Department of Environmental Protection

Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

PROPOSED Permit Electronic Posting Courtesy Notification

Tampa Electric Company
Hookers Point Station
Facility ID No.: 0570038
Hillsborough County

Title V Air Operation Permit Revision
PROPOSED Permit Revision No.: 0570038-003-AV

The electronic version of the PROPOSED permit was posted on the Division of Air Resources Management's world wide web site for the United States Environmental Protection Agency (USEPA) Region 4 office's review on April 30, 2002.

USEPA's review period ends on the 45th day after the permit posting date. Day 45 is June 13, 2002. If an objection (veto) is received from USEPA, the permitting authority will provide a copy of the objection to the applicant.

Provided an objection is not received from USEPA, the PROPOSED permit will become a FINAL permit by operation of law on the 55th day after the permit posting date. Day 55 is June 23, 2002.

Department of Environmental Protection

Jeb Bush
Governor

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

David B. Struhs
Secretary

April 22, 2002

Ms. Karen Sheffield
General Manager
Hookers Point Station
Tampa Electric Company
1700 Hemlock Street
Tampa, FL 33605-6660

Re: Title V Air Operation Permit Revision
PROPOSED Permit Project No.: 0570038-003-AV
Revision to Title V Air Operation Permit No.: 0570038-001-AV
Hookers Point Station

Dear Ms. Sheffield:

One copy of the "PROPOSED Determination" for the Title V Air Operation Permit Revision for the Hookers Point Station located at 1700 Hemlock Street, Tampa, Hillsborough County, is enclosed. This letter is only a courtesy to inform you that the DRAFT Permit has become a PROPOSED Permit.

Pursuant to Section 403.0872(6), Florida Statutes, if no objection to the PROPOSED Permit is made by the USEPA within 45 days, the PROPOSED Permit will become a FINAL Permit no later than 55 days after the date on which the PROPOSED Permit was mailed (posted) to USEPA. If USEPA has an objection to the PROPOSED Permit, the FINAL Permit will not be issued until the permitting authority receives written notice that the objection is resolved or withdrawn.

If you should have any questions, please contact Ms. Cindy Phillips, P.E. at 850/921-9534.

Sincerely,

C. H. Fancy, P.E.
Chief
Bureau of Air Regulation

/CLP
Enclosures
copy furnished to:
Thomas W. Davis, P.E.
Laura Crouch, TEC
Rob Kalch, EPCHC
Jerry Kissel, SWD FDEP
USEPA, Region 4 (INTERNET E-mail Memorandum)

STATEMENT OF BASIS

Tampa Electric Company
Hookers Point Station
Facility ID No.: 0570038
Hillsborough County

Title V Air Operation Permit **Revision**
PROPOSED Permit No.: 0570038-003-AV

The initial Title V Air Operation Permit, No. 0570038-001-AV, was effective on January 1, 1998. This Title V Air Operation Permit Revision is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210 and 62-213. The above named permittee is hereby authorized to 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.

This permit revision is being issued for the purpose of incorporating the terms and conditions of the air construction permit, No. 0570038-002-AC, to add thirty Caterpillar XQ2000 Power Modules at the Hookers Point Station.

Each Power Module consists of one Caterpillar 3516B 16-cylinder, 4-stroke cycle diesel internal combustion (IC) engine and one Caterpillar SR4B generator. The Caterpillar 3516B IC engine has a power rating of 2,593 brake horsepower (bhp) at 100 percent load. The Caterpillar SR4B generator has a power output rating of 1,825 kilowatts (kW) at 100 percent load. The IC engines will be fired exclusively with low-sulfur (maximum of 0.05 weight percent sulfur) diesel fuel oil.

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

Based on the initial Title V permit application received June 15, 1996, this facility is a major source of hazardous air pollutants (HAP).

PROPOSED Determination

Title V Air Operation Permit Revision
PROPOSED Permit Project No.: 0570038-003-AV
Revision to Title V Air Operation Permit No.: 0570038-001-AV

I. Public Notice.

An "INTENT TO ISSUE TITLE V AIR OPERATION PERMIT REVISION" to Tampa Electric Company for the Hookers Point Station located at 1700 Hemlock Street, Tampa, Hillsborough County County was clerked on January 30, 2002. The "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT REVISION" was published in the Tampa Tribune on March 4, 2002. The DRAFT Permit was available for public inspection at the Hillsborough County Environmental Protection Commission in Tampa and the permitting authority's office in Tallahassee. Proof of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT REVISION" was received.

II. Public Comment.

E-mail comments were received from the applicant on February 8, 2002 and the DRAFT Permit was changed. The comments were not considered significant enough to reissue the DRAFT Permit and require another Public Notice. No other comments were received during the 30 (thirty) day public comment period. Listed below is the response to the applicant's comments.

A. E-mail comments from Ms. Shelly Castro of Tampa Electric Company sent and received on February 8, 2002.

1. **Response:**
As a result of these comments, **Specific Condition No. A.32.** is hereby changed:

From: A.32. The existing emissions units may not operate simultaneously with the internal combustion engines unless the facility must do so to avoid interrupting customers. In the event that the facility does operate the two sources together, upon request from the Department, shall provide the necessary documentation to show the necessity of operating the two sources simultaneously. **[Applicant Request]**

To: A.32. The six oil-fired boilers may not operate simultaneously with the internal combustion engines unless the facility must do so to avoid interrupting customers. In the event that the facility does operate the two sources together, upon request from the Department, the owner and operator shall provide the necessary documentation to show the necessity of operating the two sources simultaneously. **[Applicant Request]**

2. Response:

As a result of these comments, **Specific Condition No. A.33.** is hereby changed:

From: A.33. The existing emission units may operate with a NO_x emissions cap of 100 tpy after the internal combustion engines ceases operation in June 2003. **[Applicant Request]**

To: A.33. The six oil-fired boilers may operate with a NO_x emissions cap of 100 tpy after the internal combustion engines cease operation in June 2003. **[Applicant Request]**

3. Response:

As a result of these comments, **Specific Condition No. 18. (Section III., Subsection B.)** is hereby changed:

From: 18. Fuel Oil Monitoring: The fuel shall be monitored initially and annually for the sulfur content using ASTM D4294 Method (or equivalent). The permittee shall also maintain daily records of fuel oil consumption for the emission units. **[Rules 62-297.440, F.A.C., and 62-210.200, F.A.C.]**

To: B.18. Fuel Oil Monitoring: The fuel shall be monitored ~~initially and~~ annually for the sulfur content using ASTM D4294 Method (or equivalent). The permittee shall also maintain daily records of fuel oil consumption for the emission units. **[Rules 62-297.440, F.A.C., and 62-210.200, F.A.C.]**

4. Response:

As a result of these comments, **Specific Condition No. 20. (Section III., Subsection B.)** is hereby changed:

From: 20. Initial Tests Required: Initial performance tests to demonstrate compliance with the emission standards specified in this permit shall be conducted within 60 days after achieving at least 90% of permitted capacity, but not later than 180 days after initial operation of the emissions unit. Initial performance tests shall be conducted for NO_X and visible emissions on a sample of 5 (five) randomly picked internal combustion engines for the first year. A different set of randomly picked five engines from the remaining 25 (twenty five) internal combustion engines will be tested during the second year of operation. **[Rule 62-297.310(7)(a)1., and 62-297.310(7)(c), F.A.C.]**

TO: B.20. Initial Tests Required: ~~Initial performance tests to determine compliance with the emission standards specified in this permit shall be conducted within 60 days after achieving at least 90% of permitted capacity, but not later than 180 days after initial operation of the emissions unit. Initial performance test shall be conducted for NOx and visible emissions on a sample of 5 (five) randomly picked internal combustion engines for the first year.~~ A ~~different~~ set of randomly picked five internal combustion engines (different from the five internal combustion engines tested during the first year of operation) ~~from the remaining 25 (twenty five) internal combustion engines~~ shall ~~will~~ be tested for nitrogen oxides and visible emissions during the second year of operation. **[Rule 62-297.310(7)(a)1., and 62-297.310(7)(c), F.A.C.]**

B. Document on file with the permitting authority:
E-mail received February 8, 2002, from Ms. Shelly Castro, TEC.

III. Additional Changes.

A. In condition A.31 the phrase "existing emission units" was replaced with the phrase "six oil-fired boilers." Now that the construction is completed, and the IC engines now also "exist", the phrase has become ambiguous.

B. The specific conditions in Section III., Subsection B. now have a "B." preceding each specific condition number.

IV. Conclusion.

The permitting authority hereby issues the PROPOSED Permit, with any changes noted above.

Tampa Electric Company
Hookers Point Station
Facility ID No.: 0570038
Hillsborough County

Title V Air Operation Permit Revision

PROPOSED Permit No.: 0570038-003-AV

Permitting Authority:
Florida Department of Environmental Protection
Bureau of Air Regulation
MS 5505
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
Telephone: (850) 488-0114
Fax: (850) 922-6979

Compliance Authority:
Hillsborough County Environmental Protection Commission
Air Management Division
1410 North 21 Street
Tampa, Florida 33605
Telephone: (813) 272-5530
Fax: (813) 272-5605

Title V Air Operation Permit Revision

PROPOSED Permit No.: 0570038-003-AV

Table of Contents

Department of Environmental Protection

Jeb Bush
Governor

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

David B. Struhs
Secretary

Permittee:
Tampa Electric Company
Hookers Point Station
1700 Hemlock Street
Tampa, FL 33605-6660

PROPOSED Permit No.: 0570038-003-AV
Facility ID No.: 0570038
SIC Nos.: 49, 4911
Project: Title V Air Operation Permit Revision

This permit revision is being issued for the purpose of incorporating the terms and conditions of the air construction permit, No. 0570038-002-AC, to add 30 Caterpillar XQ2000 Power Modules at the Hookers Point Station. This facility is located at 1700 Hemlock Street, Tampa, Hillsborough County; UTM Coordinates: Zone 17, 358.0 km East and 3,901.0 km North; Latitude: 27° 56′ 17" North, Longitude: 82° 26′ 36" West.

STATEMENT OF BASIS: This Title V Air Operation Permit Revision 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 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 I-1, List of Insignificant Emissions Units and/or Activities
APPENDIX TV-3, TITLE V CONDITIONS version dated 04/30/99
APPENDIX SS-1, STACK SAMPLING FACILITIES version dated 10/07/96
TABLE 297.310-1, CALIBRATION SCHEDULE version dated 10/07/96
Appendix OM-1, Operation and Maintenance Procedures
Phase II Acid Rain Application/Compliance Plan received December 26, 1995

Effective Date: January 1, 1998
Revision Effective Date: (ARMS Day 55)
Renewal Application Due Date: July 5, 2002
Expiration Date: December 31, 2002

Howard L. Rhodes, Director
Division of Air Resources Management

HLR/SMS/CLP

Section I. Facility Information.

Subsection A. Facility Description.

This facility consists of six oil-fired boilers and thirty Caterpillar XQ200 Power Modules. The boilers are regulated under Rule 62-296.405, F.A.C.

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

Based on the initial Title V permit application received June 15, 1996, this facility is a major source of hazardous air pollutants (HAP).

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

E. U. I.D. No.	Brief Description/Maximum Heat Input
001	Boiler #1 298 MMBtu/hr
002	Boiler #2 298 MMBtu/hr
003	Boiler #3 411 MMBtu/hr
004	Boiler #4 411 MMBtu/hr
005	Boiler #5 610 MMBtu/hr
006	Boiler #6 778 MMBtu/hr
007-036	30 Caterpillar XQ2000 Power Modules. Each Power Module consists of one Caterpillar 3516B 16-cylinder, 4-stroke cycle diesel internal combustion (IC) engine and one Caterpillar SR4B generator. The Caterpillar 3516B IC engine has a power rating of 2,593 brake horsepower (bhp) at 100 percent load. The Caterpillar SR4B generator has a power output rating of 1,825 kilowatts (kW) at 100 percent load. The IC engines will be fired exclusively with low-sulfur (maximum of 0.05 weight percent sulfur) diesel fuel oil.

Please reference the Permit No., Facility ID No., and appropriate Emissions Unit ID Nos. 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:
Table 1-1, Summary of Air Pollutant Standards and Terms
Table 2-1, Summary of Compliance Requirements
Appendix A-1: Abbreviations, Acronyms, Citations, and Identification Numbers
Appendix H-1: Permit History
Statement of Basis

These documents are on file with the permitting authority:
Initial Title V Air Operation Permit effective January 1, 1998.
Application for a Title V Air Operation Permit Revision received November 1, 2001.

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. APPENDIX TV-3, TITLE V CONDITIONS, is a part of this permit.
{Permitting note: APPENDIX TV-3, 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.]

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
Post Office Box 3346
Merrifield, VA 22116-3346
Telephone: 703/816-4434

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]

5. Insignificant Emissions Units and/or Activities. 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.]

6. **[Not federally enforceable.]** Precautions to prevent emissions of unconfined particulate matter: Reasonable precautions to prevent emissions of unconfined particulate matter at this facility shall include the following on an as-needed basis:

a. Chemical or water application to unpaved roads and 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.; proposed by applicant in the initial Title V permit application received June 15, 1996]

7. 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.]

8. 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.]

9. The permittee shall submit all compliance related notifications and reports required of this permit to the Department's delegated Local Program office:

Hillsborough County Environmental Protection Commission
Air Management Division
1410 North 21 Street
Tampa, Florida 33605
Telephone: (813) 272-5530
Fax: (813) 272-5605

10. 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 30303-8960
Telephone: 404/562-9155; Fax: 404/562-9163

Section III. Emissions Units and Conditions.

Subsection A. This section addresses the following emissions units.

E.U. ID No.	Brief Description/Maximum Heat Input
001	Boiler #1 298 MMBtu/hr
002	Boiler #2 298 MMBtu/hr
003	Boiler #3 411 MMBtu/hr
004	Boiler #4 411 MMBtu/hr
005	Boiler #5 610 MMBtu/hr
006	Boiler #6 778 MMBtu/hr

Hookers Point Station has six boilers, and all are fired using No. 6 fuel oil. The boilers may also fire a limited quantity of on-specification used oil. Boiler numbers 1, 4, and 5 utilize No. 2 fuel oil for ignition during startup. Propane is used for ignition during startup for Boiler number 6. The total generating capacity at this facility is 227 megawatts.

Steam produced by Boiler numbers 1 through 5 is ducted to a common steam header, which feeds four steam-turbine generators. Steam produced by Boiler number 6 is routed to its own steam-turbine generator. Boiler numbers 1, 2, and 5 exhaust through stack #1. Boilers 3 and 4 exhaust through boiler number 2 stack, while Boiler number 6 exhausts through its own stack (stack #3). These boilers were brought into service in the late 1940's and throughout the 1950's.

The boilers have no add-on pollution control equipment. Air pollutant emissions are controlled by efficient combustion and firing clean fuel.

{Permitting Note: These emission units are regulated under Acid Rain Phase II, and Rule 62-296.405, F.A.C., Fossil Fuel Steam Generators with More than 250 Million Btu per Hour Heat Input, and Rule 62-296.702, F.A.C., Fossil Fuel Steam Generators.}

The following specific conditions apply to each of the six boilers as referenced above:

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity. For each emissions unit, the maximum heat input (MMBtu per hour heat input) firing No. 6 fuel oil shall not exceed:

Boiler #1: 298 MMBtu/hr
Boiler #2: 298 MMBtu/hr
Boiler #3: 411 MMBtu/hr
Boiler #4: 411 MMBtu/hr
Boiler #5: 610 MMBtu/hr
Boiler #6: 778 MMBtu/hr

[Rules 62-4.160(2), 62-210.200(PTE) and 62-296.405, F.A.C.; AO29-202997 through AO29-203002]

A.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition A.19. [Rule 62-297.310(2), F.A.C.]

A.3. Methods of Operation. Fuels.

a. Startup: The only fuels allowed to be burned are No. 2 fuel oil or propane.

b. Normal: The only fuels allowed to be burned are No. 6 fuel oil and on-specification used oil. The used oil shall comply with the limits listed below per 40 CFR 279. No more than 250,000 gallons shall be burned annually. Off-specification used oil shall not be burned. See specific conditions A.29.
[Rule 62-213.440, F.A.C.]

A.4. Hours of Operation. This emissions unit may operate continuously, i.e., 8,760 hours per year.
[Rule 62-210.200(PTE), F.A.C.,]

Emission Limitations and Standards

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

A.5. Visible Emissions. Visible emissions shall not exceed 20 percent opacity, except for one six-minute period per hour during which opacity shall not exceed 27 percent. Emissions units governed by this visible emissions limit shall compliance test for particulate matter emissions annually and as otherwise required by Chapter 62-297, F.A.C.
[Rule 62-296.405(1)(a), F.A.C.]

A.6. Visible Emissions - Soot Blowing and Load Change. Visible emissions shall not exceed 60 percent opacity during the 3-hours in any 24 hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change.

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.
[Rule 62-210.700(3), F.A.C.]

A.7. Particulate Matter. Particulate matter emissions shall not exceed 0.1 pound per million Btu heat input , as measured by applicable compliance methods.
[Rule 62-296.405(1)(b), F.A.C.]

A.8. Particulate Matter - Soot Blowing and Load Change. Particulate matter emissions shall not exceed an average of 0.3 pound per million Btu heat input during the 3-hours in any 24-hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change.
[Rule 62-210.700(3), F.A.C.]

A.9. Sulfur Dioxide. When burning liquid fuel, sulfur dioxide emissions shall not exceed 1.1 pounds per million Btu heat input, as measured by applicable compliance methods.
[Rules 62-213.440 and 62-296.405(1)(d)1, F.A.C.]

Excess Emissions

A.10. Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and 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 for longer duration.
[Rule 62-210.700(1), F.A.C.]

A.11. Excess emissions resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized.
[Rule 62-210.700(2), F.A.C.]

A.12. 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.
[Rule 62-210.700(4), F.A.C.]

Monitoring of Operations

{Permitting Note: The attached 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.13. 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.]

Test Methods and Procedures

A.14. Visible emissions. The test method for visible emissions shall be DEP Method 9, incorporated in Chapter 62-297, F.A.C. A transmissometer may be used and calibrated according to Rule 62-297.520, F.A.C. See specific condition A.16.
[Rule 62-296.405(1)(e)1., F.A.C.]

A.15. DEP Method 9. The provisions of EPA Method 9 (40 CFR 60, Appendix A) are adopted by reference with the following exceptions:

1. EPA Method 9, Section 2.4, Recording Observations. Opacity observations shall be made and recorded by a certified observer at sequential fifteen second intervals during the required period of observation.
2. EPA Method 9, Section 2.5, Data Reduction. For a set of observations to be acceptable, the observer shall have made and recorded, or verified the recording of, at least 90 percent of

the possible individual observations during the required observation period. For single-valued opacity standards (e.g., 20 percent opacity), the test result shall be the highest valid six-minute average for the set of observations taken. For multiple-valued opacity standards (e.g., 20 percent opacity, except that an opacity of 40 percent is permissible for not more than two minutes per hour) opacity shall be computed as follows:

a. For the basic part of the standard (i.e., 20 percent opacity) the opacity shall be determined as specified above for a single-valued opacity standard.

b. For the short-term average part of the standard, opacity shall be the highest valid short-term average (i.e., two-minute, three-minute average) for the set of observations taken.

In order to be valid, any required average (i.e., a six-minute or two-minute average) shall be based on all of the valid observations in the sequential subset of observations selected, and the selected subset shall contain at least 90 percent of the observations possible for the required averaging time. Each required average shall be calculated by summing the opacity value of each of the valid observations in the appropriate subset, dividing this sum by the number of valid observations in the subset, and rounding the result to the nearest whole number. The number of missing observations in the subset shall be indicated in parenthesis after the subset average value.
[Rule 62-297.401, F.A.C.]

A.16. Particulate Matter. The test methods for particulate emissions shall be EPA Methods 17, 5, 5B, or 5F, incorporated 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 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 based 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.
[Rules 62-296.405(1)(e)2. and 62-297.401, F.A.C.]

A.17. Sulfur Dioxide. The test methods for sulfur dioxide emissions shall be EPA Methods 6, 6A, 6B, or 6C, incorporated by reference in Chapter 62-297, F.A.C. The Department will retain the authority to require EPA Method 6 or 6C if it has reason to believe that exceedances of the sulfur dioxide emissions limiting standard are occurring.
[Rules 62-213.440, 62-296.405(1)(e)3. and 62-297.401, F.A.C.; and, AO29-202997 through A029-3002.]

A.18. 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 62-297.310(1), F.A.C.]

A.19. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the 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 emissions 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.
[Rules 62-297.310(2) & (2)(b), F.A.C.]

A.20. Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the separate test runs unless otherwise specified in a particular test method or applicable rule.
[Rule 62-297.310(3), F.A.C.]

A.21. Applicable Test Procedures.
(a) Required Sampling Time.
1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
(b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
(c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
(d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1.
(e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.
[Rule 62-297.310(4), F.A.C.]

A.22. Required Stack Sampling Facilities. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit.
[Rule 62-297.310(6), F.A.C.]

A.23. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.
(a) General Compliance Testing.
1. (Not applicable.)
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 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 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 fuel, other than during startup, for a total of more than 400 hours.
6. (Not applicable.)
7. (Not applicable.)
8. (Not applicable.)
9. (See Specific Condition A.29.)
10. (Not applicable.)

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

emissions from the emissions unit and to provide a report on the results of said tests to the Department.
(c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.
[Rule 62-297.310(7)(a)2., 3., 4., 5., 10., (b) & (c), F.A.C.; SIP approved]

A.24. Annual emissions compliance testing for visible emissions is not required for these emissions units while burning only liquid fuels for less than 400 hours per year.
[Rule 62-297.310(7)(a)4., F.A.C.]

Record keeping and Reporting Requirements

A.25. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department or the Hillsborough County Environmental Protection Commission in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department or the Hillsborough County Environmental Protection Commission.
[Rule 62-210.700(6), F.A.C.]

A.26. Submit to the Department or the Hillsborough County Environmental Protection Commission a written report of emissions in excess of 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 excess 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 by the Source for a period of five years.
[Rule 62-213.440 and 62-2963405(1)(g), F.A.C.]

A.27. 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 or the Hillsborough County Environmental Protection Commission on the results of each such test.
(b) The required test report shall be filed with the Department or the Hillsborough County Environmental Protection Commission as soon as practical but no later than 45 days after the last sampling run of each test is completed.
(c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department or the Hillsborough County Environmental Protection Commission 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.
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 Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rules 62-213.440 and 62-297.310(8), F.A.C.]

A.28. Operation and Maintenance Plan. The permittee shall comply with the requirements contained in Appendix OM-1, Operation and Maintenance Plan, which is a part of this permit. [Rule 62-296.700(6), F.A.C.]

Miscellaneous Conditions

A.29. Used Oil. Burning of on-specification used oil is allowed by these emissions units in accordance with all other conditions of this permit and the following conditions:

a. On-specification Used Oil Emissions Limitations: This emissions unit is permitted to burn on-specification used oil, which contains a PCB concentration of less than 50 ppm. On-

specification used oil is defined as used oil that meets the specifications of 40 CFR 279 - Standards for the Management of Used Oil, listed below. "Off-specification" used oil shall not be burned. Used oil which fails to comply with any of these specification levels is considered "off-specification" used oil.

CONSTITUENT/PROPERTY	ALLOWABLE LEVEL
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1000 ppm maximum
Flash point	100 degrees F minimum

b. Quantity Limitation: This emissions unit is permitted to burn "on-specification" used oil that is generated by TECO in the production and distribution of electricity, not to exceed 250,000 gallons during any consecutive 12 month period.

c. PCB Limitation: Used oil containing a PCB concentration of 50 or more ppm shall not be burned at this facility. Used oil shall not be blended to meet this requirement.

d. Operational Requirements: On-specification used oil with a PCB concentration of greater than or equal to 2, and less than 50 ppm shall be burned only at normal source operating temperatures. On-specification used oil with a PCB concentration of greater than or equal to 2 ppm shall not be burned during periods of startup or shutdown.

e. Testing Requirements: The owner or operator shall sample and analyze each batch of used oil to be burned for the following parameters:

Arsenic, cadmium, chromium, lead, total halogens, flash point and PCBs.

Testing (sampling, extraction and analysis) shall be performed using approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods).

f. Record Keeping Requirements: The owner or operator shall obtain, make, and keep the following records related to the use of used oil in a form suitable for inspection at the facility by the Department and the Hillsborough County Environmental Protection Commission:

(1) The gallons of on-specification used oil generated and burned each month. (This record shall be completed no later than the fifteenth day of the succeeding month.)

(2) The total gallons of on-specification used oil burned in the preceding consecutive 12-month period. (This record shall be completed no later than the fifteenth day of the succeeding month.)

(3) Results of the analyses required above.

g. Reporting Requirements: The owner or operator shall submit to the Hillsborough County Environmental Protection Commission, within thirty days of the end of each calendar quarter, the analytical results and the total amount of on-specification used oil generated and burned during the quarter.

The owner or operator shall submit, with the Annual Operation Report form, the analytical results and the total amount of on-specification used oil burned during the previous calendar year.

[Rule 62-4.070(3) and 62-213.440, F.A.C., 40 CFR 279 and 40 CFR 761, unless otherwise noted.]

A.30. The owner or operator shall notify the Hillsborough County Environmental Protection Commission 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.
[Rule 62-297.310(7)(a)9., F.A.C.]

A.31. For each 12-month period that the thirty internal combustion engines (EU007-EU036) operate below 22,100 engine-hours, the six oil-fired boilers 001 through 006 may operate to reach the facility-wide NO_x cap of 682 tpy. NO_x emissions from the six oil-fired boilers (EU001-EU006) shall not exceed 100 tpy. The six oil-fired boilers shall use the CEM system to demonstrate compliance with the emission limits for NO_x. **[Rule 62-212.400, F.A.C. (PSD avoidance)]**

A.32. The six oil-fired boilers may not operate simultaneously with the internal combustion engines unless the facility must do so to avoid interrupting customers. In the event that the facility does operate the two sources together, upon request from the Department, the owner and operator shall provide the necessary documentation to show the necessity of operating the two sources simultaneously. **[Applicant Request]**

A.33. The six oil-fired boilers may operate with a NO_x emissions cap of 100 tpy after the internal combustion engines cease operation in June 2003. **[Applicant Request]**

Subsection B. This section addresses the following emissions units.

E.U. ID No.	Brief Description
007 - 036	30 Caterpillar XQ2000 Power Modules. Each Power Module consists of one Caterpillar 3516B 16-cylinder, 4-stroke cycle diesel internal combustion (IC) engine and one Caterpillar SR4B generator. The Caterpillar 3516B IC engine has a power rating of 2,593 brake horsepower (bhp) at 100 percent load. The Caterpillar SR4B generator has a power output rating of 1,825 kilowatts (kW) at 100 percent load. The IC engines will be fired exclusively with low-sulfur (maximum of 0.05 weight percent sulfur) diesel fuel oil.

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

PERFORMANCE RESTRICTIONS

B.1. Internal Combustion Engines: The permittee is authorized to install, tune, operate and maintain thirty new internal combustion engines with electrical generator sets (Caterpillar XQ2000 Power modules). The thirty generators are designed to produce a maximum 54.75 MW of electrical power. **[Applicant Request]**

B. 2. Future PSD Review: The internal combustion engines shall not exceed the permitted hours of operation, nor the permitted NO_x emission limits allowed by this permit. This restriction is based on the permittee's request, which formed the basis of the PSD non-applicability determination and resulted in the emission standards specified in this permit. For any request to modify this emission unit in any way (whether a physical or operational modification, including a change in the allowable hours of operation or heat input) the permittee shall submit a full PSD permit application. **[Rules 62-212.400(2)(g) and 62-212.400(6)(b), F.A.C.]**

B.3. Allowable Fuel: The internal combustion engine shall be fired primarily with No. 2 fuel oil. The permittee shall demonstrate compliance with the fuel sulfur limit by keeping the records specified in this permit. **[Applicant Request, Rule 62-210.200, F.A.C. (Definition - PTE)]**

B.4. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify the Compliance Authority 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; steps being taken to correct the problem and prevent future 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 the conditions of this permit or the regulations. **[Rule 62-4.130, F.A.C.]**

B.5. Noise Nuisance: The permittee shall comply with the noise nuisance ordinances as outlined in Chapter 1-10 of the Rules of Environmental Protection Commission of Hillsborough County. **[Rule 1-10.01(B)(9) and Rule 1-10.03, EPCHC]**

EMISSIONS CONTROLS

B.6. Unconfined Emissions of Particulate Matter: **[Rule 62-296.320(4)(c), F.A.C.]**

(a) 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.

(b) Any permit issued to a facility with emissions of unconfined particulate matter shall specify the reasonable precautions to be taken by that facility to control the emissions of unconfined particulate matter.

(c) Reasonable precautions include the following:

- Paving and maintenance of roads, parking areas and yards.
- Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
- Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.
- Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent re-entrainment, and from buildings or work areas to prevent particulate from becoming airborne.
- Landscaping or planting of vegetation.
- Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
- Confining abrasive blasting where possible.
- Enclosure or covering of conveyor systems.

(d) In determining what constitutes reasonable precautions for a particular source, 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.

EMISSION STANDARDS

B.7. Nitrogen Oxides (NO_X):

NO_X emissions from each internal combustion engine shall not exceed 53 lb/hr. Additionally, annual emissions of NO_X in tpy from these emission units shall be calculated by using the NO_x emission rate of 53 lb/hr multiplied by the total operating hours for the thirty engines divided by 2000. This NO_x emission in tpy when combined with the NO_x emissions for the existing emission units (EU001-EU006) in tpy shall not exceed 682 TPY, based upon a consecutive 12-month period. This facility-wide annual emissions cap shall become effective on the fifth day of the month following the start-up of the first internal combustion engine, and compliance shall begin based upon the first twelve months of operation thereafter. NO_x emissions from the existing emission units (EU001-EU006) shall not exceed 100 TPY. NO_x emissions from the existing emission units shall be determined using CEM's and converted to tpy.

[Rule 62-212.400, F.A.C. (PSD avoidance)]

B.8. 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 if which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (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. Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C. **[Rule 62-296.320(4)(b)1, F.A.C.]**

EXCESS EMISSIONS

B.9. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction, shall be prohibited. **[Rule 62-210.700(4), F.A.C.]**

B.10. Excess Emissions Allowed: Providing the permittee adheres to best operational practices to minimize the amount and duration of excess emissions, the following conditions shall apply:

(a) During startup and shutdown, visible emissions shall not exceed 27% opacity for up to 2 hours in any 24-hour period. **[Design; Rule 62-210.700(1), F.A.C.]**

OPERATIONAL LIMITATIONS

B.11. Fuel Oil Specification: Only No. 2 fuel oil can be fired in the internal combustion engines. The maximum sulfur content of the No. 2 fuel oil shall not exceed 0.05 percent, by weight. **[Rule 62-210.200, F.A.C. (Definitions – PTE)]**

B.12. Fuel Oil Consumption: The maximum No. 2 fuel oil allowed to be burned in thirty internal combustion engines combined is 2,713,880 gallons per year, which is equivalent to 22,100 engine-hours per year at 100% load. **[Rule 62-210.200, F.A.C. (Definitions – PTE)]**

B.13. Permitted Capacity: The heat input to each internal combustion engine from firing No. 2 fuel oil shall not exceed 17 MMBtu per hour at 100% load. **[Design, Rule 62-210.200, F.A.C. (Definition - PTE)]**

B.14. Hours of Operation: The thirty internal combustion engines shall operate no more than 22,100 engine-hours during any consecutive 12-month period. The permittee shall install, calibrate, operate and maintain a monitoring system to measure the hours of operation on each internal combustion engine. **[Rule 62-210.200, F.A.C. (Definitions - PTE)]**

B.15. Operational Period: The thirty internal combustion engines shall cease operation in June 2003. **[Applicant Request]**

EMISSIONS PERFORMANCE TESTING

B.16. Sampling Facilities: The permittee shall design the internal combustion engine stack to accommodate adequate testing and sampling locations in order to determine compliance with the applicable emission limits specified by this permit. **[Rule 62-297.310(6), F.A.C.]**

B.17. Performance Test Methods: Initial (I) and Annual (A) compliance tests shall be performed in accordance with the following reference methods as described in 40 CFR 60, Appendix A, and adopted by reference in Chapter 62-204.800, F.A.C.

(a) EPA Method 7 or 7E – Determination of Nitrogen Oxide Emissions from Stationary Sources (I, A);

(b) EPA Method 9 - Visual Determination of the Opacity of Emissions from Stationary Sources (I, A);

No other test methods may be used for compliance testing unless prior DEP approval is received, in writing, from the DEP Emissions Monitoring Section Administrator.

B.18. Fuel Oil Monitoring: The fuel shall be monitored annually for the sulfur content using ASTM D4294 Method (or equivalent). The permittee shall also maintain daily records of fuel oil consumption for the emission units. **[Rules 62-297.440, F.A.C., and 62-210.200, F.A.C.]**

B.19. Test Notification: The permittee shall notify the Compliance Authority in writing 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. **[Rule 62-297.310(7)(a)9., F.A.C.]**

B.20. Initial Tests Required: A set of randomly picked five internal combustion engines (different from the five internal combustion engines tested during the first year of operation) shall be tested for nitrogen oxides and visible emissions during the second year of operation. **[Rule 62-297.310(7)(a)1., and 62-297.310(7)(c), F.A.C.]**

B.21. Annual Performance Tests: To demonstrate compliance with the emission standards specified in this permit, the permittee shall conduct annual performance tests for NO_X and visible emissions on the emission units that operated for more than 3,700 hours in the preceding 12-month period. Tests required on an annual basis shall be conducted at least once during each federal fiscal year (October 1st to September 30th). **[Rule 62-297.310(7)(a)4., and 62-297.310(7)(c), F.A.C.]**

B.22. Tests Prior to Permit Renewal: Prior to renewing the air operation permit, the permittee shall conduct performance tests for NO_X and visible emissions on one of the internal combustion engines. These tests shall be conducted within the 12-month period prior to renewing the air operation permit. For pollutants required to be tested annually, the permittee may submit the most recent annual compliance test to satisfy the requirements of this provision. **[Rule 62-297.310(7)(a)3., F.A.C.]**

B.23. Internal Combustion Engine Testing Capacity: Performance tests for compliance with standards specified in this permit shall be conducted with the emission unit operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the maximum heat input rate allowed by the permit. If it is impracticable to test at permitted capacity, the source may be tested at less than permitted capacity. However, subsequent operation is limited to 110 percent of the value reached during the test 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 purposes of additional compliance testing to regain the permitted capacity. Emissions performance tests shall meet all applicable requirements of Chapters 62-204 and 62-297, F.A.C. **[Rule 62-297.310(2), F.A.C.]**

B.24. Calculation of Emission Rate: For each emissions performance test, 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.]**

B.25. Applicable Test Procedures

(a) Required Sampling Time.

1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes. **[Rule 62-297.310(4)(a)1., F.A.C.]**

2. The minimum observation period for a visible emissions compliance test shall be thirty (30) minutes. The observation period shall include the period during which the highest opacity can reasonably be expected to occur. **[Rule 62-297.310(4)(a)2., F.A.C.]**

(b) Minimum Sample Volume. Unless otherwise specified in the applicable rule or test method, the minimum sample volume per run shall be 25 dry standard cubic feet. **[Rule 62-297.310(4)(b), F.A.C.]**

(c) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C. **[Rule 62-297.310(4)(d), F.A.C.]**

B.26. 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. **[Rule 62-297.310(5)(a), F.A.C.]**

(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)(b), F.A.C.]**

B.27. Special Compliance Tests: When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department. **[Rule 62-297.310(7)(b), F.A.C.]**

RECORDKEEPING AND REPORTING REQUIREMENTS

B.28. Records Retention: 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 the Department upon request. **[Rules 62-4.160(14) and 62-213.440(1)(b)2., F.A.C.]**

B.29. Emissions Performance Test Reports: A report indicating the results of any required emissions performance test shall be submitted to the Compliance Authority no later than 45 days after completion of the last test run. The test report shall provide sufficient detail on the tested emission unit and the procedures used to allow the Department to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed in Rule 62-297.310(8)(c), F.A.C. **[Rule 62-297.310(8), F.A.C.]**

B. 30. Monthly Operations Summary: By the fifth calendar day of each month, the permittee shall record the 12- month hours of operation of the internal combustion engines, 12-month emission totals for NO_X and amount of the No. 2 fuel oil fired for the internal combustion engines. The information shall be recorded in a written or electronic log and shall be available for inspection and/or printing within at least one day of a request from the Compliance Authority. **[Rule 62-4.160(15), F.A.C.]**

IV. This section is the Acid Rain Part

Operated by: Tampa Electric Company
ORIS Code: 647

A. Acid Rain Part - Phase II

{Permit note: The Phase II permit is issued by FDEP.}

The emissions units listed below are regulated under Acid Rain, Phase II

E.U. ID No.	Brief Description/Maximum Heat Input
001	Boiler #1 298 MMBtu/hr
002	Boiler #2 298 MMBtu/hr
003	Boiler #3 411 MMBtu/hr
004	Boiler #4 411 MMBtu/hr
005	Boiler #5 610 MMBtu/hr
006	Boiler #6 778 MMBtu/hr

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

a. DEP Form No. 62-210.900(1)(a), dated July 1, 1995.

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

A.2. Sulfur dioxide (SO_2) allowance allocations for each Acid Rain unit are as follows:

E.U. ID No.	EPA ID	Year	2000	2001	2002
-001	HB01	SO2 allowances, under Table 2, 3, or 4 of 40 CFR 73	177*	177*	177*
-002	HB02	SO2 allowances, under Table 2, 3, or 4 of 40 CFR 73	202*	202*	202*
-003	HB03	SO2 allowances, under Table 2, 3, or 4 of 40 CFR 73	461*	461*	461*
-004	HB04	SO2 allowances, under Table 2, 3, or 4 of 40 CFR 73	692*	692*	692*
-005	HB05	SO2 allowances, under Table 2, 3, or 4 of 40 CFR 73	1234*	1234*	1234*
-006	HB06	SO2 allowances, under Table 2, 3, or 4 of 40 CFR 73	472*	472*	472*

*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, 3, or 4 of 40 CFR 73.

A.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.
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 placed 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)1., 2. & 3., F.A.C.]

A.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, Fast-Track Revisions of Acid Rain Parts.
[Rule 62-214.370(4), and Rule 62-213.413, F.A.C]

A.5. Comments, notes, and justifications: none.

B. Acid Rain Part - Phase I
{Permit note: The U.S. EPA issues Acid Rain Phase I permits}

The emissions units listed below are substitution units regulated under Acid Rain Part, Phase I, for Tampa Electric Company, Big Bend Station, **Facility ID No**. 0570039, **ORIS code**: 0695.

E.U. ID No.	**Brief Description/Maximum Heat Input**
001	Boiler #1 298 MMBtu/hr
002	Boiler #2 298 MMBtu/hr
003	Boiler #3 411 MMBtu/hr
004	Boiler #4 411 MMBtu/hr
005	Boiler #5 610 MMBtu/hr
006	Boiler #6 778 MMBtu/hr

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

Tampa Electric Company — **PROPOSED Permit No.:** 0570038-003-AV

Hookers Point Station — **Facility ID No.:** 0570038

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Categorical Exemptions, or that meet the criteria specified in Rule 62-210.300(3)(b)1., F.A.C., Generic Emissions Unit Exemption, are exempt from the permitting requirements of Chapters 62-210, 62-212 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 the potential emissions of the facility containing such emissions units. Emissions units and pollutant-emitting activities exempt from permitting under Rules 62-210.300(3)(a) and (b)1., F.A.C., shall not be exempt from the permitting requirements of Chapter 62-213, F.A.C., if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.430(6)(b), F.A.C. No emissions unit shall be entitled to an exemption from permitting under Rules 62-210.300(3)(a) and (b)1., F.A.C., if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.

The below listed emissions units and/or activities are considered insignificant pursuant to Rule 62-213.430(6), F.A.C.

Brief Description of Emissions Units and/or Activities

1. Brazing, soldering & welding.
2. Emergency generators.
3. Heating units.
4. Storage tanks.
5. Laboratory equipment used for chemical or physical analyses.
6. Fire safety equipment.
7. Turbine vapor extractor.
8. Parts cleaning and degreasing stations using non-halogenated solvents.
9. Architectural (equipment) maintenance painting.
10. (6) Fuel Oil Storage Tanks
11. No. 2, No. 6., and used oil barge and truck unloading.
12. 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 Technology (RACT) requirement of Chapter 62-296, F.A.C.; and
    b. The amount of coatings used shall include any solvents and thinners used in the process including those used for cleanup.
13. Surface coating operations utilizing only coatings containing 5.0 percent or less VOCs, by volume.
14. Degreasing units using heavier-than-air vapors exclusively, except any such unit using or emitting any substance classified as a hazardous air pollutant.
15. Evaporation of non-hazardous boiler chemical cleaning waste which was generated on-site.

APPENDIX OM-1

OPERATION & MAINTENANCE PLAN

For: Hookers Point Station
Facility ID 0570038

Hooker's Point Station
Operation & Maintenance Plan
Emission Unit 1

A. Process System Performance Parameters:

1) Source Designator: Hooker's Point Unit #1
2) Design Fuel Consumption Rate: 43 barrels per hour
3) Steam Flow: 220,000 pounds per hour
4) Operating Temperature: 900□ F.
5) Operating Pressure: 960 psi

B. The following observations, checks, and operations apply to this source while in operation and shall be conducted on the schedule specified:

Continuously Monitored and Recorded

Steam Flow
Steam Temperature
Steam Pressure
Excess Air

Daily

Check visible emissions.
Maintain optimum flame pattern for efficient fuel combustion.

Monthly

Monitor and back calculate station fuel input rate.

Fuel Oil Analyses

Sample all fuel oil cargos for composite analysis.

During major Outages

Inspect boiler, controls, auxiliaries, and ductwork and repair as necessary.

Prior to Startup

Inspect burners and clean as necessary.
Inspect burner tips and replace as necessary.

C. Records of inspection, maintenance, and performance parameters shall be retained for a minimum of two years and shall be made available to the Department or the Environmental Protection Commission of Hillsborough County upon request.

Hooker's Point Station
Operation & Maintenance Plan
Emission Unit 2

A. Process System Performance Parameters:

1) Source Designator: Hooker's Point Unit #2
2) Design Fuel Consumption Rate: 43 barrels per hour
3) Steam Flow: 220,000 pounds per hour
4) Operating Temperature: 900□ F.
5) Operating Pressure: 960 psi

B. The following observations, checks, and operations apply to this source while in operation and shall be conducted on the schedule specified:

Continuously Monitored and Recorded

Steam Flow
Steam Temperature
Steam Pressure
Excess Air

Daily

Check visible emissions.
Maintain optimum flame pattern for efficient fuel combustion.

Monthly

Monitor and back calculate station fuel input rate.

Fuel Oil Analyses

Sample all fuel oil cargos for composite analysis.

During major Outages

Inspect boiler, controls, auxiliaries, and ductwork and repair as necessary.

Prior to Startup

Inspect burners and clean as necessary.
Inspect burner tips and replace as necessary.

C. Records of inspection, maintenance, and performance parameters shall be retained for a minimum of two years and shall be made available to the Department or the Environmental Protection Commission of Hillsborough County upon request.

Hooker's Point Station
Operation & Maintenance Plan
Emission Unit 3

A. Process System Performance Parameters:

1) Source Designator: Hooker's Point Unit #3
2) Design Fuel Consumption Rate: 59.4 barrels per hour
3) Steam Flow: 303,000 pounds per hour
4) Operating Temperature: 900□ F.
5) Operating Pressure: 960 psi

B. The following observations, checks, and operations apply to this source while in operation and shall be conducted on the schedule specified:

Continuously Monitored and Recorded

Steam Flow
Steam Temperature
Steam Pressure
Excess Air

Daily

Check visible emissions.
Maintain optimum flame pattern for efficient fuel combustion.

Monthly

Monitor and back calculate station fuel input rate.

Fuel Oil Analyses

Sample all fuel oil cargos for composite analysis.

During major Outages

Inspect boiler, controls, auxiliaries, and ductwork and repair as necessary.

Prior to Startup

Inspect burners and clean as necessary.
Inspect burner tips and replace as necessary.

C. Records of inspection, maintenance, and performance parameters shall be retained for a minimum of two years and shall be made available to the Department or the Environmental Protection Commission of Hillsborough County upon request.

Hooker's Point Station
Operation & Maintenance Plan
Emission Unit 4

A. Process System Performance Parameters:

1) Source Designator: Hooker's Point Unit #4
2) Design Fuel Consumption Rate: 59.4 barrels per hour
3) Steam Flow: 303,000 pounds per hour
4) Operating Temperature: 900□ F.
5) Operating Pressure: 960 psi

B. The following observations, checks, and operations apply to this source while in operation and shall be conducted on the schedule specified:

Continuously Monitored and Recorded

Steam Flow
Steam Temperature
Steam Pressure
Excess Air

Daily

Check visible emissions.
Maintain optimum flame pattern for efficient fuel combustion.

Monthly

Monitor and back calculate station fuel input rate.

Fuel Oil Analyses

Sample all fuel oil cargos for composite analysis.

During major Outages

Inspect boiler, controls, auxiliaries, and ductwork and repair as necessary.

Prior to Startup

Inspect burners and clean as necessary.
Inspect burner tips and replace as necessary.

C. Records of inspection, maintenance, and performance parameters shall be retained for a minimum of two years and shall be made available to the Department or the Environmental Protection Commission of Hillsborough County upon request.

Hooker's Point Station
Operation & Maintenance Plan
Emission Unit 5

A. Process System Performance Parameters:

1) Source Designator: Hooker's Point Unit #5
2) Design Fuel Consumption Rate: 86.2 barrels per hour
3) Steam Flow: 440,000 pounds per hour
4) Operating Temperature: 900□ F.
5) Operating Pressure: 975 psi

B. The following observations, checks, and operations apply to this source while in operation and shall be conducted on the schedule specified:

Continuously Monitored and Recorded

Steam Flow
Steam Temperature
Steam Pressure
Excess Air

Daily

Check visible emissions.
Maintain optimum flame pattern for efficient fuel combustion.

Monthly

Monitor and back calculate station fuel input rate.

Fuel Oil Analyses

Sample all fuel oil cargos for composite analysis.

During major Outages

Inspect boiler, controls, auxiliaries, and ductwork and repair as necessary.

Prior to Startup

Inspect burners and clean as necessary.
Inspect burner tips and replace as necessary.

C. Records of inspection, maintenance, and performance parameters shall be retained for a minimum of two years and shall be made available to the Department or the Environmental Protection Commission of Hillsborough County upon request.

Hooker's Point Station
Operation & Maintenance Plan
Emission Unit 6

A. Process System Performance Parameters:

1) Source Designator: Hooker's Point Unit #6
2) Design Fuel Consumption Rate: 126 barrels per hour
3) Steam Flow: 625,000 pounds per hour
4) Operating Temperature: 950□ F.
5) Operating Pressure: 1450 psi

B. The following observations, checks, and operations apply to this source while in operation and shall be conducted on the schedule specified:

Continuously Monitored and Recorded

Steam Flow
Steam Temperature
Steam Pressure
Excess Air

Daily

Check visible emissions.
Maintain optimum flame pattern for efficient fuel combustion.

Monthly

Monitor and back calculate station fuel input rate.

Fuel Oil Analyses

Sample all fuel oil cargos for composite analysis.

During major Outages

Inspect boiler, controls, auxiliaries, and ductwork and repair as necessary.

Prior to Startup

Inspect burners and clean as necessary.
Inspect burner tips and replace as necessary.

C. Records of inspection, maintenance, and performance parameters shall be retained for a minimum of two years and shall be made available to the Department or the Environmental Protection Commission of Hillsborough County upon request.

Appendix H-1: Permit History

Tampa Electric Company
Hookers Point Station

PROPOSED Permit No.: 0570038-003-AV
Facility ID No.: 0570038

Permit History (for tracking purposes):

E.U. ID No.	Description	Permit No.	Effective Date	Expiration Date	Project Type[1]
001-006	Facility	0570038-001-AV	01/01/98	12/31/02	Initial
001	Oil-Fired Boiler #1	0570038-003-AV	Pending	12/31/02	Revision
002	Oil-Fired Boiler #2	0570038-003-AV	Pending	12/31/02	Revision
003	Oil-Fired Boiler #3	0570038-003-AV	Pending	12/31/02	Revision
004	Oil-Fired Boiler #4	0570038-003-AV	Pending	12/31/02	Revision
005	Oil-Fired Boiler #6	0570038-003-AV	Pending	12/31/02	Revision
006	Oil-Fired Boiler #6	0570038-003-AV	Pending	12/31/02	Revision
007-036	30 Power Modules	0570038-002-AC	04/20/01	03/01/02	Construction
		0570038-003-AV	Pending	12/31/02	Initial

Note: Since units 001-006 have been in service for over 30 years, no AC permits were issued.

[1] Project Type (select one): Title V: Initial, Revision, Renewal, or Admin. Correction; Construction (new or mod.); or, Extension (AC only).