J.H. PHILLIPS STATION

TITLE V OPERATION PERMIT RENEWAL APPLICATION

Prepared for:

TAMPA ELECTRIC
Tampa, Florida

Prepared by:

Environmental Consulting & Technology, Inc.
3701 Northwest 98th Street
Gainesville, Florida 32606

ECT No. 030605-0100

December 2003

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INTRODUCTION

Tampa Electric Company (TEC) operates two slow speed diesel engine generators (Units No. 1 and 2) at the J.H. Phillips Station located at 7301 Airport Road, Sebring, Highlands County, Florida. Equipment associated with the operation of the slow speed diesel engine generators include a distillate oil-fired steam boiler, an emergency diesel engine generator, a five-cell, freshwater mechanical draft cooling tower, and miscellaneous ancillary equipment. Operation of the existing slow speed diesel engine generators and associated ancillary equipment is currently authorized by FINAL Title V Air Operation Permit No. 0550018-001-AV. FINAL Permit No. 0550018-001-AV was issued with an effective date of June 24, 1999, and expires on June 24, 2004.

Pursuant to Rule 62-213.420(1)(a)3 and Section 62-4.090, Florida Administrative Code (F.A.C.), an application for renewal of a Title V operation permit must be submitted 180 days prior to expiration. Since FINAL Title V Permit No. 0550018-001-AV expires on June 24, 2004, the permit renewal application for the J.H. Phillips Station must be submitted no later than December 24, 2003. This application package, consisting of Florida Department of Environmental Protection's (FDEP's) *Application for Air Permit – Long Form* and all required supplemental facility and emission unit information, constitutes TEC's Title V permit renewal application for the J.H. Phillips Station and is submitted to satisfy the requirements of Section 62-213.400, F.A.C.

Department of Environmental Protection

Division of Air Resource Management

APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

Air Construction Permit–Use this form to apply for an air construction permit for a proposed project:

- subject to prevention of significant deterioration (PSD) review, nonattainment area (NAA) new source review, or maximum achievable control technology (MACT) review; or
- where the applicant proposes to assume a restriction on the potential emissions of one or more pollutants to escape a federal program requirement such as PSD review, NAA new source review, Title V, or MACT; or
- at an existing federally enforceable state air operation permit (FESOP) or Title V permitted facility.

Air Operation Permit – Use this form to apply for:

- an initial federally enforceable state air operation permit (FESOP); or
- an initial/revised/renewal Title V air operation permit.

Air Construction Permit & Revised/Renewal Title V Air Operation Permit (Concurrent Processing Option) – Use this form to apply for both an air construction permit and a revised or renewal Title V air operation permit incorporating the proposed project.

To ensure accuracy, please see form instructions.

Identification of Facility

1. Facility Owner/Company Name: **Tampa Electric Company**	
2. Site Name: **J.H. Phillips Station**	
3. Facility Identification Number: **0550018**	
4. Facility Location...: Street Address or Other Locator: **7301 Airport Road** City: **Sebring** County: **Highlands** Zip Code: **33876-6002**	
5. Relocatable Facility? ☐ Yes ☒ No	6. Existing Title V Permitted Facility? ☒ Yes ☐ No

Application Contact

1. Application Contact Name: **Raiza Calderon**
2. Application Contact Mailing Address... Organization/Firm: **Tampa Electric Company** Street Address: **6944 U.S. Highway 41 North** City: **Apollo Beach** State: **FL** Zip Code: **33572-1500**
3. Application Contact Telephone Numbers... Telephone: **(813) 641-5261** ext. Fax: **(813) 641-5081**
4. Application Contact Email Address: **rcalderon@tecoenergy.com**

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	12/26/03
2. Project Number(s):	0550018-003-AV
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	

APPLICATION INFORMATION

Purpose of Application

This application for air permit is submitted to obtain: (Check one)

Air Construction Permit

☐ Air construction permit.

Air Operation Permit

☐ Initial Title V air operation permit.
☐ Title V air operation permit revision.
☒ Title V air operation permit renewal.
☐ Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.
☐ Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit (Concurrent Processing)

☐ Air construction permit and Title V permit revision, incorporating the proposed project.
☐ Air construction permit and Title V permit renewal, incorporating the proposed project.

Note: By checking one of the above two boxes, you, the applicant, are requesting concurrent processing pursuant to Rule 62-213.405, F.A.C. In such case, you must also check the following box:

☐ I hereby request that the department waive the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.

Application Comment

APPLICATION INFORMATION

Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Proc. Fee
001	Slow Speed Diesel Generating Unit No. 1	N/A	N/A
002	Slow Speed Diesel Generating Unit No. 2	N/A	N/A
004	Steam Boiler	N/A	N/A

Application Processing Fee

Check one: ☐ Attached - Amount: $_____ ☒ Not Applicable

APPLICATION INFORMATION

Owner/Authorized Representative Statement **N/A**

Complete if applying for an air construction permit or an initial FESOP.

1. Owner/Authorized Representative Name:

2. Owner/Authorized Representative Mailing Address...
   Organization/Firm:
   Street Address:
   City: State: Zip Code:

3. Owner/Authorized Representative Telephone Numbers...
   Telephone: ext. Fax:

4. Owner/Authorized Representative Email Address:

5. Owner/Authorized Representative Statement:

   I, the undersigned, am the owner or authorized representative of the facility addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other requirements identified in this application to which the facility is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit.

   _____ _____
   Signature Date

APPLICATION INFORMATION

Application Responsible Official Certification

Complete if applying for an initial/revised/renewal Title V permit or concurrent processing of an air construction permit and a revised/renewal Title V permit. If there are multiple responsible officials, the "application responsible official" need not be the "primary responsible official."

1. Application Responsible Official Name: **Mark J. Hornick, General Manager**

2. Application Responsible Official Qualification (Check one or more of the following options, as applicable):

   ☒ For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C.

   ☐ For a partnership or sole proprietorship, a general partner or the proprietor, respectively.

   ☐ For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.

   ☐ The designated representative at an Acid Rain source.

3. Application Responsible Official Mailing Address...
   Organization/Firm: **Tampa Electric Company**
   Street Address: **P.O. Box 111**
   City: **Tampa** State: **FL** Zip Code: **33601-0111**

4. Application Responsible Official Telephone Numbers...
   Telephone: **(813) 288-1111** ext. **39988** Fax: **(863) 428-5927**

5. Application Responsible Official Email Address: **mjhornick@tecoenergy.com**

6. Application Responsible Official Certification:

   I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other applicable requirements identified in this application to which the Title V source is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.

   Mark J Hornick
   Signature

   12/23/03
   Date

APPLICATION INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: **Thomas W. Davis**
   Registration Number: **36777**
2. Professional Engineer Mailing Address...
   Organization/Firm: **Environmental Consulting & Technology, Inc.**
   Street Address: **3701 Northwest 98th Street**
   City: **Gainesville** State: **FL** Zip Code: **32606-5004**
3. Professional Engineer Telephone Numbers...
   Telephone: **(352) 332-0444** ext. Fax: **(352) 332-6722**
4. Professional Engineer Email Address: **tdavis@ectinc.com**
5. 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.

(3) If the purpose of this application is to obtain a Title V 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 plan and schedule is submitted with this application.

(4) If the purpose of this application is to obtain an air construction permit (check here ☐, if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal 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.

(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal 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.

Signature

12/19/03
Date

(seal)

* Attach any exception to certification statement.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates... Zone **17** East (km) **464.3** North (km) **3,035.4**		2. Facility Latitude/Longitude...**N/A** Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
3. Governmental Facility Code: **0**	4. Facility Status Code: **A**	5. Facility Major Group SIC Code: **49**	6. Facility SIC(s): **4911**
7. Facility Comment :			

Facility Contact

1. Facility Contact Name: **Tom Culverhouse, Manager**
2. Facility Contact Mailing Address... Organization/Firm: **Tampa Electric Company** Street Address: **7301 Airport Road** City: **Sebring** State: **FL** Zip Code: **33876-6002**
3. Application Contact Telephone Numbers... Telephone: **(863) 655-3899** ext. Fax: **(863) 655-1356**
4. Application Contact Email Address: **tcculverhouse@tecoenergy.com**

Facility Primary Responsible Official **N/A**

Complete if an "application responsible official" is identified in Section I. that is not the facility "primary responsible official."

1. Facility Primary Responsible Official Name:
2. Facility Primary Responsible Official Mailing Address... Organization/Firm: Street Address: City: State: Zip Code:
3. Facility Primary Responsible Official Telephone Numbers... Telephone: ( ) - ext. Fax: ( ) -
4. Facility Primary Responsible Official Email Address:

FACILITY INFORMATION

Facility Regulatory Classifications

Check all that would apply *following* completion of all projects and implementation of all other changes proposed in this application for air permit. Refer to instructions to distinguish between a "major source" and a "synthetic minor source."

1. ☐ Small Business Stationary Source	☐ Unknown
2. ☐ Synthetic Non-Title V Source	
3. ☒ Title V Source	
4. ☒ Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs)	
5. ☐ Synthetic Minor Source of Air Pollutants, Other than HAPs	
6. ☒ Major Source of Hazardous Air Pollutants (HAPs)	
7. ☐ Synthetic Minor Source of HAPs	
8. ☐ One or More Emissions Units Subject to NSPS (40 CFR Part 60)	
9. ☐ One or More Emissions Units Subject to Emission Guidelines (40 CFR Part 60)	
10. ☐ One or More Emissions Units Subject to NESHAP (40 CFR Part 61 or Part 63)	
11. ☐ Title V Source Solely by EPA Designation (40 CFR 70.3(a)(5))	
12. Facility Regulatory Classifications Comment:	

A NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE), 40 CFR Part 63 Subpart ZZZZ, was proposed by EPA on December 19, 2002. This proposed standard is anticipated to be promulgated as a final rule by February 28, 2004.

As proposed, Subpart ZZZZ does not include any specific requirements for compression ignition (CI) engines such as the Phillips Station slow speed and emergency generator diesel engines and would only require initial notifications pursuant to §63.6645(d) for these diesel engines.

FACILITY INFORMATION

List of Pollutants Emitted by Facility

1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
NOX	**A**	**N**
CO	**A**	**N**
PM	**A**	**N**
PM10	**A**	**N**
SO2	**A**	**N**
VOC	**A**	**N**
H106 (Hydrogen Chloride)	**A**	**N**
HAPs	**A**	**N**

B. EMISSIONS CAPS N/A

Facility-Wide or Multi-Unit Emissions Caps

1. Pollutant Subject to Emissions Cap	2. Facility Wide Cap [Y or N]? (all units)	3. Emissions Unit ID No.s Under Cap (if not all units)	4. Hourly Cap (lb/hr)	5. Annual Cap (ton/yr)	6. Basis for Emissions Cap

7. Facility-Wide or Multi-Unit Emissions Cap Comment:

C. FACILITY ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Facility Plot Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **A-1** ☐ Previously Submitted, Date:_____
2. Process Flow Diagram(s): (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **A-2A, 2B** ☐ Previously Submitted, Date:_____
3. Precautions to Prevent Emissions of Unconfined Particulate Matter: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) **N/A**
   ☒ Attached, Document ID: **A-3** ☐ Previously Submitted, Date:_____

Additional Requirements for Air Construction Permit Applications **N/A**

1. Area Map Showing Facility Location:
   ☐ Attached, Document ID: ☐ Not Applicable
2. Description of Proposed Construction or Modification:
   ☐ Attached, Document ID: ☐ Not Applicable
3. Rule Applicability Analysis:
   ☐ Attached, Document ID: ☐ Not Applicable
4. List of Exempt Emissions Units (Rule 62-210.300(3)(a) or (b)1., F.A.C.):
   ☐ Attached, Document ID:_____ ☐ Not Applicable
5. Fugitive Emissions Identification (Rule 62-212.400(2), F.A.C.):
   ☐ Attached, Document ID:_____ ☐ Not Applicable
6. Preconstruction Air Quality Monitoring and Analysis (Rule 62-212.400(5)(f), F.A.C.):
   ☐ Attached, Document ID:_____ ☐ Not Applicable
7. Ambient Impact Analysis (Rule 62-212.400(5)(d), F.A.C.):
   ☐ Attached, Document ID: ☐ Not Applicable
8. Air Quality Impact since 1977 (Rule 62-212.400(5)(h)5., F.A.C.):
   ☐ Attached, Document ID:_____ ☐ Not Applicable
9. Additional Impact Analyses (Rules 62-212.400(5)(e)1. and 62-212.500(4)(e), F.A.C.):
   ☐ Attached, Document ID:_____ ☐ Not Applicable
10. Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.):
    ☐ Attached, Document ID:_____ ☐ Not Applicable

FACILITY INFORMATION

Additional Requirements for FESOP Applications N/A

1. List of Exempt Emissions Units (Rule 62-210.300(3)(a) or (b)1., F.A.C.):
   ☐ Attached, Document ID: ☐ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. List of Insignificant Activities (Required for initial/renewal applications only):
   ☒ Attached, Document ID: **A-4** ☐ Not Applicable
2. Identification of Applicable Requirements (Required for initial/renewal applications, and for revision applications if this information would be changed as a result of the revision being sought):
   ☒ Attached, Document ID: **A-5**
   ☐ Not Applicable
3. Compliance Report and Plan (Required for all initial/revision/renewal applications):
   ☒ Attached, Document ID: **A-6**
   Note: A compliance plan must be submitted for each emissions unit that is not in compliance with all applicable requirements at the time of application and/or at any time during application processing. The department must be notified of any changes in compliance status during application processing.
4. List of Equipment/Activities Regulated under Title VI (If applicable, required for initial/renewal applications only):
   ☒ Attached, Document ID: **A-7**
   ☐ Equipment/Activities On site but Not Required to be Individually Listed
   ☐ Not Applicable
5. Verification of Risk Management Plan Submission to EPA (If applicable, required for initial/renewal applications only) :
   ☐ Attached, Document ID:_____ ☒ Not Applicable
6. Requested Changes to Current Title V Air Operation Permit:
   ☒ Attached, Document ID: **A-8** ☐ Not Applicable

Additional Requirements Comment

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

☒ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

☒ 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).

☐ 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.

☐ 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.

2. Description of Emissions Unit Addressed in this Section:
Slow Speed Diesel Generating Unit No. 1.

3. Emissions Unit Identification Number: **001**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**N/A**	**N/A**	**49**	☐ Yes ☒ No

9. Package Unit:
Manufacturer: **Sulzer** Model Number: **8 RNF 90 M**

10. Generator Nameplate Rating: **21.4 MW (Diesel Engine Generator + 50% of Common Steam Turbine Generator)**

11. Emissions Unit Comment:

Slow speed diesel generator Unit No. 1 has a generator nameplate rating of 19.580 MW. The heat recovery steam generator for slow speed diesel generator Unit No. 1 shares a common steam turbine generator with the heat recovery steam generator for slow speed diesel generator Unit No. 2. The common steam turbine generator has a generator nameplate rating of 3.6 MW.

EMISSIONS UNIT INFORMATION
Section [1] of [3]

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

   N/A

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

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: **N/A**	
2. Maximum Production Rate: **N/A**	
3. Maximum Heat Input Rate: **172** million Btu/hr	
4. Maximum Incineration Rate: pounds/hr **N/A** tons/day	
5. Requested Maximum Operating Schedule:	
24 hours/day	7 days/week
52 weeks/year	**8,760** hours/year
6. Operating Capacity/Schedule Comment:	
Maximum heat input based on average monthly generation (in units of kW-hr), average monthly operating time (in units of hours), and average engine heat rate (in units of Btu/kW-hr).	

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **EU-001**		2. Emission Point Type Code: **1**
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **N/A**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **N/A**		
5. Discharge Type Code: **V**	6. Stack Height: **150** feet	7. Exit Diameter: **5.3** feet
8. Exit Temperature: **752** °F	9. Actual Volumetric Flow Rate: **74,300** acfm	10. Water Vapor: % **N/A**
11. Maximum Dry Standard Flow Rate: dscfm **N/A**		12. Nonstack Emission Point Height: feet **N/A**
13. Emission Point UTM Coordinates...**N/A** Zone: East (km): North (km):		14. Emission Point Latitude/Longitude...**N/A** Latitude (DD/MM/SS) Longitude (DD/MM/SS)
15. Emission Point Comment:		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): **Slow speed diesel engine fired with No. 6 fuel oil .**		
2. Source Classification Code (SCC): **2-02-001-02**	3. SCC Units: **Thousand Gallons Burned**	
4. Maximum Hourly Rate: **1.17**	5. Maximum Annual Rate: **10,250**	6. Estimated Annual Activity Factor: **N/A**
7. Maximum % Sulfur: **2.5**	8. Maximum % Ash: **0.1**	9. Million Btu per SCC Unit: **147**
10. Segment Comment: **No SCC exists for electric generation internal combustion (IC) engines fired with No. 6 fuel oil. SCC shown is for electric generation IC engines fired with distillate fuel oil. Distillate (No. 2 fuel oil) is used for startups.**		

Segment Description and Rate: Segment ____ of ____

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
NOX			**EL**
CO			**EL**
VOC			**EL**
PM			**EL**
SO2			**EL**
H106 (Hydrogen Chloride)			**NS**
HAPS			**NS**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **NOX**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **572** lb/hour **2,505.4** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **572 lb/hr** Reference: **Condition A.4, FINAL Permit No.: 0550018-001-AV**	7. Emissions Method Code: **0**
8. Calculation of Emissions: **Annual Emissions = 572 lb/hr x 8,760 hrs/yr x 1 ton / 2,000 lb** **Annual Emissions = 2,505.4 tons/year**	
9. Pollutant Potential/Estimated Fugitive Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **819 ppm @ 15% O2**	4. Equivalent Allowable Emissions: **572** lb/hour **2,505.4** tons/year
5. Method of Compliance: **EPA Reference Method 7E**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition A.4, FINAL Permit No.: 0550018-001-AV (BACT)**	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **CO**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **99** lb/hour **433.6** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **99 lb/hr** Reference: **Condition A.4, FINAL Permit No.: 0550018-001-AV**	7. Emissions Method Code: **0**
8. Calculation of Emissions: **Annual Emissions = 99 lb/hr x 8,760 hrs/yr x 1 ton / 2,000 lb** **Annual Emissions = 433.6 tons/year**	
9. Pollutant Potential/Estimated Fugitive Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **0.575 lb / MMBtu**	4. Equivalent Allowable Emissions: **99** lb/hour **433.6** tons/year
5. Method of Compliance: **EPA Reference Methods 10 (CO) and 19 ("F" factor)**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition A.4, FINAL Permit No.: 0550018-001-AV (BACT)**	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **VOC**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **45** lb/hour **197.1** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **45 lb/hr** Reference: **Condition A.4, FINAL Permit No.: 0550018-001-AV**	7. Emissions Method Code: **0**
8. Calculation of Emissions: **Annual Emissions = 45 lb/hr x 8,760 hrs/yr x 1 ton / 2,000 lb** **Annual Emissions = 197.1 tons/year**	
9. Pollutant Potential/Estimated Fugitive Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **0.26 lb / MMBtu**	4. Equivalent Allowable Emissions: **45** lb/hour **197.1** tons/year
5. Method of Compliance: **None required (compliance with CO limit used as a surrogate)**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition A.4, FINAL Permit No.: 0550018-001-AV (BACT)**	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **17** lb/hour **74.5** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **17 lb/hr** Reference: **Condition A.4, FINAL Permit No.: 0550018-001-AV**	7. Emissions Method Code: **0**
8. Calculation of Emissions: **Annual Emissions = 17 lb/hr x 8,760 hrs/yr x 1 ton / 2,000 lb** **Annual Emissions = 74.5 tons/year**	
9. Pollutant Potential/Estimated Fugitive Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **0.1 lb / MMBtu**	4. Equivalent Allowable Emissions: **17** lb/hour **74.5** tons/year
5. Method of Compliance: **None required (compliance with VE limit used as a surrogate)**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition A.4, FINAL Permit No.: 0550018-001-AV (BACT)**	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **SO2**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **460** lb/hour **2,014.8** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **460 lb/hr** Reference: **Condition A.4, FINAL Permit No.: 0550018-001-AV**	7. Emissions Method Code: **0**
8. Calculation of Emissions: **Annual Emissions = 460 lb/hr x 8,760 hrs/yr x 1 ton / 2,000 lb** **Annual Emissions = 2,014.8 tons/year**	
9. Pollutant Potential/Estimated Fugitive Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **2.67 lb / MMBtu**	4. Equivalent Allowable Emissions: **460** lb/hour **2,014.8** tons/year
5. Method of Compliance: **Fuel analysis for sulfur content.**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition A.4, FINAL Permit No.: 0550018-001-AV (BACT)**	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

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

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **20%** Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9.**	
5. Visible Emissions Comment: **Rule 62-296.320(4)(b), F.A.C.** **Excess emissions due to startup, shutdown, and malfunction are permitted provided best operational practices to minimize emissions are adhered to and the duration of excess emissions do not exceed two hours in any 24 hour period per Rule 62-210.700(1), F.A.C.**	

Visible Emissions Limitation: Visible Emissions Limitation ____ of ____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION N/A

Complete if this emissions unit is or would be subject to continuous monitoring.
Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

FACILITY INFORMATION

EMISSIONS UNIT INFORMATION
Section [1] of [3]

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **A-2** ☐ Previously Submitted, Date _____

2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **A-9** ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: ☒ Not Applicable

4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **A-10** ☐ Previously Submitted, Date _____

5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: ☒ Not Applicable

6. Compliance Demonstration Reports/Records
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☒ Previously Submitted, Date: 7/31/03
   Test Date(s)/Pollutant(s) Tested: 6/18/03—CO, NO_x, SO_2, and VE
   _____
   ☐ To be Submitted, Date (if known):_____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ Not Applicable
   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute
   ☐ Attached, Document ID: _____ ☒ Not Applicable

FACILITY INFORMATION

EMISSIONS UNIT INFORMATION N/A
Section [1] of [3]

Additional Requirements for Air Construction Permit Applications **N/A**

1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   ☐ Attached, Document ID: ☐ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   ☐ Attached, Document ID: ☐ Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   ☐ Attached, Document ID: ☐ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   ☒ Attached, Document ID: **A-5**
2. Compliance Assurance Monitoring
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Alternative Methods of Operation
   ☐ Attached, Document ID: _____ ☒ Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   ☐ Attached, Document ID: _____ ☒ Not Applicable
5. Acid Rain Part Application
   - ☐ Certificate of Representation (EPA Form No. 7610-1)
     - ☐ Copy Attached, Document ID:_____
   - ☐ Acid Rain Part (Form No. 62-210.900(1)(a))
     - ☐ Attached, Document ID:_____
     - ☐ Previously Submitted, Date:_____
   - ☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
     - ☐ Attached, Document ID:_____
     - ☐ Previously Submitted, Date:_____
   - ☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
     - ☐ Attached, Document ID:_____
     - ☐ Previously Submitted, Date:_____
   - ☐ Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
     - ☐ Attached, Document ID:_____
     - ☐ Previously Submitted, Date:_____
   - ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
     - ☐ Attached, Document ID:_____
     - ☐ Previously Submitted, Date:_____
   - ☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
     - ☐ Attached, Document ID:_____
     - ☐ Previously Submitted, Date:_____
   - ☒ Not Applicable

FACILITY INFORMATION

EMISSIONS UNIT INFORMATION
Section [1] of [3]

Additional Requirements Comment

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

☒ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

☒ 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).

☐ 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.

☐ 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.

2. Description of Emissions Unit Addressed in this Section:
Slow Speed Diesel Generating Unit No. 2.

3. Emissions Unit Identification Number: **002**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**N/A**	**N/A**	**49**	☐ Yes ☒ No

9. Package Unit:
Manufacturer: **Sulzer** Model Number: **8 RNF 90 M**

10. Generator Nameplate Rating: **21.4 MW (Diesel Engine Generator + 50% of Common Steam Turbine Generator)**

11. Emissions Unit Comment:

Slow speed diesel generator Unit No. 2 has a generator nameplate rating of 19.580 MW. The heat recovery steam generator for slow speed diesel generator Unit No. 2 shares a common steam turbine generator with the heat recovery steam generator for slow speed diesel generator Unit No. 1. The common steam turbine generator has a generator nameplate rating of 3.6 MW.

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

   N/A

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

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: **N/A**	
2. Maximum Production Rate: **N/A**	
3. Maximum Heat Input Rate: **172** million Btu/hr	
4. Maximum Incineration Rate: pounds/hr **N/A** tons/day	
5. Requested Maximum Operating Schedule: **24** hours/day **52** weeks/year	 **7** days/week **8,760** hours/year
6. Operating Capacity/Schedule Comment: **Maximum heat input based on average monthly generation (in units of kW-hr), average monthly operating time (in units of hours), and average engine heat rate (in units of Btu/kW-hr).**	

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **EU-002**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **N/A**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **N/A**		
5. Discharge Type Code: **V**	6. Stack Height: **150** feet	7. Exit Diameter: **5.3** feet
8. Exit Temperature: **752** °F	9. Actual Volumetric Flow Rate: **74,300** acfm	10. Water Vapor: % **N/A**
11. Maximum Dry Standard Flow Rate: dscfm **N/A**	12. Nonstack Emission Point Height: feet **N/A**	
13. Emission Point UTM Coordinates...**N/A** Zone: East (km): North (km):	14. Emission Point Latitude/Longitude...**N/A** Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): **Slow speed diesel engine fired with No. 6 fuel oil .**		
2. Source Classification Code (SCC): **2-02-001-02**	3. SCC Units: **Thousand Gallons Burned**	
4. Maximum Hourly Rate: **1.17**	5. Maximum Annual Rate: **10,250**	6. Estimated Annual Activity Factor: **N/A**
7. Maximum % Sulfur: **2.5**	8. Maximum % Ash: **0.1**	9. Million Btu per SCC Unit: **147**
10. Segment Comment: **No SCC exists for electric generation internal combustion (IC) engines fired with No. 6 fuel oil. SCC shown is for electric generation IC engines fired with distillate fuel oil. Distillate (No. 2 fuel oil) is used for startups.**		

Segment Description and Rate: Segment ____ of ____

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
NOX			**EL**
CO			**EL**
VOC			**EL**
PM			**EL**
SO2			**EL**
H106 (Hydrogen Chloride)			**NS**
HAPS			**NS**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **NOX**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **572** lb/hour **2,505.4** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **572 lb/hr** Reference: **Condition A.4, FINAL Permit No.: 0550018-001-AV**	7. Emissions Method Code: **0**
8. Calculation of Emissions: **Annual Emissions = 572 lb/hr x 8,760 hrs/yr x 1 ton / 2,000 lb** **Annual Emissions = 2,505.4 tons/year**	
9. Pollutant Potential/Estimated Fugitive Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **819 ppm @ 15% O2**	4. Equivalent Allowable Emissions: **572** lb/hour **2,505.4** tons/year
5. Method of Compliance: **EPA Reference Method 7E**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition A.4, FINAL Permit No.: 0550018-001-AV (BACT)**	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **CO**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **99** lb/hour **433.6** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **99 lb/hr** Reference: **Condition A.4, FINAL Permit No.: 0550018-001-AV**	7. Emissions Method Code: **0**
8. Calculation of Emissions: **Annual Emissions = 99 lb/hr x 8,760 hrs/yr x 1 ton / 2,000 lb** **Annual Emissions = 433.6 tons/year**	
9. Pollutant Potential/Estimated Fugitive Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **0.575 lb / MMBtu**	4. Equivalent Allowable Emissions: **99** lb/hour **433.6** tons/year
5. Method of Compliance: **EPA Reference Methods 10 (CO) and 19 ("F" factor)**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition A.4, FINAL Permit No.: 0550018-001-AV (BACT)**	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **VOC**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **45** lb/hour **197.1** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **45 lb/hr** Reference: **Condition A.4, FINAL Permit No.: 0550018-001-AV**	7. Emissions Method Code: **0**
8. Calculation of Emissions: **Annual Emissions = 45 lb/hr x 8,760 hrs/yr x 1 ton / 2,000 lb** **Annual Emissions = 197.1 tons/year**	
9. Pollutant Potential/Estimated Fugitive Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **0.26 lb / MMBtu**	4. Equivalent Allowable Emissions: **45** lb/hour **197.1** tons/year
5. Method of Compliance: **None required (compliance with CO limit used as a surrogate)**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition A.4, FINAL Permit No.: 0550018-001-AV (BACT)**	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **17** lb/hour **74.5** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **17 lb/hr** Reference: **Condition A.4, FINAL Permit No.: 0550018-001-AV**	7. Emissions Method Code: **0**
8. Calculation of Emissions: **Annual Emissions = 17 lb/hr x 8,760 hrs/yr x 1 ton / 2,000 lb** **Annual Emissions = 74.5 tons/year**	
9. Pollutant Potential/Estimated Fugitive Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **0.1 lb / MMBtu**	4. Equivalent Allowable Emissions: **17** lb/hour **74.5** tons/year
5. Method of Compliance: **None required (compliance with VE limit used as a surrogate)**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition A.4, FINAL Permit No.: 0550018-001-AV (BACT)**	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **SO2**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **460** lb/hour **2,014.8** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **460 lb/hr** Reference: **Condition A.4, FINAL Permit No.: 0550018-001-AV**	7. Emissions Method Code: **0**
8. Calculation of Emissions: **Annual Emissions = 460 lb/hr x 8,760 hrs/yr x 1 ton / 2,000 lb** **Annual Emissions = 2,014.8 tons/year**	
9. Pollutant Potential/Estimated Fugitive Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **2.67 lb / MMBtu**	4. Equivalent Allowable Emissions: **460** lb/hour **2,014.8** tons/year
5. Method of Compliance: **Fuel analysis for sulfur content.**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition A.4, FINAL Permit No.: 0550018-001-AV (BACT)**	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

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

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **20%** Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9.**	
5. Visible Emissions Comment: **Rule 62-296.320(4)(b), F.A.C.** **Excess emissions due to startup, shutdown, and malfunction are permitted provided best operational practices to minimize emissions are adhered to and the duration of excess emissions do not exceed two hours in any 24 hour period per Rule 62-210.700(1), F.A.C.**	

Visible Emissions Limitation: Visible Emissions Limitation ____ of ____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION N/A

Complete if this emissions unit is or would be subject to continuous monitoring.
Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

FACILITY INFORMATION

EMISSIONS UNIT INFORMATION
Section [2] of [3]

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **A-2** ☐ Previously Submitted, Date _____

2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **A-9** ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: ☒ Not Applicable

4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **A-10** ☐ Previously Submitted, Date _____

5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: ☒ Not Applicable

6. Compliance Demonstration Reports/Records
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☒ Previously Submitted, Date: 7/31/03
   Test Date(s)/Pollutant(s) Tested: 6/18/03—CO, NO_x, SO_2, and VE
   _____
   ☐ To be Submitted, Date (if known):_____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ Not Applicable

   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute
   ☐ Attached, Document ID: _____ ☒ Not Applicable

FACILITY INFORMATION

EMISSIONS UNIT INFORMATION N/A
Section [2] of [3]

Additional Requirements for Air Construction Permit Applications **N/A**

1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   ☐ Attached, Document ID: ☐ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   ☐ Attached, Document ID: ☐ Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   ☐ Attached, Document ID: ☐ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   ☒ Attached, Document ID: **A-5**
2. Compliance Assurance Monitoring
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Alternative Methods of Operation
   ☐ Attached, Document ID: _____ ☒ Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   ☐ Attached, Document ID: _____ ☒ Not Applicable
5. Acid Rain Part Application
   ☐ Certificate of Representation (EPA Form No. 7610-1)
      ☐ Copy Attached, Document ID:_____
   ☐ Acid Rain Part (Form No. 62-210.900(1)(a))
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☐ Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☒ Not Applicable

FACILITY INFORMATION

EMISSIONS UNIT INFORMATION
Section [2] of [3]

Additional Requirements Comment

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

☒ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

☒ 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).

☐ 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.

☐ 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.

2. Description of Emissions Unit Addressed in this Section:
Steam Boiler.

3. Emissions Unit Identification Number: **004**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**N/A**	**N/A**	**49**	☐ Yes ☒ No

9. Package Unit:
Manufacturer: **Cleaver Brooks** Model Number: **CB200X-250**

10. Generator Nameplate Rating: **N/A**

11. Emissions Unit Comment:

EMISSIONS UNIT INFORMATION
Section [3] of [3]

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

   N/A

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

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: **N/A**	
2. Maximum Production Rate: **N/A**	
3. Maximum Heat Input Rate: **10. 46** million Btu/hr	
4. Maximum Incineration Rate: pounds/hr **N/A** tons/day	
5. Requested Maximum Operating Schedule:	
24 hours/day	**7** days/week
52 weeks/year	**8,760** hours/year
6. Operating Capacity/Schedule Comment:	

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **EU-004**		2. Emission Point Type Code: **1**
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **N/A**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **N/A**		
5. Discharge Type Code: **V**	6. Stack Height: **60** feet	7. Exit Diameter: **2.1** feet
8. Exit Temperature: **400** °F	9. Actual Volumetric Flow Rate: **2,880** acfm	10. Water Vapor: % **N/A**
11. Maximum Dry Standard Flow Rate: dscfm **N/A**		12. Nonstack Emission Point Height: feet **N/A**
13. Emission Point UTM Coordinates...**N/A** Zone: East (km): North (km):		14. Emission Point Latitude/Longitude...**N/A** Latitude (DD/MM/SS) Longitude (DD/MM/SS)
15. Emission Point Comment:		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): **Steam boiler fired with No. 2 fuel oil**		
2. Source Classification Code (SCC): **1-02-005-02**	3. SCC Units: **Thousand Gallons Burned**	
4. Maximum Hourly Rate: **0.076**	5. Maximum Annual Rate: **668.8**	6. Estimated Annual Activity Factor: **N/A**
7. Maximum % Sulfur: **0.5**	8. Maximum % Ash: **0.1**	9. Million Btu per SCC Unit: **137**
10. Segment Comment: **Propane is used for ignition during startups.**		

Segment Description and Rate: Segment ____ of ____

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
SO2			**WP**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **SO2**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **5.4** lb/hour **23.7** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **142 x %S** Reference: **Table 1.3-1, AP-42, September 1998**	7. Emissions Method Code: **3**

8. Calculation of Emissions:

SO_2 (lb/hr) = (142 x .5) x (0.076 10^3 gal/hr) = 5.4 lb/hr

SO_2 (ton/yr) = (5.4 lb/hr) x (8,760 hr/yr) x (1 ton / 2,000 lb) = 23.7 ton/yr

9. Pollutant Potential/Estimated Fugitive Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **Maximum 0.5 wt % S fuel oil**	4. Equivalent Allowable Emissions: **5.4** lb/hour **23.7** tons/year
5. Method of Compliance: **Fuel oil analysis for sulfur content**	
6. Allowable Emissions Comment (Description of Operating Method): **Condition B.2., FINAL Permit No.: 0550018-001-AV**	

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

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

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **20** % Exceptional Conditions: **27** % Maximum Period of Excess Opacity Allowed: **6** min/hour	
4. Method of Compliance: **EPA Reference Method 9**	
5. Visible Emissions Comment: **Rule 62-296.406(1), F.A.C.** **Pursuant to Rule 62-210.700(2), F.A.C., excess emissions from existing fossil fuel steam generators resulting from startup or shutdown are permitted provided best operational practices to minimize emissions are adhered to and the duration of excess emissions minimized.**	

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

1. Visible Emissions Subtype: **VE60**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: **60** % Maximum Period of Excess Opacity Allowed: **3 hours in any 24-hour period**	
4. Method of Compliance: **EPA Reference Method 9**	
5. Visible Emissions Comment: **Applicable during boiler cleaning (soot blowing) and load changes per Rule 62-210.700(3), F.A.C.**	

H. CONTINUOUS MONITOR INFORMATION N/A

Complete if this emissions unit is or would be subject to continuous monitoring.
Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

EMISSIONS UNIT INFORMATION
Section [3] of [3]

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **A-2** ☐ Previously Submitted, Date _____

2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **A-9** ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: ☒ Not Applicable

4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: ☒ Not Applicable

5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: ☒ Not Applicable

6. Compliance Demonstration Reports/Records
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☒ Previously Submitted, Date: 7/31/03
   Test Date(s)/Pollutant(s) Tested: 6/18/03—SO_2 and VE
   _____
   ☐ To be Submitted, Date (if known):_____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ Not Applicable
   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute
   ☐ Attached, Document ID: _____ ☒ Not Applicable

EMISSIONS UNIT INFORMATION N/A
Section [3] of [3]

Additional Requirements for Air Construction Permit Applications N/A

1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   ☐ Attached, Document ID: ☐ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   ☐ Attached, Document ID: ☐ Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   ☐ Attached, Document ID: ☐ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   ☒ Attached, Document ID: **A-5**
2. Compliance Assurance Monitoring
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Alternative Methods of Operation
   ☐ Attached, Document ID: _____ ☒ Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   ☐ Attached, Document ID: _____ ☒ Not Applicable
5. Acid Rain Part Application
   ☐ Certificate of Representation (EPA Form No. 7610-1)
      ☐ Copy Attached, Document ID:_____
   ☐ Acid Rain Part (Form No. 62-210.900(1)(a))
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☐ Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
      ☐ Attached, Document ID:_____
      ☐ Previously Submitted, Date:_____
   ☒ Not Applicable

EMISSIONS UNIT INFORMATION
Section [3] of [3]

Additional Requirements Comment

ATTACHMENT A-1

FACILITY PLOT PLAN

COMBUSTION SOURCES

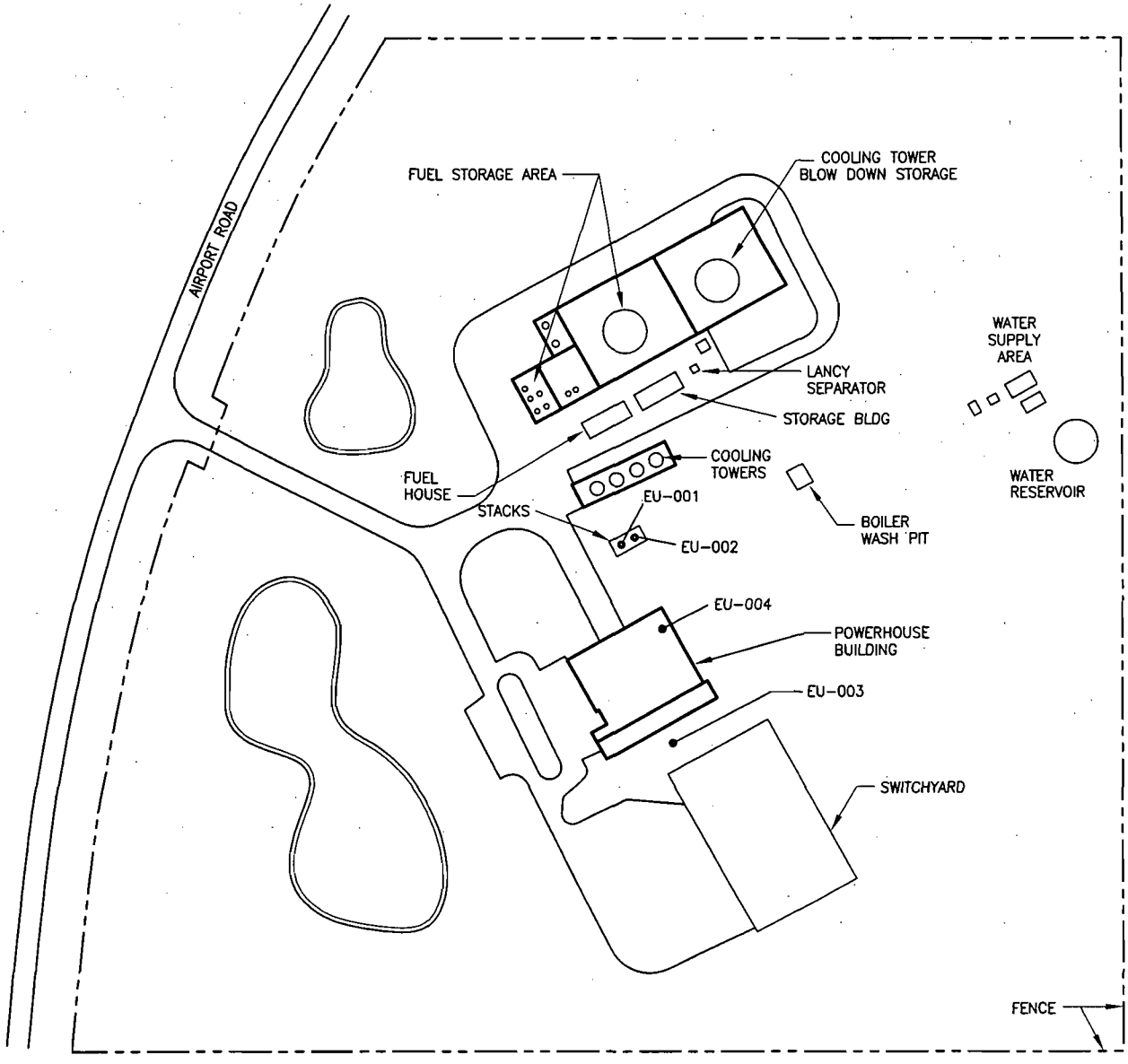
DESCRIPTION	EMISSION UNIT
SLOW SPEED DIESEL #1	EU-001
SLOW SPEED DIESEL #2	EU-002
EMERGENCY DIESEL GENERATOR	EU-003
STEAM BOILER	EU-004

N

GRAPHIC SCALE

0 50 100 200

SCALE IN FEET



ATTACHMENT A-1.

J.H. PHILLIPS STATION

FACILITY PLOT PLAN

Source: ECT, 2003.

TECO

TAMPA ELECTRIC

ATTACHMENT A-2

PROCESS FLOW DIAGRAMS

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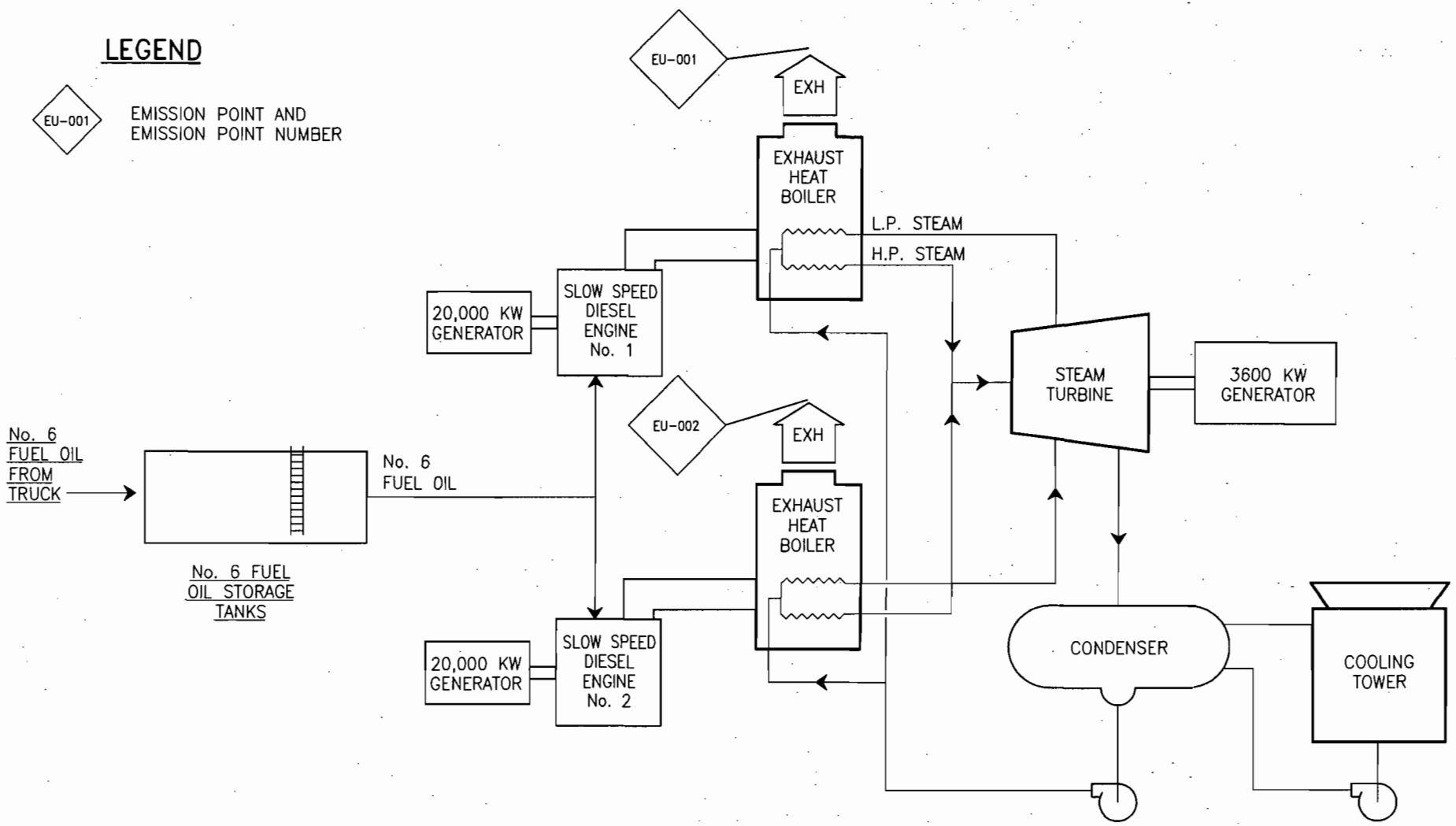

ATTACHMENT A-2A.

J.H. PHILLIPS STATION

SLOW SPEED DIESELS, PROCESS FLOW DIAGRAM

Source: ECT, 2003.

TECO

TAMPA ELECTRIC

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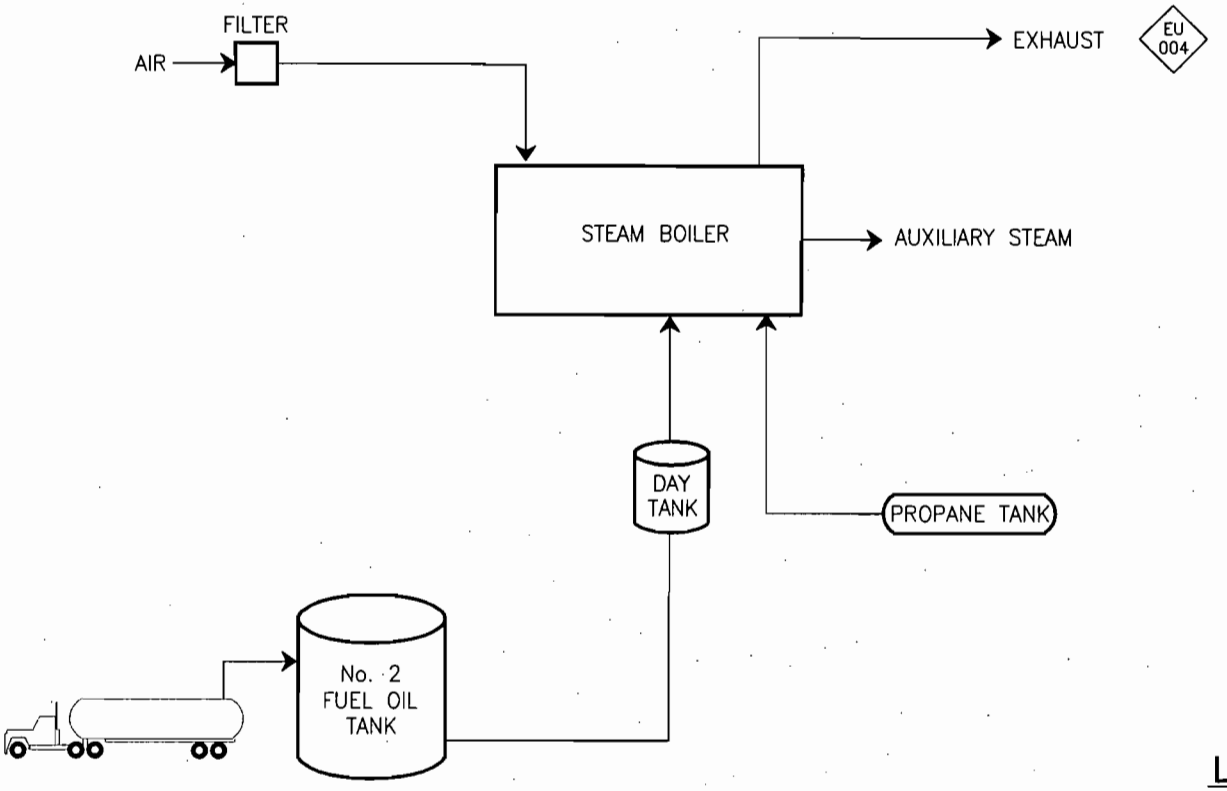

LEGEND

EU 004 — EMISSION POINT AND EMISSION POINT NUMBER

ATTACHMENT A-2B.

J.H. PHILLIPS STATION

STEAM BOILER PROCESS FLOW DIAGRAM

Source: ECT, 2003.

TECO

TAMPA ELECTRIC

ATTACHMENT A-3

PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

J.H. PHILLIPS STATION

PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

Unconfined particulate matter emissions that may result from operations include:

- Vehicular traffic on paved and unpaved roads.
- Wind-blown dust from yard areas.
- Periodic abrasive blasting.

The following techniques will be used to prevent unconfined particulate matter emissions on an as needed basis:

- Chemical or water application to:
  - Unpaved roads.
  - Unpaved yard areas.
- Paving and maintenance of roads, parking areas and yards.
- Landscaping or planting of vegetation.
- Confining abrasive blasting where possible.
- Other techniques, as necessary.

ATTACHMENT A-4
LIST OF INSIGNIFICANT ACTIVITIES

J.H. PHILLIPS STATION

LIST OF PROPOSED INSIGNIFICANT ACTIVITIES

1. Emergency diesel 600 kW generator (400 hours per year).
2. Freshwater cooling tower.
3. Brazing, soldering or welding equipment.
4. Comfort heating units with a gross maximum heat output of less than 1 MMBtu/hr.
5. No. 2 and No. 6 fuel oil storage tanks.
6. No. 2 and No. 6 fuel oil truck unloading equipment.
7. Fuel oil processing/treating equipment.
8. Laboratory equipment used for chemical or physical analyses.
9. Fire and safety equipment.
10. Turbine vapor extractors.
11. Non-halogenated solvent storage and cleaning operations.
12. Architectural (equipment) maintenance painting.
13. 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.
    b. The amount of coatings used shall include any solvents and thinners used in the process including those used for cleanup.
14. Surface coating operations utilizing only coatings containing 5.0 percent or less VOCs, by volume.
15. Degreasing units using heavier-than-air vapors exclusively, except any such unit using or emitting any substance classified as a hazardous air pollutant.
16. Evaporation of non-hazardous boiler chemical cleaning waste that was generated onsite.

J.H. PHILLIPS STATION

LIST OF PROPOSED
INSIGNIFICANT ACTIVITIES
(Continued, Page 2 of 2)

17. Internal combustion engines in boats, aircraft and vehicles used for transportation of passengers or freight.
18. Equipment used for steam cleaning.
19. Petroleum lubrication systems.
20. Any other emissions unit or activity that:
    a. Is not subject to a unit-specific applicable requirement.
    b. In combination with other units and activities proposed as insignificant, would not cause the J.H. Phillips Station to exceed any major source threshold(s) as defined by Rule 62-213.420(3)(c)1., F.A.C., unless acknowledged in a permit application.
    c. Would neither emit or have the potential to emit:
        i. 500 pounds per year 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.

ATTACHMENT A-5

IDENTIFICATION OF APPLICABLE REQUIREMENTS

Table A5-1. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for J.H. Phillips Station (Page 1 of 4)

Regulation	Citation	Not Applicable	Applicable	Applicable Requirement or Non-Applicability Rationale
40 CFR Part 60 - Standards of Performance for New Stationary Sources: Subparts A, B, C, Cb, Cc, Cd, Ce, D, Da, Db, Dc, E, Ea, Eb, Ec, F, G, H, I, J, K, Ka, Kb, L, M, N, Na, O, P, Q, R, S, T, U, V, W, X, Y, Z, AA, AAa, BB, CC, DD, EE, GG, HH, KK, LL, MM, NN, PP, QQ, RR, SS, TT, UU, VV, WW, XX, AAA, BBB, DDD, FFF, GGG, HHH, III, JJJ, KKK, LLL, NNN, OOO, PPP, QQQ, RRR, SSS, TTT, UUU, VVV, and WWW		X		None of the listed NSPS' contain requirements which are applicable to the J.H. Phillips Station.
40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants: Subparts A, B, C, D, E, F, H, I, J, K, L, N, O, P, Q, R, T, V, W, Y, BB, and FF		X		None of the listed NESHAPS' contain requirements which are applicable to the J.H. Phillips Station.
40 CFR Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories: Subparts A, B, C, D, E, F, G, H, I, L, M, N, O, Q, R, S, T, U, W, X, Y, AA, BB, CC, DD, EE, GG, HH, II, JJ, KK, LL, MM, OO, PP, QQ, RR, SS, TT, UU, VV, WW, XX, YY, CCC, DDD, EEE, GGG, HHH, III, JJJ, LLL, MMM, NNN, OOO, PPP, RRR, TTT, UUU, VVV, XXX, AAAA, CCCC, EEEE, FFFF, GGGG, HHHH, JJJJ, KKKK, MMMM, NNNN, PPPP, QQQQ, RRRR, SSSS, TTTT, UUUU, VVVV, WWWW, XXXX, YYYY, AAAAA, BBBBB, CCCCC, EEEEE, FFFFF, GGGGG, HHHHH, IIII, JJJJJ, KKKKK, LLLLL, MMMMM, QQQQQ, RRRRR, SSSSS, and TTTTT.		X		None of the listed NESHAPS' contain requirements which are applicable to the J.H. Phillips Station.

Table A5-1. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for J.H. Phillips Station (Page 2 of 4)

Regulation	Citation	Not Applicable	Applicable	Applicable Requirement or Non-Applicability Rationale
40 CFR Part 82 - Protection of Stratospheric Ozone				
Production and Consumption Controls	Subpart A	X		J.H. Phillips Station does not produce or consume ozone depleting substances.
Servicing of Motor Vehicle Air Conditioners	Subpart B	X		J.H. Phillips Station does not perform servicing of motor vehicles which involves refrigerant in the motor vehicle air conditioner. All such servicing is conducted off-site by persons who comply with Subpart B requirements.
Ban on Nonessential Products Containing Class I Substances and Ban on Nonessential Products Containing or Manufactured with Class II Substances	Subpart C	X		J.H. Phillips Station does not sell or distribute any banned nonessential substances.
The Labeling of Products Using Ozone-Depleting Substances	Subpart E	X		J.H. Phillips Station does not produce any products containing ozone depleting substances.
Prohibitions	§82.154	X	Appliances as defined by §82.152 - any device which contains and uses a Class I or II substance as a refrigerant and which is used for household or commercial purposes, including any air conditioner, refrigerator, chiller, or freezer	J.H. Phillips Station personnel do not maintain, service, repair, or dispose of any appliances. All such activities are performed by independent parties in compliance with §82.154 prohibitions.

Table A5-1. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for J.H. Phillips Station (Page 3 of 4)

Regulation	Citation	Not Applicable	Applicable	Applicable Requirement or Non-Applicability Rationale
Required Practices	§82.156	X	Same as above	J.H. Phillips Station personnel do not maintain, service, repair, or dispose of any appliances. All such activities are performed by independent parties in compliance with §82.156 required practices.
Technician Certification	§82.161	X	Same as above	J.H. Phillips Station personnel do not maintain, service, repair, or dispose of any appliances and therefore are not subject to technician certification requirements.
Certification By Owners of Recovery and Recycling Equipment	§82.162	X	Same as above	J.H. Phillips Station personnel do not maintain, service, repair, or dispose of any appliances and therefore do not use recovery and recycling equipment.
Subpart F - Recycling and Emissions Reduction				
Reporting and Recordkeeping Requirements	§82.166(k)		Appliances as defined by §82.152	Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep servicing records documenting the date and type of service, as well as the quantity of refrigerant added.
40 CFR Part 50 - National Primary and Secondary Ambient Air Quality Standards		X		State agency requirements - not applicable to individual emission sources.
40 CFR Part 51 - Requirements for Preparation, Adoption, and Submittal of Implementation Plans		X		State agency requirements - not applicable to individual emission sources.
40 CFR Part 52 - Approval and Promulgation of Implementation Plans		X		State agency requirements - not applicable to individual emission sources.
40 CFR Part 62 - Approval and Promulgation of State Plans for Designated Facilities and Pollutants		X		State agency requirements - not applicable to individual emission sources.
40 CFR Part 70 - State Operating Permit Programs		X		State agency requirements - not applicable to individual emission sources.

Table A5-1. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for J.H. Phillips Station (Page 4 of 4)

Regulation	Citation	Not Applicable	Applicable	Applicable Requirement or Non-Applicability Rationale
40 CFR Parts 49, 53, 54, 55, 56, 57, 58, 59, 64, 65, 66, 67, 68, 69, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 600, 610, 1048, 1051, 1065, and 1068		X		The listed regulations do not contain any requirements which are applicable to the J.H. Phillips Station.

Source: ECT, 2003.

Table A5-2. Summary of FDEP Regulatory Applicability and Corresponding Requirements for the J.H. Phillips Station (Page 1 of 10)

Regulation	Citation	Not Applicable	Applicable: Facility-Wide	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
Chapter 62-4, F.A.C. - Permits: Part I General					
Scope of Part I	62-4.011, F.A.C.	X			Contains no applicable requirements.
Definitions	62-4.020, .021, F.A.C.	X			Contains no applicable requirements.
General Prohibition	62-4.030, F.A.C		X		All stationary air pollution sources must be permitted, unless otherwise exempted.
Exemptions	62-4.040, F.A.C		X		Certain structural changes exempt from permitting. Other stationary sources exempt from permitting upon FDEP insignificance determination.
Procedure to Obtain Permits; Application	62-4.050(1), (2), (3), and (4).2.a, F.A.C.		X		All permit applications must be submitted on FDEP forms, in quadruplicate, and signed by a Professional Engineer. No application fee is required.
Permit Processing	62-4.055, F.A.C.	X			Contains no applicable requirements.
Consultation	62-4.060, F.A.C.	X			Consultation is encouraged, not required.
Standards for Issuing or Denying Permits; Issuance; Denial	62-4.070, F.A.C	X			Establishes standard procedures for FDEP. Requirement is not applicable to the facility.
Modification of Permit Conditions	62-4.080, F.A.C	X			Application is for Title V operating permit renewal. A Title V permit condition modification is not requested.
Renewals	62-4.090, F.A.C.		X		Establishes permit renewal criteria. Additional criteria are cited at 62-213.-430(3), F.A.C.
Suspension and Revocation	62-4.100, F.A.C.		X		Establishes permit suspension and revocation criteria.

Table A5-2. Summary of FDEP Regulatory Applicability and Corresponding Requirements for the J.H. Phillips Station (Page 2 of 10)

Regulation	Citation	Not Applicable	Applicable: Facility-Wide	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
Financial Responsibility	62-4.110, F.A.C.		X		Proof of financial responsibility may be required.
Transfer of Permits	62-4.120, F.A.C.	X			Application is for Title V operating permit renewal. A sale or legal transfer of a permitted facility is not included in this application.
Plant Operation - Problems	62-4.130, F.A.C.		X		Immediate notification is required whenever the permittee is temporarily unable to comply with any permit condition. Notification content is specified. **(potential future requirement)**
Permit Review	62-4.150, F.A.C.	X			General review requirements.
Permit Conditions	62-4.160, F.A.C.		X		Specifies general conditions that must be included in all permits.
Construction Permits	62-4.210, F.A.C.	X			General requirements for construction permits.
Operation Permits for New Sources	62-4.220, F.A.C.	X			General requirements for initial new source operation permits.
Chapter 62-103, F.A.C. - Rules of Administrative Procedure - Final Agency Action (Non-Rulemaking) and Appeal					
Public Notice of Application and Proposed Agency Action	62-103.150, F.A.C.		X		Applicant may be required to publish Notice of Application
Chapter 62-204, F.A.C. - State Implementation Plan					
State Implementation Plan	62-204.100, .200, .220(1)-(3), .240, .260, .320, .340, .360, .400, .500, and .800 F.A.C.	X			Contains no applicable requirements.

Table A5-2. Summary of FDEP Regulatory Applicability and Corresponding Requirements for the J.H. Phillips Station (Page 3 of 10)

Regulation	Citation	Not Applicable	Applicable: Facility-Wide	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
Ambient Air Quality Protection	62-204.220(4), F.A.C.	X			Assessments of ambient air pollutant impacts must be made using applicable air quality models, data bases, and other requirements approved by FDEP and specified in 40 CFR Part 51, Appendix W. Air quality modeling is not required for Title V permit applications.
Chapter 62-210, F.A.C. - Stationary Sources - General Requirements					
Purpose and Scope	62-210.100, F.A.C.	X			Contains no applicable requirements.
Definitions	62-210.200, F.A.C.	X			Contains no applicable requirements.
Permits Required	62-210.300, F.A.C., except 62-210.300(1) and (4), F.A.C.		X		Air operation permit required, with the exception of certain facilities and sources. Startup notification required if a permitted source has been shut down for more than 1 year.
Air Construction Permits	62-210.300(1), F.A.C.	X			Application is for Title V operating permit renewal. A construction permit is not requested in this application.
Emission Unit Reclassification	62-210.300(6), F.A.C.		X		Emission unit reclassification **(potential future requirement)**
Public Notice and Comment					
Public Notice of Proposed Agency Action	62-210.350(1), F.A.C.		X		All permit applicants required to publish notice of proposed agency action.
Additional Notice Requirements for Sources Subject to Prevention of Significant Deterioration or Nonattainment Area New Source Review	62-210.350(2), F.A.C.	X			PSD and nonattainment area NSR application not included in this application package.

Table A5-2. Summary of FDEP Regulatory Applicability and Corresponding Requirements for the J.H. Phillips Station (Page 4 of 10)

Regulation	Citation	Not Applicable	Applicable: Facility-Wide	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
Additional Public Notice Requirements for Sources Subject to Operation Permits for Title V Sources	62-210.350(3), F.A.C.		X		Notice requirements for Title V operating permit applicants.
Public Notice and Hearing Requirements for State Implementation Plan Revisions	62-210.350(4), F.A.C.	X			Defines requirements applicable to FDEP, only.
Administrative Permit Corrections	62-210.360, F.A.C.	X			Application is for Title V operating permit renewal. An administrative permit correction is not requested in this application.
Reports					
Notification of Intent to Relocate Air Pollutant Emitting Facility	62-210.370(1), F.A.C.	X			Facility does not have any relocatable emission units.
Annual Operating Report for Air Pollutant Emitting Facility	62-210.370(2), F.A.C.		X		Specifies annual reporting requirements
Stack Height Policy	62-210.550, F.A.C.		X		Limits credit in air dispersion studies to good engineering practice (GEP) stack heights.
Circumvention	62-210.650, F.A.C.		X		An applicable air pollution control device cannot be circumvented and must be operated whenever the emission unit is operating.
Excess Emissions	62-210.700(1), F.A.C.		X		Excess emissions due to malfunction are permitted.
Excess Emissions	62-210.700(2), F.A.C.			EU 004	Excess emissions due to startup and shutdown are permitted.

Table A5-2. Summary of FDEP Regulatory Applicability and Corresponding Requirements for the J.H. Phillips Station (Page 5 of 10)

Regulation	Citation	Not Applicable	Applicable: Facility-Wide	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
Excess Emissions	62-210.700(3), F.A.C.			EU 004	Excess emissions due to boiler cleaning (soot blowing) and load changes are permitted.
Excess Emissions	62-210.700(4), F.A.C.		X		Prohibited excess emissions.
Forms and Instructions	62-210.900, F.A.C.		X		Contains AOR requirements.
Notification Forms for Air General Permits	62-210.920, F.A.C.	X			Contains no applicable requirements.
Chapter 62-212, F.A.C. - Stationary Sources - Preconstruction Review					
Purpose and Scope	62-212.100, F.A.C.	X			Contains no applicable requirements.
General Preconstruction Review Requirements	62-212.300, F.A.C.	X			Air construction permit requirements, not applicable to Title V operating permit applications.
Prevention of Significant Deterioration	62-212.400, F.A.C.	X			PSD permit required prior to construction of facility, not applicable to Title V operating permit applications.
New Source Review for Nonattainment Areas	62-212.500, F.A.C.	X			Facility not located in any nonattainment area or nonattainment area of influence.
Sulfur Storage and Handling Facilities	62-212.600, F.A.C.	X			Applicable only to sulfur storage and handling facilities.
Chapter 62-213, F.A.C. - Operation Permits for Major Sources of Air Pollution					
Purpose and Scope	62-213.100, F.A.C.	X			Contains no applicable requirements.
Annual Licensing Fee	62-213.205(1) and (4), F.A.C.		X		Operating license fee and documentation requirements.
Annual Licensing Fee	62-213.205(2), (3), and (5), F.A.C.	X			Contains no applicable requirements.

Table A5-2. Summary of FDEP Regulatory Applicability and Corresponding Requirements for the J.H. Phillips Station (Page 6 of 10)

Regulation	Citation	Not Applicable	Applicable: Facility-Wide	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
Title V Air General Permits	62-213.300, F.A.C.	X			No eligible facilities
Permits and Permit Revisions Required	62-213.400, F.A.C.		X		Title V operation permit required.
Changes Without Permit Revision	62-213.410, F.A.C.		X		Certain changes may be made if specific notice and recordkeeping requirements are met **(potential future requirement)**.
Immediate Implementation Pending Revision Process	62-213.412, F.A.C.		X		Certain modifications can be implemented pending permit revision if specific criteria are met **(potential future requirement)**.
Fast-Track Revisions of Acid Rain Parts	62-213.413, F.A.C.	X			Optional provisions for Acid Rain permit revisions.
Trading of Emissions within a Source	62-213.415, F.A.C.	X			J.H. Phillips Station does not have any facility-wide emissions caps.
Permit Applications	62-213.420(1)(a)1.a. and (1)(b),F.A.C.		X		Title V operating permit application required.
Permit Issuance, Renewal, and Revision					
Action on Application	62-213.430(1), F.A.C.	X			Contains no applicable requirements.
Permit Denial	62-213.430(2), F.A.C.	X			Contains no applicable requirements.
Permit Renewal and Expiration	62-213.430(3), F.A.C.		X		Defines permit renewal application contents.
Permit Revision	62-213.430(4), F.A.C.		X		Defines permit revision application contents.
EPA Recommended Actions	62-213.430(5), F.A.C.	X			Contains no applicable requirements.
Permit Content	62-213.440, F.A.C.		X		Defines permit content.

Table A5-2. Summary of FDEP Regulatory Applicability and Corresponding Requirements for the J.H. Phillips Station (Page 7 of 10)

Regulation	Citation	Not Applicable	Applicable: Facility-Wide	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
Permit Review by EPA and Affected States	62-213.450, F.A.C.	X			Contains no applicable requirements.
Permit Shield	62-213.460, F.A.C.		X		Provides permit shield for facilities in compliance with permit terms and conditions.
Forms and Instructions	62-213.900, F.A.C.		X		Contains fee form requirements.
Chapter 62-214—Requirements for Sources Subject to the Federal Acid Rain Program		X			J.H. Phillips Station does not contain any emission units subject to the Acid Rain Program.
Chapter 62-252 - Gasoline Vapor Control	62-252, F.A.C.	X			J.H. Phillips Station is not located in an ozone nonattainment or air quality maintenance area.
Chapter 62-256 - Open Burning and Frost Protection Fires					
Declaration and Intent	62-256.100, F.A.C.	X			Contains no applicable requirements.
Definitions	62-256.200, F.A.C.	X			Contains no applicable requirements.
Prohibitions	**62-256.300, F.A.C.**[1]		X		Prohibits open burning.
Burning for Cold and Frost Protection	62-256.450, F.A.C.	X			Limited to agricultural protection.
Land Clearing	**62-256.500, F.A.C.**[1]		X		Defines allowed open burning for non-rural land clearing and structure demolition.
Industrial, Commercial, Municipal, and Research Open Burning	**62-256.600, F.A.C.**[1]		X		Prohibits industrial open burning
Open Burning allowed	62-256.700, F.A.C.	X			Contains no applicable requirements.
Effective Date	62-256.800, F.A.C.	X			Contains no applicable requirements.
Chapter 62-257 - Asbestos Fee			X		Requires notice and payment of fee for asbestos removal projects.

Table A5-2. Summary of FDEP Regulatory Applicability and Corresponding Requirements for the J.H. Phillips Station (Page 8 of 10)

Regulation	Citation	Not Applicable	Applicable: Facility-Wide	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
Chapter 62-281 - Motor Vehicle Air Conditioning Refrigerant Recovery and Recycling		X			Servicing of motor vehicle air conditioners and vehicle maintenance that may release refrigerants is not conducted.
Chapter 62-296 - Stationary Source - Emission Standards					
Purpose and Scope	62-296.100, F.A.C.	X			Contains no applicable requirements
General Pollutant Emission Limiting Standard, Volatile Organic Compounds Emissions	62-296.320(1), F.A.C.		X		Known and existing vapor control devices must be applied as required by the Department.
General Pollutant Emission Limiting Standard, Objectionable Odor Prohibited	62-296.320(2), F.A.C.		X		Objectionable odor release is prohibited.
General Pollutant Emission Limiting Standard, Industrial, Commercial, and Municipal Open Burning Prohibited	**62-296.320(3), F.A.C.**[1]		X		Open burning in connection with industrial, commercial, or municipal operations is prohibited.
General Particulate Emission Limiting Standard, Process Weight Table	62-296.320(4)(a), F.A.C.	X			Exempt per 62-320(4)(a)1a.
General Particulate Emission Limiting Standard, General Visible Emission Standard	62-296.320(4)(b), F.A.C.		X		Opacity limited to 20 percent, unless otherwise permitted. Test methods specified.
General Particulate Emission Limiting Standard, Unconfined Emission of Particulate Matter	62-296.320(4)(c), F.A.C.		X		Reasonable precautions must be taken to prevent unconfined particulate matter emission.

Table A5-2. Summary of FDEP Regulatory Applicability and Corresponding Requirements for the J.H. Phillips Station (Page 9 of 10)

Regulation	Citation	Not Applicable	Applicable: Facility-Wide	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
Specific Emission Limiting and Performance Standards	§62-296.406(1), (2), and (3), F.A.C.			EU-004	(1) Visible Emissions - 20 percent opacity except for either one six-minute period per hour during which opacity shall not exceed 27 percent, or one two-minute period per hour during which opacity shall not exceed 40 percent. The option selected shall be specified in the source's construction and operation permits. (2) Particulate Matter - BACT (3) Sulfur Dioxide - BACT
Specific Emission Limiting and Performance Standards	62-296.401 through 62-296.405 and 62-296.407 through 62-296.417, F.A.C.	X			No applicable unit at facility.
Reasonably Available Control Technology (RACT) Volatile Organic Compounds (VOC) and Nitrogen Oxides (NO_x) Emitting Facilities	62-296.500 through 62-296.516, F.A.C.	X			Facility doers not include any regulated units.
Reasonably Available Control Technology (RACT) - Requirements for Major VOC- and NO_x-Emitting Facilities	62-296.570, F.A.C.	X			Facility is not located in a specified ozone nonattainment area or a specified ozone air quality maintenance area (Broward, Dade and Palm Beach Counties)
Reasonably Available Control Technology (RACT) - Lead	62-296.600 through 62-296.605, F.A.C.	X			Facility not located in a lead nonattainment area or a lead air quality maintenance area.
Reasonably Available Control Technology (RACT)—Particulate Matter	§62-296.700 through 62-296.712, F.A.C.	X			Facility doers not include any regulated units.

Table A5-2. Summary of FDEP Regulatory Applicability and Corresponding Requirements for the J.H. Phillips Station (Page 10 of 10)

Regulation	Citation	Not Applicable	Applicable: Facility-Wide	Applicable: Emission Units	Applicable Requirement or Non-Applicability Rationale
Chapter 62-297 - Stationary Sources - Emissions Monitoring					
Purpose and Scope	62-297.100, F.A.C.	X			Contains no applicable requirements.
General Test Requirements	62-297.310(1) through (6), and (8), F.A.C.		X		Specifies general compliance test requirements.
Compliance Test Methods	62-297.401, F.A.C.	X			Contains no applicable requirements.
Supplementary Test Procedures	62-297.440, F.A.C.	X			Contains no applicable requirements.
EPA VOC Capture Efficiency Test Procedures	62-297.450, F.A.C.	X			Contains no applicable requirements.
CEMS Performance Specifications	62-297.520, F.A.C.	X			Contains no applicable requirements.
Exceptions and Approval of Alternate Procedures and Requirements	62-297.620, F.A.C.	X			Exceptions or alternate procedures have not been requested.
Current Permits					
FINAL Title V	0550018-001-AV		X	EU-001 through EU-004	

[1] - State requirement only; not federally enforceable.

Source: ECT, 2003.

ATTACHMENT A-6

COMPLIANCE REPORT AND PLAN

J.H. PHILLIPS STATION

COMPLIANCE REPORT, PLAN, AND CERTIFICATION

1. Compliance Report and Plan

Attachment A-5 to this Title V operation permit renewal application identifies the requirements that are applicable to the emission units that comprise this Title V source. Each emissions unit is in compliance, and will continue to comply, with the respective applicable requirements.

The emission units that comprise this Title V source will comply with future-effective applicable requirements on a timely basis.

2. Proposed Schedule for the Submission of Periodic Compliance Statements Throughout the Permit Term

Periodic compliance statements are proposed to be submitted on an annual basis within 60 days after the end of each calendar year pursuant to the requirements of FDEP Rule 62-213.440(3)(a)2.a, F.A.C.

3. Compliance Certification

I, the undersigned, am the responsible official as defined in Chapter 62-210.200(220), F.A.C., of the Title V source for which this report is being submitted. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made and data contained in this report are true, accurate, and complete.

Mark J. Hornick
General Manager

12/23/03
Date

ATTACHMENT A-7

LIST OF EQUIPMENT REGULATED UNDER TITLE VI

J.H. PHILLIPS STATION

LIST OF EQUIPMENT REGULATED UNDER TITLE VI

- One, 50-ton Trane air conditioning unit containing 53 pounds of R22 refrigerant.

ATTACHMENT A-8

REQUESTED CHANGES TO CURRENT TITLE V OPERATION PERMIT

Initial Title V Air Operation Permit
FINAL Permit No.: 0550018-001-AV

Table of Contents

Permittee:
Tampa Electric Company

FINAL Permit No.: 0550018-001-AV
Facility ID No.: 0550018
SIC Nos.: 4911
Project: Initial Title V Air Operation Permit

This permit is for the operation of two slow speed diesel engines and a steam boiler.

The slow speed diesel engines drive electric generators and burn No. 6 fuel oil. The maximum heat input for each engine is 172 MMBtu/hour. The boiler burns No. 2 fuel oil and the steam is used to heat the No. 6 fuel oil. The maximum heat input for the boiler is 10.4 MMBtu/hour. The facility is located at 7301 Airport Road, Sebring, Florida, Highlands County; UTM Coordinates: Zone 17, 464.30 km East and 3035.40 km North; Latitude: 27°26' 35" North and Longitude: 81°21'40" West.

STATEMENT OF BASIS: This Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-213. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

Referenced attachments made a part of this permit:
APPENDIX TV-~~4~~3, TITLE V CONDITIONS (version dated 02/12/02~~04/30/99~~)
[Rule 62-296.406, F.A.C.] BACT dated September 3, 1992

Effective Date: June 24, 2004~~1999~~
Renewal Application Due Date: December 24, 2008~~3~~
Expiration Date: June 24, 2009~~4~~

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

Margaret F. Highsmith
Director of
District Management

MFH/JRS/jw

Section I. Facility Information.

Subsection A. Facility Description.

This facility consists of two 19.58~~035~~ MW slow speed diesel engines, two heat recovery steam boilers, an auxiliary 10.46 MMBtu/hour steam boiler, a steam turbine, and recirculating cooling water system, fuel oil storage tanks and auxiliary support equipment.

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

Subsection B. Summary of Emissions Unit ID No(s). and Brief Description(s).

E.U. ID No.	Brief Description
001	19.580~~535~~ MW slow speed diesel generating unit
002	19.580~~535~~ MW slow speed diesel generating unit
~~003~~	~~Emergency diesel generating unit~~
004	Steam Boiler

[Reason for changes: Correction to slow speed diesel engine generator nameplate rating. Deletion of EU 003 is requested since it qualifies as an insignificant activity and is listed as such in Appendix I-1].

Two slow speed diesel engines fired with No. 6 fuel oil, and an auxiliary steam boiler fired with No. 2 fuel oil. The emergency diesel generating unit operates less than 400 hours/year and qualifies as an insignificant activity pursuant to Rule 62-213.300(2)(a)1., F.A.C..

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

Subsection C. Relevant Documents.

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

These documents are provided to the permittee for information purposes only:
Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers
Appendix H-1, Permit History/ID Number Changes
Appendix I-1, List of Insignificant Emissions Units and/or Activities
Table 1-1, Summary of Air Pollutant Standards and Terms
Table 2-1, Summary of Compliance Requirements

These documents are on file with permitting authority:
Initial Title V Permit Application received June 14, 1996.

E.U. ID No.	Description	Permit No.	Issue Date	Expiration Date
001	Diesel Generator	AO28-234787	10/15/93	10/05/98
		AO28-154204	09/16/88	09/16/93
		AO28-71313	07/28/83	07/28/88
		AC28-7377	03/16/81	08/16/83
002	Diesel Generator	AO28-234794	10/15/93	10/05/98
		AO28-154205	09/16/88	09/16/93
		AO28-71315	07/28/83	07/28/88
		AC28-7291	03/16/81	08/16/83
003	Diesel Generator	AO28-125884	05/14/87	05/14/92 Declared Exempt 3/3/92
004	Steam Boiler	AO28-234735	11/17/93	10/05/98
		AC28-221558	03/10/93	03/10/98

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. APPENDIX TV-~~43~~, TITLE V CONDITIONS, (version dated 02/12/02~~04/30/99~~) is a part of this permit. {Permitting note: APPENDIX TV-3, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided one copy when requested or otherwise appropriate.}

2. **Not federally enforceable.** General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. The permittee shall not 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.
[Rule 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; and
   b. The permittee shall submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.

[40 CFR 68]

5. Insignificant Emissions Units and or Activities. Appendix I - List of insignificant emission units and/or activities, is a part of this permit.

6. **Not federally enforceable.** General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.
[Rule 62-296.320(1)(a), F.A.C.]

7. The hours of operation of this facility are not limited.

8. If the department has reason to believe that any applicable emission standard or condition of the permit is being violated, then the department may require the permittee to conduct compliance tests or keep additional records which identify the nature and quantity of pollutant emissions.
[Rule 62-297.310(7)(b), F.A.C.]

9. When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one.
[Rule 62-213.440, F.A.C.]

10. Annual Operating Report for Air Pollutant Emitting Facility. The Annual Operating Report for Air Pollutant Emitting Facility (DEP Form No. 62-210.900(5) shall be completed each year for all Title V sources. The annual operating report shall be submitted to the Department of Environmental Protection (DEP) South District office by March 1 of the following year unless otherwise indicated by permit condition or Department request.
[Rule 62-210.370(3)(a)&(c), F.A.C.]

11. The permittee shall submit all compliance related notifications and reports required of this permit to the Department's South District office:

Department of Environmental Protection
South District
Post Office Box 2549
Fort Myers, Florida 33902-2549
Telephone: 941/332-6975
Fax: 941/332-6969

12. 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 & EPCRA Enforcement Branch, Air Enforcement Section
61 Forsyth Street
Atlanta, Georgia 30303
Telephone: 404/562-9155, Fax: 404/562-9164

Section III. Emissions Unit(s) and Conditions.

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

E.U. ID No.	Brief Description
001	19.580~~535~~ MW slow speed diesel generating unit
002	19.580~~535~~ MW slow speed diesel generating unit

The following specific conditions apply:

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity. The maximum operation heat input rate is as follows:

Unit No.	MMBtu/hour	Fuel Type
001	172	No. 6 fuel oil
002	172	No. 6 fuel oil

{Permitting note: The above heat input limitations have been placed in the permit to identify the capacity of each emissions unit for purposes of confirming that emissions testing is conducted within 90-100 percent of the emissions unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate limits and to aid in determining future rule applicability. Regular recordkeeping is not required for heat input. Instead, the owner or operator is expected to determine heat input whenever emission testing is required, in order to demonstrate what percentage of the rated capacity that the unit was tested. Such heat input determinations 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 heating value of the fuel determined by the fuel vendor or the owner or operator, to calculate average hourly heat input during the test. }

[Reason for changes: Clarify purpose of heat input data consistent with current Department policy.]

A.2. Methods of Operation. Fuels.

a. This facility is authorized to fire Number 6 fuel oil with a sulfur content of ≤2.5% in the diesel generating units.
[Rule 62-210.200, F.A.C., Definitions: Potential-to-Emit].

A.3. Hours of Operation. These emissions units are allowed to operate continuously, i.e. 8760 hours/year.
[Rules 62-4,160(2) and 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

A.4. The allowable emissions for each slow-speed diesel engine shall be as follows:

Pollutant	Maximum Emissions	lb/hour
Nitrogen Oxides (NO_x)	819 PPM @ 15% O_2	572
Carbon Monoxide (CO)	0.575 lb/MMBtu	99
Hydrocarbons (HC)	0.26 lb/MMBtu	45
Particulate Matter (PM)	0.1 lb/MMBtu	17
Sulfur Dioxide (SO_2)	2.67 lb/MMBtu	460

[BACT Dated February 17, 1981]

Test Methods and Procedures

A.5. Nitrogen oxide emission tests are required to show continuing compliance with the standards of the Department. The test results must provide reasonable assurance that the unit is capable of compliance at the permitted maximum operating rate. Test shall be conducted in accordance with EPA Method 7E as published in 40 CFR-60, Appendix A, or State approved equivalent method. Such tests shall be conducted once during each Federal fiscal year. [Construction permits No. AC28-~~221558~~7377 & No. AC28-7291, dated March 16, 1981 and Rule 62-212.410, F.A.C.]

[Reason for changes: Implement March 14 ,2000 Administratively corrected pages to the initial Title V Operation Permit No. 0550018-001-AV.]

A.6. Carbon monoxide emission tests are required to show continuing compliance with the standards of the Department. The test results must provide reasonable assurance that the unit is capable of compliance at the permitted maximum operating rate. Test shall be conducted in accordance with EPA Method 10 as published in 40 CFR-60, Appendix A, or State approved equivalent method. Such tests shall be conducted once during each Federal fiscal year. [Construction permits No. AC28-~~221558~~7377 & No. AC28-7291, dated March 16, 1981.]

[Reason for changes: Implement March 14 ,2000 Administratively corrected pages to the initial Title V Operation Permit No. 0550018-001-AV.]

A.7. Compliance with Volatile organic compound emission limits will be assumed provided the CO allowable emission rate is achieved; specific VOC compliance testing is not required. [Construction permits No. AC28-7377 & No. AC28-7291, dated March 16, 1981.]

[Reason for changes: Implement March 14 ,2000 Administratively corrected pages to the initial Title V Operation Permit No. 0550018-001-AV.]

A.~~7~~8. Visible emission tests are required to show continuing compliance with the standards of the Department. The test results must provide reasonable assurance that the unit is capable of compliance at the permitted maximum operating rate. Test shall be conducted in accordance with EPA Method 9 as published in 40 CFR-60, Appendix A, or State approved equivalent method. Such tests shall be conducted once during each Federal fiscal year. [Construction permits No. AC28-~~221558~~7377 & No. AC28-7291, dated March 16, 1981 and Rule 62-297.310(7), F.A.C.]

[Reason for changes: Implement March 14 ,2000 Administratively corrected pages to the initial Title V Operation Permit No. 0550018-001-AV.]

A.89. If the opacity determined by EPA method 9 is greater than 10% then a particulate matter emissions test is required. The test shall be conducted in accordance with EPA Method 5 as published in 40 CFR-60, Appendix A, or State approved equivalent method.
[Construction permit No. AC28-~~2215587~~377 & No. AC28-7291, dated March 16, 1981.]

[Reason for changes: Implement March 14 ,2000 Administratively corrected pages to the initial Title V Operation Permit No. 0550018-001-AV.]

A.910. Compliance with the sulfur dioxide emission limit may be calculated from analyses of sulfur in the fuel oil. Sulfur content in fuel shall not exceed 2.5% by weight.
[Construction permit No. AC28-~~2215587~~377 & No. AC28-7291, dated March 16, 1981.]

[Reason for changes: Implement March 14 ,2000 Administratively corrected pages to the initial Title V Operation Permit No. 0550018-001-AV.]

A.~~10~~11. The following parameters are to be monitored on a daily basis. Appropriate records shall be maintained on site for Department Inspection:

(a) Intake manifold temperature
(b) Intake manifold pressure
(c) Engine Speed
(d) Diesel rack position (
~~(c)~~ Fuel flow)
(e)
~~(d)~~ Injector ~~flow~~timing
(f) Gross heat of combustion value and percent sulfur content by weight for each fresh supply of fuel added to the storage facilities. A monthly fuel oil composite sample shall be prepared from daily fuel oil samples.

[Construction permit No. AC28-~~2215587~~377 & No. AC28-7291, dated March 16, 1981.]

[Reason for changes: Implement March 14 ,2000 Administratively corrected pages to the initial Title V Operation Permit No. 0550018-001-AV and requested permit language clarifies fuel oil sampling and analysis requirements.]

A.~~11~~12. Stack sampling facilities provided by the owner shall be in accordance with the requirements of Chapter 62-297. F.A.C.

[Reason for changes: Implement March 14 ,2000 Administratively corrected pages to the initial Title V Operation Permit No. 0550018-001-AV.]

A.13. Frequency of Compliance Tests. Slow Speed Diesel Unit Numbers 1 and 2 shall be stack tested for visible emissions, carbon monoxide, sulfur dioxide, and nitrogen oxide emissions. Each test shall be conducted annually during each federal fiscal year (October 1 – September 30).

Units No. 1 and 2 Required Testing

Nitrogen Oxides (NO_x) - Annually

Sulfur Dioxide (SO_2) - Annually [1]
Volatile Organic Compounds (VOC) - [2]
Carbon Monoxide (CO) - Annually
Particulate Matter (PM/PM_{10}) [3]
Visible Emissions (VE) - Annually

[1] Calculated from monthly fuel oil composite sample analyses.
[2] Only required if EPA Method 10 carbon monoxide test exceeds 99 lb/hr limit.
[3] Only required if EPA Method 9 visible emissions test exceeds 10% opacity.

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

E.U. ID No.	Brief Description
004	Steam Boiler

The following specific conditions apply:

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity. The maximum operation heat input rate is 10.46 MMBtu/hour.
[Construction permit No. AC28-221558 dated March 10, 1993]

{Permitting note: The above heat input limitation has been placed in the permit to identify the capacity of each emissions unit for purposes of confirming that emissions testing is conducted within 90-100 percent of the emissions unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate limits and to aid in determining future rule applicability. Regular recordkeeping is not required for heat input. Instead, the owner or operator is expected to determine heat input whenever emission testing is required, in order to demonstrate what percentage of the rated capacity that the unit was tested. Such heat input determinations 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 heating value of the fuel determined by the fuel vendor or the owner or operator, to calculate average hourly heat input during the test. }

[Reason for changes: Clarify purpose of heat input data consistent with current Department policy.]

B.2. Methods of Operation. Fuel. This boiler is authorized to burn No. 2 fuel oil with a sulfur content ≤ 0.5% by weight.
[Construction permit No. AC28-221558 dated March 10, 1993]

B.3. This emissions unit is allowed to operate continuously, i.e., 8760 hours/year.

Emission Limitations and Standards

B.4. Visible emissions shall not exceed 20% opacity under normal operation except for up to 6 minutes in any one hour during which the average opacity shall not exceed 27%.
[Rule 62-296.406(1), F.A.C.]

Test Methods and Procedures

B.5. Visible emissions tests are required to show continuing compliance with the standards of the Department. The test results must provide reasonable assurance that the unit is capable of compliance at the permitted maximum operating rate. Tests shall be conducted in accordance with EPA Method 9 as published in 40 CFR-60, Appendix A, or State approved equivalent method. Such tests shall be conducted once during each Federal fiscal year. Results shall be

submitted to the Department within 45 days after testing. The Department shall be notified at least 15 days prior to testing to allow witnessing.
[Rule 62-297.310(7), F.A.C.]

B.6. Frequency of Compliance Tests. Steam Boiler be stack tested for visible emissions. Each test shall be conducted annually during each federal fiscal year (October 1 – September 30).

Steam Boiler Required Testing

Nitrogen Oxides (NO_x) – Recordkeeping (C.1.)
Sulfur Dioxide (SO_2) - Annually [(1)] and Recordkeeping (C.1.)
Visible Emissions (VE) - Annually

[(1)] Calculated from monthly fuel oil composite sample analyses.

Subsection C. Common Conditions

E.U. ID No.	Brief Description
001	Diesel Generator
002	Diesel Generator
004	Steam Boiler

The following conditions apply to the emissions units listed above:

C.1. Tampa Electric Company shall maintain daily records, in a permanent form suitable for inspection, documenting the sulfur content of all fuels burned. A monthly fuel oil composite sample shall be prepared from daily fuel oil samples. The records shall contain, as a minimum, for each monthly composite sample~~day~~, the sulfur content of the fuels, the amount of each fuel burned, Btu content, and density of the fuel. The records shall contain sufficient detail to allow the Department to determine whether the emissions were properly computed. All recorded data shall be maintained on file for a period of at least 5 years. Quarterly reports shall be submitted for those quarters in which the facility is in service. The reports shall be sent to the Department within 30 days of the end of the quarter giving monthly summaries of the following data:

a) Pounds of sulfur dioxide per million Btu of heat input based on a monthly average.

b) The amount of each type of fuel burned for the reporting period.

[BACT dated February 17, 1981]

[Reason for changes: Requested permit language clarifies fuel oil sampling and analysis requirements.]

C.2. Annual compliance testing is not required for these emissions units while burning only liquid fuel(s) for less than 400 hour per year.
[Rules 62-297.310(7)(a)3 . and 5., F.A.C.; and ASP Number 97-B-01.]

Test Methods and Procedures

C.3. Operating Rate During Testing. Testing of emissions should be conducted with the source operating within 10% of its rated capacity. Testing may be conducted at less than 90% of rated capacity; however, if so, subsequent source operation is limited to up to 110% of the test load. Once the unit is so limited, operation at higher capacities is allowed for purposes of additional compliance testing to regain rated capacity in the permit with prior notification of Department's South District. [Rule 62-297.310(2) and (2)(b), F.A.C.]

C.4. Issuance of this permit does not relieve the permittee from complying with applicable emission limiting standards or other requirements of Rules 62-210, 62-212, 62-252, 62-272, 62-273, 62-275, 62-296, and 62-297, F.A.C., or any other requirements under Federal, State, or local law. [Rule 62-210.300, F.A.C.]

C.5 Fuel Oil Analysis

C.5.1. Distillate oil means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396-78, "Standard Specification for Fuel Oils" (incorporated by reference—see Sec. 60.17). Sec. 60.41c Definitions.

C.5.2. Residual oil means crude oil, fuel oil that does not comply with the specifications under the definition of distillate oil, and all fuel oil numbers 4, 5, and 6, as defined by the American Society for Testing and Materials in ASTM D396-78, "Standard Specification for Fuel Oils" (incorporated by reference—see Sec. 60.17).

C.5.3. Sulfur. The sulfur content of all fuel oils shall be determined by either ASTM Method D 129-91, or D 2622-94, or D 4294-90, or a compliance method approved by the Department. [Rule 62-213.440(1)(b)1.b, F.A.C.]

Appendix H-1, Permit History/ID Number Changes

Permit History (for tracking purposes):

E.U. ID No.	Description	Permit No.	Issue Date	Expiration Date
001	Diesel Generator	AO28-234787	10/15/93	10/05/98
		AO28-154204	09/16/88	09/16/93
		AO28-71313	07/28/83	07/28/88
		AC28-7377	03/16/81	08/16/83
002	Diesel Generator	AO28-234794	10/15/93	10/05/98
		AO28-154205	09/16/88	09/16/93
		AO28-71315	07/28/83	07/28/88
		AC28-7291	03/16/81	08/16/83
003	Diesel Generator	AO28-125884	05/14/87	05/14/92 Declared Exempt 3/3/92
004	Steam Boiler	AO28-234735	11/17/93	10/05/98
		AC28-221558	03/10/93	03/10/98

From: **Facility ID No.:** 52FTM280018

To: **Facility ID No.:** 0550018

Notes:
1 - AO permit(s) automatic extension(s) in Rule 62-210.300(2)(a)3.a., F.A.C., effective 3/21/96.
2 - AC permit(s) automatic extension(s) in Rule 62-213.420(1)(a)4., F.A.C., effective 03/20/96. {Rule 62-213.420(1)(b)2., F.A.C., effective 03/20/96, allows Title V Sources to operate under existing valid permits}

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

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Categorical Exemptions, are exempt from the permitting requirements of Chapters 62-210 and 62-4, F.A.C.; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining the potential emissions of the facility containing such emissions units. Emissions units and pollutant-emitting activities exempt from permitting under Rule 62-210.300(3)(a), 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 Rule 62.210.300(3)(a), F.A.C., if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.

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

	Emission Source	Process Area
1.	Emergency Diesel Generator	Facility-Wide
2.	Fuel Oil Storage Tanks	Facility-Wide
3.	Freshwater cooling tower	Facility-Wide
4~~3~~	Ancillary Support Equipment	Facility-Wide

Table 1-1, Summary of Air Pollutant Standards and Terms

Tampa Electric Company
J. H. Phillips Station

Permit No.: 0550018-001-AV
Facility ID No.: 0550018

This table summarizes information for convenience purposes only. This table does not supersede any of the terms of conditions of this permit.

E.U. ID No. **Brief Description**:
001& 002 Diesel Generator (emission limits below are for each diesel generator)

			Allowable Emissions			Equivalent Emissions			
Pollutant Name	Fuel(s)	Hours/Year	Standard(s)	lbs/hour	TPY	lbs/hour	TPY	Regulatory Citation(s)	See Permit Conditions
NO_x	Oil	8760	819PPM @15% O_2	572	2505	572	2505	BACT Dated 02/17/81	A.4.
CO	Oil	8760	0.575 lb/MMBtu	99	434	99	434	BACT Dated 02/17/81	A.4.
HC	Oil	8760	0.26 lb/MMBtu	45	197	45	197	BACT Dated 02/17/81	A.4.
PM	Oil	8760	0.1 LB/MMBtu	17	74.5	17	74.5	BACT Dated 02/17/81	A.4.
SO_2	Oil	8760	2.5% S 2.67lb/MMBtu	460	2015	460	2015	BACT Dated 02/17/81	A.4.

Notes:
* The "Equivalent Emissions" listed are for informational purpose only.

Table 1-1, Summary of Air Pollutant Standards and Terms

Tampa Electric Company
J. H. Phillips Station

Permit No.: 0550018-001-AV
Facility ID No.: 0550018

This table summarizes information for convenience purposes only. This table does not supersede any of the terms of conditions of this permit.

E.U. ID No. **Brief Description:**
004 Steam Boiler

			Allowable Emissions			Equivalent Emissions			
Pollutant Name	Fuel(s)	Hours/Year	Standard(s)	lbs/hour	TPY	lbs/hour	TPY	Regulatory Citation(s)	See Permit Conditions
NO_x	Oil	8760				1.5~~49~~	6.7~~53~~		
SO_2	Oil	8760	0.5% S	5.4~~29~~	23.7~~2~~	5.4~~29~~	23.7~~2~~	Construction Permit Dated 03/10/93	B.1., B.2., B.3.
PM	Oil	8760				0.2~~1~~5	1.1~~0.65~~	Rule 62-296	B.4., B.5., C.2.

Notes:
* The "Equivalent Emissions" listed are for informational purpose only.

Table 2-1, Summary of Compliance Requirements

Tampa Electric Company
J. H. Phillips Station

Permit No.: 0550018-001-AV
Facility ID No.: 0550018

This table summarizes information for convenience purposes only. This table does not supersede any of the terms of conditions of this permit.

E.U. ID No. **Brief Description:**
001& 002 Diesel Generator

Pollutant Name or Parameter	Fuels	Compliance Method	Testing Time Frequency	Frequency Base Date*	Minimum Compliance Test Duration	CMS**	See Permit Condition(s)
NO_x	Oil	EPA Method 7 E	Once/Year	09/30/99	3 Hours		A.4., A.5., A.1~~1~~2., A.13
CO	Oil	EPA Method 10	Once/Year	09/30/99	3 Hours		A.4., A.6., A.1~~1~~2., A.13
HC	Oil	Record Keeping					A.4., A.7
PM	Oil	VE	Once/Year	09/30/99	0.5 Hour		A.4., 3, A.~~7~~8., A.9., A.12., A.13
SO_2	Oil	Record Keeping (composite sample)					A.2., A.3., A.4., A.~~9~~10., A.13

Notes:
* The frequency base date is established for planning only; see Rule 62-297.310, F.A.C.
** CMS [=] continuous monitoring system

Table 2-1, Summary of Compliance Requirements

Tampa Electric Company
J. H. Phillips Station

Permit No.: 0550018-001-AV
Facility ID No.: 0550018

This table summarizes information for convenience purposes only. This table does not supersede any of the terms of conditions of this permit.

E.U. ID No. **Brief Description:**
004 Steam Boiler

Pollutant Name or Parameter	Fuels	Compliance Method	Testing Time Frequency	Frequency Base Date*	Minimum Compliance Test Duration	CMS**	See Permit Condition(s)
NO_x	Oil	Record Keeping					B.2., C.1.
SO_2	Oil	Record Keeping (composite sample)					B.2., C.1.
PM	Oil	V.E.	Once/Year	09/30/99	1 Hour		B.4., B.5., C.2.

Notes:
* The frequency base date is established for planning only; see Rule 62-297.310, F.A.C.
** CMS [=] continuous monitoring system

ATTACHMENT A-9

FUEL ANALYSIS OR SPECIFICATIONS

TECO TAMPA ELECTRIC

Environmental, Health & Safety
Laboratory Services

5012 Causeway Blvd * Tampa Fl. 33619 * Ph (813) 630-7378 * Fax (813) 630-7360 * DOH #E54272

Report Laurie Pence, Envir. Plan.
Darlene Reeves, Phillips

Report Date 10/17/2003

Laboratory ID:AA71598

Sample Information

Location Code: PP-#6-SC
Location Description: Phillips #6 Oil Mthly Sta Comp
MONTH OF COMPOSITE:SEPTEMBER

Lab Submittal Date: 10/03/2003
Sample Collection Date: 09/30/2003
Sample Collector: CLIENT

Laboratory Results

Parameter	Result	Units	MDL	Lower Limit	Upper Limit	Violation
API Gravity @ 60 Deg. F	12.0	Degrees API	0.1			
Ash, Oil	0.032	mass %	0.001			
Conradson Carbon	13.72	%				
Gross Heat of Combustion, Oils, (HHV)	150173	BTU/Gal.	1			
Gross Heat of Combustion, Oils, (HHV)	18287	BTU/Lb.	1			
Kinematic Viscosity	305	cSt				
Pounds / Gallon @ 60 Deg. F	8.212	Lbs./Gal.	0.001		9.5	
Pounds SO2 / Million BTU, Oil	2.601	Lbs.				
Relative Density 60/60 Deg. F	0.9861		0.0001			
Saybolt Furol Viscosity @ 122 F	144.0	SFS	0.1			
Sulfur in Petroleum Products	2.41	%	0.01			
Water in Oil, by Distillation	0.0	% by Volume	0.1			

Comments

Robert Dorey,
Manager, Laboratory Services

TECO
TAMPA ELECTRIC

Environmental, Health & Safety
Laboratory Services

5012 Causeway Blvd * Tampa Fl. 33619 * Ph (813) 630-7378 * Fax (813) 630-7360 * DOH #E54272

Report John Yanik, Fuels
Darlene Reeves, Sebring
Tom Culverhouse, Sebring
Laurie Pence, E/A

Report Date 10/17/2003

Laboratory ID:AA71554

Sample Information

Location Code: PP-#2-CG
Location Description: Phillips Plant, #2 Oil, Cargo
COMPOSITE LOADING NUMBERS:3 THRU 5

Lab Submittal Date: 09/30/2003
Sample Collection Date: 09/24/2003
Sample Collector: BOZEMAN
SHIPMENT DATES:09/24/03 THRU 09/26/03

Laboratory Results

Parameter	Result	Units	MDL	Lower Limit	Upper Limit	Violation
API Gravity @ 60 Deg. F	35.2	Degrees API	0.1	30		
Ash, Oil	Less than MDL	mass %	0.001		0.01	
Flash Point (P.M. Closed Cup Tester)	139	Degrees F.	75	100		
Gross Heat of Combustion, Oils, (HHV)	19516	BTU/Lb.	1			
Gross Heat of Combustion, Oils, (HHV)	137939	BTU/Gal.	1	137000		
Kinematic Viscosity	2.29	cSt				
Pounds / Gallon @ 60 Deg. F	7.068	Lbs./Gal.	0.001		9.5	
Pounds SO2 / Million BTU, Oil	0.4450	Lbs.				
Relative Density 60/60 Deg. F	0.8488		0.0001		0.876	
Saybolt Univ. Viscosity @ 100 F	33.6	SUS	0.1	32.6	40.5	
Sodium	0.06	ppm	0.02		0.5	
Sulfur in Petroleum Products	0.44	%	0.01		0.5	
Vanadium	Less than MDL	ppm	0.1			
Water and Sediment, by Volume	None Observed	% by Volume	0.025		0.05	

Comments

Robert Dorey,
Manager, Laboratory Services

ATTACHMENT A-10

PROCEDURES FOR STARTUP AND SHUTDOWN

J.H. PHILLIPS STATION

PROCEDURES FOR STARTUP AND SHUTDOWN
SLOW SPEED DIESEL

Procedures for startup and shutdown of the two slow speed diesel engines are as follows:

A. STARTUP

1. Unit is brought on line at idle speed using a fuel blend of No.2 and No.6 fuel oil.

2. Unit is brought to synchronous speed.

3. Generator breakers are closed and the unit is slowly loaded to 10 MW.

4. Once fuel blend (No.2 and No.6 fuel oil) temperature reaches the 90°C range, unit is placed on No.6 fuel oil and load increased as needed to a max of 14 MW.

5. After No.6 fuel oil temperature increases to approximately 130°C, the load is increased as needed to a max of 19.580 MW.

B. SHUTDOWN

1. After the decision for engine shutdown is made, the temperature of the No.6 fuel oil is slowly decreased to 90° C, while adding No.2 fuel oil. Load is decreased to 10 MW.

2. Unit is operated for a brief period, and then shutdown.

J.H. PHILLIPS STATION

PROCEDURES FOR STARTUP AND SHUTDOWN
STEAM BOILER

Procedures for startup and shutdown of the two slow speed diesel engines are as follows:

A. STARTUP

1. Unit automatically starts when steam demand lowers pressure in the boiler actuating a low pressure start-up control switch.

2. The boiler automatically purges. Then a diesel or propane pilot ignites the main flame.

3. The boiler controls automatically modulate the main flame to maintain operating pressure.

B. SHUTDOWN

1. The boiler automatically shuts down when low steam demand causes a high pressure shutdown control switch to shut down the burner.

2. The boiler fuel supply automatically shuts off. Next, the boiler automatically purges and shuts itself down.