

**HOOKERS POINT STATION**  
**TITLE V OPERATION PERMIT**  
**REVISION APPLICATION**

**Prepared for:**



**TAMPA ELECTRIC**  
**Tampa, Florida**

**Prepared by:**

***ECT***

***Environmental Consulting & Technology, Inc.***  
*3701 Northwest 98<sup>th</sup> Street*  
*Gainesville, Florida 32606*

**ECT No. 010897-0100**

**October 2001**

## INTRODUCTION

Tampa Electric Company (TEC) operates six, No. 6 oil-fired steam boilers (Units Nos. 1 through 6) at the Hookers Point Station located at 1700 Hemlock Street, Tampa, Hillsborough County, Florida. Operation of the existing steam boilers is currently authorized by Title V Final Permit No. 570038-001-AV. Final Permit No. 0570038-001-AV was issued with an effective date of January 1, 1998 and expires on January 1, 2003.

TEC recently constructed and placed in operation, 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 output 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 Caterpillar 3516B IC engines are fired exclusively with low sulfur (maximum of 0.05 weight percent sulfur) diesel fuel oil.

A permit was required prior to the beginning of facility construction, per Rule 62-212.300(1)(a), Florida Administrative Code (F.A.C.). TEC submitted an air construction permit application to the Florida Department of Environmental Protection (FDEP) in January 2001. In response, the FDEP issued Final Permit Number 05700388-002-AC on April 20, 2001 authorizing construction and initial operation of the 30 Caterpillar XQ2000 Power Modules. Final Permit Number 05700388-002-AC expires on December 1, 2001.

The 30 Caterpillar XQ2000 Power Modules commenced operation on May 29, 2001. Initial compliance testing, as required by Final Permit Number 0570038-002-AC, Section III, Specific Condition No. 20 (testing for nitrogen oxides [NO<sub>x</sub>] and visible emissions [VE]), was conducted during July 16 - 19, 2001. The initial emissions performance testing demonstrated that the Caterpillar XQ2000 Power Modules were operating in compliance with all applicable permit emission limits. A report of the initial performance

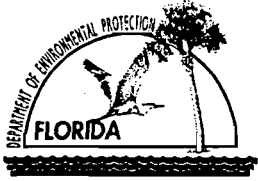
testing was submitted to the Hillsborough County Environmental Protection Commission (EPC) and the FDEP's Southwest District Office on August 21, 2001.

Permit No. 0570038-002-AC, Section II., Condition No. 9 notes that a Title V operation permit is required for regular operation of the permitted emissions units (i.e., the 30 Caterpillar XQ2000 Power Modules) and requires the owner or operator to apply for a permit at least ninety days prior to permit expiration and no later than 180 days after commencing operation. This permit application, using DEP Form No. 62-210.900(1), *Application for Air Permit – Title V Source*, constitutes TEC's application to revise Title V Final Permit No. 05700038-001-AV to include the 30 Caterpillar XQ2000 Power Modules pursuant to the requirements of Permit No. 0570038-002-AC and Chapter 62-213, F.A.C.

Following this introduction, the Department's *Application for Air Permit – Title V Source*, is provided in Appendix A. A requested alternative mode of operation, consistent with the provisions of Permit No. 0570038-002-AC, is provided in Appendix B. The current FDEP air construction permit for the 30 Caterpillar XQ2000 Power Modules is provided in Appendix C.

**APPENDIX A**

**APPLICATION FOR AIR PERMIT  
TITLE V SOURCE**



A

# Department of Environmental Protection

## Division of Air Resources Management

### APPLICATION FOR AIR PERMIT - TITLE V SOURCE

See Instructions for Form No. 62-210.900(1)

#### I. APPLICATION INFORMATION

##### Identification of Facility

1. Facility Owner/Company Name: <b>Tampa Electric Company</b>	
2. Site Name: <b>Hookers Point Station</b>	
3. Facility Identification Number: <b>0570038</b> [ ] Unknown	
4. Facility Location: Street Address or Other Locator: <b>1700 Hemlock Street</b> City: <b>Tampa</b> County: <b>Hillsborough</b> Zip Code: <b>33605-6660</b>	
5. Relocatable Facility? [ ] Yes [ <input checked="" type="checkbox"/> ] No	6. Existing Permitted Facility? [ <input checked="" type="checkbox"/> ] Yes [ ] No

##### Application Contact

1. Name and Title of Application Contact: <b>Shelly Castro</b> <b>Associate Engineer – Air Programs, Environmental Planning</b>	
2. Application Contact Mailing Address: Organization/Firm: <b>Tampa Electric Company</b> Street Address: <b>6499 U.S. Highway 41 North</b> City: <b>Apollo Beach</b> State: <b>FL</b> Zip Code: <b>3572-9200</b>	
3. Application Contact Telephone Numbers: Telephone: <b>(813)641 – 5033</b> Fax: <b>(813) 641-5081</b>	

##### Application Processing Information (DEP Use)

1. Date of Receipt of Application:	
2. Permit Number:	
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	

**Purpose of Application**

**Air Operation Permit Application**

This Application for Air Permit is submitted to obtain: (Check one)

- Initial Title V air operation permit for an existing facility which is classified as a Title V source.
- Initial Title V air operation permit for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.

Current construction permit number: \_\_\_\_\_

- Title V air operation permit revision to address one or more newly constructed or modified emissions units addressed in this application.

Current construction permit number: 0570038-002-AC

Operation permit number to be revised: 0570038-001-AV

- Title V air operation permit revision or administrative correction to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application. (Also check Air Construction Permit Application below.)

Operation permit number to be revised/corrected: \_\_\_\_\_

- Title V air operation permit revision for reasons other than construction or modification of an emissions unit. Give reason for the revision; e.g., to comply with a new applicable requirement or to request approval of an "Early Reductions" proposal.

Operation permit number to be revised: \_\_\_\_\_

Reason for revision: \_\_\_\_\_

**Air Construction Permit Application**

This Application for Air Permit is submitted to obtain: (Check one)

- Air construction permit to construct or modify one or more emissions units.
- Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.
- Air construction permit for one or more existing, but unpermitted, emissions units.



4. Professional Engineer Statement:

*I, the undersigned, hereby certify, except as particularly noted herein\*, that:*

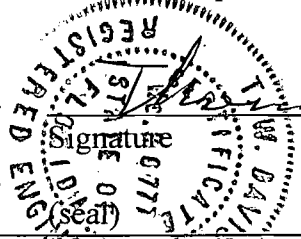
*(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and*

*(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.*

*If the purpose of this application is to obtain a Title V source air operation permit (check here [  ], if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.*

*If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [  ], if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.*

*If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [  ], if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.*



*David M. Davis*

10/29/01  
Date

\* Attach any exception to certification statement.



**Scope of Application**

<b>Emissions Unit ID</b>	<b>Description of Emissions Unit</b>	<b>Permit Type</b>	<b>Processing Fee</b>
007 - 036	IC Engine/Generator Set Nos. 1 - 30	N/A	N/A

**Application Processing Fee**

Check one: [ ] Attached - Amount: \$ \_\_\_\_\_ [ ✓ ] Not Applicable

**Construction/Modification Information**

1. Description of Proposed Project or Alterations:

**Tampa Electric Company (TEC) has installed thirty (30) Caterpillar XQ2000 Power Modules at its existing 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 output rating of 2,593 brake horsepower (bhp) at 100% load. The Caterpillar SR4B generator has a power output rating of 1,825 kilowatts (kW) at 100% load.**

**The Caterpillar 3516B IC engines are fired exclusively with low sulfur (maximum of 0.05 weight % sulfur) diesel fuel oil. The 30 Caterpillar XQ2000 Power Modules operate in conjunction with existing Hookers Point Units 1 through 6 such that total Hookers Point Station emissions remain below the PSD significant emission rate thresholds for major modifications. The 30 IC engines operate no more than a total of 22,100 engine-hours per year.**

2. Projected or Actual Date of Commencement of Construction: **April 20, 2001**

3. Projected Date of Completion of Construction: **N/A**

**Application Comment**

[Empty box for Application Comment]

## II. FACILITY INFORMATION

### A. GENERAL FACILITY INFORMATION

#### Facility Location and Type

1. Facility UTM Coordinates: Zone: <b>17</b> East (km): <b>358.0</b> North (km): <b>3,091.0</b>			
2. Facility Latitude/Longitude: Latitude (DD/MM/SS):		Longitude (DD/MM/SS):	
3. Governmental Facility Code: <b>0</b>	4. Facility Status Code: <b>A</b>	5. Facility Major Group SIC Code: <b>49</b>	6. Facility SIC(s): <b>4911</b>
7. Facility Comment (limit to 500 characters):			

#### Facility Contact

1. Name and Title of Facility Contact: <b>Karen Sheffield, General Manager</b>			
2. Application Contact Mailing Address: Organization/Firm: <b>Tampa Electric Company</b> Street Address: <b>1700 Hemlock Street</b> City: <b>Tampa</b> State: <b>FL</b> Zip Code: <b>33605-6660</b>			
3. Owner/Authorized Representative or Responsible Official Telephone Numbers: Telephone: <b>(813) 228-1111, Ext. 35300</b> Fax: <b>(813) 641-5418</b>			

**Facility Regulatory Classifications**

**Check all that apply:**

1. <input type="checkbox"/> Small Business Stationary Source?	<input type="checkbox"/> Unknown
2. <input checked="" type="checkbox"/> Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)?	
3. <input type="checkbox"/> Synthetic Minor Source of Pollutants Other than HAPs?	
4. <input checked="" type="checkbox"/> Major Source of Hazardous Air Pollutants (HAPs)?	
5. <input type="checkbox"/> Synthetic Minor Source of HAPs?	
6. <input type="checkbox"/> One or More Emissions Units Subject to NSPS?	
7. <input type="checkbox"/> One or More Emission Units Subject to NESHAP?	
8. <input type="checkbox"/> Title V Source by EPA Designation?	
9. Facility Regulatory Classifications Comment (limit to 200 characters):	

**List of Applicable Regulations**

<b>See Title V permit application</b>	

## B. FACILITY POLLUTANTS

### List of Pollutants Emitted

1. Pollutant Emitted	2. Pollutant Classif.	3. Requested Emissions Cap		4. Basis for Emissions Cap	5. Pollutant Comment
		lb/hour	tons/year		
NOX	A	N/A	682	ESCPSD	
VOC	A	N/A	N/A	N/A	
CO	A	N/A	N/A	N/A	
PM	A	N/A	N/A	N/A	
PM10	A	N/A	N/A	N/A	
SO2	A	N/A	N/A	N/A	
H106 (HCl)	A	N/A	N/A	N/A	
H107 (HF)	A	N/A	N/A	N/A	
HAPS	A	N/A	N/A	N/A	

C. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements

1. Area Map Showing Facility Location: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested
2. Facility Plot Plan: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested
3. Process Flow Diagram(s): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested
4. Precautions to Prevent Emissions of Unconfined Particulate Matter: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested
5. Fugitive Emissions Identification: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested
6. Supplemental Information for Construction Permit Application: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
7. Supplemental Requirements Comment:  <b>Items 1 through 5 previously submitted – see Hookers Point Station Title V permit application.</b>

**Additional Supplemental Requirements for Title V Air Operation Permit Applications**

8. List of Proposed Insignificant Activities: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
9. List of Equipment/Activities Regulated under Title VI: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Equipment/Activities On site but Not Required to be Individually Listed <input type="checkbox"/> Not Applicable
10. Alternative Methods of Operation: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
11. Alternative Modes of Operation (Emissions Trading): <input checked="" type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <b>See Attachment B.</b>
12. Identification of Additional Applicable Requirements: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
13. Risk Management Plan Verification: <input type="checkbox"/> Plan previously submitted to Chemical Emergency Preparedness and Prevention Office (CEPPO). Verification of submittal attached (Document ID: _____) or previously submitted to DEP (Date and DEP Office: _____) <input type="checkbox"/> Plan to be submitted to CEPPO (Date required: _____) <input type="checkbox"/> Not Applicable
14. Compliance Report and Plan: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
15. Compliance Certification (Hard-copy Required): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable

**Items 8. through 10. and 12. through 15. above previously submitted – see Hookers Point Title V permit application.**

**III. EMISSIONS UNIT INFORMATION**

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

**A. GENERAL EMISSIONS UNIT INFORMATION  
(All Emissions Units)**

**Emissions Unit Description and Status**

<p>1. Type of Emissions Unit Addressed in This Section: (Check one)</p> <p><input checked="" type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).</p> <p><input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.</p> <p><input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.</p>			
<p>2. Regulated or Unregulated Emissions Unit? (Check one)</p> <p><input checked="" type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.</p> <p><input type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.</p>			
<p>2. Description of Emissions Unit Addressed in This Section (limit to 60 characters):  <b>Caterpillar XQ2000 Power Module comprised 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 output rating of 2,593 brake horsepower (bhp) at 100% load. The Caterpillar SR4B generator has a power output rating of 1,825 kilowatts (kW) at 100% load. The IC engine is fired exclusively with low sulfur diesel fuel oil.</b></p>			
<p>4. Emissions Unit Identification Number:                  ID: <b>007 - IC Engine/Generator No. 1</b></p>		<p><input type="checkbox"/> No ID  <input type="checkbox"/> ID Unknown</p>	
<p>5. Emissions Unit Status Code: <b>A</b></p>	<p>6. Initial Startup Date: <b>5/29/01</b></p>	<p>7. Emissions Unit Major Group SIC Code: <b>49</b></p>	<p>8. Acid Rain Unit? <input type="checkbox"/></p>
<p>9. Emissions Unit Comment: (Limit to 500 Characters)</p>			



Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method):

None

2. Control Device or Method Code(s): N/A

Emissions Unit Details

1. Package Unit:

Manufacturer: **Caterpillar**

Model Number: **XQ2000**

2. Generator Nameplate Rating: **1.825 MW**

3. Incinerator Information:

Dwell Temperature:

°F

Dwell Time:

seconds

Incinerator Afterburner Temperature:

°F

**B. EMISSIONS UNIT CAPACITY INFORMATION  
(Regulated Emissions Units Only)**

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:	16.8	mmBtu/hr
2. Maximum Incineration Rate:	lb/hr	tons/day
3. Maximum Process or Throughput Rate:		
4. Maximum Production Rate:		
5. Requested Maximum Operating Schedule:	24	hours/day
	7	days/week
	52	weeks/year
	*	hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters):		
<p><b>* The 30 Caterpillar XQ2000 Power Modules operate in conjunction with existing Hookers Point Units 1 through 6 such that total Hookers Point Station emissions remain below the PSD significant emission rate thresholds for major modifications. The 30 IC engines operate no more than a total of 22,100 engine-hours per year.</b></p>		
7.		

**C. EMISSIONS UNIT REGULATIONS**  
**(Regulated Emissions Units Only)**

List of Applicable Regulations

N/A	

**D. EMISSION POINT (STACK/VENT) INFORMATION  
(Regulated Emissions Units Only)**

**Emission Point Description and Type**

1. Identification of Point on Plot Plan or Flow Diagram? <b>ENG 1</b>		2. Emission Point Type Code: <b>1</b>	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):  N/A			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:  N/A			
5. Discharge Type Code: <b>V</b>	6. Stack Height: <b>13.5 feet</b>	7. Exit Diameter: <b>6 ft x 8 ft</b>	
8. Exit Temperature: <b>856 °F</b>	9. Actual Volumetric Flow Rate: <b>14,251 acfm</b>	10. Water Vapor: <b>%</b>	
11. Maximum Dry Standard Flow Rate: <b>dscfm</b>		12. Nonstack Emission Point Height: <b>feet</b>	
13. Emission Point UTM Coordinates:  Zone:                      East (km):                      North (km):			
14. Emission Point Comment (limit to 200 characters):  <b>Exit temperature (Field No. 8) and actual flow rate (Field No. 9) are averages as measured during the July 19-19, 2001 emissions testing.</b>			

**E. SEGMENT (PROCESS/FUEL) INFORMATION**  
(All Emissions Units)

**Segment Description and Rate:** Segment 1 of 1

1. Segment Description (Process/Fuel Type) (limit to 500 characters):  <b>IC engine fired with diesel fuel oil.</b>		
3. Source Classification Code (SCC): <b>20100102</b>	3. SCC Units: <b>Thousand Gallons Burned</b>	
4. Maximum Hourly Rate: <b>0.1228</b>	5. Maximum Annual Rate: <b>1,075.73</b>	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: <b>0.05</b>	8. Maximum % Ash: <b>0.01</b>	9. Million Btu per SCC Unit: <b>137</b>
10. Segment Comment (limit to 200 characters):		

**Segment Description and Rate:** Segment      of     

1. Segment Description (Process/Fuel Type ) (limit to 500 characters):		
2. Source Classification Code (SCC):	3. SCC Units:	
3. Maximum Hourly Rate:	4. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
6. Maximum % Sulfur:	7. Maximum % Ash:	8. Million Btu per SCC Unit:
9. Segment Comment (limit to 200 characters):		

F. EMISSIONS UNIT POLLUTANTS  
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - NOX			EL

Pollutant Detail Information Page 1 of 1

**G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION**  
**(Regulated Emissions Units -**  
**Emissions-Limited and Preconstruction Review Pollutants Only)**

Potential/Fugitive Emissions

1. Pollutant Emitted: <b>NOX</b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: <b>53 lb/hour</b> <b>585.65<sup>*</sup> tons/year</b>		4. Synthetically Limited? <input checked="" type="checkbox"/>	
5. Range of Estimated Fugitive Emissions: [ ] 1      [ ] 2      [ ] 3      _____ to _____ tons/year			
6. Emission Factor: <b>53 lb/hr</b> Reference: <b>Allowable Emission Rate</b>		7. Emissions Method Code: <b>0</b>	
8. Calculation of Emissions (limit to 600 characters):  * - Annual emission rate (all 30 engines) = (53 lb/hr) x (22,100 hr/yr) x (1 ton/2,000 lb)  <b>Annual emission rate (all 30 engines) = 585.65 ton/yr</b>			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): <b>The 30 Caterpillar XQ2000 Power Modules operate in conjunction with existing Hookers Point Units 1 through 6 such that total Hookers Point Station emissions remain below the PSD significant emission rate thresholds for major modifications. Total Hookers Point Station NO<sub>x</sub> emissions are limited to 682 ton/yr.</b>			

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: <b>ESCPD</b>		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: <b>53 lb/hr</b>		4. Equivalent Allowable Emissions: <b>53 lb/hour</b> <b>585.65 tons/year</b>	
5. Method of Compliance (limit to 60 characters): <b>EPA Reference Method 7E</b>			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): <b>Annual allowable emission rate is the total for all 30 engines.</b>			

**H. VISIBLE EMISSIONS INFORMATION**  
**(Only Regulated Emissions Units Subject to a VE Limitation)**

**Visible Emissions Limitation:** Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: <b>VE20</b>	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: <b>20 %</b> Exceptional Conditions:      % Maximum Period of Excess Opacity Allowed:      min/hour	
5. Method of Compliance: <b>EPA Reference Method 9</b>	
6. Visible Emissions Comment (limit to 200 characters):  <b>Rule 62-296.320(4)(b)1., F.A.C.</b>	

**Visible Emissions Limitation:** Visible Emissions Limitation 2 of 2

2. Visible Emissions Subtype: <b>VE27</b>	2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions:      %      Exceptional Conditions: <b>27 %</b> Maximum Period of Excess Opacity Allowed: <b>60 min/hour</b>	
7. Method of Compliance: <b>EPA Reference Method 9</b>	
8. Visible Emissions Comment (limit to 200 characters):  <b>Excess emissions during startup and shutdown shall not exceed 27% opacity for up to 2 hours in any 24 hour period per Air Permit No. 0570038-002-AC, Section III, Condition No. 10.</b> <b>Rule 62-210.700(1), F.A.C.</b>	



**I. CONTINUOUS MONITOR INFORMATION**  
**(Only Regulated Emissions Units Subject to Continuous Monitoring)**

**Continuous Monitoring System:** Continuous Monitor \_\_\_\_ of \_\_\_\_

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information: Manufacturer: Model Number: <span style="float:right">Serial Number:</span>	
5. Installation Date:	6. Performance Specification Test Date:
6. Continuous Monitor Comment (limit to 200 characters):	

**Continuous Monitoring System:** Continuous Monitor \_\_\_\_ of \_\_\_\_

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information: Manufacturer: Model Number: <span style="float:right">Serial Number:</span>	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

**J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION  
(Regulated Emissions Units Only)**

**Supplemental Requirements**

1. Process Flow Diagram <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
2. Fuel Analysis or Specification <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested
3. Detailed Description of Control Equipment <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
4. Description of Stack Sampling Facilities <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
5. Compliance Test Report <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously submitted, Date: <u>August 21, 2001</u> <input type="checkbox"/> Not Applicable
6. Procedures for Startup and Shutdown <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
7. Operation and Maintenance Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
8. Supplemental Information for Construction Permit Application <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
9. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
10. Supplemental Requirements Comment:  <p><b>Item 2 previously submitted – reference January 2001 Air Construction Permit Application, Attachment B.</b></p>

**Additional Supplemental Requirements for Title V Air Operation Permit Applications**

11. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
12. Alternative Modes of Operation (Emissions Trading) <input checked="" type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <b>Attachment B</b>
13. Identification of Additional Applicable Requirements <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
14. Compliance Assurance Monitoring Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
15. Acid Rain Part Application (Hard-copy Required) <input type="checkbox"/> Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ <input type="checkbox"/> Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) Attached, Document ID: _____ <input type="checkbox"/> Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

NOTE:

EMISSION UNITS 007 THROUGH 036 ARE IDENTICAL UNITS.

SECTION III. EMISSIONS UNIT INFORMATION PROVIDED FOR EU 007 (IC ENGINE/GENERATOR NO. 1) IS ALSO APPLICABLE TO EU 008 (IC ENGINE/GENERATOR NO. 2) THROUGH EU 036 (IC ENGINE/GENERATOR NO. 30).

EMISSIONS UNIT INFORMATION SECTIONS 2 THROUGH 7 ARE IDENTICAL TO SECTION 1, WITH THE EXCEPTION OF IDENTIFICATION NUMBERS.

**APPENDIX B**

**ALTERNATIVE MODE  
OF OPERATION**

## APPENDIX B

### ALTERNATIVE MODE OF OPERATION (EMISSIONS TRADING)

The 30 Caterpillar XQ2000 Power Modules (Unit Nos. 7 through 36) operate in conjunction with the existing six, No. 6 fuel oil-fired steam boilers (Units Nos. 1 through 6) at the Hookers Point Station such that total facility-wide NO<sub>x</sub> emissions do not exceed 682 tons per year (tpy), based on a rolling 12-month average.

The 30 Caterpillar XQ2000 Power Modules operate no more than 22,100 engine-hours per year, based on a rolling 12-month average. For each 12-month period that the 30 Caterpillar XQ2000 Power Modules operate below the 22,100 engine-hour limit, the existing six, No. 6 fuel oil-fired steam boilers may operate to reach the facility-wide NO<sub>x</sub> cap of 682 tpy. The 30 Caterpillar XQ2000 Power Modules and the existing six, No. 6 fuel oil-fired steam boilers may not operate concurrently unless concurrent operation is required to avoid interruption of power to customers. In addition, NO<sub>x</sub> emissions from the existing six, No. 6 fuel oil-fired steam boilers are limited to no more than 100 tpy.

Compliance with the facility-wide NO<sub>x</sub> emissions cap is assured by:

- Continuous emissions monitoring systems (CEMS) for the existing six, No. 6 fuel oil-fired steam boilers, and
- Instrumentation to monitor the hours of operation for each of the 30 Caterpillar XQ2000 Power Modules.

**APPENDIX C**

**CURRENT AIR**

**CONSTRUCTION PERMIT**



# 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, Florida 33605-6660

<b>ARMS Permit No.</b>	0570038-002-AC
<b>Facility ID No.</b>	0570038
<b>SIC No.</b>	4911
<b>Expires:</b>	December 1, 2001

## Authorized Representative:

Mr. Darryl Scott  
General Manager

## PROJECT AND LOCATION

The proposed project authorizes the installation of thirty internal combustion engines with electrical generator sets. The thirty engines are capable of producing a nominal 54.75 MW of electricity.

The project will be located in Hillsborough County at 1700 Hemlock Street, Tampa. The UTM coordinates are Zone 17, 358 km E, 3091 km N.

## STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to install the proposed equipment in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department.

## APPENDICES

The following Appendices are attached as part of this permit.

Appendix GC - Construction Permit General Conditions

Howard L. Rhodes, Director  
Division of Air Resources Management



## SECTION II. ADMINISTRATIVE REQUIREMENTS

### FACILITY DESCRIPTION

The existing facility consists of six oil-fired steam boilers (Units Nos. 1 through 6) at the Hookers Point Station located at 1700 Hemlock Street, Tampa, Hillsborough County. All the boilers are fired using No. 6 fuel oil. The boilers may also fire a limited quantity of on-specification used oil. The total generating capacity at this facility is 227 megawatts. Also located at this facility are miscellaneous unregulated/insignificant emissions units and/or activities. Title V Final Permit No. 0570038-001-AV currently authorizes operation of the existing steam boilers. Final Title V Permit was issued with an effective date of January 1, 1998 and expires on January 1, 2002. Completion of this project will result in the installation of thirty internal combustion engines with generators capable of providing a nominal 54.75 MW of electrical power.

### REGULATORY CLASSIFICATION

Acid Rain: This facility is subject to the acid rain provisions of the Clean Air Act (Title IV).

Title V Major Source: This facility is a Title V major source of air pollution.

PSD Major Source: Each pollutant with potential emissions greater than the Significant Emissions Rates specified in Table 62-212.400-2, F.A.C. requires a PSD review and Best Available Control Technology (BACT) determination. For this project, emissions of no pollutant are significant or subject to BACT standards, provided that the Emission Unit is operated as specified in this permit. However, the existing facility is classified as a PSD Major Source.

### PERMIT SCHEDULE

- 01-23-01: Date of Receipt of Permit Application
- 02-07-01: Application deemed complete
- 03-30-01: Intent issued
- 04-04-01: Notice published in the Tampa Tribune

### RELEVANT DOCUMENTS

The documents listed form the basis of the permit. They are specifically related to this permitting action. These documents are on file with the Department.

- Application received 1-23-01
- Department letter dated 1-30-01
- Company letters dated 2-06-01 and 2-15-01
- Technical Evaluation and Preliminary Determination dated 3-21-01
- EPA's letter dated April 17, 2001

## SECTION II. ADMINISTRATIVE REQUIREMENTS

### GENERAL AND ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: All documents related to applications for permits to construct, operate or modify an emissions unit should be submitted to the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection (DEP), at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 and phone number 850/488-0114.
2. Compliance Authority: All documents related compliance activities such as reports, tests, and notifications should be submitted to the Air Management Division, Hillsborough County Environmental Protection Commission, 1900 Ninth Avenue, Tampa, Florida 33605. The phone number is 813/272-5960 and the fax number is 813/272-5157.
3. Terminology: The terms used in this permit have specific meanings as defined in the applicable chapters of the Florida Administrative Code.
4. General Conditions: The owner and operator are subject to, and shall operate under, the attached General Conditions listed in *Appendix GC* of this permit. General Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]
5. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of the subject emissions unit shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of Chapter 403, F.S. and Florida Administrative Code Chapters 62-4, 62-110, 62-204, 62-212, 62-213, 62-296, 62-297 and the Code of Federal Regulations Title 40, Part 60, adopted by reference in the Florida Administrative Code (F.A.C.) regulations. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
6. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
7. Modifications: No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
8. Expiration: This air construction permit shall expire on **December 1, 2001**. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Department's Bureau of Air Regulation prior to 60 days before the expiration of the permit. [Rules 62-210.300(1), 62-4.070(4) 62-4.080, and 62-4.210, F.A.C.]
9. Title V Permit: This permit authorizes construction and/or installation of the permitted emissions unit and initial operation to determine compliance with Department rules. A Title V operation permit is required for regular operation of the permitted emissions unit. The owner or operator shall apply for a Title V operation permit at least ninety days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the Department's Bureau of Air Regulation, and a copy sent to the Department's Southwest District office. [Rules 62-4.030, 62-4.050, 62-4.220, and 62-213.420, F.A.C.]

**SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS**

This permit addresses the following emissions units.

EU ID No.	EMISSIONS UNIT DESCRIPTION
001 – 006 <sup>#</sup>	Six boilers that are fired using No. 6 fuel oil.
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.

# Existing Emission units

\* New Emission units

**The following Specific Conditions apply to the new emission units 007-036:**

**PERFORMANCE RESTRICTIONS**

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]**
2. **Future PSD Review:** The internal combustion engines shall not exceed the permitted hours of operation, nor the permitted NO<sub>x</sub> 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.]**
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)]**
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.]**
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]**

## SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

### EMISSIONS CONTROLS

#### 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

#### 7. Nitrogen Oxides (NO<sub>x</sub>):

NO<sub>x</sub> emissions from each internal combustion engine shall not exceed 53 lb/hr. Additionally, annual emissions of NO<sub>x</sub> in tpy from these emission units shall be calculated by using the NO<sub>x</sub> emission rate of 53 lb/hr multiplied by the total operating hours for the thirty engines divided by 2000. This NO<sub>x</sub> emission in tpy when combined with the NO<sub>x</sub> 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<sub>x</sub> emissions from the existing emission units (EU001-EU006) shall not exceed 100 TPY. NO<sub>x</sub> 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)]

#### 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 of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20% opacity). The test

### SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

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

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.]
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

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

#### EMISSIONS PERFORMANCE TESTING

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.]
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.

### SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

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.]
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.]
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<sub>x</sub> 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.]
21. Annual Performance Tests: To demonstrate compliance with the emission standards specified in this permit, the permittee shall conduct annual performance tests for NO<sub>x</sub> 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 1<sup>st</sup> to September 30<sup>th</sup>). [Rule 62-297.310(7)(a)4., and 62-297.310(7)(c), F.A.C.]
22. Tests Prior to Permit Renewal: Prior to renewing the air operation permit, the permittee shall conduct performance tests for NO<sub>x</sub> 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.]
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.]
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.]
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.]

### SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

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.]
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.]
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

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.]
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.]
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<sub>x</sub> 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.]

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

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31. Annual Operating Report: The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by March 1st of each year. [Rule 62-210.370(2), F.A.C.]

The following Specific Conditions apply to the existing emission units 001-006:

1. The existing emission units shall comply with all the requirements of 0570038-001-AV with the exceptions listed below in conditions 2 through 4. [Title V Permit Requirements]
2. For each 12-month period that the thirty internal combustion engines (EU007-EU036) operate below 22,100 engine-hours, the existing emission units 001 through 006 may operate to reach the facility-wide NO<sub>x</sub> cap of 682 tpy. NO<sub>x</sub> emissions from the existing emission units (EU001-EU006) shall not exceed 100 tpy. The existing emission units shall use the CEM system to demonstrate compliance with the emission limits for NO<sub>x</sub>. [Rule 62-212.400, F.A.C. (PSD avoidance)]
3. The existing emission 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]
4. The existing emission units may operate with a NO<sub>x</sub> emissions cap of 100 tpy after the internal combustion engines ceases operation in June 2003. [Applicant Request]



**APPENDIX GC**  
GENERAL PERMIT CONDITIONS [F.A.C. 62-4.160]

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- G.1 The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- G.2 This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings or exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- G.3 As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
- G.4 This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- G.5 This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
- G.6 The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- G.7 The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
- a) Have access to and copy and records that must be kept under the conditions of the permit;
  - b) Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
  - c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.
- Reasonable time may depend on the nature of the concern being investigated.
- G.8 If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
- a) A description of and cause of non-compliance; and
  - b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

APPENDIX GC  
GENERAL PERMIT CONDITIONS [F.A.C. 62-4.160]

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The permittee shall be responsible for any and all damages, which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

- G.9 In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- G.10 The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
- G.11 This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- G.12 This permit or a copy thereof shall be kept at the work site of the permitted activity.
- G.13 This permit also constitutes:
- a) Determination of Best Available Control Technology ( )
  - b) Determination of Prevention of Significant Deterioration ( ); and
  - c) Compliance with New Source Performance Standards ( ).
- G.14 The permittee shall comply with the following:
- a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
  - b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
  - c) Records of monitoring information shall include:
    - 1. The date, exact place, and time of sampling or measurements;
    - 2. The person responsible for performing the sampling or measurements;
    - 3. The dates analyses were performed;
    - 4. The person responsible for performing the analyses;
    - 5. The analytical techniques or methods used; and
    - 6. The results of such analyses.
- G.15 When requested by the Department, the permittee shall within a reasonable time furnish any information required by law, which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.