scrubbed, 3310	Scrubbed, 3277	Scrubbed, 3374	24 hours
4	Scrubbed, 3310	Unscrubbed, 11588	Scrubbed, 3374	24 hours
5	Unscrubbed, 11707	Scrubbed, 3277	Scrubbed, 3374	24 hours
6	Unscrubbed, 9689	Scrubbed, 3277	Unscrubbed, 9876	24 hours

<sup>\*&</sup>quot;Scrubbed" refers to operation while directing flue gas to the FGD system. "Unscrubbed" refers to operation while <u>not</u> directing flue gas to the FGD system.

[40 CFR 60.40a; Permit Nos. PSD-FL-040, 0570039-003-AC, and 0570039-004-AC; Applicant request.]

ii. <u>Facility-wide Sulfur Dioxide Emission Limit</u>. In order to provide reasonable assurance that a significant net emission rate increase will not occur as a result of combusting raw and beneficiated coal residual at Big Bend, the combined emissions from Steam Generator Units 1-4 shall not exceed an annual emissions cap of 71,810 tons per year of SO<sub>2</sub>. This cap corresponds to the average emissions of the years 1999 and 2000. Any relaxation in this limit that increases the facility's potential to emit by at least 1 ton

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of pollutant per year will result in a reevaluation of PSD applicability for the facility as though construction had not yet commenced at the facility.

[Rule 62-212.400(2)(g) and Permit No. 0570039-012-AC]

A.10. Unit No. 3 shall not emit more than 0.70 of a pound of nitrogen oxides (expressed as NO<sub>2</sub>) per million BTU heat input based upon a 30-day rolling average. [Rule 62-296.405(1)(d)4. and Rule 62-296.405(1)(e)4., F.A.C.]

#### A.11. Excess Emissions.

- (1) Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (a) best operational practices to minimize emissions are adhered to and (b) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department or the Environmental Protection Commission of Hillsborough County (EPCHC) for longer duration.
- (2) 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.
- (3) 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 (a) best operational practices to minimize emissions are adhered to and (b) 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 specific condition A.11.(3), for boiler cleaning and load changes, at units which have installed and are operating 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 specific condition A.11.(3).
- (4) Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited.
- (5) In case of excess emissions resulting from malfunctions, TECO shall notify the EPCHC 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 permitting authority or the EPCHC. [Rule 62-210.700, 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.}

A.12. During each federal fiscal year (October 1 - September 30), unless otherwise specified by rule, order, or permit, the TEC shall have formal compliance tests conducted on each Steam Generator Unit. Unit No. 1, Unit No. 2, and Unit No. 3 shall each be individually stack tested for particulate matter and

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visible emissions, under both sootblowing and non-sootblowing operation conditions. When testing in CS0W1 or when testing in CS0W1 or when testing in CS001, Unit No. 1 shall not be in operation during the compliance testing of Unit No. 2, and Unit No. 2 shall not be in operation during the compliance testing of Unit No. 1, but when testing in the ductwork between CS001 and the scrubber tower inlet, Unit No. 1 may operate during the compliance testing of Unit No. 2 and Unit No. 2 may operate during the compliance testing of Unit No. 1. Testing of Unit No. 3 emissions shall be prior to their mixing with the exhaust from the scrubber for Unit No. 4.

[Rules 62-297.310(7)(a)2. and 4., and 62-4.070(3), F.A.C.]

- A.13. The test method for visible emissions shall be DEP Method 9, incorporated in Chapter 62-297, F.A.C. In lieu of Method 9 testing, a transmissometer utilizing a 6-minute block average for opacity measurement may be used, provided such transmissometer is installed, certified, calibrated, operated and maintained in accordance with the provisions of 40 CFR Part 75.

  [Rule 62-296.405(1)(e)1., F.A.C., and request of applicant.]
- A.14. The test methods for particulate emissions shall be EPA Methods 17, 5, 5B, or 5F, incorporated and adopted by reference in Chapter 62-297, F.A.C. The minimum sample volume shall be 30 dry standard cubic feet. EPA Method 5 may be used with filter temperature at no more than 320 degrees Fahrenheit. For EPA Method 17, stack temperature shall be less than 375 degrees Fahrenheit. The owner or operator may use EPA Method 5 to demonstrate compliance. EPA Method 3 or 3A with Orsat analysis shall be used when the oxygen base F-factor computed according to EPA Method 19 is used in lieu of heat input. Acetone wash shall be used with EPA Method 5 or 17. [Rule 62-296.405(1)(e)2., F.A.C.]
- A.15. Compliance testing for particulate matter emissions and visible emissions may be conducted either: (a) without fly ash re-injections occurring, or (b) while fly ash collected by the electrostatic precipitator is being re-injected into the boiler at a rate which is representative of the maximum anticipated fly ash re-injection rate. If the most recent particulate and visible emission compliance tests were conducted without fly ash re-injection occurring, and fly ash re-injection occurs for any reason other than a malfunction, then the results from new particulate and visible emissions compliance tests, conducted while fly ash collected by the precipitator is being re-injected into the boiler at a rate which is representative of the maximum anticipated fly ash re-injection rate, shall be submitted to the EPCHC within 60 days of the date that such fly ash re-injection occurred. The EPCHC may, for good cause shown, grant an extension of the 60-day time limit on a case-by-case basis.

  [AO29-219924, AO29-179912, and AO29-179911]
- A.16. <u>Petcoke Sulfur Content</u>: Until January 1, 2006, the owner or operator shall measure the sulfur content of representative samples of all petcoke received using appropriate ASTM methods to demonstrate compliance with the sulfur content limit of this permit. [Permit Nos. 0570039-003-AC & 0570039-004-AC]
- A.17. Monitor Petcoke Usage: The owner or operator shall operate and maintain equipment to record and calculate the weight percentage of petcoke and coal bunkered and fired in each emissions unit, to verify compliance with the bunkering limit and the percentage limitation on petcoke usage of this permit. [Rule 62-4.070(3), F.A.C.]
- A.18. The permittee shall demonstrate compliance with the sulfur dioxide limits in Specific Condition A.9. by means of continuous emissions monitoring systems (CEMS). In addition to any

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other requirements associated with the operation and maintenance of these CEMS (i.e., Acid Rain requirements), operation of the CEMS shall be in accordance with the requirements listed in Specific Condition A.19. The annual calibration RATA associated with these CEMS may be used in lieu of the required annual EPA Reference Method 6, as long as all of the requirements of Rule 62-297.310, F.A.C., are met (i.e., prior test notification, proper test result submittal, etc.). [Applicant request.]

- A.19. <u>Continuous Monitor Performance Specifications</u>. If continuous monitoring systems are required by rule or are elected by the permittee to be used for demonstrating compliance with the standards of the Department, they must be installed, maintained and calibrated, either:
  - (a) in accordance with the EPA performance specifications listed below. These Performance Specifications are contained in 40 CFR 60, Appendix B, and are adopted by reference in Rule 62-204.800, F.A.C.
    - (1) [Reserved]
    - (2) Performance Specification 2--Specifications and Test Procedures for SO<sub>2</sub> Continuous Emission Monitoring Systems in Stationary Sources.
    - (3) [Reserved], Or,
  - (b) in accordance with the applicable requirements of 40 CFR 75, Subparts B and C. Excess emissions pursuant to Rule 62-210.700, F.A.C., shall be determined using the 40 CFR part 75 CEMS.

[Rule 62-297.520, F.A.C.; 40 CFR 75; and, Applicant request.]

- A.20. Compliance with nitrogen oxides emission limit for Unit No. 3 shall be demonstrated continuously based upon a 30-day rolling average. The 30-day rolling average shall be determined by calculating the arithmetic average of all hourly emission rates for NO<sub>x</sub> for the 30 successive boiler operating days, except for data obtained during startup, shutdown, and malfunction. The calculations shall be consistent with the equations in 40 CFR 60, Appendix A, Reference Method 19. For the purpose of calculating a 30-day rolling average, a boiler operating day is defined as a 24-hour period (between 12:01 a.m. and 12:00 midnight) during which fossil fuel is combusted in a steam operating unit for the entire 24-hours. [Permit No. AO29-179911 (July 29, 1994 amendment); 40 CFR 60.46a(g)]
- A.21. The continuous emission monitors shall meet the quality assurance requirements and performance specifications contained in 40 CFR 75. [Rule 62-296.401(1)(e)4., F.A.C.]
- A.22. Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C. [Rule 62-296.401(1)(e)5., F.A.C.]
- A.23. For Units. No. 1, No. 2, and No. 3, TEC shall operate, calibrate, and maintain a continuous monitoring system for continuously monitoring opacity. For Unit Nos. 1-3, TECO shall also operate calibrate, and maintain a continuous monitoring system for continuously monitoring nitrogen oxides (expressed as NO<sub>2</sub>). In addition, TEC shall operate calibrate, and maintain a continuous monitoring system for continuously monitoring sulfur dioxide for Unit Nos. 1, 2, and 3 in a manner sufficient to demonstrate compliance with the emission limits of this permit. Performance specifications, location of monitor, data requirements, data reduction and reporting requirements shall conform with the requirements of 40 CFR Part 51, Appendix P, adopted and incorporated by reference in Rule 62-204.800(2), F.A.C., and 40 CFR Part 60, Appendix B, adopted by reference in Rule 62-204.800(7), F.A.C. [Rule 62-296.401(1)(f), F.A.C.]

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A.24. An oxygen or carbon dioxide continuous monitoring system shall be operated for Units No. 1-3. Measurements of oxygen or carbon dioxide in the flue gas shall be utilized to convert nitrogen oxides and sulfur dioxide continuous emission monitoring data to units of pounds per million BTU heat input for proof of compliance.

[Rule 62-296.401(1)(f)1.d., F.A.C.]

# REPORTING AND RECORD KEEPING REQUIREMENTS

- A.25. Records of Operation: The owner or operator shall make and maintain a daily record of operation of each emissions unit showing the date, fuel(s) used, whether flue gas was directed to the FGD system, and the duration of all startups, shutdowns and malfunctions. Records of fuel bunkering and petcoke usage (weight percent of petcoke fired) shall also be made on at least a daily basis. Data that verifies compliance with the percentage limitation on petcoke usage shall be submitted with the annual operating report. [Rule 62-4.070(3), F.A.C.]
- A.26. <u>Records of Petcoke Sulfur Content</u>: Until January 1, 2006, the owner or operator shall maintain records of petcoke sampling and analysis results performed as required by Specific Condition A.16. of this section. [Rule 62-4.070(3), F.A.C., and permit nos. 0570039-003-AC & 0570039-004-AC]
- A.27. Quarterly Reporting Requirements: The owner or operator shall submit to the Department a written report of emissions in excess of emission limiting standards of this permit for each calendar quarter. The nature and cause of the excessive emissions shall be explained. This report does not relieve the owner or operator of the legal liability for violations. All recorded data shall be maintained on file for a period of five years. Copies of all submittals shall be submitted to the Air Management Division, Hillsborough County Environmental Protection Commission. [Rules 62-4.070(3) and 62-296.405(1)(g), F.A.C.]
- A.28. For each unit, TEC shall submit to the EPCHC a written report of emissions in excess of the emission limiting standards as set forth in Rule 62-296.405(1), F.A.C., for each calendar quarter. The nature and cause of the excessive emissions shall be explained. This report does not relieve TEC of the legal liability for violations. All recorded data shall be maintained on file for a period of at least 5 years. The report shall be submitted within 30 days following each calendar quarter. [Rule 62-296.405(1)(g) and Rule 62-213.440(1)(b)2.b., F.A.C.]
- A.29. For Unit Nos. 1-3, gravimetric instrument data verifying that the 20.0% maximum petroleum coke content by weight has not been exceeded shall be maintained for two years and submitted to the Department and the EPCHC with each annual operating report. Also to be maintained and available for inspection shall be a record of operation showing the date, fuel used, mode of operation (integrated/non-integrated), and the duration of all startups, shutdowns and malfunctions. [Rule 62-4.070(3), F.A.C.]
- A.30. Until January 1, 2006, for Unit No. 3, TEC shall maintain and submit to the Department and the EPCHC, on an annual basis, data demonstrating that the operational change of firing petcoke did not result in an emissions increase. [Rule 62-4.070(3), F.A.C.]

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A.31. For Unit No. 3, TEC shall submit a quarterly report to the Department and the EPCHC within 30 days following each calendar quarter. This report shall contain the 30-day NO<sub>x</sub> rolling average, all time periods of boiler operation as well as a statement of CEM and/or boiler malfunction, start-up or shutdown.

[Permit No. AO29-179911 (July 29, 1994 amendment)]

# A.32. Continuous Emission Monitoring Network and Alarms:

To demonstrate compliance with emission limits that are protective of AAQS, data inputs will consist of hourly CEM data from the SO<sub>2</sub>, flow, and CO<sub>2</sub> monitors for Units 1-3 at Big Bend Station. TEC will use CEM data from common stack CS0W1 and/or CS001 to represent unit compliance with the emission limitations for each Unit 1 and Unit 2. When Unit 3 is operated in the integrated mode, TEC will use apportioned CEM data from both common stacks CS002 and CS003 to represent individual unit compliance with the emission limitations for Unit 3. In the event any monitor fails, TEC will comply with 40 CFR 75, Subpart D – Missing Data Substitution Procedures.

[Applicant request.]

#### A.33. Compliance Plan Verification:

- 1. Frequency Reporting of compliance status shall be performed on a quarterly calendar basis. Reports will be due no later than 45 days following the last day of the reporting quarter.
- 2. Content Quarterly reports will consist of:
  - a. two-hour average SO<sub>2</sub> emissions rate for each Units 1, 2, and 3 in lb/MMBtu;
  - b. three-hour average SO<sub>2</sub> emissions for Units 1-3 in ton per hour;
  - c. 24-hour average SO<sub>2</sub> emissions for Units 1-3 in tons per hour; and
  - d. 24-hour average SO<sub>2</sub> emissions for Units 1-2 and Unit 3 in tons per hour.

[Applicant request.]

A.34. These emissions units are subject to requirements contained in Consent Final Judgment (DEP vs. TEC) dated December 6, 1999 and the Consent Decree (U.S. vs. TEC) dated February 29, 2000, including the October 4, 2000 amendment.

[Permit No. 0570039-014-AC]

- A.35. The first in a series of equipment installed pursuant to the Consent Final Judgment and Consent Decree for the purposes of NO<sub>X</sub> requirements contained therein include:
  - a. Steam Generator Units No. 1-3 are equipped with Low NO<sub>X</sub> burners (LNB).
  - b. Steam Generators Units 1 and 2 are equipped with coal and air flow monitoring equipment.
  - c. Steam Generator Unit 2 is equipped with a neural network system that monitors the following parameters: excess O<sub>2</sub> bias, force draft fan balance bias, mill outlet temperature bias, rating damper bias, and mill bypass damper bias.

[Permit No. 0570039-014-AC]

A.36 Units 1, 2, and 3 shall be operated using the Low  $NO_X$  burners and in accordance with the operational procedures that have been developed to minimize  $NO_X$  emissions. [Permit No. 0570039-014-AC]

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A.37. These emissions units are subject to the Compliance Assurance Monitoring requirements contained in the attached APPENDIX CAM.

# Subsection B. Steam Generator Unit No. 4 (and No. 3 in integrated mode) This section addresses the following Regulated Emissions Units:

E.U. ID No. Brief Description

-004 Unit No. 4 Steam Generator

-003 Unit No. 3 Steam Generator, only when operated in integrated mode.

Descriptions. Unit No. 4 is a 4330 MMBTU/hour, dry-bottom tangentially fired utility boiler. The generator nameplate capacity is 486 MW. Unit No. 4 began commercial operation in 1985. Particulate matter emissions generated during the operation of the unit are controlled by a dry electrostatic precipitator (ESP) manufactured by Belco. The control efficiency of the ESP is 99.7%. Sulfur dioxide emissions are controlled by flue gas desulfurization equipment manufactured by Research-Cottrell. The fuel fired in Unit No. 4 consists of coal, or a coal/petroleum coke blend containing a maximum of 20% petroleum coke by weight, or coal blended with coal residual generated from the Polk Power Station, or a coal/petroleum coke blend further blended with coal residual generated from the Polk Power Station.

As an option, Unit No. 3 exhaust gas, following particulate matter removal by the unit's ESP, will be routed to the inlet of the Unit No. 4 flue gas desulfurization (FGD) system scrubber. In this integrated mode, Unit No. 3 will meet the same sulfur dioxide emissions limitations as Unit No. 4. The FGD scrubber will continue to treat the exhaust gas from Unit No. 4. The FGD scrubber outlet stream, consisting of the combined Unit No. 3 and Unit No. 4 treated exhaust, will then be split and discharged through stacks CS002 and CS003. Stack CS002 does *not* include a recirculation duct to return exhaust gas to the inlet of the FGD scrubber. Continuous opacity monitoring systems (COMS) will be located at the outlet of Unit No. 3 and Unit No. 4 ESPs. Continuous SO<sub>2</sub> and CO<sub>2</sub> emissions monitoring systems (CEMS) will be located in stacks CS002 and CS003. Continuous NOx emissions monitoring systems (CEMS) will be located in the inlet ducts of each unit. These monitoring systems will be used to determine compliance with all current applicable requirements.

{Applicable regulations for Unit No. 4: 40 CFR 60 Subpart Da, and the federal Acid Rain Program, Phase II SO<sub>2</sub> and NO<sub>x</sub>, adopted and incorporated by reference in Rule 62-204.800, F.A.C.; PA79-12, PSD-FL-040 and an ASP for Coal Sampling.}

#### The following conditions apply to the emissions unit listed above:

#### Essential Potential to Emit (PTE) Parameters

B.1. <u>Capacity.</u> The maximum permitted heat input rate for Unit No. 4 is 4330 MMBTU/hr. [Rules 62-4.160(2), and 62-4.070(3), F.A.C.]

{Permitting note: The heat input limitation has been placed in this permit to identify the capacity of the unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability. Regular recordkeeping, other than annual, is not required for heat input. Instead the owner or operator is expected to determine heat input whenever emission testing is required, to demonstrate at what percentage of the rate capacity that the unit

was tested. Rule 62-297.310(5), F.A.C., requires measurement of the process variables for emission tests. Such heat input determination may be based on measurements of fuel consumption by various methods to calculate average hourly heat input during the test. Annual heat input must be calculated in order to determine annual emissions of pollutants whose limits are based upon heat input.}

### B.2. Methods of Operation - Fuels.

a. Normal operation: The fuel fired in Unit No. 4 shall consist of coal, or a coal/petroleum coke blend containing a maximum of 20% petroleum coke by weight, or coal blended with coal residual generated from the Polk Power Station, or a coal/petroleum coke blend further blended with coal residual generated from the Polk Power Station. In any case, the petroleum coke content of any fuel blend shall not exceed 20% by weight. The vanadium content of the petroleum coke fired shall not exceed 2660 ppm vanadium. The ash content of the petroleum coke fired shall not exceed 0.76% by weight on a dry basis. The permittee shall maintain and submit to the Department, and to the Environmental Protection Commission of Hillsborough County, on an annual basis for the years 2001, 2002, 2003, 2004, and 2005 data demonstrating that removal of the sulfur content limit and the revision of the vanadium content limit in the petroleum coke fired did not result in a significant increase in the representative actual annual emissions of any regulated pollutant.

## b. Other operation:

- i. In addition to the fuels allowed to be burned during normal operation, Unit No. 4 may also burn new No. 2 fuel during startup, shutdown, flame stabilization and during the start of an additional solid fuel mill on an already operating unit.
- ii. Evaporation of up to 150,000 gallons per year, total at the facility, is allowed of non-hazardous, but potentially HAP-emitting, mineral acid solution boiler chemical cleaning waste which was generated on site.
- c. Coal shall not be burned in Unit No. 4 unless both the electrostatic precipitator and limestone scrubber are operating properly.
  - d. [Reserved]
- e. TEC shall maintain a daily log of the amounts and types of fuels used and copies of fuel analyses containing information on sulfur content, ash content and heating values.
- f. Beneficiated, or refined, coal residual: The total amount of beneficiated, or refined, coal residual fired at Big Bend Station (all Unit Nos. 1-4 combined) shall be limited to 500 tons per day. The beneficiated, or refined, coal residual results from using the beneficiated process, described in permit application 0570039-012-AC, to wash and screen the raw coal residual to remove fines and oversized materials. This beneficiation process shall be performed at Polk Power Station, not Big Bend Station.
- g. Raw coal residual: The total amount of raw coal residual fired at Big Bend Station (all Unit Nos. 1-4 combined) shall be limited to 200 tons per day. The raw coal residual is a by-product of the gasification of coal at the Polk Power Station. At the time of the issuance of permit 0570039-012-AC on October 4, 2001, there were approximately 100,000 tons of raw coal residual stored at Polk Power Station. Once this raw coal residual pile has been fired, TEC shall only fire raw coal residual in the event of a significant beneficiation process malfunction. TEC shall document all beneficiation process malfunctions and record the amount of raw coal residual, if any, fired at Big Bend Station. These records should be kept on site at Big Bend and made readily available to the Department and the Environmental Protection Commission of Hillsborough County upon request.
- h. No coal residual shall be fired in any Unit when the corresponding scrubber is not in operation.

[Rules 62-4.070(3), 62-4.160(2), 62-210.200, and 62-213.440(1), F.A.C.; PSD-FL-040; Power Plant Siting Certification PA 79-12; Permit No. 0570039-012-AC; Permit No. 0570039-016-AC]

{Permitting note: "Flame stabilization" is defined as the use of No. 2 fuel oil to stabilize a flame during times of unexpected poor coal quality or equipment failure such as coal piping pluggage. Flame stabilization due to poor coal quality occurs when coal is wet or does not provide the necessary heat to maintain a stable flame. In this situation, No. 2 fuel oil is combusted to provide the additional required heat input to maintain a stable flame. Flame stabilization due to equipment failure occurs when coal piping is plugged, or equipment is otherwise damaged, that results in an inconsistent amount of coal reaching the burners. Under certain conditions, this may result in the burners intermittently seeing large amounts of fuel at one time, causing a potentially explosive flame "puff". In this situation, No. 2 fuel oil must be used for stabilization to prevent flame "puffing" and ensure safe operation. Combustion of No. 2 fuel oil is also necessary during periods of load change to initialize and stabilize the flame until coal flow to the burners reaches steady state. As defined in 62-210.700(3), F.A.C., Load change occurs when the operational capacity of a unit is in the 10 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.}

B.3. <u>Mode of Operation</u>. Tampa Electric Company is allowed to divert and integrate all of the flue gas from Unit No. 3 for purposes of treating that flue gas in the existing Unit No. 4 flue gas desulfurization (FGD) system.

[Rule 62-4.070(3), F.A.C., 40 CFR 60.40a, and Permit No. PSD-FL-040]

B.4. <u>Hours of Operation.</u> Unit No. 4 is allowed to operate continuously, i.e., 8760 hours/year. [Rule 62-210.200, F.A.C., Definitions (PTE)]

#### **Emission Limitations and Standards**

#### B.5.i. Unit Particulate Matter Emission Limits:

- a. Particulate matter emissions from Unit No. 4 shall not exceed 0.01 lb/million Btu heat input. This standard applies at all times except during periods of startup, shutdown, or malfunction. [Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.42a(a); 40 CFR 60.46a(a); 40 CFR 60.46a(c); Consent Final Judgment (DEP vs. TEC) dated December 6, 1999; Consent Decree (U.S. Vs. TEC) dated February 29, 2000; and EPA letter of approval of two plans (BOP and BACT) for control of particulate matter dated June 19, 2003]
- b. Based on the maximum permitted heat input rate listed in Specific Condition B.1., particulate matter emissions from Unit No. 4 shall not exceed 43.3 lbs/hour, 1039 lbs/day, and 189.7 tons/year. ii. Facility-Wide Particulate Matter Emission Limit:
- [PSD-FL-040 and Rule 62-296.700(4)(b)1., F.A.C.; Consent Final Judgment (DEP vs. TEC) dated December 6, 1999; Consent Decree (U.S. Vs. TEC) dated February 29, 2000; and EPA letter of approval of two plans (BOP and BACT) for control of particulate matter dated June 19, 2003]
- ii. <u>Facility-wide Particulate Matter Emission Limit</u>: In order to provide reasonable assurance that a significant net emission rate increase will not occur as a result of combusting raw and beneficiated coal residual at Big Bend, the combined emissions from Steam Generator Units 1-4 shall not exceed an annual emissions cap of 2,767 tons per year of PM/PM<sub>10</sub>. This cap corresponds to the average emissions of the years 1999 and 2000. Any relaxation in this limit that increases the facility's potential to emit by at least 1 ton of pollutant per year will result in a reevaluation of PSD applicability for the facility as though construction had not yet commenced at the facility.

[Rule 62-212.400(2)(g) and Permit No. 0570039-012-AC]

{Permitting note: The averaging time for the emissions standard in this condition shall be equal to the cumulative run time required by the specified test method.}

B.6. Visible emissions from Unit No. 4 shall not exceed 20 (twenty) percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 (twenty-seven) percent opacity. [Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.42a(b); PSD-FL-040]

#### B.7. Unit Sulfur Dioxide Emission Limits.

- a. Sulfur dioxide emissions from Unit No. 4 when combusting solid fuel shall not exceed 0.82 lb/million Btu heat input and 10 percent of the potential combustion concentration (90 percent reduction). Based upon a heat input of 4330 million Btu/hour, SO<sub>2</sub> emissions shall not exceed 3551 lb/hr. [Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.43a(a)(1); PSD-FL-040]
- b. Compliance with sulfur dioxide emission limitations and percent reduction requirements is determined on a 30-day rolling average basis. [Rule 62.204.800(7)(b)2., F.A.C.; 40 CFR 60.43a(g)]
- B.8. Facility-wide Sulfur Dioxide Emission Limit. In order to provide reasonable assurance that a significant net emission rate increase will not occur as a result of combusting raw and beneficiated coal residual at Big Bend, the combined emissions from Steam Generator Units 1-4 shall not exceed an annual emissions cap of 71,810 tons per year of SO<sub>2</sub>. This cap corresponds to the average emissions of the years 1999 and 2000. Any relaxation in this limit that increases the facility's potential to emit by at least 1 ton of pollutant per year will result in a reevaluation of PSD applicability for the facility as though construction had not yet commenced at the facility.

[Rule 62-212.400(2)(g) and Permit No. 0570039-012-AC]

B.9. Nitrogen dioxide emissions from Unit No. 4 when combusting bituminous or anthracite coal, or a coal/petroleum coke blend, shall not exceed 0.60 lb/million Btu heat input. Based upon a heat input of 4330 million Btu/hour, NO<sub>x</sub> emissions shall not exceed 2598 lb/hr. These emission limits are based on a 30-day rolling average. These standards apply at all times except during periods of startup, shutdown, or malfunction.

[Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.44a(a); 40 CFR 60.4a(c), PSD-FL-040]

B.10. Carbon monoxide (CO) emissions from Unit No. 4 shall not exceed 0.029 lb/million Btu heat input, and shall not exceed 124 lb/hr.

[PSD-FL-040 (October 9, 1985 modification)]

{Permitting note: The averaging time for the emissions standard in this condition shall be equal to the cumulative run time required by the specified test method.}

#### Compliance provisions.

B.11. The sulfur dioxide emission standards in specific condition B.7. apply at all times except during periods of startup, shutdown, or when both emergency conditions exist and the following procedures in specific condition B.12. are implemented.

[Rule 62-296.800(7)(b)2., F.A.C.; 40 CFR 60.46a(c)]

B.12. During emergency conditions in the principal company, an affected facility with a malfunctioning flue gas desulfurization system may be operated if sulfur dioxide emissions are minimized by:

(1) Operating all operable flue gas desulfurization system modules, and bringing back into operation any malfunctioned module as soon as repairs are completed,

- (2) Bypassing flue gases around only those flue gas desulfurization system modules that have been taken out of operation because they were incapable of any sulfur dioxide emission reduction or which would have suffered significant physical damage if they had remained in operation, and
- (3) Operating a *spare* flue gas desulfurization system module. The Department or EPCHC may at their discretion require TEC within 60 days of notification to demonstrate spare module capability. To demonstrate this capability, the owner or operator must demonstrate compliance with the appropriate requirements of specific condition B.7. for any period of operation lasting from 24 hours to 30 days when:
  - (i) Any one flue gas desulfurization module is not operated,
  - (ii) The affected facility is operating at the maximum heat input rate,
- (iii) The fuel fired during the 24-hour to 30-day period is representative of the type and average sulfur content of fuel used over a typical 30-day period, and
- (iv) TEC has given the Department or EPCHC at least 30 days notice of the date and period of time over which the demonstration will be performed. [Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.46a(d)]
- B.13. Compliance with the sulfur dioxide emission limitations and percentage reduction requirements in specific condition B.7., and the nitrogen oxides emission limitations in specific condition B.9., is based on the average emission rate for 30 successive boiler operating days. A separate performance test is completed at the end of each boiler operating day after the initial performance test, and a new 30 day average emission rate for both sulfur dioxide and nitrogen oxides and a new percent reduction for sulfur dioxide are calculated to show compliance with the standards. [Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.46a(e)]
- B.14. Compliance is determined by calculating the arithmetic average of all hourly *emission rates* for  $SO_2$  and  $NO_x$  for the 30 successive boiler operating days, except for data obtained during startup, shutdown, malfunction ( $NO_x$  only), or emergency conditions ( $SO_2$  only). Compliance with the percentage reduction requirement for  $SO_2$  is determined based on the average inlet and average outlet  $SO_2$  emission rates for the 30 successive boiler operating days. [Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.46a(g)]
- B.15. If TEC has not obtained the minimum quantity of emission data as required in the following emission monitoring specific conditions B.16. through B.25, compliance of Unit No. 4 with the sulfur dioxide and nitrogen oxides standards for the day on which the 30-day period ends may be determined by the Administrator by following the applicable procedures in section 7 of Method 19, Determination of Compliance When Minimum Data Requirement Is Not Met.

[Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.46a(h); 40 CFR 60, Appendix A, Method 19]

#### Emission Monitoring.

B.16. TEC shall calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for measuring the opacity of emissions discharged to the atmosphere. If opacity interference due to water droplets exists in the stack (for example, from the use of an FGD system), the opacity is monitored upstream of the interference (at the inlet to the FGD system). If opacity interference is experienced at all locations (both at the inlet and outlet of the sulfur dioxide control system), alternate

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parameters indicative of the particulate matter control system's performance are monitored (subject to the approval of the Department and the EPCHC.) [Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.47a(a)]

- B.17. TEC shall calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for measuring sulfur dioxide emissions as follows:
- (1) Sulfur dioxide emissions are monitored at both the inlet and outlet of the sulfur dioxide control device.
- (2) An "as fired" fuel monitoring system (upstream of coal pulverizers) meeting the requirements of Method 19, Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates, may be used to determine potential sulfur dioxide emissions in place of a continuous sulfur dioxide emission monitor at the inlet to the sulfur dioxide control device as required in the preceding specific condition B.17.(1).

  [Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.47a(b); 40 CFR 60, App. A, Method 19]

B.18. TEC shall calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for measuring nitrogen oxides emissions discharged to the atmosphere. [Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.47a(c)]

B.19. TEC shall calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for measuring the oxygen and/or carbon dioxide content of the flue gases at each location where sulfur dioxide or nitrogen oxides emissions are monitored. The sulfur dioxide, nitrogen dioxide, oxygen and/or carbon dioxide, and opacity monitoring devices shall meet the applicable requirements of Section 62-214, F.A.C., 40 CFR 60.47a., and 40 CFR 75. ). The opacity monitor shall be placed in the duct work between the electrostatic precipitator and the FGD scrubber. The continuous monitoring system will measure sulfur dioxide emissions at the inlet of each unit and outlet of the FGD system and from the Unit 3 stack (CS002) and Unit 4 stack (CS003), while emissions of nitrogen oxides, oxygen and/or carbon dioxide, and opacity shall be measured in the Units 3 and 4 ducts prior to the FGD system. When Unit 4 is operating and Unit 3 is not operating in the integrated mode, the continuous monitoring system will measure only Unit 4's inlet duct and stack for SO<sub>2</sub> emissions. The emissions of nitrogen oxides and opacity shall be measured in the Unit 4 duct prior to the FGD system. The emissions of carbon dioxide and sulfur dioxide are both measured in the inlet and outlet ducts.

[Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.47a(d); Power Plant Siting Certification PA 79-12D]

B.20. The continuous monitoring systems required in specific conditions B.17., B.18., and B.19., shall be operated and record data during all periods of operation of Unit No. 4 including periods of startup, shutdown, malfunction or emergency conditions, except for continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments.

[Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.47a(e)]

B.21. TEC shall obtain emission data for at least 18 hours in at least 22 out of 30 successive boiler operating days. If this minimum data requirement cannot be met with a continuous monitoring system, TEC shall supplement emission data with other monitoring systems approved by the Department or the EPCHC, or the reference methods and procedures as described in Specific Condition B.23. [Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.47a (f)]

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B.22. The 1-hour averages required under 40 CFR 60.13(h), *Monitoring Requirements*, are expressed in lbs/million Btu heat input and used to calculate the average emission rates required in specific conditions B.13. and B.14. The 1-hour averages are calculated using the data points required under 40 CFR 60.13(b), *Monitoring Requirements*. At least two data points must be used to calculate the 1-hour averages.

[Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.47a(g)]

- B.23. When it becomes necessary to supplement continuous monitoring system data to meet the minimum data requirements in specific condition B.21., TEC shall use the following reference methods and procedures. Acceptable alternative methods and procedures are given in specific condition B.25.
- (1) Method 6 shall be used to determine the SO<sub>2</sub> concentration at the same location as the SO<sub>2</sub> monitor. Samples shall be taken at 60-minute intervals. The sampling time and sample volume for each sample shall be at least 20 minutes and 0.020 dscm (0.71 dscf). Each sample represents a 1-hour average.
- (2) Method 7 shall be used to determine the  $NO_x$  concentration at the same location as the  $NO_x$  monitor. Samples shall be taken at 30-minute intervals. The arithmetic average of two consecutive samples represents a 1-hour average.
- (3) The emission rate correction factor, integrated bag sampling and analysis procedure of Method 3B shall be used to determine the  $O_2$  or  $CO_2$  concentration at the same location as the  $O_2$  or  $CO_2$  monitor. Samples shall be taken for at least 30 minutes in each hour. Each sample represents a 1-hour average.
- (4) The procedures in Method 19 shall be used to compute each 1-hour average concentration in 1b/million Btu heat input.

[Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.47a(h); 40 CFR 60, Appendix A, Methods 3B, 6, 7, and 19]

- B.24. TEC shall use the following methods and procedures to conduct the monitoring system performance evaluations required under 40 CFR 60.13(c), Monitoring Requirements, and the calibration checks required under 40 CFR 60.13(d), Monitoring Requirements. Acceptable alternative methods and procedures are given in specific condition B.25.
  - (1) Methods 6, 7, and 3B, as applicable, shall be used to determine O<sub>2</sub>, SO<sub>2</sub>, and NO<sub>x</sub> concentrations
- (2)  $SO_2$  or  $NO_x$  (NO), as applicable, shall be used for preparing the calibration gas mixtures (in  $N_2$ , as applicable) under 40 CFR 60 Appendix B, Performance Specification 2.
- (3) The span value for a continuous monitoring system for measuring opacity is between 60 and 80 percent and for a continuous monitoring system measuring nitrogen oxides is determined as follows

Fossil fuel	Span value for nitrogen oxides (ppm)	
Solid	1,000	

## (4) Reserved

(5) For affected facilities burning fossil fuel alone or in combination with non-fossil fuel, the span value of the sulfur dioxide continuous monitoring system at the inlet to the sulfur dioxide control device is 125 percent of the maximum estimated hourly potential emissions of the fuel fired, and the outlet of the sulfur dioxide control device is 50 percent of maximum estimated hourly potential emissions oil fuel, alone or in combination with non-fossil fuel, the span value of the fuel fired.

[Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.47a(i); 40 CFR 60.13; 40 CFR 60 Appendix A, Methods 3B, 6, and 7; 40 CFR 60 Appendix B, Performance Specification 2.]

- B.25. TEC may use the following as alternatives to the reference methods and procedures specified in conditions B.23. and B.24.:
- (1) For Method 6, Method 6A or 6B (whenever Methods 6 and 3 or 3B data are used) or 6C may be used. Each Method 6B sample obtained over 24 hours represents 24 1-hour averages. If Method 6A or 6B is used under specific condition B.24., the conditions under 40 CFR 60.46(d)(1) apply; these conditions do not apply under specific condition B.23.
- (2) For Method 7, Method 7A, 7C, 7D, or 7E may be used. If Method 7C, 7D, or 7E is used, the sampling time for each run shall be 1 hour.
- (3) For Method 3, Method 3A or 3B may be used if the sampling time is 1 hour.
- (4) For Method 3B, Method 3A may be used.

[Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.47a(j); 40 CFR 60.46(d)(1), 40 CFR 60 Appendix A, Methods 3, 3A, 3B, 6, 6A, 6B, 6C, 7, 7A, 7C, 7D, and 7E]

#### Compliance determination procedures and methods.

B.26. In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the methods in appendix A of 40 CFR 60 or the methods and procedures as specified in conditions B.27. through B.30., except as provided in 40 CFR 60.8(b). 40 CFR 60.8(f) does not apply to specific conditions B.28 and B.29. for SO<sub>2</sub> and NO<sub>x</sub>. Acceptable alternative methods are given in specific condition B.30.

[Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.48a(a); 40 CFR 60.8]

- B.27. TEC shall determine compliance with the particulate matter standards in specific condition B.5. as follows:
- (1) The dry basis F factor (O<sub>2</sub>) procedures in Method 19 shall be used to compute the emission rate of particulate matter.
  - (2) For the particular matter concentration, Method 5B shall be used after wet FGD systems.
- (i) The sampling time and sample volume for each run shall be at least 120 minutes and 1.70 dscm (60 dscf). The probe and filter holder heating system in the sampling train may be set to provide an average gas temperature of no greater than  $160\pm14$  °C ( $320\pm25$  °F).
- (ii) For each particulate run, the emission rate correction factor, integrated or grab sampling and analysis procedures of Method 3B shall be used to determine the  $O_2$  concentration. The  $O_2$  sample shall be obtained simultaneously with, and at the same traverse points as, the particulate run. If the particulate run has more than 12 traverse points, the  $O_2$  traverse points may be reduced to 12 provided that Method 1 is used to locate the 12  $O_2$  traverse points. If the grab sampling procedure is used, the  $O_2$  concentration for the run shall be the arithmetic mean of all the individual  $O_2$  concentrations at each traverse point.
- (3) Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity. [Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.48a(b); 40 CFR 60.11, 40 CFR 60 Appendix A, Methods 1, 3B, 5B, 9, and 19]
- B.28. TEC shall determine compliance with the SO<sub>2</sub> standards in specific condition B.7. as follows:
- (1) The percent of potential SO<sub>2</sub> emissions (%Ps) to the atmosphere shall be computed using the following equation:

$$%P_s = (100 - %R_g)/100$$

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where:  $%P_s$  = percent of potential  $SO_2$  emissions, percent.  $%R_g$  = percent reduction by  $SO_2$  control system, percent.

- (2) [Reserved.]
- (3) The procedures in Method 19 shall be used to determine the percent  $SO_2$  reduction ( ${}^{\circ}R_g$  of any  $SO_2$  control system. Alternatively, a combination of an "as fired" fuel monitor and emission rates measured after the control system, following the procedures in Method 19, may be used if the percent reduction is calculated using the average emission rate from the  $SO_2$  control device and the average  $SO_2$  input rate from the "as fired" fuel analysis for 30 successive boiler operating days.
  - (4) The appropriate procedures in Method 19 shall be used to determine the emission rate.
- (5) The continuous monitoring systems specified in conditions B.17. and B.19. shall be used to determine the concentrations of SO<sub>2</sub> and CO<sub>2</sub> or O<sub>2</sub>.

[Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.48a (c); 40 CFR 60 43a; 40 CFR 60.47a(b) and (d); 40 CFR 60 Appendix A, Method 19; Applicant request; 0570039-016-AC]

- B.29. TEC shall determine compliance with the NO<sub>x</sub> standards in specific condition B.9. as follows:
  - (1) The appropriate procedures in Method 19 shall be used to determine the emission rate of NO<sub>x</sub>.
- (2) The continuous monitoring systems specified in specific conditions B.18. and B.19. shall be used to determine the concentrations of NO<sub>x</sub> and CO<sub>2</sub> or O<sub>2</sub>.

[Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.48a(d); 40 CFR 60.44a; 40 CFR 60.47a(c); 40 CFR 60.47a(d)]

- B.30. TEC may use the following as alternatives to the reference methods and procedures specified in condition B.27:
- (1) For Method 5 or 5B, Method 17 may be used at Unit No. 4 if the stack temperature at the sampling location does not exceed an average temperature of 160 °C (320 °F). The procedures of sections 2.1 and 2.3 of Method 5B may be used in Method 17 only if it is used after wet FGD systems. Method 17 shall not be used after wet FGD systems if the effluent is saturated or laden with water droplets.
- (2) The  $F_c$  factor (CO<sub>2</sub>) procedures in Method 19 may be used to compute the emission rate of particulate matter under the stipulations of 40 CFR 60.46(d)(1). The CO<sub>2</sub> shall be determined in the same manner as the O<sub>2</sub> concentration.

[Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.48a(e); 40 CFR 60.46(d)(1); 40 CFR 60 Appendix A, Methods 5, 5B, 17, and 19]

## Reporting requirements.

- B.31. For sulfur dioxide, nitrogen oxides, and particulate matter emissions, the performance test data from the initial performance test and from the performance evaluation of the continuous monitors (including the transmissometer) shall be submitted to the Department and the EPCHC. [Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.49a(a)]
- B.32. For sulfur dioxide and nitrogen oxides the following information shall be reported to the Department and the EPCHC for each 24-hour period.
  - (1) Calendar date.

- (2) The average sulfur dioxide and nitrogen oxide emission rates (lb/million Btu heat input) for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the emission standards; and, description of corrective actions taken.
- (3) Percent reduction of the potential combustion concentration of sulfur dioxide for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the standard; and, description of corrective actions taken.
- (4) Identification of the boiler operating days for which pollutant or dilutent data have not been obtained by an approved method for at least 18 hours of operation of the facility; justification or not obtaining sufficient data; and description of corrective actions taken.
- (5) Identification of the times when emissions data have been excluded from the calculation of average emission rates because of startup, shutdown, malfunction (NO<sub>x</sub> only), emergency conditions (SO<sub>2</sub> only), or other reasons, and justification for excluding data for reasons other than startup, shutdown, malfunction, or emergency conditions.
- (6) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.
- (7) Identification of times when hourly averages have been obtained based on manual sampling methods.
- (8) Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system.
- (9) Description of any modifications to the continuous monitoring system which could affect the ability of the continuous monitoring system to comply with 40 CFR 60 Appendix B, Performance Specifications 2 or 3.

[Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.49a(b); 40 CFR 60 Appendix B]

- B.33. If the minimum quantity of emission data, as required by the emission monitoring specific conditions B.16. through B.25., is not obtained for any 30 successive boiler operating days, the following information obtained under the requirements of specific condition B.15. shall be reported to the Administrator for that 30-day period:
- (1) The number of hourly averages available for outlet emission rates  $(n_0)$  and inlet emission rates  $(n_i)$  as applicable.
- (2) The standard deviation of hourly averages for outlet emission rates  $(s_0)$  and inlet emission rates  $(s_i)$  as applicable.
- (3) The lower confidence limit for the mean outlet emission rate  $(E_0^*)$  and the upper confidence limit for the mean inlet emission rate  $(E_i^*)$  as applicable.
  - (4) The applicable potential combustion concentration.
- (5) The ratio of the upper confidence limit for the mean outlet emission rate  $(E_0^*)$  and the allowable emission rate  $(E_{std})$  as applicable.

[Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.49a(c); 40 CFR 60 Appendix A, Method 19]

- B.34. If any sulfur dioxide standards under specific condition B.7. is exceeded during emergency conditions because of control system malfunction, the owner or operator of the affected facility shall submit a signed statement:
- (1) Indicating if emergency conditions existed and requirements under specific condition B.14. were met during each period, and
  - (2) Listing the following information:
    - (i) Time periods the emergency condition existed;

(ii) Electrical output and demand on the owner or operator's electric utility system and the affected facility;

- (iii) Amount of power purchased from interconnected neighboring utility companies during the emergency period;
  - (iv) Percent reduction in emissions achieved:
  - (v) Atmospheric emission rate (ng/J or lb/MMBtu) of the pollutant discharged; and
  - (vi) Actions taken to correct control system malfunction.

[Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.49a(d); 40 CFR 60.43a; 40 CFR 60.46a(d)]

#### B.35. [Reserved.]

B.36. For any periods for which opacity, sulfur dioxide or nitrogen oxides emissions data are not available, the owner or operator of the affected facility shall submit a signed statement indicating if any changes were made in operation of the emission control system during the period of data unavailability. Operations of the control system and affected facility during periods of data unavailability are to be compared with operation of the control system and affected facility before and following the period of data unavailability.

[Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.49a(f)]

- B.37. The owner or operator of the affected facility shall submit a signed statement indicating whether:
- (1) The required continuous monitoring system calibration, span, and drift checks or other periodic audits have or have not been performed as specified.
- (2) The data used to show compliance was or was not obtained in accordance with approved methods and procedures of this part and is representative of plant performance.
- (3) The minimum data requirements have or have not been met; or, the minimum data requirements have not been met for errors that were unavoidable.
- (4) Compliance with the standards has or has not been achieved during the reporting period. [Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.49a(g)]
- B.38. For the purposes of the reports required under 40 CFR 60.7, periods of excess emissions are defined as all 6-minute periods during which the average opacity exceeds the applicable opacity standards under specific condition B.6. Opacity levels in excess of the applicable opacity standard and the date of such excesses are to be submitted to the Administrator each calendar quarter. [Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.49a(h)]
- B.39. The owner or operator of an affected facility shall submit the written reports required under this section and subpart A to the Department and the EPCHC for every calendar quarter. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter. [Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.49a(i)]
- B.40. Gravimetric instrument data verifying that the 20.0% maximum petroleum coke content by weight has not been exceeded shall be maintained for **five** years and submitted to the Department and the EPCHC with each annual operating report. Also to be maintained and available for inspection shall be a daily record of operation showing the date, fuel used, mode of operation (integrated/non-integrated), and the duration of all startups, shutdowns and malfunctions. TEC shall maintain copies of fuel analyses containing information on sulfur content, ash content, and heating values.

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[PSD-FL-040; Rules 62-4.070(3), 62-213.440(1)(b)2.b., F.A.C., and Power Plant Siting Certification PA 79-12]

- B.41. TEC shall submit to the Department a standardized plan or procedure that will allow the permittee to monitor emission control equipment efficiency and enable the permittee to return malfunctioning equipment to proper operation as expeditiously as possible.

  [Power Plant Siting Certification PA 79-12]
- B.42. Pursuant to Rule 62-212.200(2)(d), F.A.C., the actual emissions of the No. 4 Unit shall equal the representative actual emissions as defined in 40 CFR 52.21(b)(33). TEC shall maintain and submit to the Department and the EPCHC on an annual basis for a period of 5 years from the date the unit begins firing petroleum coke, data demonstrating that the operational change did not result in an emissions increase. [PSD-FL-040; PA 79-12, Conditions of Certification]
- B.43. Stack height. The height of the boiler exhaust stack for Unit No. 4 (CS003) shall not be less than 490 ft. above grade.

[Power Plant Siting Certification PA 79-12]

The following requirements of 40 CFR 60, Subpart A - General Provisions Requirements, apply to Unit No. 4:

B.44. <u>Definitions.</u> For the purposes of Rule 62-204.800(7), F.A.C., the definitions contained in the various provisions of 40 CFR 60, shall apply except that the term "Administrator" when used in 40 CFR 60, shall mean the Secretary or the Secretary's designee.

[40 CFR 60.2; Rule 62-204.800(7)(a), F.A.C.]

40 CFR 60.7 Notification and record keeping.

B.45. The owner or operator subject to the provisions of 40 CFR 60 shall furnish the Administrator written notification as follows:

A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.

[40 CFR 60.7(a)(4)]

- B.46. The owner or operator subject to the provisions of 40 CFR 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or, any periods during which a continuous monitoring system or monitoring device is inoperative.

  [40 CFR 60.7(b)]
- B.47. Each owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report (excess emissions

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are defined in applicable subparts) and/or a summary report form [see 40 CFR 60.7(d)] to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or, the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted; or, the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate). Written reports of excess emissions shall include the following information:

- (1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.
- (2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
- (3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
- (4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report. [40 CFR 60.7(c)(1), (2), (3), and (4)]
- B.48. The summary report form shall contain the information and be in the format shown in Figure 1 (attached) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.
- (1) If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator.
- (2) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

{See attached Figure 1: Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance} (electronic file name: figure 1.doc) [40 CFR 60.7(d)(1) and (2)]

- B.49. (1) Notwithstanding the frequency of reporting requirements specified in 40 CFR 60.7(c), an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:
- (i) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under this part continually demonstrate that the facility is in compliance with the applicable standard;
- (ii) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in 40 CFR 60, Subpart A, and the applicable standard; and
- (iii) The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in 40 CFR 60.7(e)(2).

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- (2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.
- (3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the owner or operator shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the noncomplying event. After demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in 40 CFR 60.7(e)(1) and (e)(2). [40 CFR 60.7(e)(1)]
- B.50. Any owner or operator subject to the provisions of 40 CFR 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and, all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least 5 (five) years following the date of such measurements, maintenance, reports, and records.

[40 CFR 60.7(f); Rule 62-213.440(1)(b)2.b., F.A.C.]

#### 40 CFR 60.8 Performance tests.

B.51. Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

[40 CFR 60.8(c)]

B.52. The owner or operator of an affected facility shall provide the Administrator at least 30 days prior notice of any performance test, except as specified under other subparts, to afford the Administrator the opportunity to have an observer present.

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[40 CFR 60.8(d)]

#### 40 CFR 60.11 Compliance with standards and maintenance requirements.

- B.53. Compliance with standards in 40 CFR 60, other than opacity standards, shall be determined in accordance with performance tests established by 40 CFR 60.8, unless otherwise specified in the applicable standard.

  [40 CFR 60.11(a)]
- B.54. Compliance with opacity standards in 40 CFR 60 shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60, any alternative method that is approved by the Administrator, or as provided in 40 CFR 60.11(e)(5). [40 CFR 60.11(b)]
- B.55. The opacity standards set forth in 40 CFR 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

  [40 CFR 60.11(c)]
- B.56. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating 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, opacity observations, review of operating and maintenance procedures, and inspection of the source.

[40 CFR 60.11(d)]

B.57. The owner or operator of an affected facility subject to an opacity standard may submit, for compliance purposes, continuous opacity monitoring system (COMS) data results produced during any performance test required under 40 CFR 60.8 in lieu of EPA Method 9 observation data. If an owner or operator elects to submit COMS data for compliance with the opacity standard, he or she shall notify the Administrator of that decision, in writing, at least 30 days before any performance test required under 40 CFR 60.8 is conducted. Once the owner or operator of an affected facility has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent tests required under 40 CFR 60.8 until the owner or operator notifies the Administrator, in writing, to the contrary. For the purpose of determining compliance with the opacity standard during a performance test required under 40 CFR 60.8 using COMS data, the minimum total time of COMS data collection shall be averages of all 6-minute continuous periods within the duration of the mass emission performance test. Results of the COMS opacity determinations shall be submitted along with the results of the performance test required under 60.8. The owner or operator of an affected facility using a COMS for compliance purposes is responsible for demonstrating that the COMS meets the requirements specified in 40 CFR 60.13(c), that the COMS has been properly maintained and operated, and that the resulting data have not been altered in any way. If COMS data results are submitted for compliance with the opacity standard for a period of time during which EPA Method 9 data indicates noncompliance, the EPA Method 9 data will be used to determine opacity compliance.

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[40 CFR 60.11(e)(5)]

#### 40 CFR 60.12 Circumvention.

B.58. No owner or operator subject to the provisions of 40 CFR 60 shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

[40 CFR 60.12]

#### 40 CFR 60.13 Monitoring requirements.

- B.59. For the purposes of 40 CFR 60.13, all continuous monitoring systems (CMS) required under applicable subparts shall be subject to the provisions of 40 CFR 60.13 upon promulgation of performance specifications for continuous monitoring systems under Appendix B of 40 CFR 60 and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, Appendix F of 40 CFR 60, unless otherwise specified in an applicable subpart or by the Administrator. Appendix F is applicable December 4, 1987.

  [40 CFR 60.13(a)]
- B.60. If the owner or operator of an affected facility elects to submit continuous opacity monitoring system (COMS) data for compliance with the opacity standard as provided under 40 CFR 60.11(e)(5), he shall conduct a performance evaluation of the COMS as specified in Performance Specification 1, Appendix B, of 40 CFR 60 before the performance test required under 40 CFR 60.8 is conducted. Otherwise, the owner or operator of an affected facility shall conduct a performance evaluation of the COMS or continuous emission monitoring system (CEMS) during any performance test required under 40 CFR 60.8 or within 30 days thereafter in accordance with the applicable performance specification in Appendix B of 40 CFR 60. The owner or operator of an affected facility shall conduct COMS or CEMS performance evaluations at such other times as may be required by the Administrator under section 114 of the Act.
- (1) The owner or operator of an affected facility using a COMS to determine opacity compliance during any performance test required under 60.8 and as described in 40 CFR 60.11(e)(5) shall furnish the Administrator two or, upon request, more copies of a written report of the results of the COMS performance evaluation described in 40 CFR 60.13(c) at least 10 days before the performance test required under 60.8 is conducted.

  [40 CFR 60.13(c)(1)]
- B.61. (1) Owners and operators of all continuous emission monitoring systems (CEMS) installed in accordance with the provisions of this part shall check the zero (or low-level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span shall, as a minimum, be adjusted whenever the 24-hour zero drift or 24-hour span drift exceeds two times the limits of the applicable performance specifications in Appendix B. The system must allow the amount of excess zero and span drift measured at the 24-hour interval checks to be recorded and quantified, whenever specified. For continuous

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monitoring systems measuring opacity of emissions, the optical surfaces exposed to the effluent gases shall be cleaned prior to performing the zero and span drift adjustments except that for systems using automatic zero adjustments. The optical surfaces shall be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.

- (2) Unless otherwise approved by the Administrator, the following procedures shall be followed for continuous monitoring systems measuring opacity of emissions. Minimum procedures shall include a method for producing a simulated zero opacity condition and an upscale (span) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. Such procedures shall provide a system check of the analyzer internal optical surfaces and all electronic circuitry including the lamp and photo detector assembly.

  [40 CFR 60.13(d)(1) and (2)]
- B.62. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under 40 CFR 60.13(d), all continuous monitoring systems (CMS) shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:
- (1) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring opacity of emissions shall 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.
- (2) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

  [40 CFR 60.13(e)(1) and (2)]
- B.63. All continuous monitoring systems (CMS) or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of Appendix B of 40 CFR 60 shall be used.

  [40 CFR 60.13(f)]
- B.64. When the effluents from a single affected facility or two or more affected facilities subject to the same emission standards are combined before being released to the atmosphere, the owner or operator may install applicable continuous monitoring systems (CMS) on each effluent or on the combined effluent. When the affected facilities are not subject to the same emission standards, separate continuous monitoring systems shall be installed on each effluent. When the effluent from one affected facility is released to the atmosphere through more than one point, the owner or operator shall install an applicable continuous monitoring system on each separate effluent unless the installation of fewer systems is approved by the Administrator. When more than one continuous monitoring system is used to measure the emissions from one affected facility (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required from each continuous monitoring system.

  [40 CFR 60.13(g)]
- B.65. Owners or operators of all continuous monitoring systems for measurement of opacity shall reduce all data to 6-minute averages and for continuous monitoring systems other than opacity to 1-hour averages for time periods as defined in 40 CFR 60.2. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute period. For continuous monitoring systems other than opacity, 1-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system

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breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non reduced form (e.g., ppm pollutant and percent O<sub>2</sub> or ng/J of pollutant). All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in subparts. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit (e.g., rounded to the nearest 1 percent opacity).

[40 CFR 60.13(h)]

- B.66. These emissions units are subject to requirements contained in Consent Final Judgment (DEP vs. TEC) dated December 6, 1999 and the Consent Decree (U.S. vs. TEC) dated February 29, 2000, including the October 4, 2000 amendment.

  [Permit No. 0570039-014-AC]
- B.67. The first in a series of equipment installed pursuant to the Consent Final Judgment and Consent Decree for the purposes of  $NO_X$  requirements contained therein include:
  - a. Steam Generator Unit No. 4 is equipped with Low NO<sub>X</sub> burners (LNB).
- b. Steam Generator No. 4 is equipped with separate overfire air (SOFA). [Permit No. 0570039-014-AC]
- B.68. Unit 4 shall be operated using the Low  $NO_X$  burners and in accordance with the operational procedures that have been developed to minimize  $NO_X$  emissions. [Permit No. 0570039-014-AC]
- B.69. Unit 4 shall be operated using the Separate Overfire Air System (SOFA) and in accordance with the operational procedures that have been developed to minimize NO<sub>X</sub> emissions. [Permit No. 0570039-014-AC]
- B.70. These emissions units are subject to the Compliance Assurance Monitoring requirements contained in the attached APPENDIX CAM.

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# Subsection C. Combustion Turbines This section addresses the following Regulated Emissions Units:

<u>E.U. ID No.</u>	Brief Description
-007	Combustion Turbine No. 1
-005	Combustion Turbine No. 2
-006	Combustion Turbine No. 3

#### **Descriptions**

Combustion Turbine No. 1 is a self-contained combustion turbine generating unit. The unit is a predesigned integrated simple-cycle, single-shaft, three-bearing machine with the load connected at the exhaust end of the unit. The turbine is fired on No. 2 distillate fuel oil and operated for intermittent peaking and emergency services only. The generator nameplate capacity is 18 MW. Unit No. 1 began commercial operation in 1969.

Combustion Turbine No. 2 is a self-contained Westinghouse combustion turbine generating unit. The unit is a predesigned integrated simple-cycle, single-shaft, three-bearing machine with the load connected at the exhaust end of the unit. The turbine is fired on No. 2 distillate fuel oil and operated for intermittent peaking and emergency services only. The generator nameplate capacity is 78 MW. Unit No. 2 began commercial operation in 1974.

Combustion Turbine No. 3 is a self-contained Westinghouse combustion turbine generating unit. The unit is a predesigned integrated simple-cycle, single-shaft, multi-bearing machine with the load connected at the exhaust end of the unit. The turbine is fired on No. 2 distillate fuel oil and operated for intermittent peaking and emergency services only. The generator nameplate capacity is 78 MW. Unit No. 3 began commercial operation in 1974.

{Permitting note: These are pre-NSPS combustion turbines.}

#### The following conditions apply to the Emissions Units listed above:

#### Essential Potential to Emit (PTE) Parameters

- C.1. <u>Methods of Operation Fuels.</u> The combustion turbines shall be fired on No. 2 distillate fuel oil and operated for intermittent peaking and emergency services only. [Rule 62-4.160(2), F.A.C., Construction application request]
- C.2. <u>Hours of Operation</u>. Operation of each gas turbine shall not exceed 3650 hours of operation during any consecutive 12 months. [Design; Rule 62-210.200, F.A.C. (Definitions PTE), Permit No. 057-0039-006-AC]
- C.3. <u>Inlet Fogger Operation</u>: Combined operation of the inlet air foggers for both gas turbines CT-2 and CT-3 shall not exceed 1365 total hours during any consecutive 12 months. [Design; Rule 62-212.400, F.A.C. (BACT); Rule 62-210.200, F.A.C. (Definitions PTE), Permit No. 057-0039-006-AC]
- C.4. <u>Plant Operation Problems</u>: If temporarily unable to comply with any of the conditions of this permit due to breakdown of equipment or destruction by fire, wind or other cause, the owner or operator

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shall notify the Compliance Authority by phone, FAX, or letter as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include pertinent information as to the cause of the problem, the steps being taken to correct the problem and prevent future recurrence, and the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit and the regulations. [Rule 62-4.130, F.A.C., Permit No. 057-0039-006-AC]

#### **Emission Limitations and Standards**

C.5. Visible emissions from each combustion turbine shall not be equal to or greater than 20 percent opacity.

[Rule 62-296.320(4)(b)1., F.A.C.]

- C.6. During each federal fiscal year (October 1 September 30) the Tampa Electric Company shall have formal compliance tests conducted on each combustion turbine for opacity. 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. [Rule 62-296.712, Rule 62-297.310(7)(a)4.a., and Rule 62-297.310(7)(a)8., F.A.C.]
- C.7. The test methods for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C.

#### Recordkeeping and Reporting Requirements

- C.8. If TEC chooses to conduct a visible emissions compliance test only once per five-year period, per Rule 62-297.310(7)(a)8., daily recordkeeping of the hours of operation is required to show that the 400-hour annual limit is not exceeded each year during the five-year period. [Rule 62-297.310(7)(a)8., and Rule 62-4.070(3), F.A.C.]
- C.9. Documentation of the type, quantity, and analysis of the fuel oil used/received is required. Records shall be kept for five years. [Rules 62-4.070(3) and 62-213.440(1), F.A.C.]
- C.10. The average daily and total annual hours of operation for each combustion turbine shall be submitted in an annual operation report. In addition, for each combustion turbine, annual emissions reporting requirements, apply to emissions of each pollutant that a turbine emits in the following quantities:
  - (1) for PM<sub>10</sub>, sulfur oxides, VOC, and nitrogen oxides 25 tons per year or more,
  - (2) for carbon monoxide 250 tons per year or more,
  - (3) for lead or lead compounds, measured as elemental lead 5 tons per year or more.
  - [62-210.370(3), F.A.C., 40 CFR 51.322(b)]

Tampa Electric will evaluate emissions from the turbines through the use of AP-42 emission factors or another equivalent method such as fuel analysis. [USEPA objection resolution.]

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#### **Compliance Demonstrations**

- C.11. Records: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to DEP representatives upon request. [Rules 62-4.160(14) and 62-213.440(1)(b)2., F.A.C.]
- C.12. Monthly Operations Summary: By the fifth calendar day of each month, the permittee shall record the following information in a written log for the previous month of operation and for the previous 12 months of operation: the number of operational hours for each gas turbine; the number of hours of inlet air fogging for each gas turbine; and the total combined number of hours of inlet air fogging for both gas turbines. The Monthly Operations Summary shall be maintained on site in a legible format available for inspection at the Department's request. [Rule 62-4.160(15), F.A.C.]

## Subsection D. Flyash Handling and Storage This section addresses the following Regulated Emissions Units:

E.U. ID No.	Brief Description
-008	Fly Ash Silo No. 1 Baghouse
-018	Fly Ash Silo No. 1 Truck Loadout
-009	Fly Ash Silo No. 2 Baghouse
-019	Fly Ash Silo No. 2 Truck Loadout
-026	Fly Ash Handling and Storage Fugitive Emissions (all except silos)

#### **Descriptions**

Fly Ash Silo No. 1 handles fly ash from Steam Generator Units No. 1 and No. 2. Fly ash is pneumatically conveyed from the individual electrostatic precipitators to Silo No. 1. Also, the fly ash may be pneumatically conveyed from tanker trucks to and/or from Silo No. 2 to Silo No. 1. The sum total loading rate to the silo for all the processes combined is 44.5 tons per hour. Fly ash from Silo No. 1 is discharged in either a wet or dry state. The dry fly ash is gravity fed by tubing into totally enclosed tanker trucks. The wet fly ash is processed through a pugmill and then unloaded into a dump truck. Particulate matter emissions generated by silo loading and silo unloading to a tanker truck are controlled by a 20,081 DSCFM Flex Kleen Model No. 84 UDTR-640 baghouse in addition to reasonable precautions. All fly ash handled is generated on-site.

Fly Ash Silo No. 2 handles fly ash from Steam Generator Units Nos. 1, 2, and/or 3. Fly ash is pneumatically conveyed in a series of pipes from the individual unit precipitators (Units 1, 2, and/or 3, only two units at any time) to the silo for temporary storage. Fly ash from Silo No. 2 is discharged in either a wet or dry state. From the silo, the dry fly ash is gravity fed by tubing into closed tanker trucks and transported to an off-site consumer. The wet fly ash is processed through a pugmill and then unloaded into a dump truck to be transported to an off-site consumer. Particulate emissions generated during silo loading operation and from the tanker truck loadout chutes are controlled by a 20,081 DSCFM Flex Kleen, Model No. 84 UDTR-640 baghouse in addition to reasonable precautions.

#### The following conditions apply to the Emissions Units listed above:

#### Essential Potential to Emit (PTE) Parameters

D.1. <u>Capacity</u>. The maximum permitted loading rate for all Fly Ash Silo No. 1 processes combined is 44.5 tons per hour. The maximum permitted loading rate for all Fly Ash Silo No. 2 processes combined is 44.5 tons per hour. Separate testing of emissions from each unit shall be conducted with each emissions unit operation at 90 to 100 percent of the maximum permitted capacity. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate 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.

[AC29-194516; AO29-161082; Rule 62-4.160(2), and Rule 62-297.310(2), F.A.C.]

D.2. <u>Hours of Operation</u>. Fly Ash Silos No. 1 and No. 2 are each allowed to operate continuously, i.e., 8760 hours/year.

[Rule 62-210.200, F.A.C., Definitions (PTE)]

#### **Emission Limitations and Standards**

- D.3. Visible emissions from each silo baghouse shall not be equal to or greater than 20 percent opacity. Visible emissions from each silo truck loadout shall not be equal to or greater than 20 percent opacity. [Rule 62-296.320(4)(b)1., F.A.C.]
- D.4. Visible emissions from the flyash handling system and flyash silos are limited to 5% opacity. [Power Plant Siting Certification PA 79-12]
- D.5. Total maximum allowable emissions of particulate matter from the each silo baghouse shall not exceed 0.03 grains/DSCF, 5.16 lbs./hr. and 22.62 tons/yr. based on a design flow rate of 20,081 DSCFM. The requirement of formal particulate matter compliance testing as provided in specific condition D.6. shall be waived if the baghouse meets the alternative standard of 5% opacity. If the Department or the Environmental Protection Commission of Hillsborough County has reason to believe that the particulate weight emission standard is not being met, the agency shall require that compliance be demonstrated by EPA Method 17 specified in Rule 62-297, F.A.C.

[Rule 62-4.160(2) and Rule 62-297.620(4), F.A.C.; AO29-160255; AO29-161082]

#### Test Methods and Procedures

D.6. During each federal fiscal year (October 1 - September 30), unless otherwise specified by rule, order, or permit, the Tampa Electric Company shall have formal compliance tests conducted on each silo baghouse for opacity and particulate matter and formal compliance test conducted on each silo truck loadout for opacity.

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

D.7. The test method for particulate emissions shall be EPA Method 17, with an acetone wash and an average stack temperature below 275 degrees Fahrenheit, or EPA Method 5 with an acetone wash. These test methods are incorporated and adopted by reference in Chapter 62-297, F.A.C. Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C.

[Rules 62-296.320(4)(a)3.a.(ii) and 62-296.320(4)(a)3.c., F.A.C.]

D.8. The test methods for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C.

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

D.9. All reasonable precautions shall be taken to prevent and control generation of unconfined emissions of particulate matter in accordance with the provisions in Rule 62-296.320(4), F.A.C. These provisions are applicable to any source, including, but not limited to, vehicular movement, transportation of materials, construction, alterations, demolition or wrecking, or industrial related activities such as loading, unloading, storing and handling. The following reasonable

precaution shall be taken to control unconfined particulate matter emissions associated with the fly ash silo/truck operations. Reasonable precautions shall include, but not limited to:

- A) Fly ash transported by dump truck shall be adequately wetted and processed through the pugmill.
- B) Dump trucks used to transport fly ash shall utilize tarps at all times except when loading/unloading.
- C) Fly ash transported in a dry state shall be accomplished utilizing an enclosed tanker truck.
- D) Fly ash spilled and/or leaked on plant grounds shall be adequately wetted and disposed of daily.
- E) Fly ash collected from spills and/or leaks must be adequately wetted at all times.
- F) Ensure the proper seating of the unloader chute onto the tanker inlet prior to loading.
- G) Keep the dust extractor operational during loading.
- H) Close the tanker's inlet as soon as practical after the loading process.
- I) Extend the tubing from the silo into the closed tanker type trucks during loadout.
- J) Periodic watering of plant roads.

[Rule 62-296.320(4)(c)2., F.A.C., AO29-160255, and precautions specified in initial Title V application.]

- D.10. Compliance testing for the silo and tanker truck loading operations shall be conducted under the following conditions:
- a. All conveyance hoppers will be operational during the test.
- b. All fly ash will be directed to the silo, no reinjection of fly ash to the boiler systems will occur during the test.
- c. The boilers shall operate at the maximum capability of this unit under normal operating conditions during the test.
- d. Two tanker trucks shall be loaded during the test. The loading valve shall be open to allow 90%-100% of the maximum loading rate during testing. Position of the valve during testing shall be recorded.
- e. The visible emission test shall be at least 30 minutes in duration and the period of time during which truck loading occurred indicated on the test report.

[Rules 62-4.070(3) and 62-297.310, F.A.C.].

- D.11. Compliance with the emission limitations of Specific Conditions Nos. 3 and 4 shall be determined using EPA Methods 1, 2, 4, 5 and 9 contained in 40 CFR 60, Appendix A and adopted by reference in Rule 62-297.401, F.A.C. The Method 9 observation period for the silo and tanker truck loading operations shall be at least thirty (30) minutes in duration. The minimum requirements for stack sampling facilities, source sampling and reporting, shall be in accordance with Rule 62-297, F.A.C. and 40 CFR 60, Appendix A. [Rule 62-297, F.A.C.]
- D.12. All compliance tests shall be conducted while loading the silo at approximately the maximum feed rate (24 hour average). Failure to submit the feed rate or operating at conditions during testing which do not reflect normal operating conditions may invalidate the data. [Rule 62-4.070(3), F.A.C.].

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## Subsection E. Flyash Silo No. 3

## This section addresses the following Regulated Emissions Units:

E.U. ID No.	Brief Description
-014	Fly Ash Silo No. 3 Baghouse
-027	Fly Ash Silo No. 3 Truck Loadout
-028	Fly Ash Handling System Fugitive Emissions

#### Description

Fly Ash Silo No. 3 handles fly ash from Steam Generator Unit No. 4. Also, fly ash may be pneumatically conveyed from tanker trucks to Silo No. 3. Particulate matter emissions are controlled by a 1,200 DSCFM Flex Kleen Model 84-WRTC-80-II-G baghouse. The wet flyash may be processed through a pugmill and then unloaded into a dump truck.

#### The following conditions apply to the Emissions Unit listed above:

## Essential Potential to Emit (PTE) Parameters

E.1. Particulate matter emissions from the flyash handling system and flyash silo shall not exceed 0.2 lb/hr.

[Power Plant Siting Certification PA 79-12; PSD-FL-040]

- E.2. Visible emissions from the flyash handling system and the flyash silo are limited to 5% opacity. [Power Plant Siting Certification PA 79-12]
- E.3. The flyash handling system (including transfer and silo storage) will be maintained at negative pressures and vented to a control system.

  [PSD-FL-040]
- E.4. Tampa Electric will perform an annual VE test to satisfy the periodic monitoring requirements of these conditions. In addition, the system pressure will be monitored quarterly to assess that the system is operating under negative pressure.

  [USEPA objection resolution.]

## Subsection F. Limestone Handling and Storage This section addresses the following Regulated Emissions Units:

E.U. ID No.	Brief Description
-011	Truck Limestone Unloading Receiving Hopper
-012	Limestone Silo A with 2 baghouses
-013	Limestone Silo B with 2 baghouses
-023	Limestone Handling Conveyor LB to Conveyor LC with baghouse,
	Limestone Handling Conveyor LD to Conveyor LE with baghouse
-025	Limestone Storage and Handling Fugitive Emissions

#### **Descriptions**

Particulate matter emissions generated by the transfer of limestone from Handling Conveyor LB to Conveyor LC are controlled by a Sternvent Model DKED18003 baghouse. Particulate matter emissions generated by the transfer of limestone from Handling Conveyor LD to Conveyor LE are controlled by a Sternvent Model DKED 18003 baghouse.

#### The following conditions apply to the Emissions Units listed above:

#### Essential Potential to Emit (PTE) Parameters

- F.1. Total combined particulate matter emissions from the limestone handling conveyors shall not exceed 0.65 lb/hr. Visible emissions are limited to 5% opacity. Compliance testing for particulate matter emissions is not required provided the opacity limit is maintained.

  [PSD-FL-040; Power Plant Siting Certification PA 79-12]
- F.2. Total combined particulate matter emissions from the limestone silos shall not exceed 0.05 lb/hr. Visible emissions are limited to 5% opacity. Compliance testing for particulate matter emissions is not required provided the opacity limit is maintained.

  [PSD-FL-040; Power Plant Siting Certification PA 79-12]
- F.3. All conveyors and conveyor transfer points shall be enclosed to preclude particulate matter emissions.

  [PSD-FL-040]
- F.4. The limestone handling conveyor transfer points and silos shall be maintained at negative pressures with the exhaust vented to a control system(s).

  [PSD-FL-040]
- F.5. Tampa Electric will perform an annual VE test on E.U. ID Nos. 011, 012, 013, and 023 to satisfy the periodic monitoring requirements of these conditions. In addition, the system pressure will be monitored quarterly to assess that the system is operating under negative pressure. [USEPA objection resolution.]

## Subsection G. Coal Bunkers with Roto-Clones This section addresses the following Regulated Emissions Units:

E.U. ID No.	Brief Description
-015	Unit No. 1 Coal Bunker with Roto-Clone
-016	Unit No. 2 Coal Bunker with Roto-Clone
-017	Unit No. 3 Coal Bunker with Roto-Clone
-039	Unit No. 4 Coal Bunker with Roto-Clone

#### Descriptions

These emission units are Steam Generator Units Nos. 1- 4 Coal Bunkers with an exhaust fan/cyclone collector (Roto-Clone) controlling dust emission from each unit's respective bunker. Two moving transfer stations via their respective conveyor belts route coal through enclosed chutes to the various bunkers. Coal Bunkers 1- 4 are each equipped with a 9400 ACFM American Air Filter (AAF) Company Type D Roto-Clone to abate dust emissions during ventilation. A number of vent pipes convey fresh air from each bunker to a Roto-Clone during particulate matter removal. Particulate matter removed by the Roto-Clones is returned to the coal bunkers via a hopper and return line. Unit No. 1 Coal Bunker is situated west of Unit No. 2 Coal Bunker. Unit No. 3 Coal Bunker is situated east of Unit No. 2 Coal Bunker is located east of Unit No. 3.

#### The following conditions apply to the Emissions Units listed above:

#### Essential Potential to Emit (PTE) Parameters

- G.1. <u>Capacity</u>. The annual coal throughput shall not exceed 4,000 TPH per bunker. [Rule 62-4.160(2), F.A.C.]
- G.2. <u>Hours of Operation</u>. To show compliance with the annual allowable emission rate, the hours of bunker loading operation shall not exceed 4167 hours per year. [Rule 62-210.200, F.A.C., Definitions (PTE)]

#### **Emission Limitations and Standards**

G.3. Visible emissions from each unit shall not be equal to or greater than 20% opacity. The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C.

[Rule 62-296.320(4)(b)1. and 4., F.A.C.]

G.4. Since a source of less than 1 TPY is exempt from particulate matter RACT provisions, the maximum allowable particulate emissions shall not exceed 0.99 tons per year from each rotoclone exhaust. Also maximum allowable particulate matter emissions shall not exceed 0.48 lbs/hr from each cyclone exhaust.

[AO29-163788 to escape RACT]

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G.5. The maximum allowable emission rate for particulate matter for this source is set by specific condition no. G.4. Because of the expense and complexity of conducting a stack test on minor sources of particulate matter, the Department hereby waives the requirement for a stack test. The alternative standard establishes a visible emission limitation not to exceed an opacity of 5%. Compliance with this alternate emission limitation shall be determined using DEP Method 9 contained in 62-297.401, F.A.C.

[AO29-163788]

- G.6. Should the Department have reason to believe the particulate matter emission standard is not being met, the Department may require that compliance with the particulate emission standards be demonstrated by testing using EPA Methods 1, 2, 4 and 5 in accordance with 62-297.401, F.A.C. [Rule 62-297.310(7)(b), F.A.C.]
- G.7. Tampa Electric will monitor the hours of operation of coal bunker loading. In addition, Tampa Electric will perform an annual VE test to satisfy the periodic monitoring requirements of this condition. [USEPA objection resolution.]

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## Subsection H. Solid Fuel Yard This section addresses the following Regulated Emissions Units:

E.U. ID No.	Brief Description
-010	Solid Fuel Yard, Fugitive Emissions
-029	Cyclone collectors for fuel blending bins (FH-032 through FH-035)
-030	Cyclone collectors for fuel mills (FH-048 and FH-049)

## **Descriptions**

Solid fuel is unloaded from ship/barge into the Solid fuel yard, the blending bins or directly to the tripper room via belt conveyors. Solid fuel from the piles is loaded onto belt conveyors using a rail mounted or mobile reclaimer. The solid fuel is then belt conveyed to the blending bins, which consists of six storage bins, where the solid fuel may be blended for use at the plant, or transloaded into trucks for shipment off site. Particulate matter (PM) emissions from the conveyors in the blending bins are controlled by 4 rotoclones, one at the conveyor drop, and one for every 2 bins. Blending bins can either feed the transloader, or solid fuel can be conveyed, via 2 parallel belts (T1, T2) to 2 crushers (each belt has a crusher), or diverted directly to the tripper room. PM emissions from the 2 crushers and transfer tower are controlled by 2 rotoclones.

From the tripper room, 2 trippers bunker the solid fuels into 4 solid fuel bunkers. Each unit has its own respective bunker. From the bunkers, the solid fuel is gravity fed into 14 mills, and then fed into the boilers. There are 3 ball mills, each for Unit Nos. 1-3, and 5 bowl mills for Unit No. 4. From the mills, the solid fuel is pneumatically fed into classifiers, two for each mill on Unit Nos. 1-3 and one for each mill on Unit No. 4 for a total of 23 classifiers, and then into the respective boilers.

#### The following conditions apply to the Emissions Units listed above:

H.1. TEC shall maintain a daily log of the amounts and types of fuels used and copies of fuel analyses containing information on sulfur content, ash content and heating values.

[Power Plant Siting Certification PA 79-12]

#### H.2. Particulate matter emissions from the solid fuel handling facilities:

- (a) Pursuant to Chapter 1-3.62 Rules of the Environmental Protection Commission of Hillsborough County, visible emission shall not exceed 20% opacity for any unconfined emission unit in the fuel yard. Unconfined emissions as defined by Rule 62-296.200, F.A.C., shall include the static fuel piles, etc. Pursuant to Rule 62.296.711(2), F.A.C., visible emissions shall not exceed 5 percent opacity for the remaining emission units in the fuel yard. Visible emissions compliance tests shall be demonstrated using EPA Reference Method 9, 40 CFR Part 60, Appendix A, Visual Determination of Fugitive Emissions form Material Sources (July 1, 1993 version). All testing shall be done within 90 days of completing reconfiguration of the fuel yard, and prior notification of testing shall be submitted in writing at least 15 days beforehand to the EPC of Hillsborough County. Particulate emissions shall be controlled by use of control devices. Tampa Electric will perform an annual VE test to demonstrate compliance with the opacity standard established for the solid fuel yard.
- (b) The permittee must submit to the Department within ten (10) working days after it becomes available, copies of technical data pertaining to the selected particulate emissions control for the coal handling facility. These data should include, but not be limited to, guaranteed efficiency and emission

rates, and major design parameters such as air/cloth ratio and flow rate. The Department may, upon review of these data, disapprove the use of such device if the Department determines the selected control device to be inadequate to meet the emission limits specified in condition (a) above. Such disapproval shall be issued within 30 days of receipt of the technical data.

- (c) The fuel pile operations are subject to Rule 62-296.310(3), F.A.C., Unconfined Emissions of Particulate Matter. Reasonable precautions to minimize unconfined particulate matter shall be in accordance with Rule 62-296.310(3)(c), F.A.C.,; and, may include, but shall not be limited to, the coating of roads and construction sites used by contractors and regrassing or watering areas of disturbed fuel.
- (d) From each fuel transloading source/emissions point (i.e., off-loading and loading of fuel {for export from Big Bend Station}), the maximum hourly transloading transfer of fuel shall not exceed 4,000 tons, 24-hour rolling average.
- (e) From each fuel transloading source/emissions point, (i.e., off-loading and loading of fuel {for export from Big Bend Station}), the maximum annual transloading transfer of fuel shall not exceed 1,428,030 tons.
- (f) The number of railcars and trucks and the quantity of fuel loaded by each fuel transloading source/emissions point (i.e., off-loading and loading of fuel {for export from Big Bend Station\*}) shall be recorded, maintained, and kept on fuel for a minimum of five years. The annual quantity of fuel loaded by each fuel transloading source/emissions point shall be submitted in the Annual Operation Report.

[Power Plant Siting Certification PA 79-12]

\*Permitting Note.

- H.3. All conveyors and conveyor transfer points shall be enclosed to preclude particulate matter emissions excepting the coal handling stacker reclaimer, the tail end conveyor feeding the tripper and the barge unloading belt which are exempted for feasibility considerations.

  [PSD-FL-040]
- H.4. Coal storage piles shall be shaped, compacted and oriented to minimize wind erosion. [PSD-FL-040]
- H.5. Water sprays for storage piles, handling equipment, etc., including the handling equipment exempted from the conveyor enclosure requirement, shall be applied during dry periods and as necessary to all facilities to maintain opacity below 20 percent. [Rules 62-4.160(2) and 62-296.320(4)(c), F.A.C.]

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## Subsection I. Surface Coating of Miscellaneous Metal Parts

#### This section addresses the following Regulated Emissions Units:

-032 Surface coating of miscellaneous metal parts

#### Description

These conditions apply to the surface coating of miscellaneous metal parts as defined in Rule 62-296.513, F.A.C. These parts include such things as pumps, compressors, conveyor components, fans, blowers, transformers.

## The following conditions apply to the Emissions Unit listed above:

I.1. <u>Hours of Operation</u>. Miscellaneous metal parts surface coating operations are allowed to operate for a total 3500 hours/year.

[Rule 62-210.200, F.A.C., Definitions (PTE)]

I.2. <u>Capacity</u>. The total maximum coating usage shall not exceed 2 gallons per hour, on a 24-hr basis, and 7000 gallons per year.

[Rule 62-210.200, F.A.C., Definitions (PTE)]

- I.3. <u>Recordkeeping</u>. TEC shall maintain daily records of operations for the most recent 5 year period. The records shall be made available to the local, state, or federal air pollution agency upon request. The records shall include, but not be limited to, the following:
- a. The rule number applicable to the operation for which the records are being maintained.
- b. The application method and substrate type (metal, etc.).
- c. The amount and type of adhesive, coatings (including catalyst and reducer for multicomponent coatings), solvent, and/or graphic arts material used at each point of application, including exempt compounds.
- d. The VOC content as applied in each adhesive, coating, solvent, and/or graphic arts material.
- e. The date for each application of each adhesive, coating, solvent, and/or graphic arts material.
- f. The amount of surface preparation, clean-up, wash-up of solvent (including exempt compounds) used and the VOC content of each.

[Rule 62-296.500(2)(b)1., F.A.C.]

- I.4. The VOC content shall be calculated using a percent solids basis (less water and exempt solvents) for adhesives, coating, and inks, using EPA Reference Method 24. [Rule 62-296.500(2)(b)2., F.A.C.]
- I.5. <u>Reporting.</u> Annually, in accordance with a schedule and reporting format provided by the Department or EPCHC, TEC shall provide EPCHC with proof of compliance with the limitations in this section.

[Rule 62-296.500(2)(c), F.A.C.]

The following conditions apply to the Emissions Unit listed above if the Emissions Unit emits more than 15 pounds of VOC in any one day and 3 pounds VOC in any one hour:

- I.6. Emissions Limits for surface coating of miscellaneous metal parts.
- (a) No owner or operator of a coating line for miscellaneous metal parts and products shall cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of:
- (1) 4.3 pounds per gallon of coating (0.52 kilograms per liter), excluding water, delivered to a coating applicator that applies clear coatings;
- (2) 3.5 pounds per gallon of coating (0.42 kilograms per liter), excluding water, delivered to a coating applicator in coating application system that is air dried or forced warm air dried at temperatures up to 194 degrees Fahrenheit (90 degrees Celsius);
- (3) 3.5 pounds per gallon of coating (0.42 kilograms per liter), excluding water, delivered to a coating applicator that applies extreme performance coatings; or,
- (4) 3.0 pounds per gallon of coating (0.36 kilograms per liter), excluding water, delivered to a coating applicator for all other coatings and coating application systems.
- (b) If more than one emission limitation in condition I.6.(a) above applies to a specific coating, then the least stringent emission limitation shall be applied.
- (c) All volatile organic compound emissions from solvent washings shall be considered in the emission limitations in condition I.6.(a) above unless the solvent is directed into containers that prevent evaporation into the atmosphere.

[Rule 62-296.513(2), F.A.C.]

- I.7. <u>Control Technology.</u> The emission limits in condition I.6.(a) above shall be achieved by: The application of low solvent coating technology. [Rule 62-296.513(3), F.A.C.]
- I.8. <u>Test Methods and Procedures to Determine Low Solvent Technology</u>. The test method for volatile organic compounds shall be EPA Method 24 or EPA 450/3-84-019, incorporated and adopted by reference in Chapter 62-297, F.A.C. Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C.]

[Rules 62-296.513(4)(a) and (c), F.A.C.]

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#### Subsection J. Abrasive Blasting

This section addresses the following Regulated Emissions Units:

- -033 Abrasive Blast Booth with baghouse
- -034 Abrasive Blast Media Storage with baghouse

#### Description

The abrasive blast booth is used to prepare miscellaneous metal parts for surface coating. Particulate matter emissions from the abrasive blast booth are controlled by a Torit Model No. DFT 4-16 pulse jet baghouse with an inlet flow rate of 7,500 acfm. Particulate emissions from the abrasive blast media storage are controlled by a pulse jet baghouse with an inlet air flow rate of 800 dscfm.

#### The following conditions apply to the Emissions Units listed above:

J.1. <u>Capacity</u>. The maximum annual usage of abrasive blast media in the abrasive blast booth shall not exceed 300 tons per year.

[Rules 62-4.160(2), 62-210.200(PTE)]

J.2. <u>Hours of Operation</u>. These emissions units are each allowed to operate continuously, i.e., 8760 hours/year.

[Rule 62-210.200, F.A.C., Definitions (PTE)]

J.3. <u>Emission Limitations</u>. The particulate matter emissions from each baghouse shall not exceed 0.03 gr/dscf, or any visible emissions greater than 5% opacity. However, TEC may exceed these emission limits if a pollution control device for particulate matter is utilized that has an actual particulate matter collection efficiency of at least 98 percent. The opacity standard for the emissions units shall be the average opacity level achieved during the initial compliance test which established compliance with the standard, plus 5% opacity.

[Rules 62-296.712(2), F.A.C.]

- J.4. Test Methods and Procedures.
- (a) The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference by reference in Chapter 62-297, F.A.C.
- (b) The test method for particulate matter emissions shall be EPA Method 5, incorporated and adopted by reference in Chapter 62-297, F.A.C. The minimum sample volume shall be 30 dry standard cubic feet.
- (c) A visible emissions test indicating no visible emissions (5 percent opacity) may be submitted in lieu of a particular stack test for materials handling emissions subject to this rule, where the emissions unit is equipped with a baghouse.
- (d) Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C. [Rule 62-296.712(3), F.A.C.]
- J.5. Particulate matter emissions from the abrasive blasting operations shall not exceed 15 tons for any 12 consecutive month period.

[Rule 62-212.300, F.A.C.]

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J.6. No used or waste oils shall be burned in the diesel compressors. The observation point for the blasting operation tests shall be at the point of maximum opacity leaving the enclosure. [Rule 62-070(3), F.A.C.]

- J.7. TEC shall maintain monthly records on the type and amount of abrasive blasting material used . A rolling 12-month total shall be kept as well. [Rule 62-070(3), F.A.C.]
- J.8. During each month that the Abrasive Blast Booth is used, a VE test must be performed. A monthly VE test is not required during any month that the Abrasive Blast Booth is not used. During each month that abrasive blast media is transferred to or from Abrasive Blast Media Storage, a VE test must be performed. A monthly VE test is not required during any month that no abrasive blast media is transferred to or from Abrasive Blast Media Storage. However, at a minimum, an annual VE test must be performed.

[USEPA objection resolution.]

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#### Subsection K. Surface Coating of Ships

#### This section addresses the following Regulated Emissions Units:

-035 Surface coating of ships

#### **Description**

Surface coating maintenance of ships.

## The following conditions apply to the Emissions Units listed above:

K.1. The emissions unit must comply with the attached 40 CFR 63 Subpart A – General Provisions modified for Subpart II.

[40 CFR 63 Subpart A, Rule 62-204.800, F.A.C.]

K.2. This emissions unit must also comply with the following:

## 40 CFR 63 Subpart II – National Emission Standards for Shipbuilding and Ship Repair (Surface Coating)

{Source: 40 CFR 63 Subpart II (7/1/96 version), and Fed. Register revision dated 12/17/96}

- 63.781 Applicability
- 63.782 Definitions
- 63.783 Standards.
- 63.784 Compliance dates.
- 63.785 Compliance procedures.
- 63.786 Test methods and procedures.
- 63.787 Notification requirements.
- 63.788 Recordkeeping and reporting requirements.}

#### § 63.781 Applicability.

- (a) The provisions of this subpart apply to shipbuilding and ship repair operations at any facility that is a major source.
- (b) The provisions of this subpart do not apply to coatings used in volumes of less than 200 liters (52.8 gallons) per year, provided the total volume of coating exempt under this paragraph does not exceed 1,000 liters per year (264 gallons per year) at any facility. Coatings exempt under this paragraph shall be clearly labeled as "low-usage exempt," and the volume of each such coating applied shall be maintained in the facility's records.
- (c) The provisions of this subpart do not apply to coatings applied with hand-held, nonrefillable, aerosol containers or to unsaturated polyester resin (i.e., fiberglass lay-up) coatings. Coatings applied to suitably prepared fiberglass surfaces for protective or decorative purposes are subject to this subpart.

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(d) The provisions in subpart A of this part [See specific condition K.1., General Provisions] pertaining to startups, shutdowns, and malfunctions and continuous monitoring do not apply to this source category unless an add-on control system is used to comply with this subpart in accordance with § 63.783(c).

The following specific conditions from 40 CFR Part 63, Subpart II - Shipbuilding and Ship Repair (Surface Coating) apply:

#### 40 CFR 63.783 Standards

- (a) No owner or operator of any existing or new affected source shall cause or allow the application of any coating to a ship with an as-applied VOHAP content exceeding the applicable limit given in Table 2 of this subpart (see attachment), as determined by the procedures described in 40 CFR 63.785(c)(1)-(4). For the compliance procedures described in 40 CFR 63.785(c)(1)-(3), VOC shall be used as a surrogate for VOHAP, and the EPA Reference Method 24 shall be used as the definitive measure for determining compliance. For the compliance procedure described in 40 CFR 63.785(c)(4), an alternative test method capable of measuring independent VOHAP shall be used to determine compliance. The method must be submitted to and approved by the Administrator.

  [40 CFR 63.783(a)]
- (b) Each owner or operator of a new or existing affected source shall ensure that:
- (1) All handling and transfer of VOHAP-containing materials to and from containers, tanks, vats, drums, and piping systems is conducted in a manner that minimizes spills.
- (2) All containers, tanks, vats, drums, and piping systems are free of cracks, holes, and other defects and remain closed unless materials are being added to or removed from them.

  [40 CFR 63.783(b)]
- (c) Approval of alternative means of limiting emissions.
- (1) The owner or operator of an affected source may apply to the Permitting authority for permission to use an alternative means (such as an add-on control system) of limiting emissions from coating operations. The application must include:
- (i) An engineering material balance evaluation that provides a comparison of the emissions that would be achieved using the alternative means to those that would result from using coatings that comply with the limits in Table 2 of this section, or the results from an emission test that accurately measures the capture efficiency and control device efficiency achieved by the control system and the composition of the associated coatings so that the emissions comparison can be made;
- (ii) A proposed monitoring protocol that includes operating parameter values to be monitored for compliance and an explanation of how the operating parameter values will be established through a performance test; and
  - (iii) Details of appropriate recordkeeping and reporting procedures.
- (2) The Permitting authority shall approve the alternative means of limiting emissions if, in the Permitting authority's judgment, postcontrol emissions of VOHAP per volume applied solids will be no greater than those from the use of coatings that comply with the limits in Table 2 of this section.

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(3) The Permitting authority may condition approval on operation, maintenance, and monitoring requirements to ensure that emissions from the source are no greater than those that would otherwise result from this subpart. [Rule 62-296.820, F.A.C.; 40 CFR 63.783(c)]

## 40 CFR 63.784 Compliance Dates

- (a) Each owner or operator of an existing affected source shall comply by 12/16/97. [40 CFR 63.784(a)]
- (b) Each owner or operator of an existing unaffected area source that increases its emissions of (or its potential to emit) HAP such that the source becomes a major source that is subject to this subpart shall comply within 1 year after the date of becoming a major source.

  [40 CFR 63.784(b)]
- (c) Each owner or operator of a new or reconstructed source shall comply with this subpart according to the schedule in 40 CFR 63.6(b) of subpart A.

  [40 CFR 63.784(c)]

## 40 CFR 63.785 Compliance Procedures

- (a) For each batch of coating that is received by an affected source, the owner or operator shall (see Figure 1 for a flow diagram of the compliance procedures):
- (1) Determine the coating category and the applicable VOHAP limit as specified in 40 CFR 63.783(a).
- (2) Certify the as-supplied VOC content of the batch of coating. The owner or operator may use a certification supplied by the manufacturer for the batch, although the owner or operator retains liability should subsequent testing reveal a violation. If the owner or operator performs the certification testing, only one of the containers in which the batch of coating was received is required to be tested. [40 CFR 63.785(a)]
- (b) (1) In lieu of testing each batch of coating, as applied, the owner or operator may determine compliance with the VOHAP limits using any combination of the procedures described in paragraphs (c)(1), (c)(2), (c)(3), and (c)(4) of this section. The procedure used for each coating shall be determined and documented prior to application.
- (2) The results of any compliance demonstration conducted by the affected source or any regulatory agency using Method 24 shall take precedence over the results using the procedures in paragraphs (c)(1), (c)(2), or (c)(3) of this section.
- (3) The results of any compliance demonstration conducted by the affected source or any regulatory agency using an approved test method to determine VOHAP content shall take precedence over the results using the procedures in paragraph (c)(4) of this section.

  [40 CFR 63.785(b)]
- (c) (1) <u>Coatings to which thinning solvent will not be added</u>. For coatings to which thinning solvent (or any other material) will not be added under any circumstance or to which only water is added, the owner or operator of an affected source shall comply as follows:
  - (i) Certify the as-applied VOC content of each batch of coating.
- (ii) Notify the persons responsible for applying the coating that no thinning solvent may be added to the coating by affixing a label to each container of coating in the batch or through another means described in the implementation plan required in 40 CFR 63.787(b).

(iii) If the certified as-applied VOC content of each batch of coating used during a calendar month is less than or equal to the applicable VOHAP limit in 40 CFR 63.783(a) (either in terms of g/L of coating or g/L of solids), then compliance is demonstrated for that calendar month, unless a violation is revealed using Method 24.

- (2) <u>Coatings to which thinning solvent will be added--coating-by-coating compliance</u>. For a coating to which thinning solvent is routinely or sometimes added, the owner or operator shall comply as follows:
- (i) Prior to the first application of each batch, designate a single thinner for the coating and calculate the maximum allowable thinning ratio (or ratios, if the affected source complies with the cold-weather limits in addition to the other limits specified in Table 2) for each batch as follows:

$$R = \frac{(V_s)(VOHAP \ limit) - m_{VOC}}{D_{th}}$$
 Eqn. 1

where:

R = Maximum allowable thinning ratio for a given batch (L thinner/L coating

as supplied);

 $V_s$  = Volume fraction of solids in the batch as supplied (L solids/L coating as

supplied);

VOHAP limit = Maximum allowable as-applied VOHAP content of

the coating (g VOHAP/L solids);

 $m_{VOC}$  = VOC content of the batch as supplied

[g VOC (including cure volatiles and exempt compounds on the HAP list)/L

coating (including water and exempt compounds) as supplied];

 $D_{th}$  = Density of the thinner (g/L).

If  $V_s$  is not supplied directly by the coating manufacturer, the owner or operator shall determine  $V_s$  as follows:

$$V_s = 1 - \frac{m_{\text{volatiles}}}{D_{\text{avg}}}$$

Eqn. 2

where:

m<sub>volatiles</sub> = Total volatiles in the batch, including VOC, water, and exempt compounds, (g/L coating); and

 $D_{avg}$  = Average density of volatiles in the batch (g/L).

The procedures specified in 40 CFR 63.786(d) may be used to determine the values of variables defined in this paragraph. In addition, the owner or operator may choose to construct nomographs, based on Equation 1, similar or identical to the one provided in appendix B as a means of easily estimating the maximum allowable thinning ratio.

- (ii) Prior to the first application of each batch, notify painters and other persons, as necessary, of the designated thinner and maximum allowable thinning ratio(s) for each batch of the coating by affixing a label to each container of coating or through another means described in the implementation plan required in 40 CFR 63.787(b).
- (iii) By the 15th day of each calendar month, determine the volume of each batch of the coating used, as supplied, during the previous month.
- (iv) By the 15th day of each calendar month, determine the total allowable volume of thinner for the coating used during the previous month as follows:

$$V_{th} = \sum_{i=1}^{n} (R x V_b)_i + \sum_{i=1}^{n} (R_{cold} x V_{b-cold})_i$$

Eqn. 3

where:

 $V_{th}$  = Total allowable volume of thinner for the previous month (L thinner);

V<sub>b</sub> = Volume of each batch, as supplied and before being thinned, used during non-cold-weather days of the previous month (L coating as supplied);

R<sub>cold</sub> = Maximum allowable thinning ratio for each batch used during cold-weather days (L thinner/L coating as supplied);

V<sub>b-cold</sub> = Volume of each batch, as supplied and before being thinned, used during cold-weather days of the previous month (L coating as supplied);

i = Each batch of coating; and

n = Total number of batches of the coating.

- (v) By the 15th day of each calendar month, determine the volume of thinner actually used with the coating during the previous month.
- (vi) If the volume of thinner actually used with the coating [paragraph (c)(3)(v) of this section] is less than or equal to the total allowable volume of thinner for the coating [paragraph (c)(3)(iv) of this section], then compliance is demonstrated for the coating for the previous month, unless a violation is revealed using Method 24.
- (3) <u>Coatings to which the same thinning solvent will be added--group compliance</u>. For coatings to which the same thinning solvent (or other material) is routinely or sometimes added, the owner or operator shall comply as follows:
- (i) Designate a single thinner to be added to each coating during the month and "group" coatings according to their designated thinner.
- (ii) Prior to the first application of each batch, calculate the maximum allowable thinning ratio (or ratios, if the affected source complies with the cold-weather limits in addition to the other limits specified in Table 2) for each batch of coating in the group using the equations in paragraph (c)(2) of this section.
- (iii) Prior to the first application of each "batch," notify painters and other persons, as necessary, of the designated thinner and maximum allowable thinning ratio(s) for each batch in the group by affixing a label to each container of coating or through another means described in the implementation plan required in 40 CFR 63.787(b).

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(iv) By the 15th day of each calendar month, determine the volume of each batch of the group used, as supplied, during the previous month.

- (v) By the 15th day of each calendar month, determine the total allowable volume of thinner for the group for the previous month using Equation 3.
- (vi) By the 15th day of each calendar month, determine the volume of thinner actually used with the group during the previous month.
- (vii) If the volume of thinner actually used with the group [paragraph (c)(3)(vi) of this section] is less than or equal to the total allowable volume of thinner for the group [paragraph (c)(3)(v) of this section], then compliance is demonstrated for the group for the previous month, unless a violation is revealed using Method 24.
- (4) <u>Demonstration of compliance through an alternative (i.e., other than Method 24) test method</u>. The owner or operator shall comply as follows:
- (i) Certify the as-supplied VOHAP content (g VOHAP/L solids) of each batch of coating.
- (ii) If no thinning solvent will be added to the coating, the owner or operator of an affected source shall follow the procedure described in 40 CFR 63.785(c)(1), except that VOHAP content shall be used in lieu of VOC content.
- (iii) If thinning solvent will be added to the coating, the owner or operator of an affected source shall follow the procedure described in 40 CFR 63.785(c)(2) or (3), except that in Equation 1: the term " $m_{VOC}$ " shall be replaced by the term " $m_{VOHAP}$ ," defined as the VOHAP content of the coating as supplied (g VOHAP/L coating) and the term " $D_{th}$ " shall be replaced by the term " $D_{th(VOHAP)}$ " defined as the average density of the VOHAP thinner(s) (g/L). [40 CFR 63.785(c)]
- (d) A violation revealed through any approved test method shall result in a 1-day violation for enforcement purposes. A violation revealed through the recordkeeping procedures described in paragraphs (c)(1) through (c)(4) of this section shall result in a 30-day violation for enforcement purposes, unless the owner or operator provides sufficient data to demonstrate the specific days during which noncompliant coatings were applied. [40 CFR 63.785(d)]

#### 40 CFR 63.786 Test Methods and Procedures

- (a) For the compliance procedures described in 40 CFR 63.785(c)(1)-(3), Method 24 of 40 CFR part 60, appendix A, is the definitive method for determining the VOC content of coatings, as supplied or as applied. When a coating or thinner contains exempt compounds that are volatile HAP or VOHAP, the owner or operator shall ensure, when determining the VOC content of a coating, that the mass of these exempt compounds is included.

  [40 CFR 63.786(a)]
- (b) For the compliance procedure described in 40 CFR 63.785(c)(4), the Permitting authority must approve the test method for determining the VOHAP content of coatings and thinners. As part of the approval, the test method must meet the specified accuracy limits indicated below for sensitivity, duplicates, repeatability, and reproducibility coefficient of variation each determined at the 95 percent confidence limit. Each percentage value below is the corresponding coefficient of variation multiplied by 2.8 as in the ASTM Method E180-93: Standard Practice for Determining the Precision of ASTM

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Methods for Analysis and Testing of Industrial Chemicals (incorporation by reference--see 40 CFR 63.14).

Sensitivity: The overall sensitivity must be sufficient to identify and calculate at least one mass percent of the compounds of interest based on the original sample. The sensitivity is defined as ten times the noise level as specified in ASTM Method D3257-93: Standard Test Methods for Aromatics in Mineral Spirits by Gas Chromatography (incorporation by reference--see 40 CFR 63.14). In determining the sensitivity, the level of sample dilution must be factored in.

Repeatability: First, at the 0.1-5 percent analyte range the results would be suspect if duplicates vary by more than 6 percent relative and/or day to day variation of mean duplicates by the same analyst exceeds 10 percent relative. Second, at greater than 5 percent analyte range the results would be suspect if duplicates vary by more than 5 percent relative and/or day to day variation of duplicates by the same analyst exceeds 5 percent relative.

Reproducibility: First, at the 0.1-5 percent analyte range the results would be suspect if lab to lab variation exceeds 60 percent relative. Second, at greater than 5 percent range the results would be suspect if lab to lab variation exceeds 20 percent relative.

Any test method should include information on the apparatus, reagents and materials, analytical procedure, procedure for identification and confirmation of the volatile species in the mixture being analyzed, precision and bias, and other details to be reported. The reporting should also include information on quality assurance (QA) auditing.

Multiple and different analytical techniques must be used for positive identification if the components in a mixture under analysis are not known. In such cases a single column gas chromatograph (GC) may not be adequate. A combination of equipment may be need such as a GC/mass spectrometer or GC/infrared system. (If a GC method is used, the operator must use practices in ASTM Method E260-91: Standard Practice for Gas Chromatography [incorporation by reference--see 40 CFR 63.14].). [40 CFR 63.786(b)]

(c) A coating manufacturer or the owner or operator of an affected source may use batch formulation data as a test method in lieu of Method 24 to certify the as-supplied VOC content of a coating if the manufacturer or the owner or operator has determined that batch formulation data have a consistent and quantitatively known relationship to Method 24 results. This determination shall consider the role of cure volatiles, which may cause emissions to exceed an amount based solely upon coating formulation data. Notwithstanding such determination, in the event of conflicting results, Method 24 shall take precedence.

[40 CFR 63.786(c)]

(d) Each owner or operator of an affected source shall use or ensure that the manufacturer uses the form and procedures mentioned in appendix A of this subpart to determine values for the thinner and coating parameters used in Equations 1 and 2. The owner or operator shall ensure that the coating/thinner manufacturer (or supplier) provides information on the VOC and VOHAP contents of the coatings/thinners and the procedure(s) used to determine these values.

[40 CFR 63.786(d)]

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## 40 CFR 63.787 Notification Requirements

- (a) Each owner or operator of an affected source shall comply with all applicable notification requirements in 40 CFR 63.9(a)-(d) and (i)-(j) of subpart A (General Provisions), with the exception that the deadline specified in 40 CFR 63.9(b)(2) and (3) shall be extended from 120 days to 180 days. Any owner or operator that receives approval pursuant to 40 CFR 63.783(c) of this subpart to use an add-on control system to control coating emissions shall comply with the applicable requirements of 40 CFR 63.9(e)-(h) of subpart A.

  [40 CFR 63.787(a)]
- (b) <u>Implementation plan</u>. The provisions of 40 CFR 63.9(a) (Notification requirements/Applicability and general information) of subpart A apply to the requirements of this paragraph.
  - (1) Each owner or operator of an affected source shall:
- (i) Prepare a written implementation plan that addresses each of the subject areas specified in paragraph (b)(3) of this section; and
- (ii) Not later than December 16, 1996, submit the implementation plan to the Administrator along with the notification required by 40 CFR 63.9(b)(2) or (5) of subpart A, as applicable.
  - (2) [Reserved]
- (3) Implementation plan contents. Each implementation plan shall address the following subject areas:
- (i) Coating compliance procedures. The implementation plan shall include the compliance procedure(s) under 40 CFR 63.785(c) that the source intends to use.
- (ii) Recordkeeping procedures. The implementation plan shall include the procedures for maintaining the records required under 40 CFR 63.788, including the procedures for gathering the necessary data and making the necessary calculations.
- (iii) *Transfer, handling, and storage procedures.* The implementation plan shall include the procedures for ensuring compliance with 40 CFR 63.783(b).
- (4) Major sources that intend to become area sources by the compliance date. Existing major sources that intend to become area sources by the December 16, 1997 compliance date may choose to submit, in lieu of the implementation plan required under paragraph (b)(1) of this section, a statement that, by the compliance date, the major source intends to obtain and comply with federally enforceable limits on their potential to emit which make the facility an area source.

  [40 CFR 63.787(b)]

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## 40 CFR 63.788 Recordkeeping and reporting requirements.

(a) Each owner or operator of an affected source shall comply with the applicable recordkeeping and reporting requirements in 40 CFR 63.10(a), (b), (d), and (f) of subpart A (General Provisions). Any owner that receives approval pursuant to 40 CFR 63.783(c) of this subpart to use an add-on control system to control coating emissions shall also comply with the applicable requirements of 40 CFR 63.10(c) and (e). A summary of recordkeeping and reporting requirements is provided in Table 3. [40 CFR 63.788(a)]

## (b) Recordkeeping requirements.

- (1) Each owner or operator of a major source shipbuilding or ship repair facility having surface coating operations with less than 1000 liters (264 gallons) annual marine coating usage shall record the total volume of coating applied at the source to ships. Such records shall be compiled monthly and maintained for a minimum of 5 years.
- (2) Each owner or operator of an affected source shall compile records on a monthly basis and maintain those records for a minimum of 5 years. At a minimum, these records shall include:
  - (i) All documentation supporting initial notification;
  - (ii) A copy of the affected source's approved implementation plan;
  - (iii) The volume of each low-usage-exempt coating applied;
- (iv) Identification of the coatings used, their appropriate coating categories, and the applicable VOHAP limit;
  - (v) Certification of the as-supplied VOC content of each batch of coating;
- (vi) A determination of whether containers meet the standards as described in 40 CFR 63.783(b)(2); and
- (vii) The results of any Method 24 or approved VOHAP measurement test conducted on individual containers of coating, as applied.
- (3) The records required by paragraph (b)(2) of this section shall include additional information, as determined by the compliance procedure(s) described in 40 CFR 63.785(c) that each affected source followed:
- (i) Coatings to which thinning solvent will not be added. The records maintained by facilities demonstrating compliance using the procedure described in 40 CFR 63.785(c)(1) shall contain the following information:
  - (A) Certification of the as-applied VOC content of each batch of coating; and
  - (B) The volume of each coating applied.
- (ii) <u>Coatings to which thinning solvent will be added--coating-by-coating compliance</u>. The records maintained by facilities demonstrating compliance using the procedure described in 40 CFR 63.785(c)(2) shall contain the following information:
- (A) The density and mass fraction of water and exempt compounds of each thinner and the volume fraction of solids (nonvolatiles) in each batch, including any calculations;
- (B) The maximum allowable thinning ratio (or ratios, if the affected source complies with the cold-weather limits in addition to the other limits specified in Table 2 of this subpart) for each batch of coating, including calculations;
- (C) If an affected source chooses to comply with the cold-weather limits, the dates and times during which the ambient temperature at the affected source was below 4.5°C (40°F) at the time the coating was applied and the volume used of each batch of the coating, as supplied, during these dates;

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- (D) The volume used of each batch of the coating, as supplied;
- (E) The total allowable volume of thinner for each coating, including

calculations; and

- (F) The actual volume of thinner used for each coating.
- (iii) Coatings to which the same thinning solvent will be added--group compliance. The records maintained by facilities demonstrating compliance using the procedure described in 40 CFR 63.785(c)(3) shall contain the following information:
- (A) The density and mass fraction of water and exempt compounds of each thinner and the volume fraction of solids in each batch, including any calculations;
- (B) The maximum allowable thinning ratio (or ratios, if the affected source complies with the cold-weather limits in addition to the other limits specified in Table 2) for each batch of coating, including calculations;
- (C) If an affected source chooses to comply with the cold-weather limits, the dates and times during which the ambient temperature at the affected source was below 4.5°C (40°F) at the time the coating was applied and the volume used of each batch in the group, as supplied, during these dates;
  - (D) Identification of each group of coatings and their designated thinners;
  - (E) The volume used of each batch of coating in the group, as supplied;
  - (F) The total allowable volume of thinner for the group, including calculations;

and

- (G) The actual volume of thinner used for the group.
- (iv) <u>Demonstration of compliance through an alternative (i.e., non-Method 24) test</u> <u>method</u>. The records maintained by facilities demonstrating compliance using the procedure described in 40 CFR 63.785(c)(4) shall contain the following information:
- (A) Identification of the Permitting authority-approved VOHAP test method or certification procedure;
- (B) For coatings to which the affected source does not add thinning solvents, the source shall record the certification of the as-supplied and as-applied VOHAP content of each batch and the volume of each coating applied;
- (C) For coatings to which the affected source adds thinning solvent on a coating-by-coating basis, the source shall record all of the information required to be recorded by paragraph (b)(3)(ii) of this section; and
- (D) For coatings to which the affected source adds thinning solvent on a group basis, the source shall record all of the information required to be recorded by paragraph (b)(3)(iii) of this section.
- (4) If the owner or operator of an affected source detects a violation of the standards specified in 40 CFR 63.783, the owner or operator shall, for the remainder of the reporting period during which the violation(s) occurred, include the following information in his or her records:
- (i) A summary of the number and duration of deviations during the reporting period, classified by reason, including known causes for which a Federally-approved or promulgated exemption from an emission limitation or standard may apply.
- (ii) Identification of the data availability achieved during the reporting period, including a summary of the number and total duration of incidents that the monitoring protocol failed to perform in accordance with the design of the protocol or produced data that did not meet minimum data accuracy and precision requirements, classified by reason.
- (iii) Identification of the compliance status as of the last day of the reporting period and whether compliance was continuous or intermittent during the reporting period.
- (iv) If, pursuant to paragraph (b)(4)(iii) of this section, the owner or operator identifies any deviation as resulting from a known cause for which no Federally-approved or promulgated exemption from an emission limitation or standard applies, the monitoring report shall also include all

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records that the source is required to maintain that pertain to the periods during which such deviation occurred and:

- (A) The magnitude of each deviation;
- (B) The reason for each deviation;
- (C) A description of the corrective action taken for each deviation, including action taken to minimize each deviation and action taken to prevent recurrence; and
- (D) All quality assurance activities performed on any element of the monitoring protocol.

  [40 CFR 63.788(b)]
- (c) Reporting requirements. Before the 60th day following completion of each 6-month period after the compliance date specified in 40 CFR 63.784, each owner or operator of an affected source shall submit a report to the Permitting authority for each of the previous 6 months. The report shall include all of the information that must be retained pursuant to paragraphs (b)(2)-(3) of this section, except for that information specified in paragraphs (b)(2)(i)-(ii), (b)(2)(v), (b)(3)(i)(A), (b)(3)(ii)(A), and (b)(3)(iii)(A). If a violation at an affected source is detected, the source shall also report the information specified in paragraph (b)(4) of this section for the reporting period during which the violation(s) occurred. To the extent possible, the report shall be organized according to the compliance procedure(s) followed each month by the affected source.

[40 CFR 63.788(c)]

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# Subsection L. Limestone Handling System for FGD System for Units 1 & 2

This section addresses the following Regulated Emissions Units:

- -020 Drops from limestone conveyors LE, LF and LG and Silo C belt feeder with baghouse
- -021 Silo C with one baghouse

# Description

Components of the limestone handling system provide limestone for the FGD system. The components are Silo C and its related rotary unloader, belt feeder and wet ball mill, and reversible belt conveyors LF and LG. Conveyors LF and LG replace an existing bifurcated chute which feeds from conveyor LE to silos A and B. Particulate emissions from drops from limestone handling conveyors LE, LF and LG and the silo C belt feeder are controlled by a baghouse: American Air Filter Fabripulse - Model B, size 12-72-1155. Particulate emissions from displaced air in silo C will be controlled by a baghouse: American Air Filter Fabripak, size 6-16-132. The wet ball mill is a wet process with no expected particulate emissions.

[Note: These emissions units are subject to 40 CFR 60, Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants (40 CFR 60.670 - 60.676) and 40 CFR 60 Subpart A; Rule 1-3.61, Rules of the Environmental Protection Commission (EPC) of Hillsborough County; Rule 62-296.700, F.A.C.; and are subject to the requirements of the state rules as indicated in this permit. The visible emission limit of specific condition 16 is more stringent than the limitations of 40 CFR 60.672(a)(2) and 60.672(f), and compliance with this limit will assure compliance with those requirements.]

# The following conditions apply to the Emissions Units listed above:

## **OPERATIONAL REQUIREMENTS**

- L.1. <u>Hours of Operation</u>: These emissions units may operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200, F.A.C., Definitions-potential to emit (PTE)]
- L.2. <u>Enclosure of Equipment</u>: All conveyors and conveyor transfer points shall be enclosed and exhaust from this equipment shall be directed to a baghouse to minimize particulate matter emissions. [62-4.070(3),F.A.C.]
- L.3. Operating Procedures: Enclosures and baghouses for these emissions units shall be properly operated and maintained at all times in a condition to minimize particulate emissions. The owner and operator shall ensure that all facility staff responsible for these emissions units are trained in their operation and maintenance in accordance with the guidelines and procedures as established by the equipment manufacturers. [Rule 62-4.070(3), F.A.C.]

## EMISSION LIMITATIONS AND PERFORMANCE STANDARDS

L.4. Particulate and Visible Emissions: No owner or operator shall cause or allow visible emissions from the baghouses controlling these emissions units in excess of 0.03 gr/dscf and 5% opacity. [40 CFR 60.672(a)(1) and (2); Rules 62-4.070(3) and Rule 62-296.711(2)(b), F.A.C., Rule 1-3.61, Rules of the EPC, and request of applicant (VE limit)]

[Note: The visible emission limit of this condition is more stringent than the limitations of 40 CFR 60.672(a)(2) and 60.672(f), and compliance with this limit will assure compliance with those requirements.]

#### COMPLIANCE MONITORING AND TESTING REQUIREMENTS

L.5. <u>Visible Emissions Tests</u>: Compliance with the visible emission limits of this permit shall be demonstrated by an annual compliance test using EPA Method 9. The duration of initial tests shall

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be three hours and the duration of subsequent annual tests shall be thirty minutes. [Rules 62-4.070(3) and 62-297.310(4)(a)2., F.A.C., and 40 CFR 60.11(b)]

[Note: The three hour duration of initial tests complies with the requirements of the NSPS and the thirty minute duration of subsequent tests complies with state rules.]

L.6. Visible Emissions Tests in Lieu of Stack Tests, Emissions Unit 020: After passing the initial test required by specific condition L.9., the owner or operator is permitted to comply with the visible emission limit of specific condition L.4. and the testing requirement of specific condition L.5. in lieu of regularly demonstrating compliance with the limitations of 40 CFR 60.672(a)(1) and (2) and the particulate matter limitation of specific condition L.4. If the Department has reason to believe that the particulate weight emission limit of 40 CFR 60.672(a)(1) or the particulate matter limitation of specific condition L.4. is not being met, it shall require compliance be demonstrated by the test method specified by 40 CFR 60.675. [Rules 62-4.070(3) and 62-297.620(4), F.A.C.]

#### REPORTING AND RECORD KEEPING REQUIREMENTS

L.7. Records of Maintenance: The owner or operator shall make and maintain records of maintenance on the enclosures and baghouses sufficient to demonstrate compliance with the operating procedures requirements of specific condition L.3. [Rule 62-4.070(3), F.A.C.]

## NSPS SUBPART OOO REQUIREMENTS

[Note: The numbering of the original rules in the following conditions has been preserved for ease of reference to the rules. The definitions of terms of this part shall have the meanings as defined in 40 CFR 60.671 Definitions. The term "Administrator" when used in 40 CFR 60 shall mean the Secretary or the Secretary's designee.]

## L.8. Pursuant to 40 CFR 60.672 Standard for Particulate Matter:

[Note: The requirements of 40 CFR 60.672(a)(1) and (2) apply to emissions unit 020, and the requirements of 40 CFR 60.672(f) apply to emissions unit 021.]

- (a) No owner or operator shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any stack emissions which:
  - (1) Contain particulate matter in excess of 0.05 g/dscm; and
  - (2) Exhibit greater than 7 percent opacity.

[Note: The emission limit of specific condition L.4. is more stringent than the limitation of 40 CFR 60.672(a)(2).]

(f) No owner or operator shall cause to be discharged into the atmosphere from any baghouse that controls emissions from only an individual, enclosed storage bin, stack emissions which exhibit greater than 7 percent opacity.

[Note: The emission limit of specific condition L.4. is more stringent than the limitation of 40 CFR 60.672(f). See the note for that condition.]

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## L.9. Pursuant to 40 CFR 60.675 Test Methods and Procedures:

- (a) In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR 60 or other methods and procedures as specified in this section, except as provided in 40 CFR 60.8(b).
- (b) The owner or operator shall determine compliance with the particulate matter standards in 40 CFR 60.672(a) as follows:
- (1) Method 5 or Method 17 shall be used to determine the particulate matter concentration. The sample volume shall be at least 1.70 dscm (60 dscf). For Method 5, if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without heaters. If the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121 °C (250 °F), to prevent water condensation on the filter.
- (2) Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity. [Note: The owner or operator is required to demonstrate compliance with the particulate matter emission limitation of 40 CFR 60.672(a)(1) by performing and passing an initial particulate matter test in accordance with the requirements of this section, unless such requirement is waived by the US Environmental Protection Agency. No subsequent regular annual particulate matter testing is required. The owner or operator is permitted to comply with the visible emission limit of specific condition L.4. in lieu of regularly demonstrating compliance with the limitations of 40 CFR 60.672(a)(1) and (2). See also specific condition L.6.]
- (c) (2) In determining compliance with the opacity of stack emissions from any baghouse that controls emissions only from an individual enclosed storage bin under 40 CFR 60.672(f) of this subpart, using Method 9, the duration of the Method 9 observations shall be 1 hour (ten 6-minute averages).

[Note: The initial Method 9 test duration for emissions unit 021 is one hour pursuant to 40 CFR 60.675(c)(2), while the initial Method 9 test duration for emissions unit 020 is 3 hours pursuant to 40 CFR 60.11(b). Subsequent annual Method 9 tests shall be conducted for 30 minutes for emissions units 020 and 021.]

(g) If, after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting any rescheduled performance test required in this section, the owner or operator of an affected facility shall submit a notice to the Administrator at least 7 days prior to any rescheduled performance test.

## L.10. Pursuant to 40 CFR 60.676 Reporting and Recordkeeping:

- (f) The owner or operator of any affected facility shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in 40 CFR 60.672 of this subpart.
- (h) The subpart A requirement under 40 CFR 60.7(a)(2) for notification of the anticipated date of initial startup of an affected facility shall be waived for owners or operators of affected facilities regulated under this subpart.
- (i) A notification of the actual date of initial startup of each affected facility shall be submitted to the Administrator.
  - (1) For a combination of affected facilities in a production line that begin actual initial startup on the same day, a single notification of startup may be submitted by the owner or operator to the Administrator. The notification shall be postmarked within 15 days after such date and shall include a description of each affected facility, equipment manufacturer, and serial number of the equipment, if available.
- L.11. The attached 40 CFR 60 Subpart A NSPS General Provisions also apply to these emissions units.

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## Subsection M. Lime Silo for Wastewater Treatment Plant for the Chloride Bleed Stream

This section addresses the following Regulated Emissions Units:

-022 Lime silo with one baghouse for the waste water treatment plant for the chloride bleed stream

## Description

A lime silo with one baghouse (Griffin Environmental 36-LS Filter Vent) which supplies limestone to the wastewater treatment plant for the FGD chloride bleed stream. This plant will serve the new and existing FGD systems. Particulate emissions from displaced air from periodically filling the lime silo will be controlled with the related baghouse.

[Note: This emissions unit is subject to the requirements of the state rules as indicated in this permit. This emissions unit is subject to Rule 1-3.61, Rules of the Environmental Protection Commission (EPC) of Hillsborough County, but it exempt from the requirements of Rule 62-296.711, F.A.C., pursuant to Rule 62-296.700(2)(c), F.A.C., because it has an allowable emission rate of less than one ton per year.]

## The following conditions apply to the Emissions Unit listed above:

### **OPERATIONAL REQUIREMENTS**

- M.1. <u>Hours of Operation</u>: This emissions units may operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200, F.A.C., Definitions-potential to emit (PTE)]
- M.2. Operating Procedures: The baghouse for this emissions unit shall be properly operated and maintained at all times in a condition to minimize particulate emissions. The owner and operator shall ensure that all facility staff responsible for these emissions units are trained in their operation and maintenance in accordance with the guidelines and procedures as established by the equipment manufacturers. [Rule 62-4.070(3), F.A.C.]

## **EMISSION LIMITATIONS AND PERFORMANCE STANDARDS**

M.3. <u>Particulate and Visible Emissions</u>: No owner or operator shall cause or allow visible emissions from the baghouse controlling this emissions unit in excess of 0.03 gr/dscf and 5% opacity. [Rules 62-4.070(3) and 62-296.700(2)(c), F.A.C.]

[Note: The particulate matter limitation will ensure that allowable emissions are less than one ton per year for this emissions unit.]

#### COMPLIANCE MONITORING AND TESTING REQUIREMENTS

- M.4. <u>Visible Emissions Tests</u>: Compliance with the visible emission limit of this permit shall be demonstrated by an annual compliance test using EPA Method 9. The duration of annual tests shall be thirty minutes. [Rules 62-4.070(3) and 62-297.310(4)(a)2., F.A.C.]
- M.5. Visible Emissions Tests in Lieu of Stack Tests: The owner or operator is permitted to comply with the visible emission limit of specific condition M.3. and the testing requirement of specific condition M.4. of this section in lieu of regularly demonstrating compliance with the particulate matter limitation of specific condition M.3. of this section. If the Department has reason to believe that the particulate matter limitation of specific condition M.3. of this section is not being met, it shall require compliance be demonstrated by conducting a particulate matter test in accordance with EPA Method 5 specified at 40 CFR 60 Appendix A. [Rules 62-4.070(3) and 62-297.620(4), F.A.C.]

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# REPORTING AND RECORD KEEPING REQUIREMENTS

M.6. <u>Records of Maintenance</u>: The owner or operator shall make and maintain records of maintenance on the baghouse sufficient to demonstrate compliance with the operating procedures requirements of specific condition M.2. [Rule 62-4.070(3), F.A.C.]

M.7. Tampa Electric shall keep records of facility staff training, and shall maintain, on site, an Operations and Maintenance Plan for the baghouse that details how it shall be properly operated and maintained at all times. Tampa Electric shall also take weekly pressure readings from the baghouse pressure-sensing device.

[USEPA objection resolution.]

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#### Subsection N. Common Conditions

This section addresses the all of the Regulated Emissions Units: {Permitting note: For emissions units subject to NESHAP or NSPS requirements, when more stringent, the requirements of the NESHAPS or NSPS supercede these common conditions.}

- N.1. <u>Compliance Test Notification</u>. TECO shall notify the EPCHC, 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 TECO. [Rule 62-297.310(7)(a)9., F.A.C.]
- N.2. Special Compliance Tests. When, after inspection, the Department or the Environmental Protection Commission of Hillsborough County 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 Tampa Electric Company to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emission unit and to provide a report on the results of said test to the requesting agency.

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

## **GENERAL TEST REQUIREMENTS**

N.3. 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 the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.

[Rule 297.310(1), F.A.C.]

N.4. Operating Rate During Testing for Emission Units other than Combustion Turbines. Unless otherwise stated an emission unit's specific condition in this permit, testing of emissions shall be conducted with the emissions unit operation at 90 to 100 percent of the maximum operation rate allowed by specific condition in this permit. If it is impracticable 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. [Rule 62-297.310(2), F.A.C.]

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N.5. <u>Calculation of Emission Rate</u>. 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. [Rule 62-297.310(3), F.A.C.]

# N.6. Applicable Test Procedures.

- (a) Required Sampling Time.
- 1. Unless otherwise specified in the specific conditions of this permit, 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 proposed 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 (see attachment).
- (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. [Rule 297.310(4), F.A.C.]

## N.7. 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.

[Rule 62-297.310(5), F.A.C.]

- N.8. <u>Frequency of Compliance Tests</u>. The following provisions apply to those emissions units that are subject to an emissions limiting standard for which compliance testing is required, unless otherwise provided in a specific emission unit condition of this permit.
  - (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 and the Environmental Protection Commission of Hillsborough County, 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), F.A.C.
- (b) Special Compliance Tests. When the Department or Environmental Protection Commission of Hillsborough County, 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 and the Environmental Protection Commission of Hillsborough County.
- (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.

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

## N.9. 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 and the EPCHC on the results of each such test.
- (b) The required test report shall be filed with the EPCHC 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 EPCHC and 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.

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- 12. 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 EPCHC or the Department, 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.

[Rule 62-297.310(8), F.A.C.]

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## Subsection O. Coal Residual Storage and Transfer

## This section addresses the following Regulated Emissions Units:

- -037 Coal Residual Storage Facility
- -038 Coal Residual Transfer System

<u>Description:</u> Enclosed storage and transfer of coal residual received from the Polk Power Station. A nominal 25-ton dump truck empties a load of material into the building, and a bulldozer either pushes the material into a vacant area of the building, or it pushes the material directly into the dozer trap in the rear of the building. The dozer trap is a hopper that is partially below grade, and is used to feed the conveyor, which is capable of transferring up to 200 tons of material per hour. The conveyor is fully enclosed to prevent fugitive dust emissions, and to also prevent wetting of the material. Material inside the building will be periodically sprayed with water in an effort to minimize dust within the building.

## The following conditions apply to the Emissions Units listed above:

## **EMISSION LIMITATIONS**

- O.1. Visible emissions shall not exceed 5% opacity in lieu of particulate sampling. [Rule 62-297.620(4), F.A.C., and Permit No. 0570039-012-AC]
- O.2. All conveyors and conveyor transfer points shall be enclosed to minimize particulate matter emissions. The coal residual shall be stored in an enclosed facility. Open storage of coal residual is prohibited. [Rule 62-296.320(4)(c), F.A.C., and Permit No. 0570039-012-AC]
- O.3. The maximum conveyor transfer rate shall be 200 tons per hour and 255,500 tons per year of coal residual that has been generated at the Polk Power Station gasification process. [0570039-012-AC]

## TEST METHODS AND COMPLIANCE PROCEDURES

- O.4. Tampa Electric shall perform annual visible emissions tests for the storage facility and transfer system. Sites to be tested shall be determined by EPCHC. [Permit No. 0570039-012-AC] [Permit No. 0570039-012-AC]
- O.5. Compliance with the allowable visible emissions limitation shall be determined by using the following reference method as described in 40 CFR 60, Appendix A, adopted by reference in Chapter 62-204, F.A.C.: Method 9 Visual Determination of the Opacity of Emissions from Stationary Sources. [Permit No. 0570039-012-AC]
- O.6. TEC shall keep records of the following parameters for each specific month/day/year:
  - A) Amount of raw coal residual charged (tpd)
- B) Amount of refined/beneficiated coal residual charged (tpd) [Permit No. 0570039-012-AC]
- O.7. TEC shall also keep records of:
  - A) Annual amount of raw coal residual charged (tpy)
  - B) Annual amount of refined/beneficiated coal residual charged (tpy)
  - C) Annual VE tests.

[Permit No. 0570039-012-AC]

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Section IV. This section is the Phase II Acid Rain Part.

**Operated by:** Tampa Electric Company

**ORIS code:** 0645

# The emissions units listed below are regulated under Acid Rain:

# E.U.

ID No.	Brief Description	
-001	Unit No. 1 Steam Generator [EPA ID #: BB0]	]
-002	Unit No. 2 Steam Generator [EPA ID #: BB02	2]
-003	Unit No. 3 Steam Generator [EPA ID #: BB03	3]
-004	Unit No. 4 Steam Generator [EPA ID #: BB04	ŧ]

1. The Phase II permit application, the Phase II NOx compliance plan, and the Phase II NOx averaging plan submitted for this facility, as approved by the Department, is a part of this permit. The owners and operators of these acid rain units must comply with the standard requirements and special provisions set forth in the application listed below:

DEP Form No. 62-210.900(1)(a), version 6/16/03, received 9/27/04 (signed 6/07/04).

DEP Form No. 62-210.900(1)(a)4., F.A.C., received 9/27/04 (signed 9/27/04).

DEP Form No. 62-210.900(1)(a)5., F.A.C., received 6/28/04 (signed 6/07/04).

[Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C.]

2. Sulfur dioxide (SO<sub>2</sub>) allowance allocations and nitrogen oxide (NO<sub>x</sub>) requirements for each Acid Rain unit are as follows:

E.U.	EPA	- · · · · · · · · · · · · · · · · · · ·	Year				
ID No.	ID		2000	2001	2002	2003	2004
-001	BB01	SO <sub>2</sub> allowances, under Table 2 of 40 CFR 73	12132*	12132*	12132*	12132*	12132*
		NO <sub>x</sub> limit**		applicable (a)(3), is <b>0.8</b>			nder 40
	· ·		CFR 76.6(a)(3), is <b>0.84</b> lb/mmBtu. <b>2.a.</b> Pursuant to 40 CFR 76.11, the Florida Department of Environmental Protection approves NO <sub>x</sub> emissions averaging plan submitted on 6/28/0 for this unit. Under the plan, this unit's NO <sub>x</sub> emissis shall not exceed the annual average alternative contemporaneous emission limitation of <b>0.74</b> lb/MMBtu. In addition, this unit shall have an annuheat input of limit <b>35,364,120</b> MMBtu.				6/28/04 emissions ve

E.U.	EPA		Year 4					
ID No.	ID	<u></u> -	2000 -	2001	- 2002	2003	2004	
-002	BB02	SO <sub>2</sub> allowances, under Table 2 of 40 CFR 73	12196*	12196*	12196*	12196*	12196*	
		NO <sub>x</sub> limit**	Note: The applicable emission limitation, under 40 CFR 76.6(a)(3), is <b>0.84</b> lb/mmBtu.					
		·	2.b. Pursuant to 40 CFR 76.11, the Florida Department of Environmental Protection approves the NO <sub>x</sub> emissions averaging plan submitted on 6/28/04 for this unit. Under the plan, this unit's NO <sub>x</sub> emissions shall not exceed the annual average alternative contemporaneous emission limitation of 0.74 lb/MMBtu. In addition, this unit shall have an annual heat input limit of 35,004,960 MMBtu.					
-003	BB03	SO <sub>2</sub> allowances, under Table 2 of 40 CFR 73	11444*	11444*	11444*	11444*	11444*	
		NO <sub>x</sub> limit**		applicable $(a)(3)$ , is $0.8$			nder 40	
			1	ant to 40 C				
		·	Department of Environmental Protection approves the					
			NO <sub>x</sub> emissions averaging plan submitted on 6/28/04 for this unit. Under the plan, this unit's NO <sub>x</sub> emissions					
			shall not exceed the annual average alternative contemporaneous emission limitation of <b>0.53</b>					
			lb/MMBtu. In addition, this unit shall have an annual					
			heat input	limit of 36	,047,400 M	MBtu.		

E.U.	EPA			•	Year		
ID No.	ΙĎ		2000	2001	2002	2003	2004
-004	BB04	SO <sub>2</sub> allowances, under Table 2 of 40 CFR 73	8780*	8780*	8780*	8780*	8780*
	<b>BB</b> 04	NO <sub>x</sub> limit**	Note: The applicable emission limitation, under 40 CFR 76.5(a)(1), is <b>0.45</b> lb/mmBtu. <b>2.d.</b> Pursuant to 40 CFR 76.11, the Florida Department of Environmental Protection approves NO <sub>x</sub> emissions averaging plan submitted on 6/28/0 for this unit. Under the plan, this unit's NO <sub>x</sub> emissions and average alternative contemporaneous emission limitation of <b>0.44</b> lb/MMBtu. In addition, this unit shall have an annule heat input limit of <b>36,047,400</b> MMBtu.				

<sup>\*</sup>The number of allowances held by an Acid Rain source in a unit account may differ from the number allocated by the USEPA under Table 2 of 40 CFR 73. "Allowance" means an authorization by the USEPA Administrator under the federal Acid Rain Program to emit up to one ton of sulfur dioxide during a specified calendar year.

#### 2.e. Additional Requirements

- i. Under the plan ( $NO_x$  Phase II averaging plan), the actual Btu-weighted annual average  $NO_x$  emission rate for the units in the plan shall be less than or equal to the Btu-weighted annual average  $NO_x$  emission rate for the same units had they each been operated, during the same period of time, in accordance with the applicable emission limitations under 40 CFR 76.5, 76.6, or 76.7, except that for any early election units, the applicable emission limitations shall be under 40 CFR 76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for a year under the plan, then this unit shall be deemed to be in compliance for that year with its alternative contemporaneous annual emission limitation and annual heat input limit.
- ii. In addition to the described NO<sub>x</sub> compliance plan, these units shall comply with all other applicable requirements of 40 CFR Part 76, including the duty to reapply for a NO<sub>x</sub> compliance plan and requirements covering excess emissions.
- 3. Emission Allowances. Emissions from sources subject to the Federal Acid Rain Program (Title IV) shall not exceed any allowances that the source lawfully holds under the Federal Acid Rain Program. Allowances shall not be used to demonstrate compliance with a non-Title IV applicable requirement of the Act.

<sup>\*\*</sup> Based on the Phase II NO<sub>x</sub> applications.

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a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a permit revision pursuant to Rule 62-213.400(3), F.A.C.

- b. No limit shall be places on the number of allowances held by the source under the Federal Acid Rain Program.
- c. Allowances shall be accounted for under the Federal Acid Rain Program. [Rule 62-213.440(1)(c), F.A.C.]
- **4.** Fast-Track Revisions of Acid Rain Parts. Those Acid Rain sources making a change described at Rule 62-214.370(4), F.A.C., may request such change as provided in Rule 62-213.413, F.A.C. [Rules 62-213.413 and 62-214.370(4), F.A.C.]
- 5. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a permit revision pursuant to Rule 62-213.400, F.A.C. [40 CFR 70.6(a)(4)(i); and, Rule 62-213.440(1)(c)1., F.A.C.]
- 6. Where an applicable requirement of the Act is more stringent than applicable regulations promulgated under Title IV of the Act, both provisions shall be incorporated into the permit and shall be enforceable by the Administrator.

[40 CFR 70.6(a)(1)(ii); and, Rule 62-210.200, F.A.C., Definitions – Applicable Requirements.]

7. Comments, notes, and justifications: On 6/07/04, the Certificate of Representation was signed by Gregory M. Nelson, designated representative, and Laura R. Couch, alternate designated representative.

# IN THE CIRCUIT COURT OF THE THIRTEENTH JUDICIAL CIRCUIT IN AND FOR HILLSBOROUGH COUNTY, FLORIDA

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION.

Plaintiff.

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CASE NO .:

TAMPA ELECTRIC COMPANY.

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# CONSENT FINAL JUDGMENT

# I. INTRODUCTION AND PURPOSE

- A. This Consent Final Judgment is entered into between Plaintiff, State of Florida, Department of Environmental Protection (the "DEP"), and Defendant, Tampa Electric Company ("TAMPA ELECTRIC COMPANY"), to reach a settlement of certain matters at issue between them. The Consent Final Judgment provides for the implementation of certain actions, the investigation and implementation of certain pollution prevention technology, and the contribution of funds to assist the DEP in its Bay Regional Air Chemistry Experiment program relating to nitrogen deposition in Tampa Bay.
- B. "Consent Final Judgment" means this Consent Final Judgment, including any future modifications, and any reports, plans, specifications and schedules required by the Consent Final Judgment which, upon the approval of each by the DEP, shall be deemed incorporated into and become an enforceable part of this Consent Final Judgment as though each was originally set forth herein.

# II. JURISDICTION

- A. The DEP is the administrative agency of the State of Florida having the power and duty to protect Florida's air and water resources, and to administer and enforce the provisions of Chapter 403, Florida Statutes, and the rules promulgated thereunder, Florida Administrative Code ("F.A.C.") Title 62 including the rules which Florida has the responsibility to administer and enforce under the federally approved Florida State Implementation Plan (SIP) and the separate Environmental Protection Agency delegation of PSD authority.
- B. This Court has jurisdiction over the subject matter herein and over the Parties hereto pursuant to Chapter 403, Florida Statutes.
- C. This Court retains jurisdiction over both the subject matter of this Consent Final Judgment and the Parties during the performance of its terms to enforce compliance therewith, if necessary.

# III. PARTIES BOUND

This Consent Final Judgment shall apply to and be binding upon the DEP and TAMPA ELECTRIC COMPANY, (hereinafter individually defined as a "Party" or together defined as "Parties") and their successors and assigns. Each person signing this Consent Final Judgment certifies that he or she is authorized to execute the Consent Final Judgment and to legally bind to it the party on whose behalf he or she signs the Consent Final Judgment.

## IV. STATEMENT OF FACTS

A. TAMPA ELECTRIC COMPANY owns and is an operator of the Big Bend coal fired electric generation plant in Hillsborough County. Big Bend generates

electricity from four steam generating boilers which are designated as Big Bend Unit 1, Big Bend Unit 2, Big Bend Unit 3, and Big Bend Unit 4. TAMPA ELECTRIC COMPANY also owns and is an operator of the Gannon coal fired electric generation plant in Hillsborough County. Gannon generates electricity from six steam generating boilers which are designated as Gannon Unit 1, Gannon Unit 2, Gannon Unit 3, Gannon Unit 4, Gannon Unit 5, and Gannon Unit 6.

- B. The DEP has alleged that Tampa Electric Company undertook a number of activities at the Gannon and Big Bend Generating Stations without appropriate regulatory review and permits, in violation of Chapter 403, Florida Statutes, and applicable provisions of the federally approved SIP. These activities include, but are not limited to, the following:
- 1. TAMPA ELECTRIC COMPANY modified, and thereafter operated, its electric generating units at Big Bend and Gannon, which are coal fired electricity generating power plants in Hillsborough County, Florida, without first obtaining appropriate permits authorizing this construction and without installing the best control technology (BACT) to control emissions of nitrogen oxides, sulfur dioxide, and particulate matter, as required by Florida law.
- 2. As a result of TAMPA ELECTRIC COMPANY's operation of the power plants, these unlawful modifications and the absence of appropriate controls, sulfur dioxide, nitrogen oxides, and particulate matter have been, and still are being, released into the atmosphere aggravating air pollution locally and downwind from these plants.
- 3. At various times, TAMPA ELECTRIC COMPANY commenced construction of modifications at Big Bend. These modifications included, but are not

and 1991, respectively; (2) replacement of the waterwall in Big Bend Unit 2 in 1994, and (3) replacement of the high temperature reheater in Big Bend Unit 2 in 1994.

- 4. Such modifications by TAMPA ELECTRIC COMPANY were done without obtaining a permit from the DEP and without applying BACT for nitrogen oxide, sulfur dioxide and particulate matter as required by Chapter 403, Florida Statutes.
- 5. At various times, TAMPA ELECTRIC COMPANY commenced construction of modifications to Gannon. These modifications included, but were not limited to: (1) replacement of the furnace floor in Gannon Unit 3 with a new design in 1996; and, (2) replacement of the cyclone in Gannon Unit 4 in 1994.
- 6. Such modifications by TAMPA ELECTRIC COMPANY were done without obtaining a permit from the DEP and without applying BACT for nitrogen oxide, sulfur dioxide and particulate matter as required by Chapter 403, Florida Statutes.
- C. Tampa Electric Company has agreed to the entry of the Consent Final Judgment and has agreed to implement the requirements of the Consent Final Judgment without an admission of liability and in recognition of the benefits of resolving litigation and elimination of such related expenses as settlement of the claims set forth in the Complaint, which Tampa Electric Company believes to be disputed claims.

  Tampa Electric Company neither admits nor denies the facts set forth in the Complaint and in Section IV.B. of this Consent Final Judgment.

## V. REQUIREMENTS OF THE CONSENT FINAL JUDGMENT

A. TAMPA ELECTRIC COMPANY shall shut down coal-fired Units 1, 2, and 6 at Gannon Station and repower Units 3, 4, & 5 for gas to be phased-in between

January 1, 2003 and December 31, 2004. The repowered Units shall meet BACT for nitrogen oxide applicable to combined cycle gas turbines with an emission rate of 3.5 ppm. This requirement shall be included as a permit condition issued through the normal process.

- B. TAMPA ELECTRIC COMPANY shall evaluate using "zero-ammonia" nitrogen oxide control technology at its Gannon facility. If, by May, 2000, such technology is found by the DEP to be commercially viable, TAMPA ELECTRIC COMPANY shall install such technology on one of the units it intends to repower so long as the incremental capital cost differential above the cost of Selective Catalytic Reduction (SCR) does not exceed \$8 million and TAMPA ELECTRIC COMPANY obtains acceptable performance guarantees and remedies from the manufacturer of the technology. The installation shall be performed as part of the repowering process and shall be completed no later than December 31, 2004. In the event that the DEP does not find that the technology is commercially viable, then by December 31, 2004, TAMPA ELECTRIC COMPANY shall spend up to \$8 million to demonstrate alternative commercially viable nitrogen oxide reduction technologies for natural gas-fired or coal-fired generating facilities as determined by the DEP and TAMPA ELECTRIC COMPANY.
- C. At Big Bend Station, the new scrubber serving Units 1&2 is currently going through performance testing and is scheduled for commercial operation on or about January 1, 2000. It has a guaranteed removal efficiency of 93% but is the first Unit with a large, high velocity tower serving approximately 800 mega watts TAMPA ELECTRIC COMPANY shall use reasonable commercial efforts to optimize the removal efficiency

to achieve a 95% removal efficiency by May 1, 2002 if such rate is not achieved by commercial operation.

- D. TAMPA ELECTRIC COMPANY shall maximize scrubber utilization on all four boilers at Big Bend. The DEP recognizes the need for shut down for operational reasons.
- E. TAMPA ELECTRIC COMPANY shall add nitrogen oxide controls, repower or shut down Units 1 through 3 at Big Bend Station by May 2010 and at Unit 4 at Big Bend Station by May 2007. If SCRs or similar nitrogen oxide controls are installed, BACT for nitrogen oxide will be .10 lbs./mmBTU on Unit 4 and .15 lbs./mmBTU on Units 1, 2, and 3.
- F. TAMPA ELECTRIC COMPANY shall undertake a performance optimization study and a BACT analysis of its electrostatic precipitators and make reasonable upgrades to the electrostatic precipitators at Big Bend Station by May 1, 2003, if the study indicates that reasonable upgrades are necessary to optain performance optimization.
- G. TAMPA ELECTRIC COMPANY shall report to DEP on the technical feasibility of installing a particulate matter continuous emissions monitor on one stack at Big Bend March 1, 2002. If the DEP determines by May 31, 2002 that installation to be technically feasible. TAMPA ELECTRIC COMPANY shall install a particulate matter continuous emissions monitor on one stack at Big Bend station no later than May 1, 2003. Such monitor shall be installed solely for demonstration and informational purposes.

- H. TAMPA ELECTRIC COMPANY shall be entitled to retain all sulfur dioxide reduction credits as currently authorized by law and freely trade them as allowed by the acid rain program. These credits were an integral part of the economics of the repowering project. If a credit trading program is developed by state or federal law for nitrogen oxide, TAMPA ELECTRIC COMPANY shall bank such credits obtained from the reductions achieved through the implementation of this Consent Final Judgment, but such credits shall not be eligible for sale to third parties but shall be held for TAMPA ELECTRIC COMPANY's (or any affiliate's) own account.
- I. TAMPA ELECTRIC COMPANY shall agree to cooperate with the DEP on its Bay Regional Air Chemistry Experiment BRACE program relating to nitrogen deposition in Tampa Bay, including allowing necessary stack testing access to the DEP, and contributing \$2 million dollars to the Hillsborough Environmental Protection Commission (EPC) for use in the BRACE program, in lieu of civil penalties. The DEP will enter into an agreement with EPC to ensure that the funds are spent on the BRACE program. TAMPA ELECTRIC COMPANY shall make the first payment to EPC in the amount of \$500,000 by July 1, 2000, and shall pay \$500,000 each six months thereafter until the full \$2 million dollars has been paid.
- J. TAMPA ELECTRIC COMPANY shall collaborate with the DEP to develop and implement State tax policy aimed at emissions reductions and such other supplemental environmental programs which are agreed to by TAMPA ELECTRIC COMPANY and the DEP.
- K. TAMPA ELECTRIC COMPANY shall be entitled to relief from the time requirements of this Consent Final Judgment in the event of a force majeure that

includes, among other things, delays in regulatory approvals, construction, labor, material or equipment delays, natural gas and gas transportation availability delays, acts of God or other similar events that are beyond the control of the company and not resulting from its owns actions, for the length of time necessarily imposed by the delay.

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L. TAMPA ELECTRIC COMPANY shall be released from civil liability for all past New Source Review (NSR) related acts and State Implementation Plan (SIP) violations associated with the Prevention of Significant Deterioration (PSD), New Source Performance Standards (NSPS) and NSR related matters set forth herein and in the Complaint.

- M. TAMPA ELECTRIC COMPANY shall also be protected from triggering NSR requirements with respect to repairs, maintenance and physical or operation changes during the term of the Consent Final Judgment which term shall remain effective until the actions required hereunder have been implemented.
- N. The DEP shall cooperate with TAMPA ELECTRIC COMPANY and the United States Environmental Protection Agency in an effort to clarify the NSR regulations for repairs, maintenance, physical and operation changes in the future.
- O. TAMPA ELECTRIC COMPANY's obligation to implement the emissions reductions and other requirements set forth herein will be conditioned on the receipt of necessary federal, state and local environmental permits, and acceptable regulatory treatment, including cost recovery by the Florida Public Service Commission.
- P. DEP will defend the terms of this Consent Final Judgment in any action to which it is a party.

# VI. MISCELLANEOUS

- A. This Consent Final Judgment embodies the entire agreement and understanding of the Parties and supersedes any and all prior agreements, drafts, arrangements, conversations, negotiations or understandings relating to matters provided for in the Consent Final Judgment.
- B. This Consent Final Judgment may be executed in one or more counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument.
- C. Each provision of the Consent Final Judgment shall be interpreted in such a manner as to be effective and valid under applicable law, but if any provision of the Consent Final Judgment shall be prohibited or invalid under applicable law, such provision shall be ineffective to the extent of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of the Consent Final Judgment.
- D. This Consent Final Judgment is not, and shall not be construed to be, a permit issued pursuant to any federal, State or local law, rule or regulation.
- E. If, for any reason, the Court should decline to enter this Consent Final Judgment in the form in which it is lodged, the Consent Final Judgment as lodged is voidable, at the sole discretion of either Party. The Parties agree that because the claims of the DEP contained herein were disputed as to validity and amount, none of the terms of the lodged but voided Consent Final Judgment may be used as evidence in any litigation for any purpose, except with the written consent of TAMPA ELECTRIC COMPANY.

F. Except as provided for herein, there shall be no modifications or amendments of this Consent Final Judgment without written agreement of the Parties to this Consent Final Judgment and approval by the Court.

# VII. FINAL JUDGMENT/RETENTION OF JURISDICTION

This Consent Final Judgment constitutes a final judgment in this action. This Court will retain jurisdiction for the purpose of enabling the Parties to apply to the Court at any time for such further order, direction or relief as may be necessary or appropriate for the construction or modification of this Consent Final Judgment, or to effectuate or enforce compliance with its terms, or to resolve disputes.

DONE AND ORDERED IN CHAMBE	ERS this day of	·
1999.		ORIGINAL SIGNED
	Circuit Judge	DEC 1 6 1999 ROBERT H. BONANNO CIRCUIT JUDGE
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION	TAMPA ELECTRIC C	OMPANY
By David Shruhs Secretary of the Florida Department of Environmental Protection	By: John B. Ramil President	3.02/
	$\boldsymbol{\Sigma}$	/ ///

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Review Draft ... 10/20/00

UNITED STATES DISTRICT COURT MIDDLE DISTRICT OF FLORIDA

UNITED STATES OF AMERICA,

Plaintiff,

CIVIL ACTION NO. 99-2524

V.

CIV-T-23F

IAMPA ELECTRIC COMPANY,

Defendant.

## AMENDMENT TO CONSENT DECREE

WHEREAS, on October 4, 2000, this Court entered a Consent Decree resolving this maner;

WHEREAS Tampa Electric Company ("Tampa Electric") has for sometime been undertaking work related to carrying out its obligations under the Consent Decree, including but not limited to work involving scrubbers — which are pollution control devices that reduce emission of certain pollutants into the air;

WHEREAS Tampa Electric reports that it has not issued its final acceptance to the scrubber contractor for the supply and installation of the scrubber that serves Big Bend Units I and 2 and has also retained a consultant to analyze options for improving performance of that scrubber, and Tampa Electric further reports that detailed inspection of the scrubber serving Big Bend Units 3 and 4 reveals that this scrubber will require more maintenance and upgrading than

originally anticipated as part of bringing the scrubber up to performance levels required by the Consent Decree;

WHEREAS Tampa Electric reports that scrubber work necessary for Big Bend Units 3 and 4 would be most easily performed during the next scheduled outage for those units, which should be during April or May 2000;

WHEREAS Tampa Electric has proposed certain adjustments to the Consent Decree to address these issues concerning scrubbers and also has identified several small corrections to the Decree:

WHEREAS the United States believes that the adjustments and corrections effected by this amendment are appropriate;

NOW, THEREFORE, without any admission of fact or law, it is hereby URDERED AND DECREED that the Consent Decree is amended as follows:

#### A. ADJUSTMENTS

- 1. Alter first sentence of Paragraph 29 to extend deadline for certain work on the scrubber serving Big Bend Units 1 and 2, by replacing "September 1, 2000," with "December 31, 2000,".
- 2. Add New Paragraph 30.1, as follows:
  - 30.1. One-time increase in number of days Tamna Electric may operate Big

    Bend Unit 3 without meatment by a scrubber. In addition to the number

    of calendar days that Tampa Electric may, under Paragraph 30.A(1) of this

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Decree, operate Big Bend Unit 3 without weating emissions from that Unit with a scrubber, Tampa Electric also may operate Unit 3 for up to an additional 30 calendar days without treating emissions from that Unit with a scrubber if and only if:

- A. Each day of such operation (and scrubber outage) under this provision takes place prior to May 31, 2001;
- B. The purpose of the scrubber outage during such operation of Unit 3 is repair, improvement, and/or upgrade of the scrubber;
- C. Tampa Electric complies with paragraph 30.8 of this Decree while operating Unit 3 during such scrubber outage; and
- D. Tampa Electric documents in detail each day of Unit 3 operation and scrubber outage that the company claims under this provision, and supplies such documentation as part of the periodic reporting requirements that apply to Tampa Electric under this Decree.
- 3. After Paragraph 53.1 by adding "30.1" between "30" and "31" in the list of paragraphs identified in Paragraph 53.1

## B. CORRECTIONS

1. At page 6, in first line of Paragraph 4 of the Decree, delete "2.2 lb/mmBTU" and replace with 12.2 lbs SO<sub>2</sub> /mmBTU".

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Steven A. Herman
Assistant Administrator for Office of Enforcement
and Compliance Assurance
U.S. Environmental Protection Agency
Washington, D.C.

Bruce Buckbeit Director

Gregory Jaffe
Senior Enforcement Counsel

Air Enforcement Division
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
Washington, D.C.

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### **BEST AVAILABLE COPY**

THROUGH ITS UNDERSIGNED REPRESENTATIVES, TAMPA ELECTRIC COMPANY AGREES AND CONSENTS TO ENTRY OF THE FOREGOING CONSENT DECREE

FOR TAMPA ELECTRIC COMPANY

Date:

John B. Ramil President Tamps Electric Company

Sheila M. McDevin General Counsel Tampa Electric Company

## UNITED STATES DISTRICT COURT MIDDLE DISTRICT OF FLORIDA

UNITED STATES OF AMERICA,	)
•	)
Plaintiff,	)
	) CIVIL ACTION NO. 99-2524
v.	) CIV-T-23F
	)
_	)
TAMPA ELECTRIC COMPANY,	)
	)
Defendant.	)
	_)

### **CONSENT DECREE**

WHEREAS, Plaintiff, the United States of America ("Plaintiff" or "the United States"), on behalf of the United States Environmental Protection Agency ("EPA") filed a Complaint on November 3, 1999, alleging that Defendant, Tampa Electric Company ("Tampa Electric") commenced construction of major modifications of major emitting facilities in violation of the Prevention of Significant Deterioration ("PSD") requirements at Part C of the Clean Air Act ("Act"), 42 U.S.C. §§ 7470-7492;

WHEREAS, EPA issued a Notice of Violation with respect to such allegations to .

Tampa Electric on November 3, 1999 (the "NOV");

WHEREAS, the parties recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated in good faith and at arm's length: that

the parties have voluntarily agreed to this Consent Decree; that implementation of this Consent Decree will avoid prolonged and complicated litigation between the parties; and that this Consent Decree is fair, reasonable, consistent with the goals of the Act, and in the public interest;

WHEREAS, the United States alleges that the Complaint states a claim upon which relief can be granted against Tampa Electric under Sections 113 and 167 of the Act, 42 U.S.C. §§ 7413 and 7477, and 28 U.S.C. § 1355;

WHEREAS, Tampa Electric has not answered or otherwise responded to the Complaint in light of the settlement memorialized in this Consent Decree;

WHEREAS, Tampa Electric has denied and continues to deny the violations alleged in the NOV and the Complaint; maintains that it has been and remains in compliance with the Clean Air Act and is not liable for civil penalties or injunctive relief; and states that it is agreeing to the obligations imposed by this Consent Decree solely to avoid the costs and uncertainties of litigation and to improve the environment in and around the Tampa Bay area of Florida;

WHEREAS, Tampa Electric is the first electric utility of those against which the United States brought enforcement actions in November, 1999, to come forward and invest time and effort sufficient to develop a settlement with the United States;

WHEREAS, Tampa Electric's decision to Re-Power some of its coal-fired electric generating Units with natural gas will significantly reduce emissions of both regulated and unregulated pollutants below levels that would have been achieved merely by

installing appropriate pollution control technologies on Tampa Electric's existing coalfired electric generating Units;

WHEREAS, prior to the filing of the Complaint or issuance of the Notice of Violation in this matter, Tampa Electric already had placed in service or installed both scrubbers and electrostatic precipitators that serve all existing coal-fired electric generating Units at the company's Big Bend electric generating plant;

WHEREAS, the United States recognizes that a BACT Analysis conducted under existing procedures most likely would not find it cost effective to replace Tampa Electric's existing control equipment at Big Bend for particulate matter, in light of the design and performance of that equipment;

WHEREAS, Tampa Electric and the United States have crafted this Consent

Decree to take into account physical and operational constraints resulting from the
unique, Riley Stoker wet bottom, turbo-fired boiler technology now in operation at Big

Bend, which could limit the efficiency of nitrogen oxides emissions controls installed for those boilers;

WHEREAS, Tampa Electric regularly combusts coal with a sulphur content of five or six pounds per mmBTU heat input;

WHEREAS, Tampa Electric is a mid-sized electric utility and is smaller on a financial basis than some of the other electric utilities against which the United States brought similar enforcement actions in November 1999;

WHEREAS, Tampa Electric owns and operates fewer coal-fired electric

generating plants than some of the other electric utilities against which the United States brought similar enforcement actions in November 1999;

WHEREAS, the two Tampa Electric plants addressed by this enforcement action constitute over ninety percent of the entire base load generating capacity of Tampa Electric;

WHEREAS, the United States and Tampa Electric have agreed that settlement of this action is in the best interest of the parties and in the public interest, and that entry of this Consent Decree without further litigation is the most appropriate means of resolving this matter; and

WHEREAS, the United States and Tampa Electric have consented to entry of this Consent Decree without trial of any issue;

NOW, THEREFORE, without any admission of fact or law, and without any admission of the violations alleged in the Complaint or NOV, it is hereby ORDERED AND DECREED as follows:

### 1. JURISDICTION AND VENUE

1. This Court has jurisdiction over the subject matter herein and over the parties consenting hereto pursuant to 28 U.S.C. § 1345 and pursuant to Sections 113 and 167 of the Act, 42 U.S.C. §§ 7413 and 7477. Venue is proper under Section 113(b) of the Act, 42 U.S.C. § 7413(b), and under 28 U.S.C. § 1391(b) and (c).

Solely for the purposes of this Consent Decree and the underlying Complaint.

Tampa Electric waives all objections and defenses that it may have to the claims set forth in the Complaint, the jurisdiction of the Court or to venue in this District.

Tampa Electric shall not challenge the terms of this Consent Decree or this Court's jurisdiction to enter and enforce this Consent Decree. Except as expressly provided for herein, this Consent Decree shall not create any rights in any party other than the United States and Tampa Electric. Tampa Electric consents to entry of this Consent Decree without further notice.

### II. APPLICABILITY

2. The provisions of this Consent Decree shall apply to and be binding upon the United States and upon Tampa Electric, its successors and assigns, and Tampa Electric's officers, employees and agents solely in their capacities as such. If Tampa Electric proposes to sell or transfer any of its real property or operations subject to this Consent Decree, it shall advise the purchaser or transferee in writing of the existence of this Consent Decree, and shall send a copy of such written notification by certified mail, return receipt requested, to EPA sixty (60) days before such sale or transfer. Tampa Electric shall not be relieved of its responsibility to comply with all requirements of this Consent Decree unless the purchaser or transferee assumes responsibility for full performance of Tampa Electric's responsibilities under this Consent Decree, including liabilities for

nonperformance. Tampa Electric shall not purchase or otherwise acquire capacity and/or energy from a third party in lieu of obtaining it from Gannon or Big Bend unless the seller or provider agrees that the facilities providing such capacity and/or energy will meet the emission control requirements set forth in this Consent Decree or equivalent requirements approved in advance by the United States.

3. Tampa Electric shall provide a copy of this Consent Decree to all vendors, suppliers, consultants, contractors, agents, and any other company or other organization performing any of the work described in Sections IV or VII of this Consent Decree. Notwithstanding any retention of contractors, subcontractors or agents to perform any work required under this Consent Decree, Tampa Electric shall be responsible for ensuring that all work is performed in accordance with the requirements of this Consent Decree. In any action to enforce this Consent Decree. Tampa Electric shall not assert as a defense the failure of its employees, servants, agents, or contractors to take actions necessary to comply with this Consent Decree, unless Tampa Electric establishes that such failure resulted from a Force Majeure event as defined in this Consent Decree.

### III. <u>DEFINITIONS</u>

4. "Alternative Coal" shall mean coal with a sulphur content of no more than 2.2 lb/mmBTU, on an as determined basis.

- 5. "BACT Analysis" shall mean the technical study, analysis, review, and selection of recommendations typically performed in connection with an application for a PSD permit. Except as otherwise provided in this Consent Decree, such study, analysis, review, and selection of recommendations shall be carried out in conformance with applicable federal and state regulations and guidance describing the process and analysis for determining Best Available Control Technology (BACT).
- 6. "Big Bend" shall mean the electric generating plant, presently coal-fired, owned and operated by Tampa Electric and located in Hillsborough County, Florida, which presently includes four steam generating boilers and associated and ancillary systems and equipment, known as Big Bend Units 1, 2, 3, and 4.
- 7. "Consent Decree" shall mean this Consent Decree and the Appendix thereto.
- 8. "Emission Rate" shall mean the average number of pounds of pollutant emitted per million BTU of heat input ("lb/mmBTU") or the average concentration of a pollutant in parts per million by volume ("ppm"), as dictated by the unit of measure specified for the rate in question, where:

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in the case of a coal-fired, steam electric generating unit, such rates shall be calculated as a 30 day rolling average. A 30 day rolling average for an Emission Rate expressed as lb/mmBTU shall be determined by calculating the emission rate for a given operating day, and then arithmetically averaging the emission rates for

the previous 29 operating days with that date. A new 30 day rolling average shall be calculated for each new operating day;

A in the case of a gas-fired, electric generating unit, such rates shall be calculated as a 24-hour rolling average, excluding periods of start up, shutdown, and malfunction as provided by applicable Florida regulations at the time the Emission Rate is calculated. A rolling average for Emission Rates expressed as ppm shall be determined on a given day by summing hourly emission rates for the immediately preceding 24-hour period and dividing by 24;

A the reference methods for determining Emission Rates for SO<sub>2</sub> and NO<sub>3</sub> shall be those specified in 40 C.F.R. Part 75, Appendix F. The reference methods for determining Emission Rates for PM shall be those specified in 40 C.F.R. Part 60, Appendix A. Method 5, Method 5B, or Method 17; and

A nothing in this Consent Decree is intended to nor shall alter applicable law concerning the use of data, for any purpose under the Clean Air Act, generated by methods other than the reference methods specified herein.

9. "EPA" shall mean the United States Environmental Protection Agency.

3.5

10. "Gannon" shall mean the electric generating plant, presently coal-fired, owned and operated by Tampa Electric, located in Hillsborough County. Florida, which presently includes six steam generating boilers and associated and ancillary systems and equipment, known as Gannon Units 1, 2, 3, 4, 5, and 6. Tampa Electric intends to rename Gannon "Bayside Power Station" upon completion of

- the Re-Powering required under this Consent Decree.
- 11. "lb/mmBTU" shall mean pounds per million British Thermal Units of heat input.
- 12. "NOx" shall mean oxides of nitrogen.

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- 13. "NOV" shall mean the Notice of Violation issued by EPA to Tampa Electric dated November 3, 1999.
- 14. "PM" shall mean total particulate matter, and the reference method for measuring

  PM shall be that specified in the definition of Emission Rate in this Consent

  Decree.
- 15. "ppm" shall mean parts per million by dry volume, corrected to 15% O<sub>2</sub>.
- incurred or made in carrying out the dollar-limited projects identified in Paragraph 35 of Section IV of this Consent Decree (Early Reductions of NO<sub>x</sub> from Big Bend Units 1 through 3) and in Section VII of this Consent Decree (NO<sub>x</sub> Reduction Projects and Mitigation Projects), to the extent that such expenditures or payments both: (A) comply with the Project Dollar and other requirements set by this Consent Decree for such expenditures and payments in Section VII and in Paragraph 35 of Section IV of this Consent Decree, and (B) constitute either Tampa Electric's properly documented external costs for contractors, vendors, as well as equipment, or its internal costs consisting of employee time, travel, and other out-of-pocket expenses specifically attributable to these particular projects.
- 17. "PSD" shall mean Prevention of Significant Deterioration within the meaning of

Part C of the Clean Air Act, 42 U.S.C. §§ 7470, et seq.

- 18. "Re-Power" shall mean the removal or permanent disabling of devices, systems, equipment, and ancillary or supporting systems at a Gannon or Big Bend Unit such that the Unit cannot be fired with coal, and the installation of all devices, systems, equipment, and ancillary or supporting systems needed to fire such Unit with natural gas under the limits set in this Consent Decree (or with No. 2 fuel oil, as a back up fuel only, and under the limits specified by this Consent Decree) plus installation of the control technology and compliance with the Emission Rates called for under this Consent Decree.
- 19. "Reserve / Standby" shall mean those devices, systems, equipment, and ancillary or supporting systems that: (1) are not used as part of the Units that must be Re-Powered under Paragraph 26, (2) are not in operation subsequent to the Re-Powering required under Paragraph 26, (3) are maintained and held by Tampa Electric for system reliability purposes, and (4) may be restarted only by Re-Powering.
- 20. "SCR" shall mean Selective Catalytic Reduction.
- 21. "Shutdown" shall mean the permanent disabling of a coal-fired boiler such that it cannot burn any fuel nor produce any steam for electricity production, other than through Re-Powering.
- 22. "SO<sub>2</sub>" shall mean sulphur dioxide.
- 23. "Title V Permit" shall mean the permit required under Subchapter V of the Clean

- Air Act, 42 U.S.C. § 7661, et seq.
- 24. "Total Baseline Emissions" shall mean calendar year 1998 emissions of NO<sub>x</sub>, SO<sub>2</sub>, and PM comprised of the following amounts for each pollutant:
- A. for Gannon: 30,763 tons of NO<sub>x</sub> 64,620 tons of SO<sub>2</sub>, and 1,914 tons of PM; and
- A.
- B.  $\frac{\text{for Big Bend}}{\text{PM}}$ : 36,077 tons of NO<sub>x</sub>, 107,334 tons of SO<sub>2</sub>, and 3,002 tons of PM.
- 25. "Unit" shall mean for the purpose of this Consent Decree a generator, the steam turbine that drives the generator, the boiler that produces the steam for the steam turbine, the equipment necessary to operate the generator, turbine and boiler, and all ancillary equipment, including pollution control equipment or systems necessary for the production of electricity. An electric generating plant may be comprised of one or more Units.

# IV. <u>EMISSIONS REDUCTIONS AND CONTROLS</u> <u>- GANNON AND BIG</u> <u>BEND</u>

### A. GANNON

26. <u>Consent Decree-Required Re-Powering of Gannon</u>. Tampa Electric shall Re-Power Units at Gannon with a coal-fired generating capacity of no less than 550 MW ("Megawatt"), as follows.

- A. On or before May 1, 2003, Tampa Electric shall Re-Power Units with a coal-fired generating capacity of no less than 200 MW. On or before December 31, 2004, Tampa Electric shall Re-Power additional Units with a coal-fired generating capacity equal to or greater than the difference between 550 MW of coal-fired generating capacity and the MW value of coal-fired generating capacity that Tampa Electric Re-Powered in complying with the first sentence of this Subparagraph A.
- A. All Re-Powering required by this Paragraph shall include installation and operation of SCR, other pollution control technology approved in advance and in writing by EPA, or any innovative technology demonstration project approved pursuant to Paragraph, 52.C to control Unit emissions. Each Re-Powered Unit shall, in conformance with the definition of Re-Power, use natural gas as its primary fuel and shall meet an Emission Rate for NO<sub>x</sub> of no greater than 3.5 ppm.
- A. A Unit Re-Powered under this or any other provision of this Consent Decree may be fired with No. 2 fuel oil if and only if: (1) the Unit cannot be fired with natural gas; (2) the Unit has not yet been fired with No. 2 fuel oil as a back up fuel for more than 875 full load equivalent hours in the calendar year in which Tampa Electric wishes to fire the Unit with such oil; (3) the oil to be used in firing the Unit has a sulphur content of less than 0.05 percent (by weight); (4) Tampa Electric uses all emission control equipment for that Unit when it is fired with such oil to the maximum extent possible; and (5) Tampa Electric complies with all applicable permit conditions, including emission rates for firing with No. 2 fuel oil, as set forth in applicable preconstruction and operating permits.

- A. Tampa Electric shall timely apply for a preconstruction permit under Rule 62-212, F.A.C., prior to commencing such Re-Powering. In applying for such permit Tampa Electric shall seek, as part of the permit, provisions requiring installation of SCR or other EPA-approved control technology and a NO<sub>x</sub> Emission Rate no greater than 3.5 ppm.
- 27. Schedule for Shutdown of Units. Tampa Electric shall Shutdown and cease any and all operation of all six (6) Gannon coal-fired boilers with a combined coalfired capacity of not less than 1194 MW on or before December 31, 2004. Notwithstanding the requirements of this Paragraph, Tampa Electric may retain any Unit Shutdown pursuant to this Paragraph on Reserve / Standby, unless such Unit is to be, or has been, Re-Powered under Paragraph 26, above. If Tampa Electric later decides to restart any Shutdown Unit retained on Reserve / Standby, then prior to such re-start, Tampa Electric shall timely apply for a PSD permit for the Unit(s) to be Re-Powered, and Tampa Electric shall abide by the permit issued as a result of that application, including installation of BACT and its corresponding Emission Rate, as determined at the time of the restart. Tampa Electric shall operate the Re-Powered Unit to meet the NO<sub>x</sub> Emission Rate established in the PSD Permit or an Emission Rate for NO<sub>x</sub> of 3.5 ppm, whichever is more stringent. Tampa Electric shall provide a copy of any permit application(s), proposed permit(s), and permit(s) to the United States as specified in Paragraph 82 (Notice). For any Unit Shutdown and placed on Reserve / Standby under this Paragraph, and notwithstanding the definition of Re-Power in .

this Consent Decree, Tampa Electric also may elect to fuel such a Unit with a gaseous fuel other than or in addition to natural gas, if and only if Tampa Electric: applies for and secures a PSD permit before using such fuel in any such Unit, complies with all requirements issued in such a permit, and complies with all other requirements of this Consent Decree applicable to Re-Powering.

28. <u>Permanent Bar on Combustion of Coal</u>. Commencing on January 1, 2005, Tampa Electric shall not combust coal in the operation of any Unit at Gannon.

### B. BIG BEND

29. Initial Reduction and Control of SO<sub>2</sub> Emissions from Big Bend Units 1 and 2.

Commencing upon the later of the date of entry of this Consent Decree or

September 1, 2000, and except as provided in this Paragraph, Tampa Electric shall operate the existing scrubber that treats emissions of SO<sub>2</sub> from Big Bend Units 1 and 2 at all times that either Unit 1 or 2 is in operation. Tampa Electric shall operate the scrubber so that at least 95% of all the SO<sub>2</sub> contained in the flue gas entering the scrubber is removed. Notwithstanding the requirement to operate the scrubber at all times Unit 1 or 2 is operating, the following operating conditions shall apply:

A.

B. Tampa Electric may operate Units 1 and/or 2 during outages of the scrubber serving Units 1 and 2, but only so long as Tampa Electric:

(1) in calendar year 2000, does not operate Unit 1 and/or 2, or any combination of the two of them, on more than sixty (60) calendar days, or any part thereof (providing that when both Units 1 and 2 operate on the same calendar day, such operation shall count as two days of the sixty (60) day limit), and in calendar years 2001 - 2009, does not operate Unit 1 and/or 2, or any combination of the two of them, on more than forty-five (45) calendar days, or any part thereof, in any calendar year (providing that when both Units 1 and 2 operate on the same calendar day, such operation shall count as two days of the forty-five (45) day limit); or

A.

B.

. . .

must operate Unit 1 and/or 2 in any calendar year from 2000 through 2009 either to avoid interruption of electric service to its customers under interruptible service tariffs, or to respond to a system-wide or state-wide emergency as declared by the Governor of Florida under Section 366.055, F.S. (requiring availability of reserves), or under Section 377.703, F.S.

D. (energy policy contingency plan), or under Section 252.36, F.S. (Emergency management powers of the Governor), in which Tampa Electric must generate power from Unit 1 and/or 2 to meet such emergency.

1.

- 2. Whenever Tampa Electric operates Units 1 and/or 2 without all emissions from such Unit(s) being treated by the scrubber, Tampa Electric shall: (1) combust only Alternative Coal at the Unit(s) operating during the outage (except for coal already bunkered in the hopper(s) for Units 1 or 2 at the time the outage commences); (2) use all existing electric generating capacity at Big Bend and Gannon that is served by fully operational pollution control equipment before operating Big Bend Units 1 and/or 2; and (3) continue to control SO<sub>2</sub> emissions from Big Bend Units 1 and/or 2 as required by Paragraph 31 (Optimizing Availability of Scrubbers Serving Big Bend Units 1, 2, and 3).
- A. In calendar years 2010 through 2012, Tampa Electric may operate Units 1 and/or 2 during outages of the scrubber serving Units 1 and 2, but only so long as Tampa Electric complies with the requirements of Subparagraphs A and B, above, and uses only coal with a sulphur content of 1.2 lb/mmBTU, or less, in place of Alternative Coal.
- A. If Tampa Electric Re-Powers Big Bend Unit 1 or 2, or replaces the scrubber or provides additional scrubbing capacity to comply with Paragraph 40, then upon such compliance the provisions of Subparagraphs 29.A. 29.B, and 29.C shall not apply to the affected Unit.

Initial Reduction and Control of SO<sub>2</sub> Emissions from Big Bend Unit 3. Commencing upon entry of the Consent Decree, and except as provided in this Paragraph, Tampa Electric shall operate the existing scrubber that treats emissions of SO<sub>2</sub> from Big Bend Units 3 and 4 at all times that Unit 3 is in operation. When Big Bend Units 3 and 4 are both operating, Tampa Electric shall operate the scrubber so that at least 93% of all the SO<sub>2</sub> contained in the flue gas entering the scrubber is removed. When Big Bend Unit 3 alone is operating, until May 1, 2002, Tampa Electric shall operate the scrubber so that at least 93% of all SO<sub>2</sub> contained in the flue gas entering the scrubber is removed or the Emission Rate for SO<sub>2</sub> for Unit 3 does not exceed 0.35 lb/mmBTU. When Unit 3 alone is operating, from May 1, 2002 until January 1, 2010, Tampa Electric shall operate the scrubber so that at least 95% of the SO<sub>2</sub> contained in the flue gas entering the scrubber is removed or the Emission Rate for SO<sub>2</sub> does not exceed 0.30 lb/mmBTU. Notwithstanding the requirement to operate the scrubber at all times Unit 3 is operating, and providing Tampa Electric is otherwise in compliance with this Consent Decree, the following operating conditions shall apply:

A.

30.

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- B. In any calendar year from 2000 through 2009, Tampa Electric may operate

  Unit 3 in the case of outages of the scrubber serving Unit 3, but only so long as

  Tampa Electric:
  - (1) does not operate Unit 3 during outages on more than thirty (30)

A.

B. must operate Unit 3 either: to avoid interruption of electric service to its customers under interruptible service tariffs, or to respond to a system-wide or state-wide emergency as declared by the Governor of Florida under Section 366.055, F.S. (requiring availability of reserves), or under Section 377.703, F.S. (energy policy contingency plan), or under Section 252.36, F.S. (Emergency management powers of the Governor), in which Tampa Electric must generate power from Unit 3 to meet such emergency.

C.

1.

- 2. Whenever Tampa Electric operates Unit 3 without treating all emissions from that Unit with the scrubber, Tampa Electric shall: (1) combust only Alternative Coal at Unit 3 during the outage (except for coal already bunkered in the hopper(s) for Unit 3 at the time the outage commences); (2) use all existing electric generating capacity at Big Bend and Gannon that is served by fully operational pollution control equipment before operating Big Bend Unit 3; and (3) continue to control SO<sub>2</sub> emissions from Big Bend Unit 3 as required by Paragraph 31 (Optimizing Availability of Scrubbers Serving Big Bend Units, 1, 2, and 3).
- A. If Tampa Electric Re-Powers Big Bend Unit 3, or replaces the scrubber or provides additional scrubbing capacity to comply with Paragraph 40, then upon

compliance with Paragraph 40 the provisions of Subparagraphs 30.A and 30.B shall not apply to Unit 3.

A.

- B. Nothing in this Consent Decree shall alter requirements of the New Source Performance Standards (NSPS), 40 C.F.R. Part 60 Subpart Da. that apply to operation of the scrubber serving Unit 4.
- Optimizing Availability of Scrubbers Serving Big Bend Units 1, 2, and 3.

  Tampa Electric shall maximize the availability of the scrubbers to treat the emissions of Big Bend Units 1, 2, and 3, as follows:
- As soon as possible after entry of this Consent Decree, Tampa Electric shall submit to EPA for review and approval a plan addressing all operation and maintenance changes to be made that would maximize the availability of the existing scrubbers treating emissions of SO<sub>2</sub> from Big Bend Units 1 and 2, and from Unit 3. In order to improve operations and maintenance practices as soon as possible, Tampa Electric may submit the plan in two phases.
  - (1) Each phase of the plan proposed by Tampa Electric shall include a schedule pursuant to which Tampa Electric will implement measures relating to operation and maintenance of the scrubbers called for by that phase of the plan, within sixty days of its approval by EPA. Tampa Electric shall implement each phase of the plan as approved by EPA.

Such plan may be modified from time to time with prior written approval of EPA.

(2) The proposed plan shall include operation and maintenance activities that will minimize instances during which SO<sub>2</sub> emissions are not scrubbed, including but not limited to improvements in the flexibility of scheduling maintenance on the scrubbers, increases in the stock of spare parts kept on hand to repair the scrubbers, a commitment to use of overtime labor to perform work necessary to minimize periods when the scrubbers are not functioning, and use of all existing capacity at Big Bend and Gannon Units that are served by available, operational pollution control equipment to minimize pollutant emissions while meeting power needs.

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(3) If Tampa Electric elects to submit the plan to EPA in two phases, the first phase to be submitted shall address, at a minimum, use of overtime hours to accomplish repairs and maintenance of the scrubber and increasing the stock of scrubber spare parts that Tampa Electric shall keep at Big Bend to speed future maintenance and repairs. If Tampa Electric elects to submit the plan in two phases, EPA shall complete review of the first phase within fifteen business days of receipt. For the second phase of the plan or submission of the plan in its entirety, EPA shall complete review of such plan or phase thereof within 60 days of receipt. Within sixty days after EPA's approval of the plan or any phase of the plan.

Tampa Electric shall complete implementation of that plan or phase and continue operation under it subject only to the terms of this Consent Decree.

### 32. PM Emission Minimization and Monitoring at Big Bend.

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- A. Within twelve months after entry of this Consent Decree, Tampa Electric shall complete an optimization study which shall recommend the best operational practices to minimize emissions from each Electrostatic Precipitator (ESP) and shall deliver the completed study to EPA for review and approval. Tampa Electric shall implement these recommendations within sixty days after EPA has approved them and shall operate each. ESP in conformance with the study and its recommendations until otherwise specified under this Consent Decree.
- B. Within twelve months after entry of this Consent Decree, Tampa Electric shall complete a BACT Analysis for upgrading each existing ESP now located at Big Bend and shall deliver the Analysis to EPA for review and approval. Notwithstanding the definition of BACT Analysis in this Consent Decree, Tampa Electric need not consider in this BACT Analysis the replacement of any existing ESP with a new ESP, scrubber, or baghouse, or the installation of a supplemental pollution control device of similar cost to a replacement ESP, scrubber, or baghouse. Tampa Electric shall simultaneously deliver to EPA all documents that support the BACT

Analysis or that were considered in preparing the Analysis. Tampa

Electric shall retain a qualified contractor to assist in the performance and completion of the BACT Analysis. On or before May 1, 2004, after EPA approval of the recommendation(s) made by the BACT Analysis, Tampa Electric shall complete installation of all equipment called for in the recommendation(s) of the Analysis and thereafter shall operate each ESP in conformance with the recommendation(s), including compliance with the Emission Rate(s) specified by the recommendation(s).

- C. Within six months after Tampa Electric completes installation of the equipment called for by the BACT Analysis, as approved by EPA, Tampa Electric shall revise the previous optimization study and shall recommend the best operational practices to minimize emissions from each ESP, taking into account the recommendations from the BACT Analysis required by this Paragraph, and shall deliver the completed study to EPA for review and approval. Commencing no later than 180 days after EPA approves the study and its recommendation(s), Tampa Electric shall operate each ESP in conformance with the study's recommendation.
- D. Tampa Electric shall include the recommended operational practices for each ESP and the recommendations from the BACT Analysis in Tampa Electric's Title V Permit application and all other relevant applications for operating or construction permits.

- E. <u>Installation and Operation of a PM Monitor</u>: On or before March 1, 2002,

  Defendant shall install, calibrate, and commence continuous operation of a

  continuous particulate matter emissions monitor (PM CEM) in the duct at

  Big Bend that services Unit 4. Data from the PM CEM shall be used by

  Tampa Electric, at a minimum, to monitor progress in reducing PM

  emissions.
- F. "Continuous operation" of the PM CEM shall mean operation at all times that Unit 4 operates, except for periods of malfunction of the PM CEM or routine maintenance performed on the PM CEM. If after Tampa Electric operates this PM CEM for at least two years, and if the parties then agree that it is infeasible to sustain continuous operation of the PM CEM,

  Tampa Electric shall submit an alternative PM monitoring plan for review and approval by EPA. The plan shall include an explanation of the basis for stopping operation of the PM CEM and a proposal for an alternative monitoring protocol. Until EPA approves such plan, Tampa Electric shall continue to operate the PM CEM.

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G. Installation and Operation of Second PM Monitor. If Tampa Electric advises EPA, pursuant to Paragraph 36, that it has elected to continue to combust coal at Big Bend Units 1, 2, or 3, and Tampa Electric has not ceased operating the first PM CEM as described in Subparagraph F, above, then Tampa Electric shall install, calibrate, and commence

continuous operation of a PM CEM on a second duct at Big Bend on or before May 1, 2007. The requirement to operate a PM CEM under any provision of this Paragraph shall terminate if and when the Unit monitored by the PM CEM is Re-Powered.

H. Testing and Reporting Requirement. Prior to installation of the PM CEM on each duct, Tampa Electric shall conduct a stack test on each stack at Big Bend on at least an annual basis and report its results to EPA as part of the quarterly report under Section V. The stack test requirement in this Subparagraph may be satisfied by Tampa Electric's annual stack tests conducted as required by its permit from the State of Florida. Following installation of each PM CEM, Defendant shall include in its quarterly reports to EPA pursuant to Section V all data recorded by the PM CEM, in electronic format, if available.

- I. Nothing in this Consent Decree is intended to nor shall alter applicable law concerning the use of data, for any purpose under the Clean Air Act, generated by the PM CEMs.
- 33. Election for Big Bend Unit 4: Shutdown. Re-Power. or Continued Combustion of Coal. Tampa Electric shall advise EPA in writing, on or before May 1, 2005, whether Big Bend Unit 4 will be Shutdown, will be Re-Powered, or will continue to be fired by coal.

34. Reduction of NO, at Big Bend Unit 4 after 2005 Election. Based on Tampa Electric's election in Paragraph 33, Tampa Electric shall take one of the following actions:

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- 8. If Tampa Electric elects to continue firing Unit 4 with coal, on or before June 1, 2007, Tampa Electric shall install and commence operation of SCR, or other technology if approved in writing by EPA in advance, sufficient to limit the coal-fired Emission Rate of NO<sub>x</sub> from Unit 4 to no more than 0.10 lb/mmBTU. Thereafter, Tampa Electric shall continue operation of SCR or other EPA approved control technology, and Tampa Electric shall continue to meet an Emission Rate for NO<sub>x</sub> from Unit 4 no greater than 0.10 lb/mmBTU; or
- A. If Tampa Electric elects to Re-Power Unit 4, Tampa Electric shall not combust coal at Unit 4 on or after June 1, 2007. Tampa Electric shall timely apply for a preconstruction permit under Rule 62-212, F.A.C., prior to commencing construction of the Re-Powering of Unit 4. In applying for such permit, Tampa Electric shall seek, as part of the permit, provisions requiring installation of SCR or other EPA approved control technology and a NO<sub>x</sub> Emission Rate no greater than 3.5 ppm. Tampa Electric shall operate the Re-Powered Unit 4 to meet an Emission Rate for NO<sub>x</sub> of no greater than 3.5 ppm or the rate established in the preconstruction permit, whichever is more stringent;

Or

If Tampa Electric elects to Shutdown Big Bend Unit 4. Tampa Electric A.

shall complete Shutdown of Big Bend Unit 4 on or before June 1, 2007.

Notwithstanding the requirements of this Subparagraph, Tampa Electric may retain this Unit, after it is Shutdown pursuant to this Subparagraph, on Reserve / Standby. If Tampa Electric later decides to restart Unit 4 then, prior to such restart, Tampa Electric shall timely apply for a PSD permit, and Tampa Electric shall abide by the permit issued as a result of that application, including installation of BACT and its corresponding Emission Rate, as determined at the time of the restart. Tampa Electric shall operate the Re-Powered Unit 4 to meet an Emission Rate for NO<sub>x</sub> of no greater than 3.5 ppm or the Emission Rate established in the PSD permit, whichever is more stringent. Tampa Electric shall provide a copy of any permit application(s), proposed permit(s), and permit(s) to the United States as specified in Paragraph 82 (Notice). Upon Shutdown of a Unit under this Subparagraph, Tampa Electric may never again use coal to fire that Unit.

- A. Notwithstanding the provisions of Subparagraphs B and C above or the definition of Re-Power in this Consent Decree, Tampa Electric may also elect to fuel Big Bend Unit 4 with a gaseous fuel other than or in addition to natural gas, if and only if Tampa Electric applies for and secures a PSD permit before using such fuel in this Unit, complies with all requirements issued in such a permit, and complies with all requirements of this Consent Decree applicable to Re-Powering.
- 35. <u>Early Reductions of NO<sub>x</sub> from Big Bend Units 1 through 3</u>: On or before

December 31, 2001, Tampa Electric shall submit to EPA for review and comment a plan to reduce NO<sub>x</sub> emissions from Big Bend Units 1, 2 and 3, through the expenditure of up to \$3 million Project Dollars on combustion optimization using commercially available methods, techniques, systems, or equipment, or combinations thereof. Subject only to the financial limit stated in the previous sentence, for Units 1 and 2 the goal of the combustion optimization shall be to reduce the NO<sub>x</sub> Emission Rate by at least 30% when compared against the NO<sub>x</sub> Emissions Rate for these Units during calendar year 1998, which the United States and Tampa Electric agree was 0.86 lb/mmBTU. For Unit 3 the goal of the combustion optimization shall be to reduce the NO<sub>x</sub> Emissions Rate by at least 15% when compared against the NO<sub>x</sub> Emission Rate for this Unit during calendar year 1998, which the United States and Tampa Electric agree was 0.57 lb/mmBTU. If the financial limit in this Paragraph precludes designing and installing combustion controls that will meet the percentage reduction goals for the NO<sub>x</sub> Emission Rates specified in this Paragraph for all three Units, then Tampa Electric's plan shall first maximize the Emission Rate reductions at Units 1 and 2 and then at Unit 3. Unless the United States has sought dispute resolution on Tampa Electric's plan on or before May 30, 2002, Tampa Electric shall implement all aspects of its plan at Big Bend Units 1, 2, and 3 on or before December 31, 2002. On or before April 1, 2003, Tampa Electric shall submit to EPA a report that documents the date(s) of complete implementation of the plan,

the results obtained from implementing the plan, including the emission reductions or benefits achieved, and the Project Dollars expended by Tampa Electric in implementing the plan.

- 36. Election for Big Bend Units 1 through 3: Shutdown. Re-Power. or Continued
  Combustion of Coal. Tampa Electric shall advise EPA in writing, on or before
  May 1, 2007, whether Big Bend Units 1, 2, or 3, or any combination of them, will be Shutdown, will be Re-Powered, or will continue to be fired by coal.
- 37. Further NO<sub>x</sub> Reduction Requirements if Big Bend Units 1. 2. and/or 3 Remain

  Coal-fired. If Tampa Electric advises EPA in writing, pursuant to Paragraph 36, above, that Tampa Electric will continue to combust coal at Units 1, 2, and/or 3, then:

. . . .

- A. Subject only to Subparagraphs B and D, Tampa Electric shall timely solicit contract proposals to acquire, install, and operate SCR, or other technology if approved in writing by EPA in advance, sufficient to limit the Emission Rate of NO<sub>x</sub> to no more than 0.10 lb/mmBTU at each Unit that will combust coal. Tampa Electric shall install and operate such equipment on all Units that will continue to combust coal and shall achieve an Emission Rate of NO<sub>x</sub> on each such Unit no less stringent than 0.10 lb/mmBTU.
- A. Notwithstanding Subparagraph A, Tampa Electric shall not be required to install SCR to limit the Emission Rate of NO<sub>x</sub> at Units 1, 2 and/or 3 to 0.10 lb/mmBTU if the "installation cost ceiling" contained in this Paragraph will be exceeded by such installation. If Tampa Electric decides to continue burning coal at Units 1, 2 and 3, the

installation cost ceiling for SCR at Units 1, 2, and 3 shall be three times the cost of installing SCR at Big Bend Unit 4 plus forty-five (45%) percent of the cost of installing SCR at Big Bend 4. If Tampa Electric decides to continue burning coal at only two Units at Big Bend, the installation cost ceiling for SCR at those two Units shall be two times the cost of installing SCR at Big Bend 4 plus forty-five (45) percent of the cost of installing SCR at Big Bend Unit 4. If Tampa Electric decides to continue burning coal at only one Unit at Big Bend, the installation cost ceiling for SCR at that Unit shall be the cost of installing SCR at Big Bend 4 plus forty five (45) percent.

A. If, based on the contract proposals obtained under Subparagraph A, Tampa Electric determines that the projected cost of proposed control equipment satisfying a 0.10 lb/mmBTU Emission Rate will not exceed the "installation cost ceiling," Tampa Electric shall install and operate such equipment on all Units that will continue to combust coal and shall achieve a NO<sub>x</sub> Emission Rate on each Unit no less stringent than 0.10 lb/mmBTU. If, based on the contract proposals, Tampa Electric determines that the projected cost will exceed the installation cost ceiling, Tampa Electric shall so advise EPA and shall provide EPA with the basis for Tampa Electric's determination, including all documentation sufficient to replicate and evaluate Tampa Electric's cost projections.

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A. Unless EPA contests Tampa Electric's determination that the installation cost ceiling will be exceeded by installing control equipment to reduce NO<sub>x</sub> emissions to 0.10

lb/mmBTU or less, Tampa Electric shall install, at each Unit that will continue to combust coal, the NO<sub>x</sub> control technology designed to achieve the lowest Emission Rate that can be attained within the "installation cost ceiling." Notwithstanding any provision of this Consent Decree, including the "installation cost ceiling," Tampa Electric shall install NO<sub>x</sub> control technology that is designed to achieve an Emission Rate no less stringent than 0.15 lb/mmBTU. Each Unit combusting coal and its NO<sub>x</sub> controls shall meet the Emission Rate for which they are designed.

A. Tampa Electric shall acquire, install, commence operating emission control equipment, and meet the applicable Emission Rate for NO<sub>x</sub> at each of the Units to remain coal-fired, as follows: (1) for the first of the Units to remain coal-fired, or if only one Unit is to be coal-fired, on or before May 1, 2008; (2) for the second Unit, if there is one, on or before May 1, 2009; (3) for the third Unit, if there is one, on or before May 1, 2010.

Tampa Electric's NO. Reduction Requirements if Tampa Electric Re-Powers

Units 1. 2. and/or 3. If, by May 1, 2007, Tampa Electric advises EPA that Tampa

Electric has elected to Re-Power one or more of Units 1, 2, and 3 at Big Bend,

then Tampa Electric shall complete all steps necessary to accomplish such Re
Powering in a time frame to commence operation of the Re-Powered Unit(s) no

later than May 1, 2010. Any Unit(s) to be replaced by a Re-Powered Unit may

continue to operate until the earlier of six months after the date the Re-Powered

Unit begins commercial operation or December 31, 2010. Tampa Electric shall timely apply for a preconstruction permit under Rule 62-212, F.A.C., prior to commencing construction of any Re-Powered Unit at Big Bend. In applying for such permit Tampa Electric shall seek, as part of the permit, provisions requiring installation of SCR or other EPA approved control technology and a NO<sub>x</sub>. Emission Rate no greater than 3.5 ppm. Tampa Electric shall operate any Unit Re-Powered under this Paragraph to meet an Emission Rate for NO<sub>x</sub> of no greater than 3.5 ppm or the rate established in the preconstruction permit, whichever is more stringent. Notwithstanding the provisions of this Paragraph or the definition of Re-Power in this Consent Decree, Tampa Electric may also elect to fuel Units 1, 2, or 3 with a gaseous fuel other than or in addition to natural gas, if and only if Tampa Electric applies for and secures a PSD permit before using such fuel in any of these Units, complies with all requirements issued in such a permit, and complies with all requirements of this Consent Decree applicable to Re-Powering.

Requirements Applicable to Big Bend Units 1. 2, and/or 3 if Shutdown. If Tampa Electric elects to Shutdown one or more of Units 1, 2, and 3, Tampa Electric shall complete Shutdown of the first such Unit on or before May 1, 2008; of the second Unit, if applicable, on or before May 1, 2009, and of the third Unit, if applicable, on or before May 1, 2010. Notwithstanding the requirements of this Paragraph.

Tampa Electric may retain any Unit Shutdown pursuant to this Paragraph on

Reserve / Standby. If Tampa Electric later decides to restart such Unit retained on Reserve / Standby by Re-Powering it then, prior to such restart, Tampa Electric shall timely apply for a PSD permit for the Unit(s) to be Re-Powered, and Tampa Electric shall abide by the permit issued as result of that application, including installation of BACT and its corresponding Emission Rate determined at the time of the restart. Tampa Electric shall operate each Unit Re-Powered under this Paragraph to meet an Emission Rate for NO<sub>x</sub> of no greater than 3.5 ppm or the Emission Rate established in the PSD permit, whichever is more stringent. Tampa Electric shall provide a copy of any permit application(s), proposed permit(s), and permit(s) to the United States as specified in Paragraph 82 (Notice). Upon Shutdown of a Unit under this Paragraph, Tampa Electric may never again use coal to fire that Unit. For any Unit Shutdown and placed on on Reserve / Standby under this Paragraph, and notwithstanding the definition of Re-Power in this Consent Decree, Tampa Electric also may elect to fuel such a Unit with a gaseous fuel other than or in addition to natural gas, if and only if Tampa Electric: applies for and secures a PSD permit before using such fuel in any of such Unit, complies with all requirements issued in such a permit, and complies with all requirements of this Consent Decree applicable to Re-Powering.

40. Further SO<sub>2</sub> Reduction Requirements if Big Bend Units 1. 2. or 3 Remains Coalfired. If Tampa Electric elects under Paragraph 36 to continue combusting coal at Units 1. 2. and/or 3. Tampa Electric shall meet the following requirements.

- A. Removal Efficiency or Emission Rate. Commencing on dates set forth in Subparagraph C and continuing thereafter, Tampa Electric shall operate coal-fired Units and the scrubbers that serve those Units so that emissions from the Units shall meet at least one of the following limits:
  - (1) the scrubber shall remove at least 95% of the SO<sub>2</sub> in the flue gas that entered the scrubber; or

- (2) the Emission Rate for SO<sub>2</sub> from each Unit does not exceed 0.25 lb/mmBTU.
- A. Availability Criteria. Commencing on the deadlines set in this Paragraph and continuing thereafter, Tampa Electric shall not allow emissions of SO<sub>2</sub> from Big Bend Units 1, 2, or 3 without scrubbing the flue gas from those Units and using other equipment designed to control SO<sub>2</sub> emissions. Notwithstanding the preceding sentence, to the extent that the Clean Air Act New Source Performance Standards identify circumstances during which Bend Unit 4 may operate without its scrubber, this Consent Decree shall allow Big Bend Units 1, 2, and/or 3 to operate when those same circumstances are present at Big Bend Units 1, 2, and/or 3.
- A. <u>Deadlines</u>. Big Bend Unit 3 and the scrubber(s) serving it shall be subject to the requirements of this Paragraph beginning January 1, 2010 and continuing thereafter.

  Until January 1, 2010, Tampa Electric shall control SO<sub>2</sub> emissions from Unit 3 as required by Paragraphs 30 and 31. Big Bend Units 1 and 2 and the scrubber(s) serving them shall

be subject to the requirements of this Paragraph beginning January 1, 2013 and continuing thereafter. Until January 1, 2013, Tampa Electric shall control SO<sub>2</sub> emissions from Units 1 and 2 as required by Paragraphs 29 and 31.

A. Nothing in this Consent Decree shall alter requirements of NSPS, 40 C.F.R. Part 60 Subpart Da, that apply to operation of Unit 4 and the scrubber serving it.

### C. BIG BEND AND GANNON -- PERMITS AND RESOLUTION OF CLAIMS

- Decree, in any instance where otherwise applicable law or this Consent Decree requires Tampa Electric to secure a permit to authorize constructing or operating any device under this Consent Decree, Tampa Electric shall make such application in a timely manner. Such applications shall be completed and submitted to the appropriate authorities to allow sufficient time for all legally required processing and review of the permit request. Failure to comply with this provision shall bar any use by Tampa Electric of the Force Majeure provisions of this Consent Decree.
- 42. Title V Permits.

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B. On or before January 1, 2004, Tampa Electric shall apply for a Title V Permit(s), or for an amendment to an existing Title V Permit(s), to include all performance.

operational, maintenance, and control technology requirements established by or determined under this Consent Decree for Gannon, including but not limited to Emission Rates, removal efficiencies, limits on fuel use (including those imposed on Re-Powered or Shutdown Units), and operation and maintenance optimization requirements.

- A. On or before January 1, 2009, Tampa Electric shall apply for a Title V Permit(s), or for an amendment to an existing Title V Permit(s), to include all performance, operational, maintenance, and control technology requirements established by or determined under this Consent Decree for Big Bend, including but not limited to Emission Rates, removal efficiencies, limits on fuel use (including those imposed on Re-Powered or Shutdown Units), and operation and maintenance optimization requirements.
- A. Except as this Consent Decree expressly requires otherwise, this Consent Decree shall not be construed to require Tampa Electric to apply for or obtain a permit pursuant to the Prevention of Significant Deterioration requirements of the Clean Air Act for any work performed by Tampa Electric within the scope of the Resolution of Claims provisions of Paragraphs 43 and 44, below.
- 43. Resolution of Past Claims This Consent Decree resolves all of Plaintiff's civil claims for liability arising from violations of either: (1) the Prevention of Significant Deterioration or Non-Attainment provisions of Parts C and D of the Clean Air Act, 42 U.S.C. § 7401, et seq at Units at Big Bend or Gannon, or (2) 40 C.F.R. Section 60.14 at Units at Big Bend or Gannon, that:

- B. are alleged in the Complaint filed November 3, 1999, or in the NOV issued on that date:
- A. could have been alleged by the United States in the Complaint filed November 3, 1999, or in the NOV issued on that date; or
- A. have arisen from Tampa Electric's actions that occurred between November 3, 1999 and the date on which this Consent Decree is entered by the Court.
- 44. Resolution of Future Claims Covenant not to Sue. The United States covenants not to sue Tampa Electric for civil claims arising from the Prevention of Significant Deterioration or Non-Attainment provisions of Parts C and D of the Clean Air Act, 42 U.S.C. § 7401 et seq., at Big Bend or Gannon Units and that are based on failure to obtain PSD or nonattainment New Source Review (NSR) permits for:
- A. work that this Consent Decree expressly directs Tampa Electric to undertake; or
- A. physical changes or changes in the method of operation of Big Bend or Gannon
  Units not required by this Consent Decree, if and only if:

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- B. such change is commenced after Tampa Electric is implementing the plan, or the first phase of the plan if applicable, approved by EPA under Paragraph 31 (Optimizing Availability of Scrubbers).
- 1. such change is commenced, within the meaning of 40 C.F.R. Section 52.21(b)(9),

during the time this Consent Decree applies to the Unit at which this change has been made;

- (3) Tampa Electric is otherwise in compliance with this Consent

  Decree;
- (4) hourly Emission Rates of NO<sub>x</sub>, SO<sub>2</sub>, or PM at the changed Unit(s) do not exceed their respective hourly Emission Rates prior to the change, as measured by 40 C.F.R. § 60.14(h); and
- (5) in any calendar year following the change, emissions of no pollutant within the scope of Total Baseline Emissions exceed the emissions of that pollutant in the Total Baseline Emissions.
- Separate Limitation on Resolution of Claims. Notwithstanding the provisions of Section XIII ("Termination"), the provisions of Paragraph 44 ("Resolution of Future Claims Covenant Not to Sue") shall terminate at Gannon and Big Bend, as follows. On December 31, 2006, the provisions of Paragraph 44 shall terminate and be of no further effect as to physical changes or changes in the method of operation at Gannon. On December 31, 2012, the provisions of Paragraph 44 shall terminate and be of no further effect as to physical changes or changes in the method of operation at Big Bend. If Tampa Electric Re-Powers any Unit at Big Bend under the terms provided by this Consent Decree, then for each such Unit the provisions of Paragraph 44 shall terminate two years after each such Unit is Re-Powered or on December 31, 2012, whichever is earlier.

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46. Exclusion of Certain Emission Allowances. For any and all actions taken by

Tampa Electric pursuant to the terms of this Consent Decree, including but not
limited to upgrading of ESPs and scrubbers, installation of NO<sub>x</sub> controls, RePowering, and Shutdown, Tampa Electric shall not use or sell any resulting NO<sub>x</sub>
or SO<sub>2</sub> emission allowances or credits in any emission trading or marketing
program of any kind; provided, however, that:

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- A. SO<sub>2</sub> credits allocated to Tampa Electric by the Administrator of EPA under the Act, due to the Re-Powering or Shutdown of Gannon, may be retained by Tampa Electric during the year in which they are allocated, but only for Tampa Electric's own use in meeting any acid rain requirement imposed under the Act. For any such allowances not used by Tampa Electric for this purpose by June 30 of the following calendar year,

  Tampa Electric shall not use, sell, trade, or otherwise transfer these allowances for its benefit or the benefit of a third party unless such a transfer would result in the retiring of such allowances without their ever being used.
- A. If Tampa Electric decides to Re-Power any Unit at Big Bend, then Tampa Electric shall be entitled to retain for any purpose under law the difference between the emission allowances that would have resulted from installing BACT- level NO<sub>x</sub> and SO<sub>2</sub> controls at the existing coal-fired Unit and the emission allowances that result from Re-Powering that Unit. Before Tampa Electric uses any allowances within the scope of this Subparagraph, Tampa Electric shall submit the calculation of the net emission allowances for approval by the United States.

A. Nothing in this Consent Decree shall preclude Tampa Electric from using or selling emission allowances arising from Tampa Electric's activities occurring prior to December 31, 1999, or Tampa Electric's activities after that date that are not related to actions required of Tampa Electric under this Consent Decree. The United States and Tampa Electric agree that the operation of the SO<sub>2</sub> scrubber serving Big Bend Units 1 and 2 meets the requirements of this Subparagraph, and that emission allowances resulting from the operation of this scrubber shall not be treated as an activity related to or required under this Consent Decree.

### V. REPORTING AND RECORD KEEPING

47. Beginning at the end of the first calendar quarter after entry of this Consent

Decree, and in addition to any other express reporting requirement in this Consent

Decree. Tampa Electric shall submit to EPA a quarterly report, consistent with

the form attached to this Consent Decree as the Appendix, within thirty (30) days

after the end of each calendar quarter until this Consent Decree is terminated.

...

48. Tampa Electric's report shall be signed by Tampa Electric's Vice President,

Environmental and Fuels, or, in his or her absence, Vice President, Energy

Supply, or higher ranking official, and shall contain the following certification:

I certify under penalty of law that this information was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my directions and my inquiry of the person(s) who manage the system, or the person(s) directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I understand that there are significant penalties for making misrepresentations to

or misleading the United States.

### VI. CIVIL PENALTY

49. Within thirty (30) calendar days of entry of this Consent Decree, Tampa Electric shall pay to the United States a civil penalty in the amount of \$3.5 million. The civil penalty shall be paid by Electronic Funds Transfer ("EFT") to the United States Department of Justice, in accordance with current EFT procedures, referencing the USAO File Number and DOJ Case Number 90-5-2-1-06932 and the civil action case name and case number of this action. The costs of such EFT shall be Tampa Electric's responsibility. Payment shall be made in accordance with instructions provided by the Financial Litigation Unit of the U.S. Attorney's Office for the Middle District of Florida. Any funds received after 11:00 a.m. (EST) shall be credited on the next business day. Tampa Electric shall provide notice of payment, referencing the USAO File Number, DOJ Case Number 90-5-2-1-06932, and the civil action case name and case number, to the Department of Justice and to EPA, as provided in Paragraph 82 (Notice). Failure to timely pay the civil penalty shall subject Tampa Electric to interest accruing from the date payment is due until the date payment is made at the rate prescribed by 28 U.S.C. § 1961, and shall render Tampa Electric liable for all charges, costs, fees, and penalties established by law for the benefit of a creditor or of the United States in securing payment.

### VII. NO, REDUCTION PROJECTS AND MITIGATION PROJECTS

- Other Mitigation Projects (referred to together as "Projects") described in this Section, and in Paragraph 35 of this Consent Decree, in compliance with the schedules and terms of this Consent Decree. In performing these Projects, Tampa Electric shall spend no less than \$10 million in Project Dollars, in total, unless the Additional NO<sub>x</sub> Reduction Project(s) selected under Paragraph 52.C is estimated to cost more than \$5 million, in which case Tampa Electric shall spend no less than \$10 million but no more than \$11 million in Project Dollars, in total. Tampa Electric shall expend the full amount of the Project Dollars required by this Paragraph on or before May 1, 2010. Tampa Electric shall maintain for review by EPA, upon its request, all documents identifying Project Dollars spent by Tampa Electric.
- All plans and reports prepared by Tampa Electric pursuant to the requirements of Paragraph 35 and this Section of the Consent Decree shall be publicly available without charge.
- 52. Tampa Electric shall submit the required plans for and complete the following Projects:

(1)

(2) Early NO<sub>x</sub> reductions through combustion optimization as described in Paragraph 35 of this Consent Decree.

Electric shall expend no more than \$2 million Project Dollars in conducting or financing stack tests, emissions estimation, ambient air monitoring, data acquisition and analysis, and any combination thereof that: (1) is not otherwise required by law, (2) will provide data or analysis that is not already available, (3) will complement work carried out by other persons examining the air chemistry of Tampa Bay Estuary, and (4) will help close gaps in current understanding of air chemistry in the Tampa Bay Estuary. Tampa Electric shall either conduct this work itself, fund other persons already conducting such work on a non-profit basis, or both. For work Tampa Electric intends to conduct itself, the company shall describe the proposed work and a schedule for completion to EPA, in writing, at least 90 days prior to the date on which Tampa Electric intends to start such work, including an explanation of why the proposed work meets all the requirements of this Subparagraph. Unless EPA objects to the proposed work on the grounds it does not comply with the requirements of this Subparagraph, Tampa Electric shall undertake and complete the work according to the proposed schedule. If Tampa Electric elects to spend some or all of the \$2 million Project Dollars to finance work to be performed by other persons or organizations, the company shall provide to EPA for review and approval a plan that describes the work to be performed, the persons or organizations conducting the work, the schedule for its completion, the schedule for Tampa Electric's payments, and an explanation of why the proposed payment(s) meets all the requirements of this Subparagraph. The plan shall be provided to EPA at least 90 days prior to the date on

which Tampa Electric will begin transferring the money to finance such work.

All payments to persons or organizations under such a plan shall be completed by Tampa Electric no later than June 30, 2002. Before Tampa Electric makes such payments for the benefit of any person or organization carrying out work under this Paragraph, Tampa Electric shall secure a written, signed commitment from such person to provide Tampa Electric and EPA with the results of the work.

### C. Additional NO<sub>x</sub> Reductions Project(s).

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- Oblians required under this Consent Decree to: (i) demonstrate innovative NO<sub>x</sub> control technologies on any of its Units or boilers at Gannon or Big Bend not Shutdown or on Reserve / Standby; and/or (ii) reduce the NO<sub>x</sub> Emission Rate for any Big Bend coalcombusting Unit below the lowest rate otherwise applicable to it under this Consent Decree.
- (1) For anv Project(s) at Gannon. If Tampa Electric elects to undertake a project on an eligible Gannon Unit(s) to demonstrate any innovative NO<sub>x</sub> control technology, within six months after entry of this Consent Decree Tampa Electric shall submit a plan to EPA, for review and approval, which sets forth: (a) the NO<sub>x</sub> demonstration or innovative control technology projects being proposed; (b) the anticipated cost of the projects; (c) the reduction in NO<sub>x</sub> or other environmental benefits anticipated to result from the project, and (d) a schedule for implementation of the project providing for

commencement and completion in accordance with the requirements of this Subparagraph. EPA shall complete its review of this plan within 60 days after receipt. If such project is approved, Tampa Electric shall complete installation of the technology no later than December 31, 2004 as part of the Re-Powering of such Units; provided, however, that nothing in this Paragraph alters Tampa Electric's obligation under Paragraph 26 of this Consent Decree.

(1) For anv Project(s) at Big Bend. At least three (3) years prior to the date on which the expenditure of any Project Dollars is to commence on Big Bend under this

Subparagraph C, Tampa Electric shall submit a plan to EPA for review and approval which sets forth: (a) the NO<sub>x</sub> demonstration or innovative control technology projects being proposed; (b) the anticipated cost of the projects; (c) the reduction in NO<sub>x</sub> or other environmental benefits anticipated to result from the project, and (d) a schedule for implementation of the project providing for commencement and completion in accordance with the requirements of this Subparagraph. If EPA approves the projects contained in the plan, Tampa Electric shall implement the project(s). Projects that would demonstrate innovative NO<sub>x</sub> control technology or reduce the NO<sub>x</sub> Emission Rate for any Big Bend coal-fired or Re-Powered Unit shall be operating and achieving reductions or demonstrating the performance of the innovative technology, as applicable, not later than May 1, 2010.

[1] Follow-up Report(s). Within sixty (60) days following the implementation of each EPA-approved project, Tampa Electric shall submit to EPA a report that documents the date that all aspects of the project were implemented, Tampa Electric's results in implementing the project, including the emission reductions or other environmental benefits achieved, and the Project Dollars expended by Tampa Electric in implementing the project.

### VIII. STIPULATED PENALTIES

- 53. For purposes of this Consent Decree, within thirty days after written demand from the United States, and subject to the provisions of Sections X (Force Majeure) and XI (Dispute Resolution), Tampa Electric shall pay the following stipulated penalties to the United States for each failure by Tampa Electric to comply with the terms of this Consent Decree.
  - A. For failure to pay timely the civil penalty as specified in Section VI of this Consent Decree, \$10,000 per day.
- A. For all violations of a 24 hour Emission Rate (1) Less than 5% in excess of limit: \$4,000 per day, per violation; (2) more than 5% but less than 10% in excess of limit: \$9,000 per day per violation; (3) equal to or greater than 10% in excess of limit: \$27,500 per day, per violation
- A. For all violations of 30-day rolling average Emission Rates (1) Less

than 5% in excess of limit: \$150 per day per violation; (2) more than 5% but less than 10% in excess of limit: \$300 per day per violation; (3) equal to or greater than 10% in excess of limit: \$800 per day per violation. Violation of an Emission Rate that is based on a 30 day rolling average is a violation on every day of the 30 day period on which the average is based. Where a violation of a 30 day rolling monthly average Emission Rate (for the same pollutant and from the same source) recurs within periods less than 30 days, Tampa Electric shall not pay a daily stipulated penalty for any day of the recurrence for which a stipulated penalty has already been paid.

- A. For all violations of a 95% removal efficiency requirement (1) For removal efficiency less than 95% but greater than or equal to 94%, \$4,000 per day, per violation; (2) for removal efficiency less than 94% but greater than or equal to 91%, \$9,000 per day, per violation; (3) for removal efficiency less than 91%, \$27,500 per day, per violation. For all violations of a 93% removal efficiency requirement (1) For removal efficiency less than 93% but greater than or equal to 92%, \$4,000 per day, per violation; (2) for removal efficiency less than 92% but greater than or equal to 90%, \$9,000 per day, per violation; (3) for removal efficiency less than 90%, \$27,500 per day, per violation;
- A. Violation of deadlines for Shutdown of boilers or Units or megawatt capacity \$27,500 per day, per violation.
- A. Failure to apply for the permits required by Paragraphs 26, 27, 34, 38, and

### 42 — \$1,000 per day, per violation.

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- A. Failure to implement the recommendations of the PM BACT Analysis or the PM optimization study by May 1, 2004 \$5,000 per day, per violation for first 30 days; \$15,000 per day, per violation, for next 30 days; \$27,500 per day, per violation, thereafter.
- A. Failure to commence combustion optimization at Big Bend Units 1, 2, or 3 on or before May 30, 2003 as required by Paragraph 35, \$10,000 per day, per violation.
- A. Failure to operate the scrubbers at Big Bend Units 1, 2, or 3 on any day except as permitted by Paragraphs 29, 30, or 31, \$27,500 per day, per violation.
- A. Failure to submit quarterly progress and monitoring report \$100 per day, per violation, for first ten days late, and \$500 per day for each day thereafter.
- A. Failure to complete timely any action or payment required by or established under Subparagraph 52(B) (Performance of Air Chemistry Work in Tampa Bay Estuary), \$5,000 per day, per violation
- A. Failure to perform NO<sub>x</sub> reduction or demonstration project(s), by the deadline(s) established in Subparagraph 52.C (Additional NO<sub>x</sub> Reductions Project(s)), \$10,000 per day, per violation;
- A. For failure to spend at least the number of Project Dollars required by this Consent Decree by date specified in Paragraph 50, \$5,000 per day, per violation;
- A. Violation of any Consent Decree prohibition on use of allowances as provided in Paragraph 46 three times the market value of the improperly used

allowance as measured at the time of the improper use.

- 54. Should Tampa Electric dispute its obligation to pay part or all of a stipulated penalty demanded by the United States, it may avoid the imposition of a separate stipulated penalty for the failure to pay the disputed penalty by depositing the disputed amount in a commercial escrow account pending resolution of the matter and by invoking the Dispute Resolution provisions of this Consent Decree within the time provided in this Section VIII of the Consent Decree for payment of the disputed penalty. If the dispute is thereafter resolved in Tampa Electric's favor, the escrowed amount plus accrued interest shall be returned to Tampa Electric. If the dispute is resolved in favor of the United States, it shall be entitled to the escrowed amount determined to be due by the Court, plus accrued interest. The balance in the escrow account, if any, shall be returned to Tampa Electric.
- 55. The United States reserves the right to pursue any other remedies to which it is entitled, including, but not limited to, a new civil enforcement action and additional injunctive relief for Tampa Electric's violations of this Consent Decree. If the United States elects to seek civil or contempt penalties after having collected stipulated penalties for the same violation, any further penalty awarded shall be reduced by the amount of the stipulated penalty timely paid or escrowed by Tampa Electric. Tampa Electric shall not be required

to remit any stipulated penalty to the United States that is disputed in compliance with

Part XI of this Consent Decree until the dispute is resolved in favor of the United

States. However, nothing in this Paragraph shall be construed to cease the accrual of the stipulated penalties until the dispute is resolved.

#### IX. RIGHT OF ENTRY

Any authorized representative of EPA or an appropriate state agency, including independent contractors, upon presentation of credentials, shall have a right of entry upon the premises of Tampa Electric's plants identified herein at any reasonable time for the purpose of monitoring compliance with the provisions of this Consent Decree, including inspecting plant equipment and inspecting and copying all records maintained by Tampa Electric required by this Consent Decree. Tampa Electric shall retain such records for a period of twelve (12) years from the date of entry of this Consent Decree. Nothing in this Consent Decree shall limit the authority of EPA to conduct tests and inspections at Tampa Electric's facilities under Section 114 of the Act, 42 U.S.C. § 7414.

#### X. FORCE MAJEURE

57. If any event occurs which causes or may cause a delay in complying with any provision of this Consent Decree, Tampa Electric shall notify the United States in writing as soon as practicable, but in no event later than seven (7) business days following the date Tampa Electric first knew, or within ten (10) business days following the date Tampa Electric should have known by the exercise of due

diligence, that the event caused or may cause such delay. In this notice Tampa Electric shall reference this Paragraph of this Consent Decree and describe the anticipated length of time the delay may persist, the cause or causes of the delay, the measures taken or to be taken by Tampa Electric to prevent or minimize the delay, and the schedule by which those measures will be implemented. Tampa Electric shall adopt all reasonable measures to avoid or minimize such delays.

- 58. Failure by Tampa Electric to comply with the notice requirements of Paragraph
  57 shall render this Section X voidable by the United States as to the specific
  event for which Tampa Electric has failed to comply with such notice
  requirement. If voided, the provisions of this Section shall have no effect as to the
  particular event involved.
- Electric's claim of a delay in performance within (15) fifteen business days of receipt of the Force Majeure notice provided under Paragraph 57. If the United States agrees that the delay in performance has been or will be caused by circumstances beyond the control of Tampa Electric, including any entity controlled by Tampa Electric, and that Tampa Electric could not have prevented the delay through the exercise of due diligence, the parties shall stipulate to an extension of the required deadline(s) for all requirement(s) affected by the delay for a period equivalent to the delay actually caused by such circumstances. Such stipulation shall be filed as a modification to this Consent Decree in order to be

- effective. Tampa Electric shall not be liable for stipulated penalties for the period of any such delay.
- 60. If the United States does not accept Tampa Electric's claim of a delay in performance, to avoid the imposition of stipulated penalties Tampa Electric must submit the matter to this Court for resolution by filing a petition for determination. Once Tampa Electric has submitted the matter, the United States shall have fifteen business days to file its response. If Tampa Electric submits the matter to this Court for resolution, and the Court determines that the delay in performance has been or will be caused by circumstances beyond the control of Tampa Electric, including any entity controlled by Tampa Electric, and that Tampa Electric could not have prevented the delay by the exercise of due diligence, Tampa Electric shall be excused as to that event(s) and delay (including stipulated penalties otherwise applicable), but only for the period of time equivalent to the delay caused by such circumstances.

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Tampa Electric shall bear the burden of proving that any delay in performance of any requirement of this Consent Decree was caused by or will be caused by circumstances beyond its control, including any entity controlled by it, and that Tampa Electric could not have prevented the delay by the exercise of due diligence. Tampa Electric shall also bear the burden of proving the duration and extent of any delay(s) attributable to such circumstances. An extension of one compliance date based on a particular event may, but will not necessarily, result in

an extension of a subsequent compliance date.

- Onanticipated or increased costs or expenses associated with the performance of Tampa Electric's obligations under this Consent Decree shall not constitute circumstances beyond the control of Tampa Electric or serve as a basis for an extension of time under this Section. However, failure of a permitting authority to issue a necessary permit in a timely fashion may constitute a Force Majeure event where the failure of the permitting authority to act is beyond the control of Tampa Electric and Tampa Electric has taken all steps available to it to obtain the necessary permit, including, but not limited to, submitting a complete permit application, responding to requests for additional information by the permitting authority in a timely fashion, accepting lawful permit terms and conditions, and prosecuting appeals of any allegedly unlawful terms and conditions imposed by the permitting authority in an expeditious fashion.
- Tampa Electric's response to such circumstances, the kinds of events listed below could also qualify as Force Majeure events within the meaning of this Section X of the Consent Decree: Construction, labor, or equipment delays; natural gas and gas transportation availability delays; acts of God; and the failure of an innovative technology approved under Paragraph 26.B and 52.C.
- 64. Notwithstanding any other provision of this Consent Decree, this Court shall not draw any inferences nor establish any presumptions adverse to either party as a

- result of Tampa Electric delivering a notice pursuant to this Section or the parties' inability to reach agreement on a dispute under this Part.
- As part of the resolution of any matter submitted to this Court under this Section, the parties by agreement, or this Court by order, may in appropriate circumstances extend or modify the schedule for completion of work under this Consent Decree to account for the delay in the work that occurred as a result of any delay agreed to by the United States or approved by this Court. Tampa Electric shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule.

#### XI. DISPUTE RESOLUTION

- 66. The dispute resolution procedure provided by this Section XI shall be available to resolve all disputes arising under this Consent Decree, except as provided in Section X regarding Force Majeure, or in this Section XI, provided that the party making such application has made a good faith attempt to resolve the matter with the other party.
- 67. The dispute resolution procedure required herein shall be invoked by one party to this Consent Decree giving written notice to another advising of a dispute pursuant to this Section XI. The notice shall describe the nature of the dispute and shall state the noticing party's position with regard to such dispute. The party receiving such a notice shall acknowledge receipt of the notice, and the parties

- shall expeditiously schedule a meeting to discuss the dispute informally not later than fourteen (14) days following receipt of such notice.
- 68. Disputes submitted to dispute resolution under this Section shall, in the first instance, be the subject of informal negotiations between the parties. Such period of informal negotiations shall not extend beyond thirty (30) calendar days from the date of the first meeting between representatives of the United States and Tampa Electric unless the parties' representatives agree to shorten or extend this period.
- 69. If the parties are unable to reach agreement during the informal negotiation period, the United States shall provide Tampa Electric with a written summary of its position regarding the dispute. The written position provided by the United States shall be considered binding unless, within thirty (30) calendar days thereafter, Tampa Electric files with this Court a petition which describes the nature of the dispute and seeks resolution. The United States may respond to the petition within forty-five (45) calendar days of filing.
- 70. Where the nature of the dispute is such that a more timely resolution of the issue is required, the time periods set out in this Section may be shortened upon motion of one of the parties to the dispute.
- 71. This Court shall not draw any inferences nor establish any presumptions adverse to either party as a result of invocation of this Section or the parties' inability to reach agreement.

- 72. As part of the resolution of any dispute under this Section, in appropriate circumstances the parties may agree, or this Court may order, an extension or modification of the schedule for completion of work under this Consent Decree to account for the delay that occurred as a result of dispute resolution. Tampa Electric shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule.
- 73. The Court shall decide all disputes pursuant to applicable principles of law for resolving such disputes; provided, however, that the United States and Tampa Electric reserve their rights to argue for what the applicable standard of law should be for resolving any particular dispute. Notwithstanding the preceding sentence of this Paragraph, as to disputes arising under Paragraph 32, the Court shall sustain the position of the United States as to the BACT Analysis recommendations and the optimization study measures that should be installed and implemented, unless Tampa Electric demonstrates that the position of the United States is arbitrary or capricious.

#### XII. GENERAL PROVISIONS

- 74. <u>Effect of Settlement</u>. This Consent Decree is not a permit; compliance with its terms does not guarantee compliance with all applicable Federal, State or Local laws or regulations.
- 75. Satisfaction of all of the requirements of this Consent Decree constitutes full

settlement of and shall resolve and release Tampa Electric from all civil liability of Tampa Electric to the United States for the claims referred to in Paragraphs 43 and 44 of this Consent Decree. This Consent Decree does not apply to any claim(s) of alleged criminal liability, which are reserved.

- 76. In any subsequent administrative or judicial action initiated by the United States for injunctive relief or civil penalties relating to the facilities covered by this Consent Decree, Tampa Electric shall not assert any defense or claim based upon principles of waiver, res judicata, collateral estoppel, issue preclusion, claim splitting, or other defense based upon any contention that the claims raised by the United States in the subsequent proceeding were brought, or should have been brought, in the instant case; provided, however, that nothing in this Paragraph is intended to affect the enforceability of the Resolution of Claims provisions of Paragraphs 43 and 44 of this Consent Decree..
- Other Laws. Except as specifically provided by this Consent Decree, nothing in this Consent Decree shall relieve Tampa Electric of its obligation to comply with all applicable Federal, State and Local laws and regulations. Subject to Paragraph 43 and 44, nothing contained in this Consent Decree shall be construed to prevent or limit the United States' rights to obtain penalties or injunctive relief under the Clean Air Act or other federal, state or local statutes or regulations.
- 78. Third Parties. This Consent Decree does not limit, enlarge or affect the rights of any party to this Consent Decree as against any third parties.

- 79. Costs. Each party to this action shall bear its own costs and attorneys' fees.
- 80. Public Documents. All information and documents submitted by Tampa Electric to the United States pursuant to this Consent Decree shall be subject to public inspection, unless subject to legal privileges or protection or identified and supported as business confidential by Tampa Electric in accordance with 40 C.F.R. Part 2.
- Public Comments. The parties agree and acknowledge that final approval by the United States and entry of this Consent Decree is subject to the requirements of 28 C.F.R. § 50.7, which provides for notice of the lodging of this Consent Decree in the Federal Register, an opportunity for public comment, and the right of the United States to withdraw or withhold consent if the comments disclose facts or considerations which indicate that the Consent Decree is inappropriate, improper, or inadequate.
- Notice. Unless otherwise provided herein, notifications to or communications with the United States or Tampa Electric shall be deemed submitted on the date they are postmarked and sent either by overnight mail, return receipt requested, or by certified or registered mail, return receipt requested. Except as otherwise provided herein, when written notification to or communication with the United States, EPA, or Tampa Electric is required by the terms of this Consent Decree, it shall be addressed as follows:

As to the United States of America:

For U.S. DOJ -

Chief
Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611, Ben Franklin Station

Washington, D.C. 20044-7611

DJ# 90-5-2-1-06932

Whitney L. Schmidt
Coordinator, Affirmative Civil Enforcement Program
Office of the United States Attorney
Middle District of Florida
400 N. Tampa Street
Tampa, FL 33602

For U.S. EPA -

Director, Air Enforcement Division
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
Ariel Rios Building [2242A]
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

and

Regional Administrator U.S. EPA Region IV 61 Forsyth Street, S.E. Atlanta, GA 30303

#### As to Tampa Electric:

Sheila M. McDevitt General Counsel Tampa Electric Company P.O. Box 111 Tampa, FL 333601-0111

- 83. Any party may change either the notice recipient or the address for providing notices to it by serving all other parties with a notice setting forth such new notice recipient or address.
- 84. Modification. Except as otherwise allowed by law, there shall be no modification of this Consent Decree without written approval by the United States and Tampa Electric, and approval of such modification by the Court.
- of this Consent Decree to enforce compliance with the terms and conditions of this Consent Decree and to take any action necessary or appropriate for its interpretation, construction, execution, or modification. During the term of this Consent Decree, any party may apply to the Court for any relief necessary to construe or effectuate this Consent Decree.

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86. Complete Agreement. This Consent Decree constitutes the final, complete and exclusive agreement and understanding among the parties with respect to the settlement embodied in this Consent Decree. The parties acknowledge that there are no representations, agreements or understandings relating to the settlement other than those expressly contained in this Consent Decree. An Appendix is attached to and incorporated into this Consent Decree by this reference.

#### XIII. TERMINATION

87. Except as provided in Paragraphs 43, 44, and 45 (involving resolution of claims),

after Tampa Electric satisfies all requirements of this Consent Decree, including payment of all stipulated penalties that may be due, installation of control technology systems as specified herein, the receipt of all permits specified herein, securing valid Title V Permits for Gannon and Big Bend that incorporate all emission and fuel limits from this Consent Decree as well as all operational limits established under this Consent Decree, and the submission of all final reports indicating satisfaction of the requirements for implementation of all acts called for under Part VII of this Consent Decree.

88. If Tampa Electric believes it has achieved compliance with the requirements of this Consent Decree, then Tampa Electric shall so certify to the United States.

Unless the United States objects in writing with specific reasons within 60 days of receipt of Tampa Electric's certification, the Court shall order that this Consent Decree be terminated on Tampa Electric's motion. If the United States objects to Tampa Electric's certification, then the matter shall be submitted to the Court for resolution under Section XI of this Consent Decree. In such case, Tampa Electric shall bear the burden of proving that this Consent Decree should be terminated.

SO ORDERED, THIS _	DAY OF	2000.

UNITED STATES DISTRICT JUDGE

# Signature Page for Consent Decree in <u>United States v. Tampa Electric Company</u>, Civ. No. 99-2524 CIV-T-23F

Steve A. Herman

Assistant Administrator for Enforcement U.S. Environmental Protection Agency Washington, D.C.

Bruce Buckheit

Director

Gregory Jaffe

Senior Enforcement Counsel

Air Enforcement Division
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
Washington, D.C.

Signature Page for Consent Decree in United States v. Tampa Electric Company, Civ. No. 99-2524 CIV-T-23F

John H. Hankinson
Regional Administrator
U.S. Environmental Protection Agency (Region IV)

Atlanta, Georgia

::; ::;

# Signature Page for Consent Decree in <u>United States v. Tampa Electric Company</u>, Civ. No. 99-2524 CIV-T-23F

THROUGH ITS UNDERSIGNED REPRESENTATIVES, THE UNITED STATES AGREES AND CONSENTS TO ENTRY OF THE FOREGOING CONSENT DECREE:

Date: 2/28/w

FOR PLAINTIFF
UNITED STATES OF AMERICA:

Lois J Schiffer

Assistant Attorney General

Environment and Natural Resources

Division

United States Department of Justice

W. Benjamin Fisherow

Assistant Chief

Thomas A. Mariani, Jr.

Jon A. Mueller

Senior Attorneys

Environmental Enforcement Section

United States Department of Justice

P.O. Box 7611

Washington, D.C. 20044

(202) 514-4620

Donna A. Bucella

United States Attorney for the

Middle District of Florida

29. 11. 17. V

Whitney L. Schmidt

Affirmative Civil Enforcement Coordinator

Assistant United States Attorney

United States Attorney's Office

Middle District of Florida

Florida Bar No. 0337129

Tampa, Florida 33602

(813) 274-6000

(813) 274-6198 (facsimile)

# Signature Page for Consent Decree in <u>United States v. Tampa Electric Company</u>, Civ. No. 99-2524 CIV-T-23F

THROUGH ITS UNDERSIGNED REPRESENTATIVES, TAMPA ELECTRIC COMPANY AGREES AND CONSENTS TO ENTRY OF THE FOREGOING CONSENT DECREE

Date: 2/29/00

FOR TAMPA ELECTRIC COMPANY

John B. Ramil

President

Tampa Electric Company

Sheila M. McDevitt

General Counsel

Tampa Electric Company

# Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers (version dated 02/05/97)

### Abbreviations and Acronyms:

°F: Degrees Fahrenheit

**BACT:** Best Available Control Technology

CFR: Code of Federal Regulations

**DEP:** State of Florida, Department of Environmental Protection

**DARM**: Division of Air Resource Management **EPA**: United States Environmental Protection Agency

F.A.C.: Florida Administrative Code

F.S.: Florida Statute

ISO: International Standards Organization

LAT: Latitude LONG: Longitude

MMBtu: million British thermal units

MW: Megawatt

**ORIS:** Office of Regulatory Information Systems

**SOA**: Specific Operating Agreement **UTM**: Universal Transverse Mercator

#### Citations:

The following examples illustrate the methods used in this permit to abbreviate and cite the references of rules, regulations, guidance memorandums, permit numbers, and ID numbers.

#### Code of Federal Regulations:

Example: [40 CFR 60.334]

Where: 40 reference to Title 40

CFR reference to Code of Federal Regulations

60 reference to Part 60

60.334 reference to Regulation 60.334

#### Florida Administrative Code (F.A.C.) Rules:

Example: [Rule 62-213, F.A.C.]

Where: 62 reference to Title 62

62-213 reference to Chapter 62-213

62-213.205 reference to Rule 62-213.205, F.A.C.

**ISO:** International Standards Organization refers to those conditions at 288 degrees K, 60 percent relative humidity, and 101.3 kilopascals pressure.

# Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers (version dated 02/05/97) (continued)

#### **Identification Numbers:**

#### Facility Identification (ID) Number:

Example: Facility ID No.: 1050221

Where:

105 = 3-digit number code identifying the facility is located in Polk County

0221 = 4-digit number assigned by state database.

Permit Numbers:

Example: 1050221-002-AV, or

1050221-001-AC

Where:

AC = Air Construction Permit

AV = Air Operation Permit (Title V Source)

105 = 3-digit number code identifying the facility is located in Polk County

0221 = 4-digit number assigned by permit tracking database

001 or 002 = 3-digit sequential project number assigned by permit tracking database

Example: PSD-FL-185

PA95-01 AC53-208321

Where:

PSD = Prevention of Significant Deterioration Permit

PA = Power Plant Siting Act Permit

AC = old Air Construction Permit numbering

## **Appendix H-1: Permit History**

Tampa Electric Company Big Bend Station

FINAL Title V Operation Permit Revision No.: 0570039-017-AV Facility ID No.: 0570039

E.U. ID No.	Description	Permit No.	Effective Date	Expiration Date	Project Type
003	Unit No. 3 Steam Generator – Removed the sulfur content limit of the petroleum coke fired and revised the vanadium content limit in the petroleum coke ash.	AO-29-179911	09-07-2000	12-31-01	State AO permit revision
004	Unit No. 4 Steam Generator – Removed the sulfur content limit of the petroleum coke fired and revised the vanadium content limit in the petroleum coke ash.	0570039-008-AC	12-29-00	01-01-01	PSD Construction: minor modification
001 - 036	All emission units	0570039-002-AV	01-01-01	12-31-04	Title V: Initial
004	Unit No. 4 Steam Generator – Revised the revision to the vanadium content limit.	0570039-009-AC	05-07-01	05-07-06	PSD Construction: minor modification
001 - 036	All emissions units	0570039-010-AV	07-24-01	12-31-04	Title V: Revision
001 - 004, 037 - 038	Allowed the storage, transfer and firing of Polk Power Station coal residual	0570039-012-AC	10-04-01	12-31-03	PSD Construction: minor modification
001 - 038	All emissions units	0570039-013-AV	04-06-04	12-31-04	Title V: Revision
001 - 004	Steam Generator units NOx Pollution Control Projects	0570039-014-AC	Pending		PSD Construction: minor modification
001 - 039	Most emissions units - Clarifications and deletion of redundant conditions All emissions units - Renewal	0570039-017-AV	Pending		Title V: Revision/Renewal
001 - 039	Most emission units - Clarifications and deletion of redundant conditions	0570039-016-AC	Pending		PSD Construction: minor modification

#### Appendix I-1: List of Insignificant Emissions Units and/or Activities

Tampa Electric Company Big Bend Station FINAL Title V Operation Permit Revision No.: 0570039-017-AV Facility ID No.: 0570039

Page 1 of 2

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Full Exemptions, are exempt from the permitting requirements of Chapters 62-210 and 62-4, F.A.C.; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining whether a facility containing such emissions units or activities would be subject to any applicable requirements. Emissions units and pollutant-emitting activities exempt from permitting under Rule 62-210.300(3)(a), F.A.C., are also exempt from the permitting requirements of Chapter 62-213, F.A.C., provided such emissions units and activities also meet the exemption criteria of Rule 62-213.430(6)(b), F.A.C. The below listed emissions units and/or activities are hereby exempt pursuant to Rule 62-213.430(6), F.A.C.

#### **Brief Description of Emissions Units and/or Activities**

- 1. Internal combustion engines in boats, aircraft and vehicles used for transportation of passengers or freight.
- 2. Cold storage refrigeration equipment, except for any such equipment located at a Title V source using an ozone-depleting substance regulated under 40 CFR Part 82.
- 3. Vacuum pumps in laboratory operations.
- 4. Equipment used for steam cleaning.
- 5. Belt or drum sanders having a total sanding surface of five square feet or less and other equipment used exclusively on wood or plastics or their products having a density of 20 pounds per cubic foot or more.
- 6. Equipment used exclusively for space heating, other than boilers.
- 7. Laboratory equipment used exclusively for chemical or physical analyses.
- 8. Brazing, soldering or welding equipment.
- 9. One or more emergency generators located within a single facility provided:
  - a. None of the emergency generators is subject to the Federal Acid Rain Program; and
  - b. Total fuel consumption by all such emergency generators within the facility is limited to 32,000 gallons per year of diesel fuel, 4,000 gallons per year of gasoline, 4.4 million standard cubic feet per year of natural gas or propane, or an equivalent prorated amount if multiple fuels are used.
- 10. One or more heating units and general purpose internal combustion engines located within a single facility provided:
  - a. None of the heating units or general purpose internal combustion engines is subject to the Federal Acid Rain Program; and
  - b. Total fuel consumption by all such heating units and general purpose internal combustion engines within the facility is limited to 32,000 gallons per year of diesel fuel, 4,000 gallons per year of gasoline, 4.4 million standard cubic feet per year of natural gas or propane, or an equivalent prorated amount if multiple fuels are used.
- 11. Fire and safety equipment.
- 12. Degreasing units using heavier-than-air vapors exclusively, except any such unit using or emitting any substance classified as a hazardous air pollutant.
- 13. No. 2 and No. 6 fuel oil storage tanks that are not regulated by 40 CFR 60 Subpart Kb.
- 14. No. 2 and No. 6 fuel oil truck unloading equipment.

#### Appendix I-1: List of Insignificant Emissions Units and/or Activities

Tampa Electric Company Big Bend Station FINAL Title V Operation Permit Revision No.: 0570039-017-AV

Facility ID No.: 0570039

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- 15. Equipment for physically treating fuel oil by filtration, water separation, etc.
- 16. Non-halogenated solvent storage and cleaning operations not regulated by 40 CFR 63.
- 17. Architectural & equipment maintenance painting.
- 18. Surface coating operations within a single facility if the total quantity of coatings containing greater than 5.0 percent VOCs, by volume, used is 6.0 gallons per day or less, averaged monthly, provided:
  - a. Such operations are not subject to a volatile organic compound Reasonably Available Control Techology (RACT) requirement of Chapter 62-296, F.A.C.
  - b. The amount of coating used shall include any solvents and thinners used in the process including those used for cleanup.
  - c. Such operations are not subject to 40 CFR 63.
- 19. Surface coating operations utilizing only coatings containing 5.0 percent or less VOCs, by volume, and the operations are not subject to 40 CFR 63.
- 20. Evaporation of up to 150,000 gallons per year of nonhazardous boiler chemical cleaning waste that was generated on site.
- 21. Any other emissions unit or activity shall be considered insignificant if all of the following criteria are met:
  - a. Such unit or activity would be subject to no unit-specific applicable requirement.
  - b. Such unit or activity, in combination with other units and activities proposed as insignificant, would not cause the facility to exceed any major source threshold(s) as defined in subparagraph 62-213.420(3)(c)1., F.A.C., unless it is acknowledged in the permit application that such units or activities would cause the facility to exceed such threshold(s).
- 3. Such unit or activity would neither emit nor have the potential to emit:
  - a. 500 pounds per year or more of lead and lead compounds expressed as lead;
  - b. 1,000 pounds per year or more of any hazardous air pollutant;
  - c. 2,500 pounds per year or more of total hazardous air pollutants; or
  - d. 5.0 tons per year or more of any other regulated pollutant.

#### Note:

# None of the emissions units or activities listed 1 through 20 above shall be considered insignificant if:

- 1. Such unit or activity would be subject to any unit-specific applicable requirement;
- 2. Such unit or activity, in combination with other units and activities proposed for exemption, would cause the facility to exceed any major source threshold(s) as defined in Rule 62-
- 213.420(3)(c)1., F.A.C., unless it is acknowledged in the permit application that such units or activities would cause the facility to exceed such threshold(s); or
- 3. Such unit or activity would emit or have the potential to emit:
  - a. 500 pounds per year or more of lead and lead compounds expressed as lead;
  - b. 1,000 pounds per year or more of any hazardous air pollutant;
  - c. 2,500 pounds per year or more of total hazardous air pollutants; or
  - d. 5.0 tons per year or more of any other regulated pollutant.

[Rule 62-213.430(6), F.A.C]

# FIGURE 1--SUMMARY REPORT--GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE

[Note: This form is referenced in 40 CFR 60.7, Subpart A-General Provisions	1			
Pollutant (Circle One): SO <sub>2</sub> NO <sub>X</sub> TRS H <sub>2</sub> S	CO Opacity			
Reporting period dates: From	to			
Company:				
Emission Limitation:	· · · · · · · · · · · · · · · · · · ·			
Address:				
Monitor Manufacturer:	·			
Model No.:				
Date of Latest CMS Certification or Audit:				
Process Unit(s) Description:				
Total source operating time in reporting period <sup>1</sup> :	•			
Emission data summary 1	CMS performance summary 1			
1. Duration of excess emissions in reporting period due to:	1. CMS downtime in reporting period due to:			
a. Startup/shutdown	a. Monitor equipment malfunctions			
b. Control equipment problems	b. Non-Monitor equipment malfunctions			
c. Process problems	c. Quality assurance calibration			
d. Other known causes	d. Other known causes			
e. Unknown causes	e. Unknown causes			
2. Total duration of excess emissions	2. Total CMS Downtime			
3. Total duration of excess emissions x (100) / [Total	3. [Total CMS Downtime] x (100) / [Total source operating			
source operating time] % <sup>2</sup>	time] % <sup>2</sup>			
	missions is 1 percent or greater of the total operating time or tal operating time, both the summary report form and the excess			
<u>Note</u> : On a separate page, describe any changes since last qu	arter in CMS, process or controls.			
I certify that the information contained in this report is true, according to the contained in this report is true, according to the contained in this report is true, according to the contained in this report is true, according to the contained in this report is true, according to the contained in this report is true, according to the contained in this report is true, according to the contained in this report is true, according to the contained in this report is true, according to the contained in this report is true, according to the contained in this report is true, according to the contained in this report is true, according to the contained in this report is true, according to the contained in this report is true, according to the contained in this report is true, according to the contained in the contained	curate, and complete.			
Name:				
Signature:	Date:			
Title:				

# TABLE 297.310-1 CALIBRATION SCHEDULE (version dated 10/07/96)

[Note: This table is referenced in Rule 62-297.310, F.A.C.]

[Note: This table is referenced in Rule 62-297.310, F.A.C.]				
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	Micrometer	+/-0.001" mean of at least three readings Max. deviation between 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%	

[electronic file name: 297310-1.doc]

# APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96)

Stack Sampling Facilities Provided by the Owner of an Emissions Unit. This section describes the minimum requirements for stack sampling facilities that are necessary to sample point emissions units. Sampling facilities include sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. Emissions units must provide these facilities at their expense. 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.

# APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96) (continued)

- 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. [Rule 62-297.310(6), F.A.C.]

[Note: This attachment includes "canned conditions" developed from the "Title V Core List."]

{Permitting note: APPENDIX TV-4, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided one copy when requested or otherwise appropriate.}

#### Chapter 62-4, F.A.C.

1. Not federally enforceable. General Prohibition. Any stationary installation which will reasonably be expected to be a source of pollution shall not be operated, maintained, constructed, expanded, or modified without the appropriate and valid permits issued by the Department, unless the source is exempted by Department rule. The Department may issue a permit only after it receives reasonable assurance that the installation will not cause pollution in violation of any of the provisions of Chapter 403, F.S., or the rules promulgated thereunder. A permitted installation may only be operated, maintained, constructed, expanded or modified in a manner that is consistent with the terms of the permit.

[Rule 62-4.030, Florida Administrative Code (F.A.C.); Section 403.087, Florida Statute (F.S.)]

- 2. Not federally enforceable. Procedures to Obtain Permits and Other Authorizations; Applications.
- (1) Any person desiring to obtain a permit from the Department shall apply on forms prescribed by the Department and shall submit such additional information as the Department by law may require.
- (2) All applications and supporting documents shall be filed in quadruplicate with the Department.
- (3) To ensure protection of public health, safety, and welfare, any construction, modification, or operation of an installation which may be a source of pollution, shall be in accordance with sound professional engineering practices pursuant to Chapter 471, F.S. All applications for a Department permit shall be certified by a professional engineer registered in the State of Florida except, when the application is for renewal of an air pollution operation permit at a non-Title V source as defined in Rule 62-210.200, F.A.C., or where professional engineering is not required by Chapter 471, F.S. Where required by Chapter 471 or 492, F.S., applicable portions of permit applications and supporting documents which are submitted to the Department for public record shall be signed and sealed by the professional(s) who prepared or approved them.
- (4) Processing fees for air construction permits shall be in accordance with Rule 62-4.050(4), F.A.C.
- (5)(a) To be considered by the Department, each application must be accompanied by the proper processing fee. The fee shall be paid by check, payable to the Department of Environmental Protection. The fee is non-refundable except as provided in Section 120.60, F.S., and in this section.
  - (c) Upon receipt of the proper application fee, the permit processing time requirements of Sections 120.60(2) and 403.0876, F.S., shall begin.
  - (d) If the applicant does not submit the required fee within ten days of receipt of written notification, the Department shall either return the unprocessed application or arrange with the applicant for the pick up of the application.
  - (e) If an applicant submits an application fee in excess of the required fee, the permit processing time requirements of Sections 120.60(2) and 403.0876, F.S., shall begin upon receipt, and the Department shall refund to the applicant the amount received in excess of the required fee.
- (6) Any substantial modification to a complete application shall require an additional processing fee determined pursuant to the schedule set forth in Rule 62-4.050, F.A.C., and shall restart the time requirements of Sections 120.60 and 403.0876, F.S. For purposes of this Subsection, the term "substantial modification" shall mean a modification which is reasonably expected to lead to substantially different environmental impacts which require a detailed review.
- (7) Modifications to existing permits proposed by the permittee which require substantial changes in the existing permit or require substantial evaluation by the Department of potential impacts of the proposed modifications shall require the same fee as a new application for the same time duration except for modification under Chapter 62-45, F.A.C. [Rule 62-4.050, F.A.C.]
- 3. <u>Standards for Issuing or Denying Permits</u>. Except as provided at Rule 62-213.460, F.A.C., the issuance of a permit does not relieve any person from complying with the requirements of Chapter 403, F.S., or Department rules. [Rule 62-4.070(7), F.A.C.]

#### 4. Modification of Permit Conditions.

- (1) For good cause and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions and on application of the permittee the Department may grant additional time. For the purpose of this section, good cause shall include, but not be limited to, any of the following: (also, see Condition No. 38.).
  - (a) A showing that an improvement in effluent or emission quality or quantity can be accomplished because of technological advances without unreasonable hardship.
  - (b) A showing that a higher degree of treatment is necessary to effect the intent and purpose of Chapter 403, F.S.
  - (c) A showing of any change in the environment or surrounding conditions that requires a modification to conform to applicable air or water quality standards.
  - (e) Adoption or revision of Florida Statutes, rules, or standards which require the modification of a permit condition for compliance.
- (2) A permittee may request a modification of a permit by applying to the Department.
- (3) A permittee may request that a permit be extended as a modification of the permit. Such a request must be submitted to the Department in writing before the expiration of the permit. Upon timely submittal of a request for extension, unless the permit automatically expires by statute or rule, the permit will remain in effect until final agency action is taken on the request. For construction permits, an extension shall be granted if the applicant can demonstrate reasonable assurances that, upon completion, the extended permit will comply with the standards and conditions required by applicable regulation. For all other permits, an extension shall be granted if the applicant can demonstrate reasonable assurances that the extended permit will comply with the standards and conditions applicable to the original permit. A permit for which the permit application fee was prorated in accordance with Rule 62-4.050(4)(1), F.A.C., shall not be extended. In no event shall a permit be extended or remain in effect longer than the time limits established by statute or rule.

[Rule 62-4.080, F.A.C.]

5. Renewals. Prior to 180 days before the expiration of a permit issued pursuant to Chapter 62-213, F.A.C., the permittee shall apply for a renewal of a permit using forms incorporated by reference in the specific rule chapter for that kind of permit. A renewal application shall be timely and sufficient. If the application is submitted prior to 180 days before expiration of the permit, it will be considered timely and sufficient. If the renewal application is submitted at a later date, it will not be considered timely and sufficient unless it is submitted and made complete prior to the expiration of the operation permit. When the application for renewal is timely and sufficient, the existing permit shall remain in effect until the renewal application has been finally acted upon by the Department or, if there is court review of the Department's final agency action, until a later date is required by Section 120.60, F.S., provided that, for renewal of a permit issued pursuant to Chapter 62-213, F.A.C., the applicant complies with the requirements of Rules 62-213.420(1)(b)3. and 4., F.A.C.

[Rule 62-4.090, F.A.C.]

#### 6. Suspension and Revocation.

- (1) Permits shall be effective until suspended, revoked, surrendered, or expired and shall be subject to the provisions of Chapter 403, F.S., and rules of the Department.
- (2) Failure to comply with pollution control laws and rules shall be grounds for suspension or revocation.
- (3) A permit issued pursuant to Chapter 62-4, F.A.C., shall not become a vested property right in the permittee. The Department may revoke any permit issued by it if it finds that the permit holder or the his agent:
  - (a) Submitted false or inaccurate information in his application or operational reports.
  - (b) Has violated law, Department orders, rules or permit conditions.
  - (c) Has failed to submit operational reports or other information required by Department rules.
  - (d) Has refused lawful inspection under Section 403.091, F.S.
- (4) No revocation shall become effective except after notice is served by personal services, certified mail, or newspaper notice pursuant to Section 120.60(7), F.S., upon the person or persons named therein and a hearing held if requested within the time specified in the notice. The notice shall specify the provision of the law, or rule alleged to be violated, or the permit condition or Department order alleged to be violated, and the facts alleged to constitute a violation thereof. [Rule 62-4.100, F.A.C.]

7. **Not federally enforceable.** Financial Responsibility. The Department may require an applicant to submit proof of financial responsibility and may require the applicant to post an appropriate bond to guarantee compliance with the law and Department rules. [Rule 62-4.110, F.A.C.]

#### Transfer of Permits.

- (1) Within 30 days after the sale or legal transfer of a permitted facility, an "Application for Transfer of Permit" (DEP Form 62-1.201(1)) must be submitted to the Department. This form must be completed with the notarized signatures of both the permittee and the proposed new permittee. For air permits, an "Application for Transfer of Air Permit" (DEP Form 62-210.900(7)) shall be submitted.
- (2) The Department shall approve the transfer of a permit unless it determines that the proposed new permittee cannot provide reasonable assurances that conditions of the permit will be met. The determination shall be limited solely to the ability of the new permittee to comply with the conditions of the existing permit, and it shall not concern the adequacy of these permit conditions. If the Department proposes to deny the transfer, it shall provide both the permittee and the proposed new permittee a written objection to such transfer together with notice of a right to request a Chapter 120, F.S., proceeding on such determination.
- (3) Within 30 days of receiving a properly completed Application for Transfer of Permit form, the Department shall issue a final determination. The Department may toll the time for making a determination on the transfer by notifying both the permittee and the proposed new permittee that additional information is required to adequately review the transfer request. Such notification shall be served within 30 days of receipt of an Application for Transfer of Permit form, completed pursuant to Rule 62-4.120(1), F.A.C. If the Department fails to take action to approve or deny the transfer within 30 days of receipt of the completed Application for Transfer of Permit form, or within 30 days of receipt of the last item of timely requested additional information, the transfer shall be deemed approved.
- (4) The permittee is encouraged to apply for a permit transfer prior to the sale or legal transfer of a permitted facility. However, the transfer shall not be effective prior to the sale or legal transfer.
- (5) Until this transfer is approved by the Department, the permittee and any other person constructing, operating, or maintaining the permitted facility shall be liable for compliance with the terms of the permit. The permittee transferring the permit shall remain liable for corrective actions that may be required as a result of any violations occurring prior to the sale or legal transfer of the facility. [Rule 62-4.120, F.A.C.]
- 9. <u>Plant Operation-Problems</u>. If the permittee is temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by hazard of fire, wind or by other cause, the permittee shall immediately notify the Department. Notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its recurrence, and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with Department rules. (also, see Condition No. 10.).

[Rule 62-4.130, F.A.C.]

- 10. For purposes of notification to the Department pursuant to Condition No. 9., Condition No. 12.(8), and Rule 62-4.130, F.A.C., Plant Operation-Problems, "immediately" shall mean the same day, if during a workday (i.e., 8:00 a.m. 5:00 p.m.), or the first business day after the incident, excluding weekends and holidays; and, for purposes of 40 CFR 70.6(a)(3)(iii)(B), "prompt" shall have the same meaning as "immediately". [also, see Conditions Nos. 9. and 12.(8).]
  [40 CFR 70.6(a)(3)(iii)(B)]
- 11. Not federally enforceable. Review. Failure to request a hearing within 14 days of receipt of notice of proposed or final agency action on a permit application or as otherwise required in Chapter 62-103, F.A.C., shall be deemed a waiver of the right to an administrative hearing.

[Rule 62-4.150, F.A.C.]

- 12. Permit Conditions. All permits issued by the Department shall include the following general conditions:
- (1) The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- (2) This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- (3) As provided in Subsections 403.087(7) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.
- (4) This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- (5) This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of F.S. and Department rules, unless specifically authorized by an order from the Department.
- (6) The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- (7) The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
  - (a) Have access to and copy any records that must be kept under conditions of the permit;
  - (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and,
  - (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.
- (8) If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information: (also, see Condition No. 10.)
  - (a) A description of and cause of noncompliance; and,
  - (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.
- (9) In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the F.S. or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- (10) The permittee agrees to comply with changes in Department rules and F.S. after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by F.S. or Department rules.
- (11) This permit is transferable only upon Department approval in accordance with Rule 62-4.120, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- (12) This permit or a copy thereof shall be kept at the work site of the permitted activity.
- (14) The permittee shall comply with the following:
  - (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
  - (b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least five (5) years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

- (c) Records of monitoring information shall include:
  - 1. the date, exact place, and time of sampling or measurements;
  - 2. the person responsible for performing the sampling or measurements;
  - 3. the dates analyses were performed;
  - 4. the person responsible for performing the analyses;
  - 5. the analytical techniques or methods used;
  - 6. the results of such analyses.
- (15) When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly. [Rules 62-4.160 and 62-213.440(1)(b), F.A.C.]

#### 13. Construction Permits.

- (1) No person shall construct any installation or facility which will reasonably be expected to be a source of air or water pollution without first applying for and receiving a construction permit from the Department unless exempted by statute or Department rule. In addition to the requirements of Chapter 62-4, F.A.C., applicants for a Department Construction Permit shall submit the following as applicable:
  - (a) A completed application on forms furnished by the Department.
  - (b) An engineering report covering:
    - 1. plant description and operations,
    - 2. types and quantities of all waste material to be generated whether liquid, gaseous or solid,
    - 3. proposed waste control facilities,
    - 4. the treatment objectives,
    - 5. the design criteria on which the control facilities are based, and,
    - 6. other information deemed relevant.

Design criteria submitted pursuant to Rule 62-4.210(1)(b)5., F.A.C., shall be based on the results of laboratory and pilot-plant scale studies whenever such studies are warranted. The design efficiencies of the proposed waste treatment facilities and the quantities and types of pollutants in the treated effluents or emissions shall be indicated. Work of this nature shall be subject to the requirements of Chapter 471, F.S. Where confidential records are involved, certain information may be kept confidential pursuant to Section 403.111, F.S.

- (c) The owners' written guarantee to meet the design criteria as accepted by the Department and to abide by Chapter 403, F.S. and the rules of the Department as to the quantities and types of materials to be discharged from the installation. The owner may be required to post an appropriate bond or other equivalent evidence of financial responsibility to guarantee compliance with such conditions in instances where the owner's financial resources are inadequate or proposed control facilities are experimental in nature.
- (2) The construction permit may contain conditions and an expiration date as determined by the Secretary or the Secretary's designee.
- (3) When the Department issues a permit to construct, the permittee shall be allowed a period of time, specified in the permit, to construct, and to operate and test to determine compliance with Chapter 403, F.S., and the rules of the Department and, where applicable, to apply for and receive an operation permit. The Department may require tests and evaluations of the treatment facilities by the permittee at his/her expense.

[Rule 62-4.210, F.A.C.]

14. Not federally enforceable. Operation Permit for New Sources. To properly apply for an operation permit for new sources, the applicant shall submit the appropriate fee and certification that construction was completed noting any deviations from the conditions in the construction permit and test results where appropriate.

[Rule 62-4.220, F.A.C.]

#### Chapters 28-106 and 62-110, F.A.C.

15. <u>Public Notice, Public Participation, and Proposed Agency Action</u>. The permittee shall comply with all of the requirements for public notice, public participation, and proposed agency action pursuant to Rules 62-110.106 and 62-210.350, F.A.C. [Rules 62-110.106, 62-210.350 and 62-213.430(1)(b), F.A.C.]

16. <u>Administrative Hearing</u>. The permittee shall comply with all of the requirements for a petition for administrative hearing or waiver of right to administrative proceeding pursuant to Rules 28-106.201, 28-106.301 and 62-110.106, F.A.C. [Rules 28-106.201, 28-106.301 and 62-110.106, F.A.C.]

#### Chapter 62-204, F.A.C.

17. <u>Asbestos.</u> This permit does not authorize any demolition or renovation of the facility or its parts or components which involves asbestos removal. This permit does not constitute a waiver of any of the requirements of Chapter 62-257, F.A.C., and 40 CFR 61, Subpart M, National Emission Standard for Asbestos, adopted and incorporated by reference in Rule 62-204.800, F.A.C. Compliance with Chapter 62-257, F.A.C., and 40 CFR 61, Subpart M, Section 61.145, is required for any asbestos demolition or renovation at the source.

[40 CFR 61; Rule 62-204.800, F.A.C.; and, Chapter 62-257, F.A.C.]

#### Chapter 62-210, F.A.C.

- 18. Permits Required. The owner or operator of any emissions unit which emits or can reasonably be expected to emit any air pollutant shall obtain an appropriate permit from the Department prior to beginning construction, modification, or initial or continued operation of the emissions unit unless exempted pursuant to Department rule or statute. All emissions limitations, controls, and other requirements imposed by such permits shall be at least as stringent as any applicable limitations and requirements contained in or enforceable under the State Implementation Plan (SIP) or that are otherwise federally enforceable. Except as provided at Rule 62-213.460, F.A.C., issuance of a permit does not relieve the owner or operator of an emissions unit from complying with any applicable requirements, any emission limiting standards or other requirements of the air pollution rules of the Department or any other such requirements under federal, state, or local law.
- (1) Air Construction Permits.
  - (a) Unless exempt from permitting pursuant to Rule 62-210.300(3)(a) or (b), F.A.C., or Rule 62-4.040, F.A.C., an air construction permit shall be obtained by the owner or operator of any proposed new or modified facility or emissions unit prior to the beginning of construction or modification, in accordance with all applicable provisions of Chapter 62-210, F.A.C., Chapter 62-212, F.A.C., and Chapter 62-4, F.A.C. Except as provided under Rule 62-213.415, F.A.C., the owner or operator of any facility seeking to create or change an air emissions bubble shall obtain an air construction permit in accordance with all the applicable provisions of Chapter 62-210, F.A.C., Chapter 62-212, F.A.C., and Chapter 62-4, F.A.C. The construction permit shall be issued for a period of time sufficient to allow construction or modification of the facility or emissions unit and operation while the new or modified facility or emissions unit is conducting tests or otherwise demonstrating initial compliance with the conditions of the construction permit.
  - (b) Notwithstanding the expiration of an air construction permit, all limitations and requirements of such permit that are applicable to the design and operation of the permitted facility or emissions unit shall remain in effect until the facility or emissions unit is permanently shut down, except for any such limitation or requirement that is obsolete by its nature (such as a requirement for initial compliance testing) or any such limitation or requirement that is changed in accordance with the provisions of Rule 62-210.300(1)(b)1., F.A.C. Either the applicant or the Department can propose that certain conditions be considered obsolete. Any conditions or language in an air construction permit that are included for informational purposes only, if they are transferred to the air operation permit, shall be transferred for informational purposes only and shall not become enforceable conditions unless voluntarily agreed to by the permittee or otherwise required under Department rules.
    - 1. Except for those limitations or requirements that are obsolete, all limitations and requirements of an air construction permit shall be included and identified in any air operation permit for the facility or emissions unit. The limitations and requirements included in the air operation permit can be changed, and thereby superseded, through the issuance of an air construction permit, federally enforceable state air operation permit, federally enforceable air general permit, or Title V air operation permit; provided, however, that:
      - a. Any change that would constitute an administrative correction may be made pursuant to Rule 62-210.360, F.A.C.;
        b. Any change that would constitute a modification, as defined at Rule 62-210.200, F.A.C., shall be accomplished only through the issuance of an air construction permit; and
      - c. Any change in a permit limitation or requirement that originates from a permit issued pursuant to 40 CFR 52.21, Rule 62-204.800(10)(d)2., F.A.C., Rule 62-212.400, F.A.C., Rule 62-212.500, F.A.C., or any former codification of Rule 62-212.400 or Rule 62-212.500, F.A.C., shall be accomplished only through the issuance of a new or revised air construction permit under Rule 62-204.800(10)(d)2., Rule 62-212.400, or Rule 62-212.500, F.A.C., as
    - 2. The force and effect of any change in a permit limitation or requirement made in accordance with the provisions of Rule 62-210.300(1)(b)1., F.A.C., shall be the same as if such change were made to the original air construction permit.

      3. Nothing in Rule 62-210.300(1)(b), F.A.C., shall be construed as to allow operation of a facility or emissions unit without a valid air operation permit.

- (2) Air Operation Permits. Upon expiration of the air operation permit for any existing facility or emissions unit, subsequent to construction or modification, or subsequent to the creation of or change to a bubble, and demonstration of compliance with the conditions of the construction permit for any new or modified facility or emissions unit, any air emissions bubble, or as otherwise provided in Chapter 62-210, F.A.C., or Chapter 62-213, F.A.C., the owner or operator of such facility or emissions unit shall obtain a renewal air operation permit, an initial air operation permit or general permit, or an administrative correction or revision of an existing air operation permit, whichever is appropriate, in accordance with all applicable provisions of Chapter 62-210, F.A.C., Chapter 62-213, F.A.C., and Chapter 62-4, F.A.C.
  - (a) Minimum Requirements for All Air Operation Permits. At a minimum, a permit issued pursuant to this subsection shall:
    - 1. Specify the manner, nature, volume and frequency of the emissions permitted, and the applicable emission limiting standards or performance standards, if any;
    - 2. Require proper operation and maintenance of any pollution control equipment by qualified personnel, where applicable in accordance with the provisions of any operation and maintenance plan required by the air pollution rules of the Department.
    - 3. Contain an effective date stated in the permit which shall not be earlier than the date final action is taken on the application and be issued for a period, beginning on the effective date, as provided below.
      - a. The operation permit for an emissions unit which is in compliance with all applicable rules and in operational condition, and which the owner or operator intends to continue operating, shall be issued or renewed for a five-year period, except that, for Title V sources subject to Rule 62-213.420(1)(a)1., F.A.C., operation permits shall be extended until 60 days after the due date for submittal of the facility's Title V permit application as specified in Rule 62-213.420(1)(a)1., F.A.C.
      - b. Except as provided in Rule 62-210.300(2)(a)3.d., F.A.C., the operation permit for an emissions unit which has been shut down for six months or more prior to the expiration date of the current operation permit, shall be renewed for a period not to exceed five years from the date of shutdown, even if the emissions unit is not maintained in operational condition, provided:
        - (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.
      - c. Except as provided in Rule 62-210.300(2)(a)3.d., 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 Rule 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.
      - d. The operation permit for an electric utility generating unit on cold standby or long-term reserve shutdown shall be renewed for a five-year period, and additional five-year periods, even if the unit is not maintained in operational condition, provided the conditions given in Rules 62-210.300(2)(a)3.b.(i) through (iii), F.A.C., are met.
    - 4. In the case of an emissions unit permitted pursuant to Rules 62-210.300(2)(a)3.b., c., and d., F.A.C., include reasonable notification and compliance testing requirements for reactivation of such emissions unit and provide that the owner or operator demonstrate to the Department prior to reactivation that such reactivation would not constitute reconstruction pursuant to Rule 62-204.800(7), F.A.C.

[Rules 62-210.300(1) & (2), F.A.C.]

- 19. Not federally enforceable. Notification of Startup. The owner or operator of any emissions unit or facility which has a valid air operation permit which has been shut down more than one year, shall notify the Department in writing of the intent to start up such emissions unit or facility, a minimum of 60 days prior to the intended startup date.
  - (a) The notification shall include information as to the startup date, anticipated emission rates or pollutants released, changes to processes or control devices which will result in changes to emission rates, and any other conditions which may differ from the valid outstanding operation permit.

(b) If, due to an emergency, a startup date is not known 60 days prior thereto, the owner shall notify the Department as soon as possible after the date of such startup is ascertained.

[Rule 62-210.300(5), F.A.C.]

#### 20. Emissions Unit Reclassification.

- (a) Any emissions unit whose operation permit has been revoked as provided for in Chapter 62-4, F.A.C., shall be deemed permanently shut down for purposes of Rule 62-212.500, F.A.C. Any emissions unit whose permit to operate has expired without timely renewal or transfer may be deemed permanently shut down, provided, however, that no such emissions unit shall be deemed permanently shut down if, within 20 days after receipt of written notice from the Department, the emissions unit owner or operator demonstrates that the permit expiration resulted from inadvertent failure to comply with the requirements of Rule 62-4.090, F.A.C., and that the owner or operator intends to continue the emissions unit in operation, and either submits an application for an air operation permit or complies with permit transfer requirements, if applicable.
- (b) If the owner or operator of an emissions unit which is so permanently shut down, applies to the Department for a permit to reactivate or operate such emissions unit, the emissions unit will be reviewed and permitted as a new emissions unit. [Rule 62-210.300(6), F.A.C.]

#### 21. Transfer of Air Permits.

- (a) An air permit is transferable only after submission of an Application for Transfer of Air Permit (DEP Form 62-210.900(7)) and Department approval in accordance with Rule 62-4.120, F.A.C. For Title V permit transfers only, a complete application for transfer of air permit shall include the requirements of 40 CFR 70.7(d)(1)(iv), adopted and incorporated by reference at Rule 62-204.800, F.A.C. Within 30 days after approval of the transfer of permit, the Department shall update the permit by an administrative permit correction pursuant to Rule 62-210.360, F.A.C.
- (b) For an air general permit, the provision of Rules 62-210.300(7)(a) and 62-4.120, F.A.C., do not apply. Thirty (30) days before using an air general permit, the new owner must submit an air general permit notification to the Department in accordance with Rule 62-210.300(4), F.A.C., or Rule 62-213.300(2)(b), F.A.C. [Rule 62-210.300(7), F.A.C.]

#### 22. Public Notice and Comment.

- (1) Public Notice of Proposed Agency Action.
  - (a) A notice of proposed agency action on permit application, where the proposed agency action is to issue the permit, shall be published by any applicant for:
    - 1. An air construction permit;
    - 2. An air operation permit, permit renewal or permit revision subject to Rule 62-210.300(2)(b), F.A.C., (i.e., a FESOP), except as provided in Rule 62-210.300(2)(b)1.b., F.A.C.; or
    - 3. An air operation permit, permit renewal, or permit revision subject to Chapter 62-213, F.A.C., except Title V air general permits or those permit revisions meeting the requirements of Rule 62-213.412(1), F.A.C.
  - (b) The notice required by Rule 62-210.350(1)(a), F.A.C., shall be published in accordance with all otherwise applicable provisions of Rule 62-110.106, F.A.C. A public notice under Rule 62-210.350(1)(a)1., F.A.C., for an air construction permit may be combined with any required public notice under Rule 62-210.350(1)(a)2. or 3., F.A.C., for air operation permits. If such notices are combined, the public notice must comply with the requirements for both notices.
  - (c) Except as otherwise provided at Rules 62-210.350(2) and (5), F.A.C., each notice of intent to issue an air construction permit shall provide a 14-day period for submittal of public comments.
- (2) Additional Public Notice Requirements for Emissions Units Subject to Prevention of Significant Deterioration or Nonattainment - Area Preconstruction Review.
  - (a) Before taking final agency action on a construction permit application for any proposed new or modified facility or emissions unit subject to the preconstruction review requirements of Rule 62-212.400 or 62-212.500, F.A.C., the Department shall comply with all applicable provisions of Rule 62-110.106, F.A.C., and provide an opportunity for public comment which shall include as a minimum the following:
    - 1. A complete file available for public inspection in at least one location in the district affected which includes the information submitted by the owner or operator, exclusive of confidential records under Section 403.111, F.S., and the Department's analysis of the effect of the proposed construction or modification on ambient air quality, including the Department's preliminary determination of whether the permit should be approved or disapproved;
    - 2. A 30-day period for submittal of public comments; and,

- 3. A notice, by advertisement in a newspaper of general circulation in the county affected, specifying the nature and location of the proposed facility or emissions unit, whether BACT or LAER has been determined, the degree of PSD increment consumption expected, if applicable, and the location of the information specified in paragraph 1. above; and, notifying the public of the opportunity for submitting comments and requesting a public hearing.
- (b) The notice provided for in Rule 62-210.350(2)(a)3., F.A.C., shall be prepared by the Department and published by the applicant in accordance with all applicable provisions of Rule 62-110.106, F.A.C., except that the applicant shall cause the notice to be published no later than thirty (30) days prior to final agency action.
- (c) A copy of the notice provided for in Rule 62-210.350(2)(a)3., F.A.C., shall also be sent by the Department to the Regional Office of the U. S. Environmental Protection Agency and to all other state and local officials or agencies having cognizance over the location of such new or modified facility or emissions unit, including local air pollution control agencies, chief executives of city or county government, regional land use planning agencies, and any other state, Federal Land Manager, or Indian Governing Body whose lands may be affected by emissions from the new or modified facility or emissions unit.
- (d) A copy of the notice provided for in Rule 62-210.350(2)(a)3., F.A.C., shall be displayed in the appropriate district, branch and local program offices.
- (e) An opportunity for public hearing shall be provided in accordance with Chapter 120, F.S., and Rule 62-110.106, F.A.C.
- (f) Any public comments received shall be made available for public inspection in the location where the information specified in Rule 62-210.350(2)(a)1., F.A.C., is available and shall be considered by the Department in making a final determination to approve or deny the permit.
- (g) The final determination shall be made available for public inspection at the same location where the information specified in Rule 62-210.350(2)(a)1., F.A.C., was made available.
- (h) For a proposed new or modified emissions unit which would be located within 100 kilometers of any Federal Class I area or whose emissions may affect any Federal Class I area, and which would be subject to the preconstruction review requirements of Rule 62-212.400, F.A.C., or Rule 62-212.500, F.A.C.:
  - 1. The Department shall mail or transmit to the Administrator a copy of the initial application for an air construction permit and notice of every action related to the consideration of the permit application.
  - 2. The Department shall mail or transmit to the Federal Land Manager of each affected Class I area a copy of any written notice of intent to apply for an air construction permit; the initial application for an air construction permit, including all required analyses and demonstrations; any subsequently submitted information related to the application; the preliminary determination and notice of proposed agency action on the permit application; and any petition for an administrative hearing regarding the application or the Department's proposed action. Each such document shall be mailed or transmitted to the Federal Land Manager within fourteen (14) days after its receipt by the Department.
- (3) Additional Public Notice Requirements for Facilities Subject to Operation Permits for Title V Sources.
  - (a) Before taking final agency action to issue a new, renewed, or revised air operation permit subject to Chapter 62-213, F.A.C., the Department shall comply with all applicable provisions of Rule 62-110.106, F.A.C., and provide an opportunity for public comment which shall include as a minimum the following:
    - 1. A complete file available for public inspection in at least one location in the district affected which includes the information submitted by the owner or operator, exclusive of confidential records under Section 403.111, F.S.; and,
    - 2. A 30-day period for submittal of public comments.
  - (b) The notice provided for in Rule 62-210.350(3)(a), F.A.C., shall be prepared by the Department and published by the applicant in accordance with all applicable provisions of Rule 62-110.106, F.A.C., except that the applicant shall cause the notice to be published no later than thirty (30) days prior to final agency action. If written comments received during the 30-day comment period on a draft permit result in the Department's issuance of a revised draft permit in accordance with Rule 62-213.430(1), F.A.C., the Department shall require the applicant to publish another public notice in accordance with Rule 62-210.350(1)(a), F.A.C.
  - (c) The notice shall identify:
    - 1. The facility;
    - 2. The name and address of the office at which processing of the permit occurs;
    - 3. The activity or activities involved in the permit action;
    - 4. The emissions change involved in any permit revision;
    - 5. The name, address, and telephone number of a Department representative from whom interested persons may obtain additional information, including copies of the permit draft, the application, and all relevant supporting materials, including any permit application, compliance plan, permit, monitoring report, and compliance statement required pursuant to Chapter 62-213, F.A.C. (except for information entitled to confidential treatment pursuant to Section 403.111, F.S.), and all other materials available to the Department that are relevant to the permit decision;

- 6. A brief description of the comment procedures required by Rule 62-210.350(3), F.A.C.;
- 7. The time and place of any hearing that may be held, including a statement of procedure to request a hearing (unless a hearing has already been scheduled); and,
- 8. The procedures by which persons may petition the Administrator to object to the issuance of the proposed permit after expiration of the Administrator's 45-day review period.

[Rule 62-210.350, F.A.C.]

#### 23. Administrative Permit Corrections.

- (1) A facility owner shall notify the Department by letter of minor corrections to information contained in a permit. Such notifications shall include:
  - (a) Typographical errors noted in the permit;
  - (b) Name, address or phone number change from that in the permit;
  - (c) A change requiring more frequent monitoring or reporting by the permittee;
  - (d) A change in ownership or operational control of a facility, subject to the following provisions:
    - 1. The Department determines that no other change in the permit is necessary;
    - 2. The permittee and proposed new permittee have submitted an Application for Transfer of Air Permit, and the Department has approved the transfer pursuant to Rule 62-210.300(7), F.A.C.; and
    - 3. The new permittee has notified the Department of the effective date of sale or legal transfer.
  - (e) Changes listed at 40 CFR 72.83(a)(1), (2), (6), (9) and (10), adopted and incorporated by reference at Rule 62-204.800, F.A.C., and changes made pursuant to Rules 62-214.340(1) and (2), F.A.C., to Title V sources subject to emissions limitations or reductions pursuant to 42 USC ss. 7651-76510;
  - (f) Changes listed at 40 CFR 72.83(a)(11) and (12), adopted and incorporated by reference at Rule 62-204.800, F.A.C., to Title V sources subject to emissions limitations or reductions pursuant to 42 USC ss. 7651-76510, provided the notification is accompanied by a copy of any EPA determination concerning the similarity of the change to those listed at Rule 62-210.360(1)(e), F.A.C.; and,
  - (g) Any other similar minor administrative change at the source.
- (2) Upon receipt of any such notification the Department shall within 60 days correct the permit and provide a corrected copy to the owner.
- (3) After first notifying the owner, the Department shall correct any permit in which it discovers errors of the types listed at Rules 62-210.360(1)(a) and (b), F.A.C., and provide a corrected copy to the owner.
- (4) For Title V source permits, other than general permits, a copy of the corrected permit shall be provided to EPA and any approved local air program in the county where the facility or any part of the facility is located.
- (5) The Department shall incorporate requirements resulting from issuance of a new or revised construction permit into an existing Title V source permit, if the construction permit or permit revision incorporates requirements of federally enforceable preconstruction review, and if the applicant requests at the time of application that all of the requirements of Rule 62-213.430(1), F.A.C., be complied with in conjunction with the processing of the construction permit application.

[Rule 62-210.360, F.A.C.]

#### 24. Reports.

- (3) Annual Operating Report for Air Pollutant Emitting Facility.
  - (a) The Annual Operating Report for Air Pollutant Emitting Facility (DEP Form No. 62-210.900(5)) shall be completed each year.
  - (c) The annual operating report shall be submitted to the appropriate Department District or Department approved local air pollution control program office by March 1 of the following year unless otherwise indicated by permit condition or Department request.

[Rule 62-210.370(3), F.A.C.]

25. <u>Circumvention</u>. No person shall circumvent any air pollution control device, or allow the emission of air pollutants without the applicable air pollution control device operating properly.

[Rule 62-210.650, F.A.C.]

- 26. Forms and Instructions. The forms used by the Department in the stationary source control program are adopted and incorporated by reference in this section. The forms are listed by rule number, which is also the form number, with the subject, title and effective date. Forms 62-210.900(1),(3),(4) and (5), F.A.C., including instructions, are available from the Department as hard-copy documents or executable files on computer diskettes. Copies of forms (hard-copy or diskette) may be obtained by writing to the Department of Environmental Protection, Division of Air Resource Management, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Notwithstanding the requirement of Rule 62-4.050(2), F.A.C., to file application forms in quadruplicate, if an air permit application is submitted using the Department's electronic application form, only one copy of the diskette and signature pages is required to be submitted.
- (1) Application for Air Permit Title V Source, Form and Instructions (Effective 02/11/1999).
  - (a) Acid Rain Part (Phase II), Form and Instructions (Effective 04/16/2001).
    - 1. Repowering Extension Plan, Form and Instructions (Effective 07/01/1995).
    - 2. New Unit Exemption, Form and Instructions (Effective 04/16/2001).
    - 3. Retired Unit Exemption, Form and Instructions (Effective 04/16/2001).
    - 4. Phase II NOx Compliance Plan, Form and Instructions (Effective 01/06/1998).
    - 5. Phase II NOx Averaging Plan, Form (Effective 01/06/1998).
  - (b) Reserved.
- (5) Annual Operating Report for Air Pollutant Emitting Facility, Form and Instructions (Effective 02/11/1999).
- (7) Application for Transfer of Air Permit Title V and Non-Title V Source, (Effective 04/16/2001).

[Rule 62-210.900, F.A.C.]

#### Chapter 62-213, F.A.C.

27. <u>Annual Emissions Fee</u>. Each Title V source permitted to operate in Florida must pay between January 15 and March 1 of each year, upon written notice from the Department, an annual emissions fee in an amount determined as set forth in Rule 62-213.205(1), F.A.C.

[Rules 62-213.205 and 62-213.900(1), F.A.C.]

28. <u>Annual Emissions Fee.</u> Failure to pay timely any required annual emissions fee, penalty, or interest constitutes grounds for permit revocation pursuant to Rule 62-4.100, F.A.C.

[Rule 62-213.205(1)(g), F.A.C.]

29. <u>Annual Emissions Fee.</u> Any documentation of actual hours of operation, actual material or heat input, actual production amount, or actual emissions used to calculate the annual emissions fee shall be retained by the owner for a minimum of five (5) years and shall be made available to the Department upon request.

[Rule 62-213.205(1)(i), F.A.C.]

30. Annual Emissions Fee. A completed DEP Form 62-213.900(1), F.A.C., "Major Air Pollution Source Annual Emissions Fee Form", must be submitted by the responsible official with the annual emissions fee. [Rule 62-213.205(1)(j), F.A.C.]

31. <u>Air Operation Permit Fees</u>. No permit application processing fee, renewal fee, modification fee or amendment fee is required for an operation permit for a Title V source.

[Rule 62-213.205(4), F.A.C.]

- 32. Permits and Permit Revisions Required. All Title V sources are subject to the permit requirements of Chapter 62-213, F.A.C.
- (1) No Title V source may operate except in compliance with Chapter 62-213, F.A.C.
- (2) Except as provided in Rule 62-213.410, F.A.C., no source with a permit issued under the provisions of this chapter shall make any changes in its operation without first applying for and receiving a permit revision if the change meets any of the following:
  - (a) Constitutes a modification;
  - (b) Violates any applicable requirement;
  - (c) Exceeds the allowable emissions of any air pollutant from any unit within the source;
  - (d) Contravenes any permit term or condition for monitoring, testing, recordkeeping, reporting or of a compliance certification requirement;
  - (e) Requires a case-by-case determination of an emission limitation or other standard or a source specific determination of ambient impacts, or a visibility or increment analysis under the provisions of Chapters 62-212 or 62-296, F.A.C.;
  - (f) Violates a permit term or condition which the source has assumed for which there is no corresponding underlying applicable requirement to which the source would otherwise be subject;
  - (g) Results in the trading of emissions among units within a source except as specifically authorized pursuant to Rule 62-213.415, F.A.C.;

- (h) Results in the change of location of any relocatable facility identified as a Title V source pursuant to paragraph (a)-(e), (g) or (h) of the definition of "major source of air pollution" at Rule 62-210.200, F.A.C.;
- (i) Constitutes a change at an Acid Rain Source under the provisions of 40 CFR 72.81(a)(1),(2),or (3),(b)(1) or (b)(3), hereby incorporated by reference;
- (j) Constitutes a change in a repowering plan, nitrogen oxides averaging plan, or nitrogen oxides compliance deadline extension at an Acid Rain Source;
- (k) Is a request for industrial-utility unit exemption pursuant to Rule 62-214.340, F.A.C. [Rules 62-213.400(1) & (2), F.A.C.]
- 33. <u>Changes Without Permit Revision</u>. Title V sources having a valid permit issued pursuant to Chapter 62-213, F.A.C., may make the following changes without permit revision, provided that sources shall maintain source logs or records to verify periods of operation in each alternative method of operation:
- (1) Permitted sources may change among those alternative methods of operation allowed by the source's permit as provided by the terms of the permit;
- (2) Permitted sources may implement the terms or conditions of a new or revised construction permit if;
  - (a) The application for construction permit complied with the requirements of Rule 62-213.420(3) and (4), F.A.C.;
  - (b) The terms or conditions were subject to federally enforceable preconstruction review pursuant to Chapter 62-212, F.A.C.; and.
  - (c) The new or revised construction permit was issued after the Department and the applicant complied with all the requirements of Rule 62-213.430(1), F.A.C.;
- (3) A permitted source may implement operating changes, as defined in Rule 62-210.200, F.A.C., after the source submits any forms required by any applicable requirement and provides the Department and EPA with at least 7 days written notice prior to implementation. The source and the Department shall attach each notice to the relevant permit;
  - (a) The written notice shall include the date on which the change will occur, and a description of the change within the permitted source, the pollutants emitted and any change in emissions, and any term or condition becoming applicable or no longer applicable as a result of the change;
  - (b) The permit shield described in Rule 62-213.460, F.A.C., shall not apply to such changes;
- (4) Permitted sources may implement changes involving modes of operation only in accordance with Rule 62-213.415, F.A.C. [Rule 62-213.410, F.A.C.]
- 34. Immediate Implementation Pending Revision Process.
- (1) Those permitted Title V sources making any change that constitutes a modification pursuant to the definition of modification at Rule 62-210.200, F.A.C., but which would not constitute a modification pursuant to 42 USC 7412(a) or to 40 CFR 52.01, 60.2, or 61.15, adopted and incorporated by reference at Rule 62-204.800, F.A.C., may implement such change prior to final issuance of a permit revision in accordance with this section, provided the change:
  - (a) Does not violate any applicable requirement;
  - (b) Does not contravene any permit term or condition for monitoring, testing, recordkeeping or reporting, or any compliance certification requirement:
  - (c) Does not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis under the provisions of Chapter 62-212 or 62-296, F.A.C.;
  - (d) Does not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and which the source has assumed to avoid an applicable requirement to which the source would otherwise be subject including any federally enforceable emissions cap or federally enforceable alternative emissions limit.
- (2) A Title V source may immediately implement such changes after they have been incorporated into the terms and conditions of a new or revised construction permit issued pursuant to Chapter 62-212, F.A.C., and after the source provides to EPA, the Department, each affected state and any approved local air program having geographic jurisdiction over the source, a copy of the source's application for operation permit revision. The Title V source may conform its application for construction permit to include all information required by Rule 62-213.420, F.A.C., in lieu of submitting separate application forms.

- (3) The Department shall process the application for operation permit revision in accordance with the provisions of Chapter 62-213, F.A.C., except that the Department shall issue a draft permit revision or a determination to deny the revision within 60 days of receipt of a complete application for operation permit revision or, if the Title V source has submitted a construction permit application conforming to the requirements of Rule 62-213.420, F.A.C., the Department shall issue a draft permit or a determination to deny the revision at the same time the Department issues its determination on issuance or denial of the construction permit application. The Department shall not take final action until all the requirements of Rules 62-213.430(1)(a), (c), (d), and (e), F.A.C., have been complied with.
- (4) Pending final action on the operation permit revision application, the source shall implement the changes in accordance with the terms and conditions of the source's new or revised construction permit.
- (5) The permit shield described in Rule 62-213.460, F.A.C., shall not apply to such changes until after the Department takes final action to issue the operation permit revision.
- (6) If the Department denies the source's application for operation permit revision, the source shall cease implementation of the proposed changes.

[Rule 62-213.412, F.A.C.]

#### 35. Permit Applications.

- (1) Duty to Apply. For each Title V source, the owner or operator shall submit a timely and complete permit application in compliance with the requirements of Rules 62-213.420, F.A.C., and Rules 62-4.050(1) through (3), F.A.C.
  - (a) Timely Application.
    - 3. For purposes of permit renewal, a timely application is one that is submitted in accordance with Rule 62-4.090, F.A.C.
  - (b) Complete Application.
    - 1. Any applicant for a Title V permit, permit revision or permit renewal must submit an application on DEP Form No. 62-210.900(1), which must include all the information specified by Rule 62-213.420(3), F.A.C., except that an application for permit revision must contain only that information related to the proposed change. The applicant shall include information concerning fugitive emissions and stack emissions in the application. Each application for permit revision or permit renewal shall be certified by a responsible official in accordance with Rule 62-213.420(4), F.A.C.
    - 2. For those applicants submitting initial permit applications pursuant to Rule 62-213.420(1)(a)1., F.A.C., a complete application shall be an application that substantially addresses all the information required by the application form number 62-210.900(1), and such applications shall be deemed complete within sixty days of receipt of a signed and certified application unless the Department notifies the applicant of incompleteness within that time. For all other applicants, the applications shall be deemed complete sixty days after receipt, unless the Department, within sixty days after receipt of a signed application for permit, permit revision or permit renewal, requests additional documentation or information needed to process the application. An applicant making timely and complete application for permit, or timely application for permit renewal as described by Rule 62-4.090(1), F.A.C., shall continue to operate the source under the authority and provisions of any existing valid permit or Florida Electrical Power Plant Siting Certification, and in accordance with applicable requirements of the Acid Rain Program, until the conclusion of proceedings associated with its permit application or until the new permit becomes effective, whichever is later, provided the applicant complies with all the provisions of Rules 62-213.420(1)(b)3. and 4. F.A.C. Failure of the Department to request additional information within sixty days of receipt of a properly signed application shall not impair the Department's ability to request additional information pursuant to Rules 62-213.420(1)(b)3. and 4. F.A.C.
    - 3. For those permit applications submitted pursuant to the provisions of Rule 62-213.420(1)(a)1., F.A.C., the Department shall notify the applicant if the Department becomes aware at any time during processing of the application that the application contains incorrect or incomplete information. The applicant shall submit the corrected or supplementary information to the Department within ninety days unless the applicant has requested and been granted additional time to submit the information. Failure of an applicant to submit corrected or supplementary information requested by the Department within ninety days or such additional time as requested and granted shall render the application incomplete.
    - 4. For all applications other than those addressed at Rule 62-213.420(1)(b)3., F.A.C., should the Department become aware, during processing of any application that the application contains incorrect information, or should the Department become aware, as a result of comment from an affected State, an approved local air program, EPA, or the public that additional information is needed to evaluate the application, the Department shall notify the applicant within 30 days. When an applicant becomes aware that an application contains incorrect or incomplete information, the applicant shall submit the corrected or supplementary information to the Department. If the Department notifies an applicant that corrected or supplementary information is necessary to process the permit, and requests a response, the applicant shall provide the information to the Department within ninety days of the Department request unless the applicant has requested

and been granted additional time to submit the information or, the applicant shall, within ninety days, submit a written request that the Department process the application without the information. Failure of an applicant to submit corrected or supplementary information requested by the Department within ninety days, or such additional time as requested and granted, or to demand in writing within ninety days that the application be processed without the information shall render the application incomplete. Nothing in this section shall limit any other remedies available to the Department.

[Rules 62-213.420(1)(a)3. and 62-213.420(1)(b)1., 2., 3. & 4., F.A.C.]

- 36. <u>Confidential Information</u>. Whenever an applicant submits information under a claim of confidentiality pursuant to Section 403.111, F.S., the applicant shall also submit a copy of all such information and claim directly to EPA. (also, see Condition No. 50.) [Rule 62-213.420(2), F.A.C.]
- 37. Standard Application Form and Required Information. Applications shall be submitted under Chapter 62-213, F.A.C., on forms provided by the Department and adopted by reference in Rule 62-210.900(1), F.A.C. The information as described in Rule 62-210.900(1), F.A.C., shall be included for the Title V source and each emissions unit. An application must include information sufficient to determine all applicable requirements for the Title V source and each emissions unit and to evaluate a fee amount pursuant to Rule 62-213.205, F.A.C.
  [Rule 62-213.420(3), F.A.C.]
- 38. a. <u>Permit Renewal and Expiration</u>. Permits being renewed are subject to the same requirements that apply to permit issuance at the time of application for renewal. Permit renewal applications shall contain that information identified in Rules 62-210.900(1) and 62-213.420(3), F.A.C. Unless a Title V source submits a timely application for permit renewal in accordance with the requirements of Rule 62-4.090(1), F.A.C., the existing permit shall expire and the source's right to operate shall terminate. No Title V permit will be issued for a new term except through the renewal process.
- b. <u>Permit Revision Procedures.</u> Permit revisions shall meet all requirements of Chapter 62-213, F.A.C., including those for content of applications, public participation, review by approved local programs and affected states, and review by EPA, as they apply to permit issuance and permit renewal, except that permit revisions for those activities implemented pursuant to Rule 62-213.412, F.A.C., need not meet the requirements of Rule 62-213.430(1)(b), F.A.C. The Department shall require permit revision in accordance with the provisions of Rule 62-4.080, F.A.C., and 40 CFR 70.7(f), whenever any source becomes subject to any condition listed at 40 CFR 70.7(f)(1), hereby adopted and incorporated by reference. The below requirements from 40 CFR 70.7(f) are adopted and incorporated by reference in Rule 62-213.430(4), F.A.C.:
  - o 40 CFR 70.7(f): Reopening for Cause. (also, see Condition No. 4.)
  - (1) This section contains provisions from 40 CFR 70.7(f) that specify the conditions under which a Title V permit shall be reopened prior to the expiration of the permit. A Title V permit shall be reopened and revised under any of the following circumstances:
    - (i) Additional applicable requirements under the Act become applicable to a major Part 70 source with a remaining permit term of 3 or more years. Such a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii).
    - (ii) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approved by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
  - (iii) The permitting authority or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
    - (iv) The Administrator or the permitting authority determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
  - (2) Proceedings to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable.
  - (3) Reopenings under 40 CFR 70.7(f)(1) shall not be initiated before a notice of such intent is provided to the Part 70 source by the permitting authority at least 30 days in advance of the date that the permit is to be reopened, except that the permitting authority may provide a shorter time period in the case of an emergency.

[Rules 62-213.430(3) & (4), F.A.C.; and, 40 CFR 70.7(f)]

39. Insignificant Emissions Units or Pollutant-Emitting Activities.

- (a) All requests for determination of insignificant emissions units or activities made pursuant to Rule 62-213.420(3)(m), F.A.C., shall be processed in conjunction with the permit, permit renewal or permit revision application submitted pursuant to Chapter 62-213, F.A.C. Insignificant emissions units or activities shall be approved by the Department consistent with the provisions of Rule 62-4.040(1)(b), F.A.C. Emissions units or activities which are added to a Title V source after issuance of a permit under Chapter 62-213, F.A.C., shall be incorporated into the permit at its next renewal, provided such emissions units or activities have been exempted from the requirement to obtain an air construction permit and also qualify as insignificant pursuant to Rule 62-213.430(6), F.A.C.
- (b) An emissions unit or activity shall be considered insignificant if all of the following criteria are met:1. Such unit or activity would be subject to no unit-specific applicable requirement;
  - 2. Such unit or activity, in combination with other units or activities proposed as insignificant, would not cause the facility to exceed any major source threshold(s) as defined in Rule 62-213.420(3)(c)1., F.A.C., unless it is acknowledged in the permit application that such units or activities would cause the facility to exceed such threshold(s);
  - 3. Such unit or activity would not emit or have the potential to emit:
    - a. 500 pounds per year or more of lead and lead compounds expressed as lead;
    - b. 1,000 pounds per year or more of any hazardous air pollutant;
    - c. 2,500 pounds per year or more of total hazardous air pollutants; or
    - d. 5.0 tons per year or more of any other regulated pollutant.

[Rule 62-213.430(6), F.A.C.]

- 40. <u>Permit Duration</u>. Permits for sources subject to the Federal Acid Rain Program shall be issued for terms of five years, provided that the initial Acid Rain Part may be issued for a term less than five years where necessary to coordinate the term of such part with the term of a Title V permit to be issued to the source. Operation permits for Title V sources may not be extended as provided in Rule 62-4.080(3), F.A.C., if such extension will result in a permit term greater than five years. [Rule 62-213.440(1)(a), F.A.C.]
- 41. <u>Monitoring Information</u>. All records of monitoring information shall specify the date, place, and time of sampling or measurement and the operating conditions at the time of sampling or measurement, the date(s) analyses were performed, the company or entity that performed the analyses, the analytical techniques or methods used, and the results of such analyses. [Rule 62-213.440(1)(b)2.a., F.A.C.]
- 42. Retention of Records. Retention of records of all monitoring data and support information shall be for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

[Rule 62-213.440(1)(b)2.b., F.A.C.]

- 43. <u>Monitoring Reports</u>. The permittee shall submit reports of any required monitoring at least every six (6) months. All instances of deviations from permit requirements must be clearly identified in such reports. [Rule 62-213.440(1)(b)3.a., F.A.C.]
- 44. <u>Deviation from Permit Requirements Reports</u>. The permittee shall report in accordance with the requirements of Rules 62-210.700(6) and 62-4.130, F.A.C., deviations from permit requirements, including those attributable to upset conditions as defined in the permit. Reports shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. [Rule 62-213.440(1)(b)3.b., F.A.C.]
- 45. Reports. All reports shall be accompanied by a certification by a responsible official, pursuant to Rule 62-213.420(4), F.A.C. [Rule 62-213.440(1)(b)3.c, F.A.C.]

- 46. If any portion of the final permit is invalidated, the remainder of the permit shall remain in effect. [Rule 62-213.440(1)(d)]., F.A.C.]
- 47. It shall not be a defense for a permittee in an enforcement action that maintaining compliance with any permit condition would necessitate halting of or reduction of the source activity.

  [Rule 62-213.440(1)(d)3., F.A.C.]
- 48. Any Title V source shall comply with all the terms and conditions of the existing permit until the Department has taken final action on any permit renewal or any requested permit revision, except as provided at Rule 62-213.412(2), F.A.C. [Rule 62-213.440(1)(d)4., F.A.C.]
- 49. A situation arising from sudden and unforeseeable events beyond the control of the source which causes an exceedance of a technology-based emissions limitation because of unavoidable increases in emissions attributable to the situation and which requires immediate corrective action to restore normal operation, shall be an affirmative defense to an enforcement action in accordance with the provisions and requirements of 40 CFR 70.6(g)(2) and (3), hereby adopted and incorporated by reference. [Rule 62-213.440(1)(d)5., F.A.C.]
- 50. <u>Confidentiality Claims.</u> Any permittee may claim confidentiality of any data or other information by complying with Rule 62-213.420(2), F.A.C. (also, see Condition No. 36.). [Rule 62-213.440(1)(d)6., F.A.C.]
- 51. <u>Statement of Compliance</u>. (a)2. The permittee shall submit a Statement of Compliance with all terms and conditions of the permit using DEP Form No. 62-213.900(7). Such statements shall be accompanied by a certification in accordance with Rule 62-213.420(4), F.A.C. Such statement shall be submitted (postmarked) to the Department and EPA:
  - a. Annually, within 60 days after the end of each calendar year during which the Title V permit was effective, or more frequently if specified by Rule 62-213.440(2), F.A.C., or by any other applicable requirement; and
  - b. Within 60 days after submittal of a written agreement for transfer of responsibility as required pursuant to 40 CFR 70.7(d)(1)(iv), adopted and incorporated by reference at Rule 62-204.800, F.A.C., or within 60 days after permanent shutdown of a facility permitted under Chapter 62-213, F.A.C., provided that, in either such case, the reporting period shall be the portion of the calendar year the permit was effective up to the date of transfer of responsibility or permanent facility shutdown, as applicable.
- 3. The statement of compliance status shall include all the provisions of 40 CFR 70.6(c)(5)(iii), incorporated by reference at Rule 62-204.800, F.A.C.
- (b) The responsible official may treat compliance with all other applicable requirements as a surrogate for compliance with Rule 62-296.320(2), Objectionable Odor Prohibited.

[Rules 62-213.440(3)(a)2. & 3. and (b), F.A.C.]

52. <u>Permit Shield.</u> Except as provided in Chapter 62-213, F.A.C., compliance with the terms and conditions of a permit issued pursuant to Chapter 62-213, F.A.C., shall, as of the effective date of the permit, be deemed compliance with any applicable requirements in effect, provided that the source included such applicable requirements in the permit application. Nothing in Rule 62-213.460, F.A.C., or in any permit shall alter or affect the ability of EPA or the Department to deal with an emergency, the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance, or the requirements of the Federal Acid Rain Program.

[Rule 62-213.460, F.A.C.]

- 53. Forms and Instructions. The forms used by the Department in the Title V source operation program are adopted and incorporated by reference in Rule 62-213.900, F.A.C. The form is listed by rule number, which is also the form number, and with the subject, title, and effective date. Copies of forms may be obtained by writing to the Department of Environmental Protection, Division of Air Resources Management, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, or by contacting the appropriate permitting authority.
- (1) Major Air Pollution Source Annual Emissions Fee Form. (Effective 01/03/2001)
- (7) Statement of Compliance Form. (Effective 01/03/2001)

[Rule 62-213.900, F.A.C.: Forms (1) and (7)]

#### Chapter 62-256, F.A.C.

54. **Not federally enforceable.** Open Burning. This permit does not authorize any open burning nor does it constitute any waiver of the requirements of Chapter 62-256, F.A.C. Source shall comply with Chapter 62-256, F.A.C., for any open burning at the source. [Chapter 62-256, F.A.C.]

#### Chapter 62-281, F.A.C.

- 55. Refrigerant Requirements. Any facility having refrigeration equipment, including air conditioning equipment, which uses a Class I or II substance (listed at 40 CFR 82, Subpart A, Appendices A and B), and any facility which maintains, services, or repairs motor vehicles using a Class I or Class II substance as refrigerant must comply with all requirements of 40 CFR 82, Subparts B and F, and with Rule 62-281.100, F.A.C. Those requirements include the following restrictions:
- (1) Any facility having any refrigeration equipment normally containing 50 (fifty) pounds of refrigerant, or more, must keep servicing records documenting the date and type of all service and the quantity of any refrigerant added pursuant to 40 CFR 82.166;
- (2) No person repairing or servicing a motor vehicle may perform any service on a motor vehicle air conditioner (MVAC) involving the refrigerant for such air conditioner unless the person has been properly trained and certified as provided at 40 CFR 82.34 and 40 CFR 82.40, and properly uses equipment approved pursuant to 40 CFR 82.36 and 40 CFR 82.38, and complies with 40 CFR 82.42;
- (3) No person may sell or distribute, or offer for sale or distribution, any substance listed as a Class I or Class II substance at 40 CFR 82, Subpart A, Appendices A and B, except in compliance with Rule 62-281.100, F.A.C., and 40 CFR 82.34(b), 40 CFR 82.42, and/or 40 CFR 82.166;
- (4) No person maintaining, servicing, repairing, or disposing of appliances may knowingly vent or otherwise release into the atmosphere any Class I or Class II substance used as a refrigerant in such equipment and no other person may open appliances (except MVACs as defined at 40 CFR 82.152) for service, maintenance or repair unless the person has been properly trained and certified pursuant to 40 CFR 82.161 and unless the person uses equipment certified for that type of appliance pursuant to 40 CFR 82.158 and unless the person observes the practices set forth at 40 CFR 82.156 and 40 CFR 82.166;
- (5) No person may dispose of appliances (except small appliances, as defined at 40 CFR 82.152) without using equipment certified for that type of appliance pursuant to 40 CFR 82.158 and without observing the practices set forth at 40 CFR 82.156 and 40 CFR 82.166;
- (6) No person may recover refrigerant from small appliances, MVACs and MVAC-like appliances (as defined at 40 CFR 82.152), except in compliance with the requirements of 40 CFR 82, Subpart F.
- [40 CFR 82; and, Chapter 62-281, F.A.C. (Chapter 62-281, F.A.C., is not federally enforceable)]

#### Chapter 62-296, F.A.C.

- 56. <u>Industrial, Commercial, and Municipal Open Burning Prohibited</u>. Open burning in connection with industrial, commercial, or municipal operations is prohibited, except when:
  - (a) Open burning is determined by the Department to be the only feasible method of operation and is authorized by an air permit issued pursuant to Chapter 62-210 or 62-213, F.A.C.; or,
  - (b) An emergency exists which requires immediate action to protect human health and safety; or,
  - (c) A county or municipality would use a portable air curtain incinerator to burn yard trash generated by a hurricane, tornado, fire or other disaster and the air curtain incinerator would otherwise be operated in accordance with the permitting exemption criteria of Rule 62-210.300(3), F.A.C.

[Rule 62-296.320(3), F.A.C.]

#### 57. <u>Unconfined Emissions of Particulate Matter</u>.

- (4)(c)1. 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.
  - 3. Reasonable precautions include the following:
    - a. Paving and maintenance of roads, parking areas and yards.
    - b. Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
    - c. Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.

- d. Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent reentrainment, and from buildings or work areas to prevent particulate from becoming airborne.
- e. Landscaping or planting of vegetation.
- f. Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
- g. Confining abrasive blasting where possible.
- h. Enclosure or covering of conveyor systems.
- 4. In determining what constitutes reasonable precautions for a particular facility, the Department shall consider the cost of the control technique or work practice, the environmental impacts of the technique or practice, and the degree of reduction of emissions expected from a particular technique or practice.

[Rules 62-296.320(4)(c)1., 3., & 4. F.A.C.]

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# Appendix U-1: List of Unregulated Emissions Units and Activities

Tampa Electric Company Big Bend Station FINAL Title V Operation Permit Revision No.: 0570039-017-AV Facility ID No.: 0570039

<u>Unregulated Emissions Units and/or Activities</u>. An emissions unit which emits no "emissions-limited pollutant" and which is subject to no unit-specific work practice standard, though it may be subject to regulations applied on a facility-wide basis (e.g., unconfined emissions, odor, general opacity) or to regulations that require only that it be able to prove exemption from unit-specific emissions or work practice standards.

The below listed emissions units and/or activities are neither 'regulated emissions units' nor 'exempt emissions units'.

# <u>E.U.</u> ID

<u>No.</u>

# **Brief Description of Emissions Units and/or Activities**

-036

Slag and bottom ash sources BH-001 through BH-004 Gypsum handling and storage sources GH-001 through GH-017 No. 2 Fuel Oil Storage Tanks > 550 gallons Vehicle Refueling Operations Turbine Vapor Extractor

# **APPENDIX CAM - Compliance Assurance Monitoring Requirements**

Pursuant to Rule 62-213.440(1)(b)1.a., F.A.C., the CAM plans that are included in this appendix contain the monitoring requirements necessary to satisfy 40 CFR 64. Conditions 1. - 17. are generic conditions applicable to all emissions units that are subject to the CAM requirements. Specific requirements related to each emissions unit are contained in the attached tables, as submitted by the applicant and approved by the Department.

## 40 CFR 64.6 Approval of Monitoring.

- 1. The attached CAM plans, as submitted by the applicant and revised by the Department, are approved for the purposes of satisfying the requirements of 40 CFR 64.3.

  [40 CFR 64.6(a)]
- 2. The attached CAM plans include the following information:
  - (i) The indicator(s) to be monitored (such as temperature, pressure drop, emissions, or similar parameter);
  - (ii) The means or device to be used to measure the indicator(s) (such as temperature measurement device, visual observation, or CEMS); and
  - (iii) The performance requirements established to satisfy 40 CFR 64.3(b) or (d), as applicable.

[40 CFR 64.6(c)(1)]

3. The attached CAM plans describe the means by which the owner or operator will define an exceedance of the permitted limits or an excursion from the stated indicator ranges and averaging periods for purposes of responding to (see CAM Conditions 5. - 9.) and reporting exceedances or excursions (see CAM Conditions 10. - 14.).

[40 CFR 64.6(c)(2)]

4. The permittee is required to conduct the monitoring specified in the attached CAM plans and shall fulfill the obligations specified in the conditions below (see CAM Conditions 5. - 17.).

[40 CFR 64.6(c)(3)]

## 40 CFR 64.7 Operation of Approved Monitoring.

- Commencement of operation. The owner or operator shall conduct the monitoring required under this appendix upon the effective date of this Title V permit.
   CFR 64.7(a)]
- 6. Proper maintenance. At all times, the owner or operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

  [40 CFR 64.7(b)]
- 7. Continued operation. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. 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.

[40 CFR 64.7(c)]

- **8.** Response to excursions or exceedances.
  - a. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions, if allowed by this permit). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
  - b. Determination of whether the owner or operator has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

[40 CFR 64.7(d)(1) & (2)]

9. Documentation of need for improved monitoring. If the owner or operator identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the owner or operator shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[40 CFR 64.7(e)]

# 40 CFR 64.8 Quality Improvement Plan (QIP) Requirements.

10. Based on the results of a determination made under CAM Condition 8.b a., above, the permitting authority may require the owner or operator to develop and implement a QIP. Consistent with CAM Condition 4., an accumulation of exceedances or excursions exceeding 5 percent duration of a pollutant-specific emissions unit's operating time for a reporting period, may require the implementation of a QIP. The threshold may be set at a higher or lower percent or may rely on other criteria for purposes of indicating whether a pollutant-specific emissions unit is being maintained and operated in a manner consistent with good air pollution control practices.

[40 CFR 64.8(a)]

# 11. Elements of a QIP:

- a. The owner or operator shall maintain a written QIP, if required, and have it available for inspection.
- b. The plan initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the owner or operator shall modify the plan to include procedures for conducting one or more of the following actions, as appropriate:
  - (i) Improved preventive maintenance practices.
  - (ii) Process operation changes.
  - (iii) Appropriate improvements to control methods.
  - (iv) Other steps appropriate to correct control performance.
  - (v) More frequent or improved monitoring (only in conjunction with one or more steps under CAM Condition 11.b(i) through (iv), above).

[40 CFR 64.8(b)]

12. If a QIP is required, the owner or operator shall develop and implement a QIP as expeditiously as practicable and shall notify the permitting authority if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.

[40 CFR 64.8(c)]

- 13. Following implementation of a QIP, upon any subsequent determination pursuant to CAM Condition 8.b., the permitting authority may require that an owner or operator make reasonable changes to the QIP is found to have:
  - a. Failed to address the cause of the control device performance problems; or
  - b. Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

[40 CFR 64.8(d)]

14. Implementation of a QIP shall not excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.

[40 CFR 64.8(e)]

# 40 CFR 64.9 Reporting And Recordkeeping Requirements.

# 15. General reporting requirements.

- a. On and after the date specified in CAM Condition 5. by which the owner or operator must use monitoring that meets the requirements of this appendix, the owner or operator shall submit monitoring reports semi-annually to the permitting authority in accordance with Rule 62-213.440(1)(b)3.a., F.A.C.
- b. A report for monitoring under this part shall include, at a minimum, the information required under Rule 62-213.440(1)(b)3.a., F.A.C., and the following information, as applicable:
  - (i) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
  - (ii) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
  - (iii) A description of the actions taken to implement a QIP during the reporting period as specified in CAM Conditions 10. through 14. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[40 CFR 64.9(a)]

#### **16.** General recordkeeping requirements.

- a. The owner or operator shall comply with the recordkeeping requirements specified in Rule 62-213.440(1)(b)2., F.A.C. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to CAM Conditions 10. through 14. and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).
- b. Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.

[40 CFR 64.9(b)]

# 40 CFR 64.10 Savings Provisions.

- 17. It should be noted that nothing in this appendix shall:
  - a. Excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act. The requirements of this appendix shall not be used to justify the approval of monitoring less stringent than the monitoring which is required under separate legal authority and are not intended to establish minimum requirements

for the purpose of determining the monitoring to be imposed under separate authority under the Act, including monitoring in permits issued pursuant to title I of the Act. The purpose of this part is to require, as part of the issuance of a permit under Title V of the Act, improved or new monitoring at those emissions units where monitoring requirements do not exist or are inadequate to meet the requirements of this part.

- b. Restrict or abrogate the authority of the Administrator or the permitting authority to impose additional or more stringent monitoring, recordkeeping, testing, or reporting requirements on any owner or operator of a source under any provision of the Act, including but not limited to sections 114(a)(1) and 504(b), or state law, as applicable.
- c. Restrict or abrogate the authority of the Administrator or permitting authority to take any enforcement action under the Act for any violation of an applicable requirement or of any person to take action under section 304 of the Act.

[40 CFR 64.10]

# Emissions Units 001, 002, 003 & 004

# Steam Generating Units Nos. 1-4 PM Emissions Controlled By ESPs Monitoring Approach

	Indicator No. 1
I. Indicator	Opacity.
II. Measurement Approach	The use of a 40 CFR 75 certified continuous opacity monitoring system (COMS0 and data acquisition handling system (DAHS).
III. Indicator Range	An excursion is defined as any 1-hour average visible emission that exceeds maximum indicator range percent opacity, excluding periods of startup, shutdown and malfunction pursuant to Rule 62-210.700, F.A.C.
IV. Performance Criteria	
a. Data Represent- ativeness	The COMS locations meet the specifications of 40 CFR 75 and 40 CFR 60, Appendix B.
b. Verification of Operational Status	N/A
c. QA/QC Practices and Criteria	The COMS are operated and maintained in accordance with Appendix B to Part 75, Quality Assurance and Quality Control Procedures.
d. Monitoring Frequency	Continuous
e. Data Collection Procedures	Automated data acquisition system (DAHS)
f. Averaging Period	3-hour average

Ranges for Indicator — Opacity

Emission Unit/Control Device	Indicator Range (% opacity)  Maximum
Unit 1—ESP	15
Unit 2—ESP	15
Unit 3—ESP	15
Unit 4—ESP	15