

Department of Environmental Protection

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

David B. Struhs Secretary

November 7, 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 Renewal

PROPOSED Permit Project No.: 0570038-005-AV

Hookers Point Station

Dear Ms. Sheffield:

One copy of the "<u>PROPOSED Determination</u>" for the Title V Air Operation Permit Renewal 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Permit will not be issued until the permitting authority receives written notice that the objection is resolved or withdrawn.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,

Trina Vielhauer, Chief Bureau of Air Regulation

Tima LV wham

TV/SMS/CLP
Enclosures
copy furnished to:
Thomas W. Davis, P.E.
Laura Crouch, TEC
Rob Kalch, EPCHC
Eric Peterson, SWD FDEP

USEPA, Region 4 (INTERNET E-mail Memorandum)

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leb Bush Governor

Department of **Environmental Protection**

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 Renewal PROPOSED Permit Renewal No.: 0570038-005-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 November 8, 2002.

USEPA's review period ends on the 45th day after the permit posting date. Day 45 is December 22, 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 January 1, 2003.

PROPOSED Determination

Title V Air Operation Permit Renewal PROPOSED Permit Project No.: 0570038-005-AV Page 1 of 5

I. Public Notice.

An "INTENT TO ISSUE TITLE V AIR OPERATION PERMIT RENEWAL" to Tampa Electric Company for the Hookers Point Station located at 1700 Hemlock Street, Tampa, Hillsborough County was clerked on September 27, 2002. The "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT RENEWAL" was published in the Tampa Tribune on October 1, 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 RENEWAL" was received on October 11, 2002.

II. Public Comment.

Comments were received from the applicant on October 28, 2002 and the DRAFT Permit was subsequently changed. The comments were not considered significant enough to reissue the DRAFT Permit and require another Public Notice. E-mailed comments were also received from the Environmental Protection Commission of Hillsborough County. No other comments were received during the 30-day public comment period. Listed below are the responses to the comments.

A. Comments from Ms. Laura Crouch of Tampa Electric Company received on October 28, 2002.

1. Response:

As a result of these comments, the UTM coordinates on the Placard Page are hereby changed:

From: Zone 17, 358.0 km East and 3,901.0 km North

To: Zone 17, 358.0 km East and 3,091.0 km North

2. Response:

As a result of these comments, **Section I**, **Subsection D** is hereby deleted.

3. Response:

As a result of these comments, Facility-wide condition No. 6 (Section II) is hereby changed:

From: 6. <u>Precautions to prevent emissions of unconfined particulate matter</u>: Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:

- 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]

Title V Air Operation Permit Renewal PROPOSED Permit Project No.: 0570038-005-AV Page 3 of 5

6. Response:

As a result of these comments, Specific Condition No. 7 (Section III) is hereby changed:

From: 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 582 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.

[0570038-004-AC; Rule 62-212.400, F.A.C. (PSD avoidance)]

{Permitting note: The averaging time for condition 7 is based on the run time of the specified test method, unless otherwise specified in this permit.}

To: 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 tons/year (TPY) tpy when combined with the NO_x emissions for the existing emission units (EU001-EU006) in tpy shall not exceed 582 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.

[0570038-004-AC; Rule 62-212.400, F.A.C. (PSD avoidance)]

{Permitting note: <u>Unless otherwise specified</u>, <u>Tthe averaging time for condition 7 is based on the run specified averaging time of the specified applicable test method, unless otherwise specified in this permit.}</u>

7. Response:

As a result of these comments, Specific Condition No. 14 (Section III) is hereby changed:

From: 14. 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 6 (six) randomly picked internal combustion engines for the first year. A different set of randomly picked six engines from the remaining internal combustion engines will be tested during subsequent years of operation until all of the engines have completed the initial performance test. [0570038-004-AC; Rule 62-297.310(7)(a)1., and 62-297.310(7)(c), F.A.C.]

Title V Air Operation Permit Renewal PROPOSED Permit Project No.: 0570038-005-AV Page 5 of 5

To: 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, n 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. [0570038-004-AC; Rule 62-296.320(4)(b)1, F.A.C.]

{Permitting note: Unless otherwise specified, the averaging time for condition 8 is based on the specified averaging time of the applicable test method.}

IV. Conclusion.

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

STATEMENT OF BASIS

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

Title V Air Operation Permit Renewal PROPOSED Permit No.: 0570038-005-AV

The initial Title V Air Operation Permit, No. 0570038-001-AV, was effective on January 1, 1998. This Title V Air Operation Permit 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 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 is being issued for the purpose of renewing the current Title V Air Operation Permit and for the purpose of incorporating the terms and conditions of the air construction permit, No. 0570038-004-AC, in order to operate thirty Caterpillar XQ2000 Power Modules at the Hookers Point Station. The six currently-operated utility boilers shall be permanently retired as of January 1, 2003.

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. Each Power Module has its own No. 2 fuel oil storage tank with a design capacity of 1250 gallons.

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

Based on the Title V permit renewal application received July 1, 2002, this facility is not a major source of hazardous air pollutants (HAP).

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

Title V Air Operation Permit Renewal

PROPOSED Permit No.: 0570038-005-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 Renewal

PROPOSED Permit No.: 0570038-005-AV

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Department of Environmental Protection

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

David B. Struhs Secretary

Permittee:

Tampa Electric Company Hookers Point Station 1700 Hemlock Street Tampa, FL 33605-6660 PROPOSED Permit No.: 0570038-005-AV

Facility ID No.: 0570038

SIC Nos.: 49, 4911

Project: Title V Air Operation Permit Renewal

This permit renewal is being issued for the purpose of operating 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 3,091.0 km North; Latitude: 27° 56′ 17" North, Longitude: 82° 26′ 36" West.

This Title V Air Operation Permit 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 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-4, TITLE V CONDITIONS version dated 2/12/02 APPENDIX SS-1, STACK SAMPLING FACILITIES version dated 10/07/96 TABLE 297.310-1, CALIBRATION SCHEDULE version dated 10/07/96 Retired Unit Exemption Form received 7/31/02

Effective Date: January 1, 2003

Renewal Application Due Date: July 5, 2007

Expiration Date: December 31, 2007

Howard L. Rhodes, Director Division of Air Resource Management

HLR/SMS/CLP

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Section I. Facility Information.

Subsection A. Facility Description.

This facility consists of thirty Caterpillar XQ200 Power Modules. The six previously permitted oil-fired boilers are retired as of January 1, 2003.

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

Based on the Title V permit renewal application received July 1, 2002, this facility is not a major source of hazardous air pollutants (HAP).

Subsection B. Summary of Emissions Unit ID Nos. and Brief Description

E.U. ID No.	Description						
008-037	30 Caterpillar XQ2000 Power Modules. Each Power Module consists of one Caterpillar						
1	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 exclusivel						
	with low-sulfur (maximum of 0.05 weight percent sulfur) diesel fuel oil. Each Power Module						
	has its own No. 2 fuel oil storage tank with a design capacity of 1250 gallons.						

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.

Title V Air Operation Permit Revision effective July 2, 2002.

Application for a Title V Air Operation Permit Renewal received July 1, 2002.

PROPOSED Permit No.: 0570038-005-AV

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.]
- 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. <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.]
- 6. [Not federally enforceable.] Precautions to prevent emissions of unconfined particulate matter: Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:
 - 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

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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.]

{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.)}

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

11. Certification by Responsible Official (RO). In addition to the profession 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. Emissions Units and Conditions.

This section addresses the following emissions units.

E.U. ID No. Brief Description

008 - 037

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. Each Power Module has its own No. 2 fuel oil storage tank with a design capacity of 1250 gallons.

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

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

- 1. <u>Internal Combustion Engines</u>: The permittee is authorized to operate and maintain thirty 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. [0570038-004-AC; Applicant Request]
- 2. <u>Permitted Capacity</u>: The heat input to each internal combustion engine from firing No. 2 fuel oil shall not exceed 17 MMBtu per hour at 100% load. [0570038-004-AC; Design, Rule 62-210.200, F.A.C. (Definition PTE)]

{Permitting note: The heat input limitations have been placed in each 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 record keeping 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., included in the permit, requires measurement of the process variables for emission tests. Such heat input determination may be based on measurements of fuel consumption by various methods including but not limited to fuel flow metering or tank drop measurements, using the heat value of the fuel determined by the fuel vendor or the owner or operator, to calculate average hourly heat input during the test.}

3. <u>Hours of Operation</u>: 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. [0570038-004-AC; Rule 62-210.200, F.A.C. (Definitions - PTE)]

Hookers Point Station

- 4. 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. [0570038-004-AC; Rules 62-212.400(2)(g) and 62-212.400(6)(b), F.A.C.]
- 5. 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. The permittee shall demonstrate compliance with the fuel sulfur limit by keeping the records specified in this permit. [0570038-004-AC; Rule 62-210.200, F.A.C. (Definitions – PTE)]
- 6. Fuel Oil Consumption: The maximum No. 2 fuel oil allowed to be burned in thirty internal combustion engines combined is 2,828,800 gallons per year, which is equivalent to 22,100 engine-hours per year at 100% load.

[0570038-004-AC; Rule 62-210.200, F.A.C. (Definitions – PTE)]

EMISSION LIMITATIONS AND STANDARDS

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, emission in tons/year (TPY) shall not exceed 582 TPY, based upon a consecutive 12-month period. [0570038-004-AC; Rule 62-212.400, F.A.C. (PSD avoidance)] {Permitting note: Unless otherwise specified, the averaging time for condition 7 is based on the specified averaging time of the applicable test method.}

8. General Visible Emissions Standard:

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. [0570038-004-AC; Rule 62-296.320(4)(b)1, F.A.C.]

{Permitting note: Unless otherwise specified, the averaging time for condition 8 is based on the specified averaging time of the applicable test method.}

EXCESS EMISSIONS

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. [0570038-004-AC; Rule 62-210.700(4), F.A.C.]

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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: during startup and shutdown, visible emissions shall not exceed 27% opacity for up to 2 hours in any 24-hour period. [0570038-004-AC; Rule 62-210.700(1), F.A.C.]

TEST METHODS AND PROCEDURES

- 11. <u>Sampling Facilities</u>: The permittee shall maintain 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. [0570038-004-AC; Rule 62-297.310(6), F.A.C.]
- 12. <u>Performance Test Methods</u>: 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. [0570038-004-AC]

13. <u>Fuel Oil Monitoring</u>: 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.

[0570038-004-AC; Rules 62-297.440, F.A.C., and 62-210.200, F.A.C.]

- 14. <u>Initial Tests Required</u>: 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 and second year. A different set of randomly picked six engines from the remaining internal combustion engines will be tested during subsequent years of operation until all of the engines have completed the initial performance test. [0570038-004-AC; Rule 62-297.310(7)(a)1., and 62-297.310(7)(c), F.A.C.]
- 15. <u>Annual Performance Tests</u>: 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).

[0570038-004-AC; Rule 62-297.310(7)(a)4., and 62-297.310(7)(c), F.A.C.]

16. 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.

[0570038-004-AC; Rule 62-297.310(7)(a)3., F.A.C.]

17. 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

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[0570038-004-AC; Rule 62-297.310(2), F.A.C.]

18. <u>Calculation of Emission Rate</u>: 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. [0570038-004-AC; Rule 62-297.310(3), F.A.C.]

19. 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. [0570038-004-AC; 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.

[0570038-004-AC; Rule 62-297.310(4)(a)2., F.A.C.]

shall meet all applicable requirements of Chapters 62-204 and 62-297, 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. [0570038-004-AC; 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. [0570038-004-AC; Rule 62-297.310(4)(d), F.A.C.]

20. 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.

[0570038-004-AC; 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.

[0570038-004-AC; Rule 62-297.310(5)(b), F.A.C.]

21. 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. [0570038-004-AC; Rule 62-297.310(7)(b), F.A.C.]

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RECORDKEEPING AND REPORTING REQUIREMENTS

22. <u>Test Notification</u>: 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. [0570038-004-AC; Rule 62-297.310(7)(a)9., F.A.C.]

23. 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.

[0570038-004-AC; Rules 62-4.160(14) and 62-213.440(1)(b)2., F.A.C.]

- 24. 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. [0570038-004-AC; Rule 62-297.310(8), F.A.C.]
- 25. 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.

 [0570038-004-AC; Rule 62-4.130, F.A.C.]

26. 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.

[0570038-004-AC; Rule 62-4.160(15), F.A.C.]

Tampa Electric Company Hookers Point Station

MONITORING OF OPERATIONS

- 27. Temperature Periodic Monitoring: The permittee on a weekly basis shall monitor and record the manifold exhaust temperature of each internal combustion engine that is operating on that day. The permittee will monitor the engines each week with the objective of periodically monitoring the manifold exhaust temperature of all thirty (30) internal combustion engines. Upon the occurrence of an abnormal temperature reading, the engine will be shut down and investigated. An abnormal temperature is defined as any manifold exhaust temperature above 1400 degrees F. The incident time, date, cause and corrective action will be recorded. [0570038-004-AC; Applicant Request]
- 28. Visible Emissions (VE) Periodic Monitoring: The permittee on a weekly basis shall evaluate VE using EPA reference Method 9 on a maximum of six (6) internal combustion engines that are operating on that day. The number of engines monitored each week will depend on the number of engines that are operating. The permittee will monitor different engines each week with the objective of periodically monitoring VE of all 30 engines. If the VE from the 30 engines are consistently ten (10) percent opacity or less during a quarter, then the frequency of VE monitoring can be reduced to once per month for 6 engines. The frequency of VE monitoring will revert to a weekly schedule in the event monitored VE exceed 10 percent opacity for any engine. [0570038-004-AC; Applicant Request]

LOCAL APPLICABLE REQUIREMENTS

29. <u>Noise Nuisance</u>: 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. [0570038-004-AC; Rule 1-10.01(B)(9) and Rule 1-10.03, EPCHC]

PROPOSED Permit No.: 0570038-005-AV

Section IV. Acid Rain Part, Phase II.

Operated by: Tampa Electric Company

ORIS Code: 647

The emissions units listed below are regulated under Phase II of the Federal Acid Rain Program.

E.U. ID No.	Description
001 - 006	Boilers 1-6, PERMANENTLY RETIRED

1. The "Retired Unit Exemption" form submitted for this facility constitutes the Acid Rain Part application pursuant to 40 CFR 72.8 and is a part of this permit. The owners and operators of this acid rain unit shall comply with the standard requirements and special provisions set forth in DEP Form No. 62-210.900(1)(a)3., dated and signed by the designated representative on July 30, 2002. This unit is subject to the following: 40 CFR 72.1 which requires the unit to have an Acid Rain Part as part of its Title V permit; 40 CFR 72.2 which provides associated definitions; 40 CFR 72.3 which provides measurements, abbreviations, and acronyms; 40 CFR 72.4 which provides the federal authority of the Administrator; 40 CFR 72.5 which provides the authority of the states; 40 CFR 72.6 which makes the boiler a Phase II unit; 40 CFR 72.10 which gives the public access to information about this unit; and, 40 CFR 72.13 which incorporates certain ASTM methods into 40 CFR Part 72.

[Chapter 62-213, F.A.C. and Rule 62-214.340, F.A.C.]

2. Sulfur dioxide (SO₂) allowance allocations for each Acid Rain unit are as follows:

E.U. ID No.	EPA.	Year	2003	2004	2005	2006	2007
001	HB01	SO2 allowances, under Table 2 of 40 CFR 73	177*	177*	177*	177*	177*
002	HB02	SO2 allowances, under Table 2 of CFR 73	207*	207*	207*	207*	207*
003	HB03	SO2 allowances, under Table 2 of 40 CFR 73	469*	469*	469*	469*	469*
004	HB04	SO2 allowances, under Table 2 of 40 CFR 73	701*	701*	701*	701*	701*
005	HB05	SO2 allowances, under Table 2 of 40 CFR 73	1253*	1253*	1253*	1253*	1253*
006	HB06	SO2 allowances, under Table 2 of 40 CFR 73	478*	478*	478*	478*	478*

^{*}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.

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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 62-213.440(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.]
- 4. The designated representative of these acid rain units applied for an exemption from the requirements of the Federal Acid Rain Program by submitting a completed and signed "Retired Unit Exemption" form (DEP Form No. 62-210.900(1)(a)3:, F.A.C., attached) to the Department. The date of permanent retirement is January 1, 2003. [Rule 62-214.340(2), F.A.C.; and, 40 CFR 72.8.]

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

Tampa Electric Company
Hookers Point Station

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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) and/or Rule 62-210.300(3)(a), F.A.C.: Brief Description of Emissions Units and/or Activities

- 1. Brazing, soldering or welding equipment.
- 2. One or more emergency generators 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.
- 3. Comfort heating with a gross maximum heat output of less than one million Btu per hour.
- 4. (30) 1250-gallon design capacity No. 2 Fuel Oil Storage Tanks
- 5. Laboratory equipment used exclusively for chemical or physical analyses.
- 6. Fire and safety equipment.
- 7. Architectural (equipment) maintenance painting.
- 8. 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.
- 9. Surface coating operations utilizing only coatings containing 5.0 percent or less VOCs, by volume.
- 10. Degreasing units using heavier-than-air vapors exclusively, except any such unit using or emitting any substance classified as a hazardous air pollutant.
- 11. Internal combustion engines in boats, aircraft and vehicles used for transportation of passengers or freight.
- 12. Equipment used for steam cleaning.
- 13. Petroleum lubrication systems.
- 14. Any other emissions unit or activity that meets all of the following criteria:
 - a. It would be subject to no unit-specific applicable requirement.
 - b. It would neither emit nor have the potential to emit:
 - (i) 500 pounds per year or more of lead and lead compounds expressed as lead;
 - (ii) 1,000 pounds per year or more of any hazardous air pollutant;
 - (iii) 2,500 pounds per year or more of total hazardous air pollutants; or
 - (iv) 5.0 tons per year or more of any other regulated pollutant.
 - c. Its emissions, in combination with the emissions of other units and activities at the facility, would not 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.